GRAND FORKS COUNTY 2035 LAND USE PLAN

March 7th, 2006

A RESOLUTION AUTHORIZING THE ADOPTION OF ZONING AND LANDUSE REGULATIONS, TO PROMOTE THE PUBLIC HEALTH, SAFETY AND WELFARE OF THE UNINCORPORATED AREA OF GRAND FORKS COUNTY

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INTRODUCTION.

Grand Forks County began its Comprehensive Planning Efforts in 1978 when the County Board adopted the "1978 Master Plan for Development". The original plan was prepared by the Red River Regional Council in reaction to an amendment to NDCC 11-33-01 regarding the siting of solid waste facilities which states, in part, "The board of county commissioners shall establish zoning requirements for solid waste disposal and incineration facilities."

The 1978 Master Plan was updated in 1995 when the "Grand Forks County Year 2015 Land Use Plan" was adopted. The 1995 Plan was prepared by the Grand Forks – East Grand Forks Metropolitan Organization due to an amendment to NDCC 11-33-03 that stated the county must have an adopted comprehensive plan to establish zoning regulations.

Since 1995 many physical, economic, and demographic changes have taken place within the county. Some of the events that have impacted these changes include the flood of 1997, the loss of the missile program at the air force base, and the increasing residential pressures adjacent to the metropolitan area. The 2035 Land Use Plan Update will consider these trends and address any needed changes in the County's Land Use Goals and Policies.

I. PURPOSE OF THE PLAN AND VISION.

The 2035 Grand Forks County Land Use Plan is a document that serves several purposes:

- A guide to county residents and decision-makers to plan for future growth, zoning and land use requirements in the planning area, as well as transportation issues, floodplain management, and natural resource protection.
- A representation of the goals and values of the county and a vision for maintaining a high quality of life.
- A continuation of the fulfillment of state-mandated requirements to prepare a Comprehensive Plan to guide land use policies and regulation.

The plan focuses on three main elements: 1) Land Use, 2) Transportation, and 3) Natural Resources.

• LAND USE - The County Board is the zoning authority for 28 of the 41 townships within Grand Forks County. The land use element guides residential density, commercial and industrial activity and zoning within this 28 township area. A partnership decision-making process with township boards is also currently in place. This Plan has been developed utilizing a comprehensive methodology to analyze land use from an area wide perspective. This Plan also improves on the relationship of land uses from a county wide perspective. This approach considers the crossjurisdictional needs of transportation, storm water management, and public infrastructure thus transcending both township and municipal boundaries. A high

degree of communication and joint/shared decision-making allows this approach to be successful.

- TRANSPORTATION This element incorporates goals and policies to preserve the
 integrity of the Grand Forks County roadway network. The land use planning process
 provides the vehicle for a safe, efficient, accessible, and functional transportation
 system.
- NATURAL RESOURCES County goals, policies, and implementation efforts that
 are directed at natural resources are contained in, but not exclusive to, this element of
 the plan. The Land Use element also contains direction regarding natural resource
 protection. The content of this element refers to goals and policies developed to
 address the specific areas of importance, which include the protection of the ground
 water and surface water drainage systems from the impacts of rural development.

II. THE PLANNING PROCESS.

Governments engage in planning for three basic reasons: to meet expected change, to produce desirable change, and to prevent and avoid undesirable change.

The land use plan documents the values and vision of the county in the form of goals and objectives for guiding its future land use. If the land use plan is to serve as an effective blueprint for future development, it is imperative that public and private groups and individuals affected by the plan be involved in the planning process during plan preparation.

This planning process is a four-step procedure: (1) inventory and analysis; (2) development of goals and policies; (3) plan development; and (4) plan implementation.

The analysis section of the plan sets forth projections and forecasts of changes that might be expected to occur during the planning period (usually 25 years). The goals and objectives section represents the collective desires of the people for the type of community in which they want to live. Policy statements guide decisions and explain how goals are to be accomplished.

Plan development is the study of alternative courses of action. In this section, decisions are made for future uses of the land.

The final step is implementation. Zoning and subdivision regulations are the tools normally associated with this phase. Other tools are considered too, such as capital improvements, annexation, official mapping, and other health safety standards. These tools are developed to carry out the intent and goals of the plan. The key to the success of a plan is that these tools are used in a consistent and non-capricious manner.

III. COMMUNITY BACKGROUND.

A. PLANNING AREA.

For the purposes of this document, the planning area will be defined as the 28 Townships for which the County exercises its zoning jurisdiction. The planning area will exclude the incorporated municipalities within the county, their respective exterritorial areas, and the 13 Townships which currently enforce their own zoning. The total planning area is about 913 square miles. (See Map 1.1)

North Dakota State Century Code does give the County authority for subdivision jurisdiction over townships which have their own zoning. Grand Forks County does exercise subdivision authority in the 13 townships that regulate their own zoning. The goals and policies of this plan will apply to any subdivision application within a township that regulates its own zoning, as required by State Century Code. However the development densities for the subdivision requests shall be regulated in accordance with the Township's Zoning Ordinance.

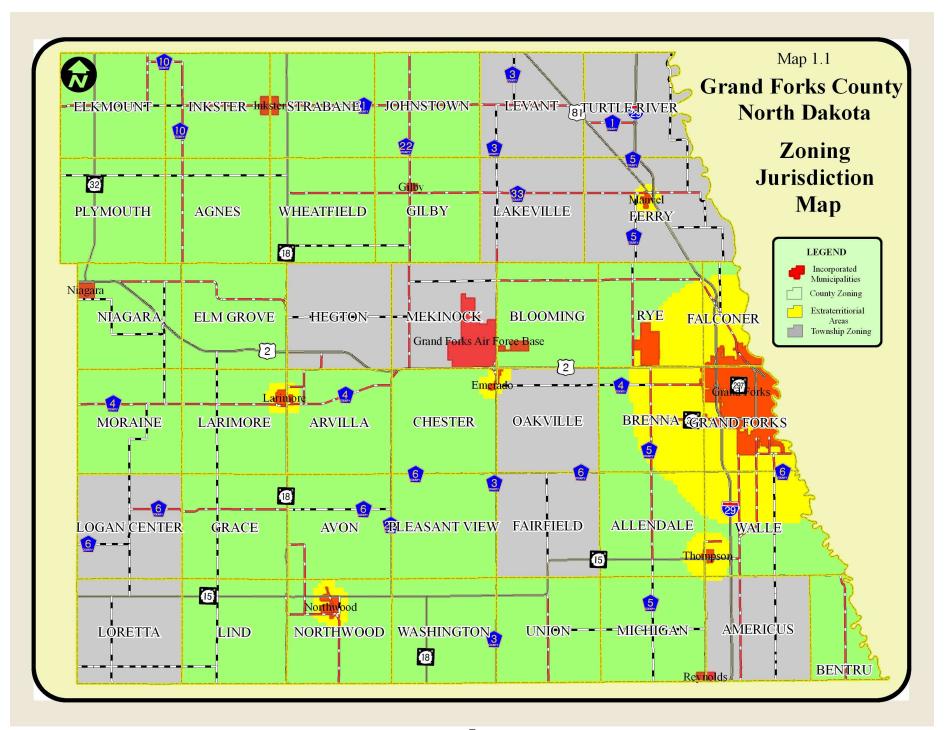
State Century Code also gives the County jurisdiction over townships for permitting solid waste management and incineration facilities. The goal and policies of this plan will apply to request for those types of facilities in both townships that regulate their own zoning, and townships that are under the County's Zoning jurisdiction.

North Dakota State Law allows municipalities to enact an extraterritorial (ET) area for land use and zoning jurisdiction. The size of the ET area is based on the population of the city. Six cities in Grand Forks County exercise an ET area for which they have land use and zoning authority. Grand Forks has a two (2) mile ET area. The city of Thompson has a one (1) mile ET area, and the cities of Emerado, Larimore, Manvel and Northwood have half (½) mile ET areas. Thirteen (13) townships in Grand Forks County have opted to administer their own land use and zoning regulations. The majority of Grand Forks Township is encompassed by the City of Grand Forks and their ET area.

B. REGIONAL SETTING.

Grand Forks County is located in the Northeast Portion of North Dakota, approximately half way between the City of Fargo and the Canadian border, as demonstrated on Map 1.2. The Grand Forks metropolitan area is located in the east central portion of the county, and serves as a regional center for northeastern North Dakota and northwestern Minnesota. Grand Forks County had a population 66,109 in the 2000 Census. Almost 75 percent of the county's population lives in the City of Grand Forks. The County has nine other incorporated municipalities, which include the cities of Emerado, Gilby, Inkster, Larimore, Manvel, Niagara, Northwood, Reynolds, and Thompson. The county is also home to the Grand Forks Air Force Base which is a significant source of employment and population.

The agricultural land in the County is rich and fertile land used for cropping and other lands with a grass cover that is used primarily for grazing and to support wildlife. Principal cash crops of the region include potatoes, sugar beets, sunflowers, soybeans, corn and wheat. Many of the area's major employers are manufacturers or processors of agricultural products. These employers include: American Crystal Sugar (East Grand



Forks, Minnesota), Conta Luna Foods, J R Simplot Company, North Dakota State Mill, and RDO Foods. Publicly owned parcels of grasslands and wetlands provide citizens of the County with opportunities for hunting, wildlife viewing, photography and hiking. Having a major university and large air force base within the County also makes government services an important segment of the local economy.

Grand Forks County is serviced by an excellent system of transportation facilities. Interstate 29 and U.S. Highway 2 both pass through the county. Interstate 29 provides a

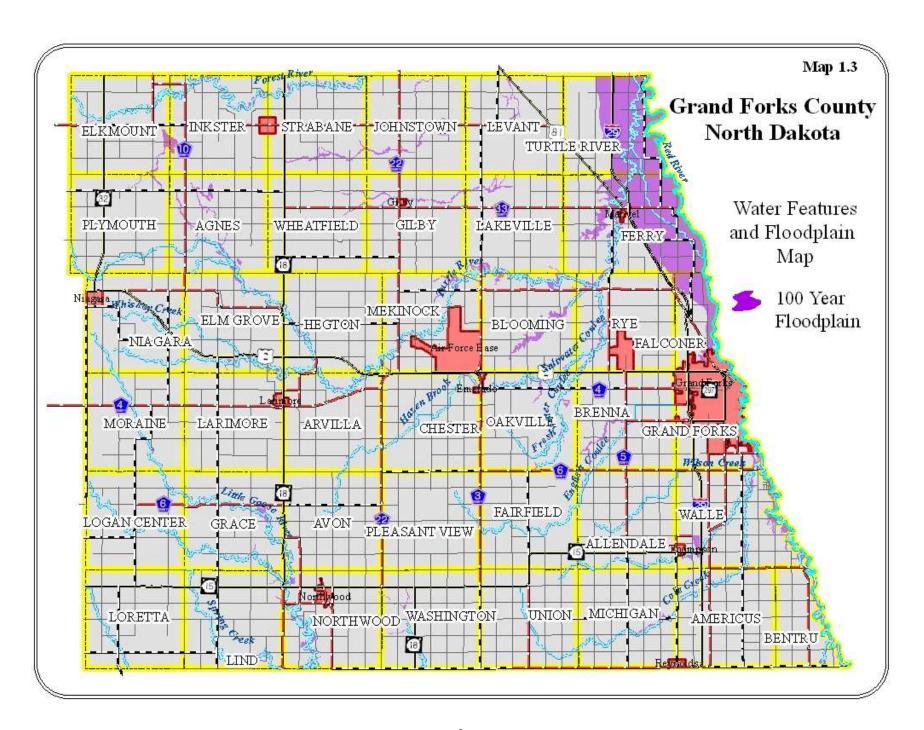
convenient route to points north and south, such as Fargo and Sioux Falls, connecting at the U.S. – Canada border with the route to Winnipeg. U.S. Highway 2 provides an east-west highway connection between Duluth to the east and points west, such as Minot and Williston. Efforts are being made to upgrade U.S. Highway 2 to a four-lane divided roadway from Duluth, Minnesota, to Williston, North Dakota. Other arterial roadways in the County include, U.S. Highway 81, State Highway 18, and State Highway 15. Grand Forks is also served by the Burlington Northern-Santa Fe Railroad, Amtrak, and an International Airport facility, which is currently used by one commercial airline. Northwest.



C. PHYSICAL CHARACTERISTICS.

The area's climate is the result of its interior, mid-continent location – 1,500 miles from the moderating affects of either ocean. A land surface absorbs and loses heat more rapidly than a water surface, thus the continental climate of the plains is characterized by sharply defined seasons, warm summers and cold winters, with low to moderate amounts of precipitation and periodic drought. Despite periods of low moisture, the valley receives 19.3 inches of precipitation on average annually, with most of it falling during the summer growing season.

Because of the extremely low relief of the valley, flooding continues to be a problem for people who reside along the Red River and its tributaries. The major tributaries that flow through County include: the Turtle River, English Coulee, Goose River, Freshwater Coulee, and Cole Creek. Flooding is also a problem along any of these major tributaries as evident with the amount of 100 year floodplain shown on Map 1.3. The Cities that are most significantly affected by flooding are Grand Forks and Manvel.



Rivers are not the only source of flooding in the county. The low relief also makes the area highly susceptible to overland flooding. This type of flooding occurs after extreme rain events or the spring snow melt. The combination of frozen ground, saturated soils, or impermeable clay soils prevents water from soaking into the ground. The result is a widespread, slow moving mass of water that inundates large areas most of which are not part of any floodplain. The northeast corners of sections are the most susceptible to the overland flooding as the predominate drainage pattern of the region flows to the northeast.

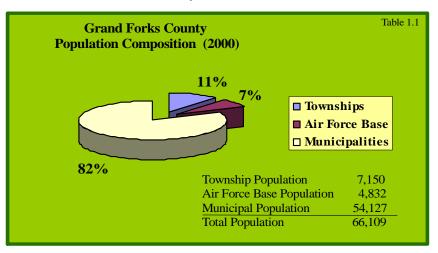
In 1997 Grand Forks County experienced a 210-year flood event, as a result many advances in flood forecasting and protection have been made. The Federal Emergency Management Agency (FEMA) is in the process of amending the flood map to incorporate additional information obtained from the 1997 event. The City of Grand Forks is cooperating with the Army Corp of Engineers to upgrade their flood protection system.

The 1997 flood was caused by a combination of river flooding and overland flooding from the snowmelt. Other occurrences of localized overland flooding have affected portions of the county almost every year during the recent wet cycle and corresponding high water table.

D. POPULATION.

Land use planning should be concerned with the human and social characteristics of the community's composition as well as the physical characteristics of growth and development. A study of population for Grand Forks County must take into account the

number of residents, the age and distribution of the population, natural increase (births less deaths), and net migration. An analysis of the county's past trends, current status and future projection of population can serve as a guide in anticipating the County's future land use, housing, transportation and facility needs.



1. COMPOSITION AND CHANGE.

At stated before the majority of the county population resides in its ten (10) cities (see Table 1.1). The 2000 Census population of Grand Forks County was at 66,109, which was a 6.4% decrease in population since 1990 (see Table 1.2). The 2000 Census marked the first time ever that Grand Forks County had lost population from the previous Census. The loss in population was a result of two events that took place in the county during the 1990's. The first event was the Flood of 1997. The majority of the population loss occurred in the City of Grand Forks, which reflects heavily on the County's population numbers. Based on the census, the loss in City of Grand Forks was 59, but this does not

account for any growth between 1990 and the flood. The actual loss was approximately 5,100 persons according to census population estimates.

The other major event that took place was the realignment of the Air Force Base. In 1995 the base lost its missile wing as part the military's realignment process. At the time the Air Base's population was reduced by about 40% (1,900 persons). This loss further cut into the growth that occurred in the County in the 1990's. The estimated loss in population of 7,000 persons, associated with those two events skews the perception that rural residential growth was declining during the 1990's. If the flood and the Air Base realignment are factored out, the growth numbers reflect the historical average shown in Table 1.2.

TABLE 1.2 HISTORICAL CENSUS POPULATION GRAND FORKS COUNTY 1900-2000

YEAR	POPULATION	INCREASE	% CHANGE
1900	24,459	-	-
1910	27,888	3,429	+12.2
1920	28,795	907	+3.1
1930	31,956	3,161	+9.8
1940	34,518	2,562	+7.4
1950	39,443	4,925	+12.4
1960	48,677	9,234	+18.9
1970	61,102	12,425	+20.3
1980	66,100	4,998	+7.5
1990	70,683	4,583	+6.4
2000	66,109	-4,574	-6.5

Source: U.S. Census of Population, 1900-2000

The population density decreases drastically as you progress westward in the county. Map 1.4 shows the population density of the county by township according to the 2000 Census. Table 1.3 breaks down the population numbers by township and city.

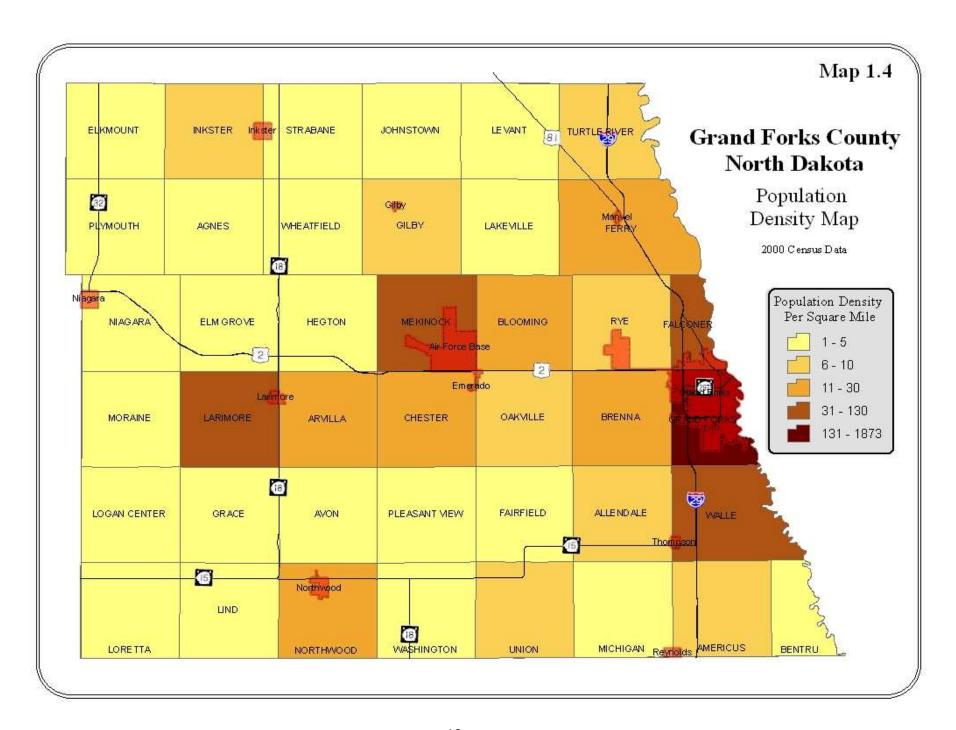


TABLE 1.3 2000 POPULATION (Minor Civil Division) GRAND FORKS COUNTY

MCD	POPULATION	MCD	POPULATION
Agnes Township	83	Larimore Township	122
Allendale Township	368	Levant Township	56
Americus Township	162	Lind Township	65
Arvilla Township	334	Logan Center Township	48
Avon Township	86	Loretta Township	52
Bentru Township	64	Manvel City	370
Blooming Township	761	Mekinock Township	4,529
Brenna Township	638	Michigan Township	161
Chester Township	155	Moranie Township	77
Elkmount Township	54	Niagara City	57
Elm Grove Township	123	Niagara Township	94
Emerado City	510	Northwood City	959
Fairfield Township	126	Northwood Township	138
Falconer Township	313	Oakville Township	238
Ferry Township	380	Pleasant View Township	135
Gilby City	243	Plymouth Township	71
Gilby Township	122	Reynolds City	126
Grace Township	82	Rye Township	261
Grand Forks City	49,321	Strabane Township	136
Grand Forks Township	448	Thompson City	1,006
Hegton Township	172	Turtle River Township	218
Inkster City	102	Union Township	209
Inkster Township	127	Walle Township	369
Johnstown Township	91	Washington Township	134
Lakeville Township	71	Wheatfield Township	109
Larimore City	1,433		

Source: U.S. Census of Population, 1900-2000

2. AGE DISTRIBUTION.

In Grand Forks County the median age of the population has increased (See Table 1.4). In 1990 the median age was 27.3 years. This figure rose to 29.2 years in 2000. Between the 1990-2000, the age groups that saw the largest losses were the 25-34 and under 14. These groups represent young adults and their children. The flood-related loss of most of the affordable housing in the City Grand Forks is directly responsible for the loss of these

age groups. These groups were also more financially susceptible to such a natural disaster. The natural progression of established age groups, such as the so called "baby boomers", could also account for the slight increase in median age. Overall, the actual impact is minimal relative to the county wide population.

TABLE 1.4 AGE-GENDER DISTRIBUTION GRAND FORKS COUNTY

Age	1990		2000		
Group	Total	%	Total	%	
0-4	5,905	8	4,245	6	
5-9	5,485	8	4,258	6	
10-14	4,648	7	4,482	7	
15-19	5,869	8	6,363	9	
20-24	9,977	14	9,372	14	
25-34	14,156	20	9,419	14	
35-44	9,426	13	9,601	15	
45-54	5,038	7	7,766	12	
55-59	2,044	3	2,376	4	
60-64	1,950	3	1,859	3	
65-74	3,306	5	3,120	5	
75-84	2,042	3	2,315	4	
85+	837	1	933	1	
Total	70,683	100	66,109	100	

Source: U.S. Census of Population, 2000

3. NATURAL INCREASE.

Another important aspect of a population analysis is the community's trend toward population increase, stability, or decrease. A natural increase occurs in a community when the number of resident births exceed the number of resident deaths. On the other hand, when resident deaths are greater than the number of resident births, a community would find itself in the unfortunate situation of experiencing a natural decrease. Presently, statistics indicate that many rural counties in the State of North Dakota are experiencing a natural decrease. Grand Forks County, primarily because it is part of a metropolitan growth center, has experienced a consistent rate of natural increase over the last decade.

Resident births in Grand Forks County remained relatively consistent with an average of 891 births annually from 2000 to 2004. The number of resident deaths in Grand Forks County remained steady with an annual average of 459 deaths between 2000 and 2004. Overall, Grand Forks County averaged a natural increase of 432 persons annually between 2000 and 2004.

4. MIGRATION.

Another aspect of a population analysis is the migration pattern and trend being experienced by a county. Trends in Greater North Dakota indicate an out-migration of its population since 1940. During this sixty-year period, rural areas and smaller communities in the state were the most affected by this trend of out-migration. The rural residents moved to larger urban centers, like Greater Grand Forks, to find better employment and educational opportunities. During this same period the population of Grand Forks County doubled.

Historically Grand Forks County has experience more in-migration than out-migration, which explains the growth trends. During the 1990's and early 2000's the County experienced an increase in out-migration, which impacted the annual growth rate significantly. The 1997 flood contributed to an out-migration and directly contributed to the County's first decade of negative growth in recent history.

5. POPULATION PROJECTIONS.

Estimates of the future growth for Grand Forks County are based primarily on growth patterns for the metropolitan area. Although the birth rate has remained strong, some outmigration is expected to continue. The trend of population centralization to urban centers supplies the Grand Forks County Planning Area with rural residential growth. Commuters who work in the larger cities and the Air Force Base account for the vast majority of the rural growth. So the county's rural growth rate is heavily influenced by the growth of the Grand Forks Metropolitan Area and the Air Force Base. Major changes in the future, such as the population displacement associated with a flood, or the impacts of a base realignment are not able to be accounted for in the population projection numbers.

Population forecasts are based on expectations that the local economy will continue to expand, primarily due to the continuing growth of Greater Grand Forks as a metropolitan service and trade center. The relationship between the economy and population growth is reciprocal in effect. Population growth will stimulate the economy and economic growth will attract more people. The impact of industrial growth has a similar effect, but large introductions of new industries into the local economy are not anticipated at this time. The federal government process of reducing the size of the military is uncertain at this time. Military growth is expected in new areas to accommodate new technologies, and reductions are expected in the sections that are outdated. The Grand Forks Air Force Base, which contributed significantly to past growth in the community, is considered to have an uncertain future and could be a potential factor affecting future population growth. The University of North Dakota and the other major employers in Grand Forks County are anticipated to remain stable.

In summary, continued economic growth and employment opportunities in Greater Grand Forks will foster population growth. Economic indicators such as employment and new housing will probably exceed the rate of population growth in the future because household size is decreasing and more Grand Forks County residents, especially women, are joining the labor force. Using past population trends as a guide to future growth in Grand Forks County is difficult. The flood makes the 1990's useless and the three

decades of the 1950's, 1960's, and 1970's were skewed by the building and expansions of Air Force Base program. The rest of the historical data indicates that the county grew at an average rate of 0.77 percent per year. Recent building permit data indicates that the population in the Grand Forks County Planning Area is growing as fast as 1.2% annually. Table 1.5 shows population projections for Grand Forks County year by year until 2035 under the two different growth scenarios. At 0.77 percent per year the county's population would be 86,467 in 2035. At 1.2 percent the county would have a population of 100,362 in 2035.

TABLE 1.5
POPULATION PROJECTIONS
GRAND FORKS COUNTY

Possible Population Projections					
Growth Rate	0.77%	1.2%			
<u>Year</u>	<u>Population</u>	<u>Population</u>			
2000	66,109	66,109			
2005	68,693	70,171			
2010	71,379	74,484			
2015	74,169	79,061			
2020	77,069	83,920			
2025	80,082	89,078			
2030	83,213	94,552			
2035	86,467	100,362			

E. ECONOMY.

A thorough analysis concerning economic trends in Grand Forks County would go well beyond the scope of this plan, as it is intended as a guide for land use planning, not economic planning. However, the effect of the economy on land use cannot be overlooked; the general growth and development of a community depends in large part upon the economic opportunity available within a county and surrounding area. In Grand Forks County, the economy depends upon the level of agricultural, industrial, commercial, business trade and service activity. In addition, the level of activity at the University of North Dakota, the Grand Forks Air Force Base, and other public institutions, also has a major impact on the local economy. Greater Grand Forks is a trade center for a large area in northeast North Dakota, northwest Minnesota, and southern Manitoba. The local economy cannot be understood without considering its relationship to the surrounding regional area. Other indicators affecting the viability of the local economy are employment levels, the volume of wholesale and retail trade and the amount of industrial activity present in the area. This section will discuss the Greater Grand Forks Economic Trade Area, employment trends in Grand Forks County, outline the local wholesale and retail trade sector and discuss the local industrial and manufacturing activity.

1. GREATER GRAND FORKS ECONOMIC TRADE AREA.

The Greater Grand Forks Economic Trade Area consists of seven counties in northwest Minnesota and 10 counties in North Dakota. Three more counties, Griggs, Steele, and Traill Counties, have their population centers in the northern parts of the counties and are closer to Greater Grand Forks than Fargo and may reasonably be considered within the Greater Grand Forks Trade Area. Since these counties are located between Polk and Clay Counties, there is some overlap between the Greater Grand Forks Economic Trade Area and the Fargo-Moorhead Economic Trade Area. Map 1.5 shows the 17 county area of North Dakota and Minnesota and a portion of southern Manitoba in Canada. Although it is not possible to determine the economic impact of the Canadian influence on Greater Grand Forks in terms of area served, it is assumed to include that area of southern Manitoba as far north as Winnipeg.

MAP 1.5
GREATER GRAND FORKS ECONOMIC TRADE AREA



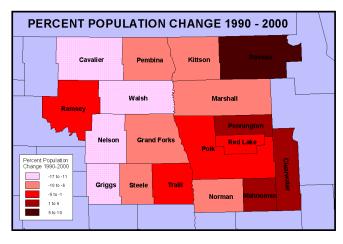
Source: Souris-Red-Rainy River Basins Comprehensive Study Prepared by: Grand Forks-East Grand Forks MPO

The Greater Grand Forks Economic Trade Area is highly specialized in agriculture, depending to a significant degree upon agriculture as its basic industry. A variety of crops are grown including wheat, potatoes, flax, sugar beets, barley, sunflowers, and other small grains. While agriculture is the area's most important industry, it must be noted that agriculture

employment has been declining and income growth has been slow. The region's dependence upon agriculture has been a principal cause of slow economic growth in the trade area.

As is typical of most economies that are dominated by agriculture, all but four of the counties in the Greater Grand Forks Economic Trade Area have been declining in population. All four of these

MAP 1.6



counties are located on the eastern fringe of the trade area and none have agricultural economies. The total population of the trade area declined by almost 12,000 people from 1990 to 2000. Map 1.6 reflects the county population changes that have occurred in the Greater Grand Forks Economic Trade Area from 1990 to 2000, and also indicates the percent of change. Out-migration from the 1997 flood and shifts in employment opportunities have resulted in varying growth rates in the populations of the cities in the area. Grand Forks County shows negative growth for the first time in many decades.

The loss of population is a direct result of 1997 flood as many people moved out of the region due to lack of housing immediately following the flood. Roseau County, Minnesota has experienced an increase in population of almost 4,500 people since 1980, in large part due to the expanding employment opportunities from the Polaris Production facility in Roseau, and Marvin Windows in Warroad. Military employment, especially the Air Force Base, is important to the area; however, decisions concerning its status are made outside the area and are not shaped by local economic considerations.

2. EMPLOYMENT.

The employed population in Grand Forks County according to the 2000 census was 35,684 persons. Between 1990 and 2000 the size of the labors force declined by two percent, which was a total of 665 persons lost from the labor force.

Employment can be divided into seven basic sectors including construction, manufacturing, transportation-communications & public utilities, wholesale trade, retail trade, finance-insurance & real estate services, and government (Table 1.6). Services are the largest employer, accounting for almost 47 percent of all persons employed in Grand Forks County. This percentage has increased ten percent since a 1990. Other gains came in the construction sector. All other sectors have remained relatively constant in percentage and numbers since 1990.

TABLE 1.6 EMPLOYMENT BY SECTOR GRAND FORKS COUNTY

EMPLOYMENT	1990		2000	
	#	%	#	%
Agriculture	1,330	3.7	797	2.5
Construction	1,409	3.8	2,443	7.4
Manufacturing	1,928	5.4	2,087	6.2
Transportation, Communications,	1,976	5.5	1,662	5.0
& Public Utilities				
Wholesale/Retail Trade	8,077	22.2	5,550	16.6
Finance, Insurance & Real Estate	1,608	4.4	1,533	4.7
Services	13,388	36.8	15,657	46.8
Government	1,828	5.0	1,497	4.5
Armed Forces	<u>4,805</u>	<u>13.2</u>	<u>2,253</u>	<u>6.3</u>
TOTAL	36,349	100.0	35,684	100.0

3. COMMERCIAL ACTIVITY.

Grand Forks County is the center of the dominant retail trade center for a seventeen county trade area that serves an estimated population of 208,411 people. While the population of the rural trade area has been decreasing, the Grand Forks metropolitan population has remained steady with the income level, as well as regional buying power continuing to increase. The demand for rural goods and services has been limited by the decline in rural population, affecting the amount and type of goods and services provided to the surrounding area.

Greater Grand Forks Convention & Visitors Bureau indicated that there has been a large influx of Canadian Shoppers in recent years, especially on the weekends and during Canadian Holidays. The American Pembina Border crossing is the fourth busiest crossing between the U.S. and Canada. A number of the people crossing the border are going to Grand Forks metropolitan area on business, vacation, or shopping trips. Much of the recent commercial expansion in metropolitan area, especially in the Columbia Mall area, can be attributed to the influence of Canadian shoppers. The increase in commercial activity can also be attributed to the recent construction of the Alerus Center and Ralph Englested Arena.

4. INDUSTRIAL AND MANUFACTURING.

The dominance of agricultural upon the trade area economy, as well as the distance to major manufacturing areas, has greatly influenced the nature of industry in the area. Industrial activity in the County focuses on the processing and distribution of agricultural related products. The leading industrial activity is food processing, notably potato processing and sugar beet refining. Related industrial activities include seed production and grain milling, the processing of dairy products, soft drink bottling, and the production of chemical and fertilizers.

Some smaller industrial activities include: concrete products, printing and publishing, farm equipment manufacturing, and other machinery and machine works. Sand and gravel are the only natural resources that are extracted in the area.

The future expansion of Grand Fork County industrial and manufacturing businesses is promising, especially in and around the metropolitan area. The creation of the University Technology Park is intended to attract 'high tech' industries to the Grand Forks area. In addition, the Grand Forks Industrial Park is planning an expansion to the south to accommodate future industrial growth.

5. AIR FORCE BASE.

The Grand Forks Air Force Base has had a major influence on the economy of Grand Forks County since its inception in 1954. Up until the 1990's the Air Force Base had steadily increased its personal and operations. The economy of central Grand Forks County grew equally. Many of the service based businesses in and around the City of

Emerado rely on the base's population for their livelihood. The Air Base population in 1990 was around 6,000 persons. A base realignment in 1995 moved the missile wing from the base, which contributed to the County's population loss in the 1990's. The population declined to 4,832 in the year 2000. The base is currently in the midst of another round of realignment by the national government. Any decrease in the base's population as a result of this realignment will have significant impacts the economy of Grand Forks County, especially in small towns adjacent to the base.

IV. LAND USE

A. EXISTING LAND USE

A land use inventory was compiled to determine the county's existing land usage. The actual land use data was obtained through county assessing data. Assessing data terminology and land use terminology are not always consistent due to the fact that they serve different purposes. However, the data will suffice for demonstrating broad categories of existing land use within the County. The 2005 existing land use map uses four broad categories: agricultural/vacant, residential, commercial/industrial, and institutional/public land. The future land use categories will be more detailed, and more categories will be utilized.

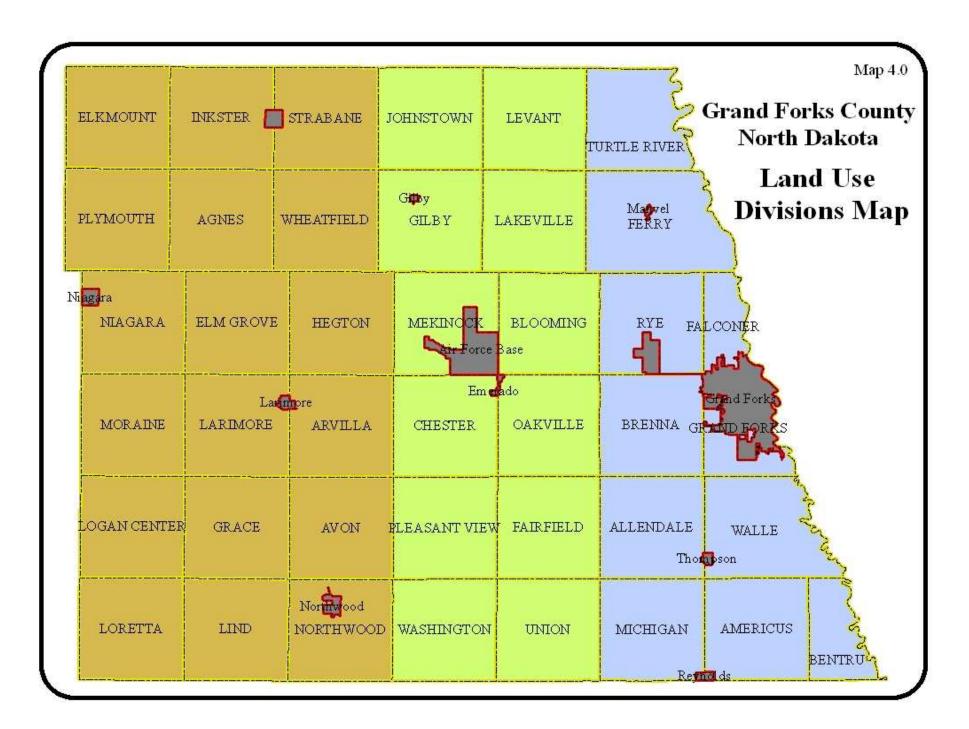
1. TRENDS IN LAND USE DISTRIBUTION

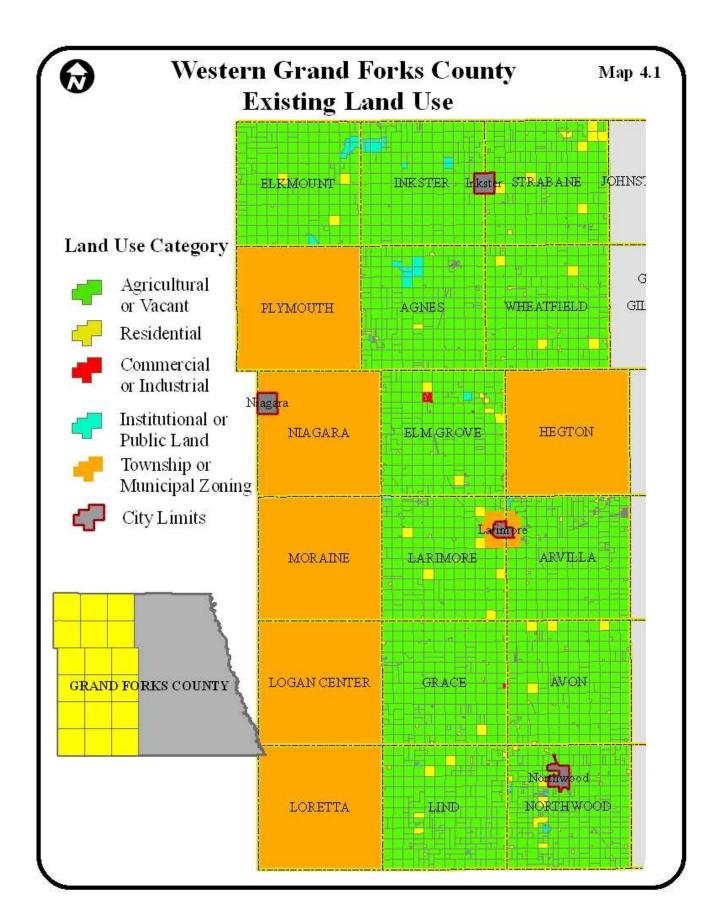
The population distribution and physical characteristics of the County provides three natural divisions, as shown on Map 4.0. In the western portion of the county, the population density is very low with the predominate land use being agriculture (Map 4.1). The central portion of the county is also primarily agricultural. This portion of the county is characterized by being influenced by the Air Force Base, which is shown as the large institutional use on Map 4.2. Finally, the eastern portion of the county is characterized by its location in the actual Red River Valley, and the high population associated with the metropolitan area (Map 4.3). Each division has its own set of smaller incremental land use issues, while at the same time share larger comprehensive ones.

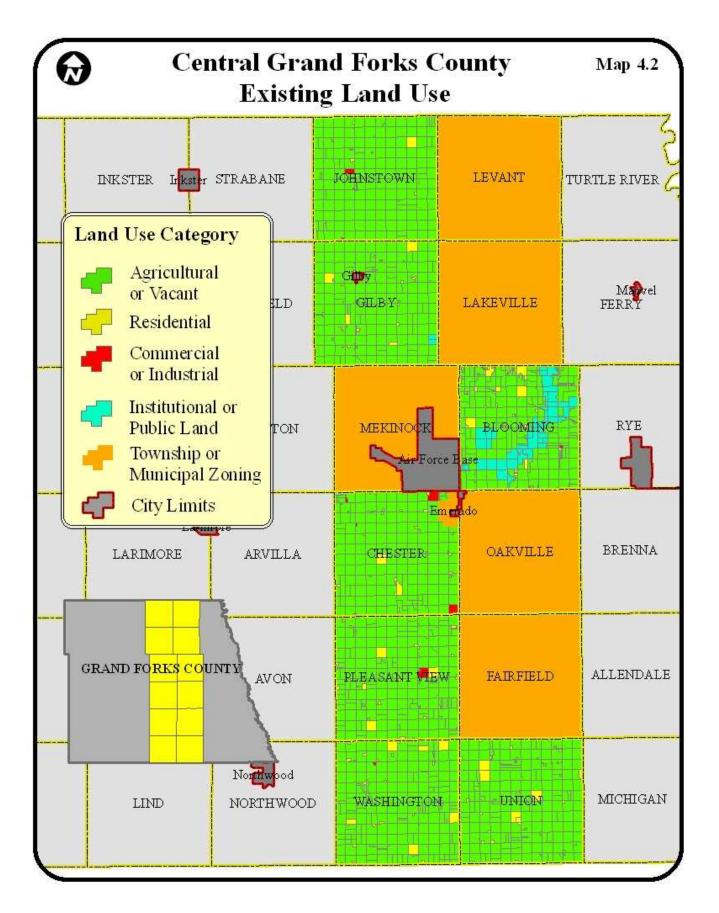
2. WESTERN DIVISION

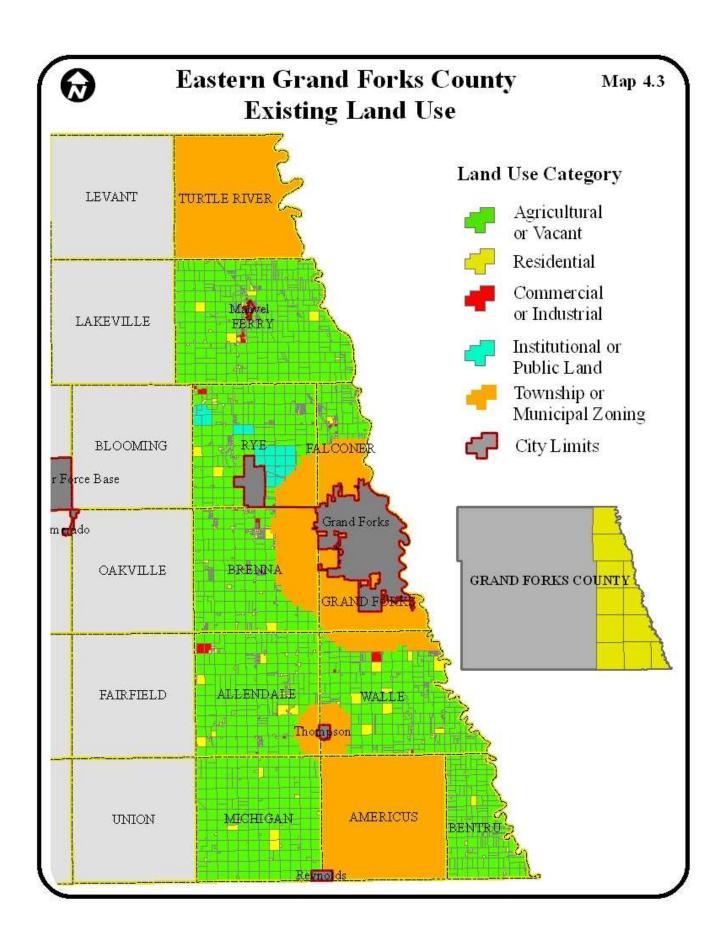
Map 4.1 shows the distinct agricultural land use trend in the western part of the County. The large tracts of land are prevalent in this area. The large tracts shown as residential land use does not mean the entire tract is covered in houses. Chances are there is only one dwelling on the parcel. The entire parcel is designated as residential because it is the highest current use of the property according to the assessing data.

Other features of the western portion of the County include the communities of Inkster, Larimore, Niagara, and Northwood. There are also some tracts designated as Institutional land uses. These tracts are primarily publicly owned by the water resource district and part of water control structures or recreational areas.









3. CENTRAL DIVISION

The existing land uses in the central portion of the County are influenced by the Air Force base. Residential land uses are more prevalent in this area as many of the people employed by the base live in the surrounding rural area. The communities of Emerado, Arvilla, and Gilby are located in this section of the County. The Air Force base also drives the service based land uses in these smaller communities, especially in Emerado. The large institutional land use tract east of the Air Force Base is a combination of housing for the base and the Kellys Slough wildlife area.

4. EASTERN DIVISION

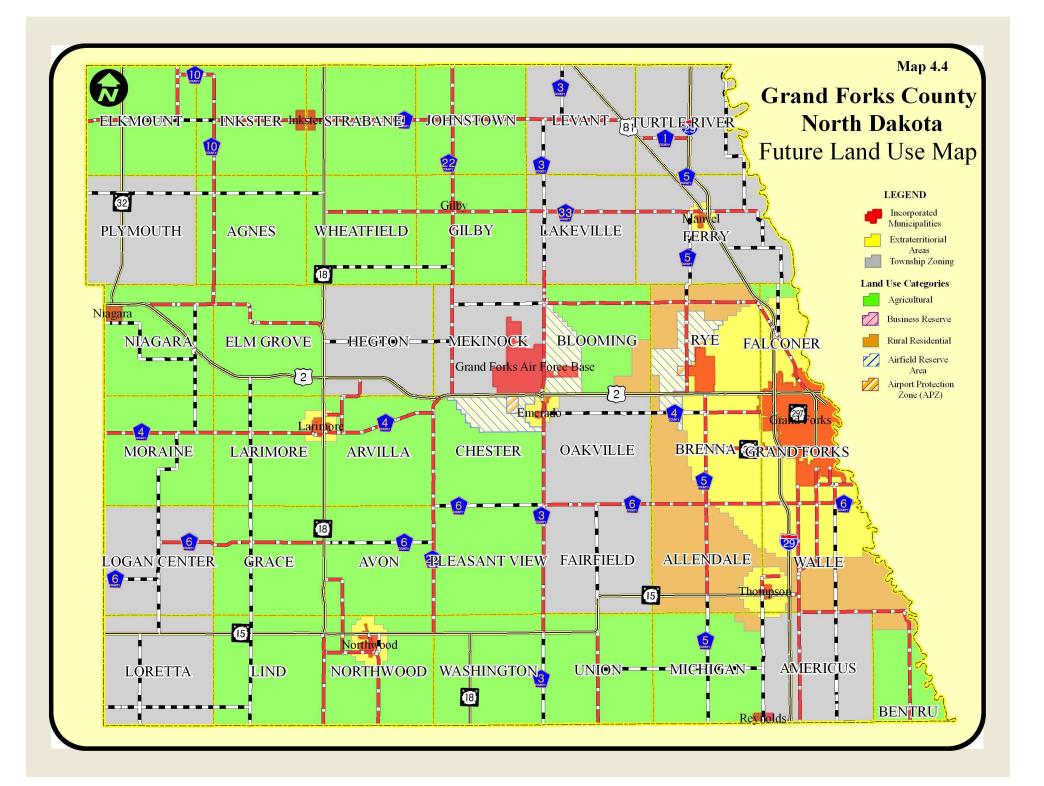
The eastern portion of the County largely consists of the geological feature known as the Red River Valley. This area has the highest concentration of existing rural residential land uses as shown on Map 4.3. Employment in and around the Grand Forks Metropolitan Area is the main reason for the rural residential development. Other communities in this portion of the County include, Thompson, Manvel, and Reynolds. The large institutional uses shown adjacent to the City of Grand Forks are the City's waste water facility and lagoons. Further to the west, the publicly owned land associated with the Kelly's Slough Wildlife Area also shows up as an institutional use on the land use map.

B. PROPOSED LAND USE GENERAL GOALS AND POLICIES

The land use goals and policies create a vehicle to determine, organize, and define the character and intensity of land use within the scope of the planning area with the cooperation of the surrounding townships and municipalities. The creation of the goals and policies should take into consideration both existing and future patterns of development. Map 4.4 shows the proposed land use described in this Plan. The map identifies the areas to be proposed for agricultural, residential, commercial, industrial, and areas to be protected for airfield operations. Goals and policies controlling each area identified on this map are separated into sections within the growth management portion of this plan.

This Plan proposes a land use philosophy that will:

- Promote the majority of growth where municipal services are available;
- Allow for managed rural residential growth;
- Allow commercial/industrial uses within limited planned areas;
- Preserve agricultural uses.
- Preserve our prairie heritage by protecting remaining native prairie and providing educational and cultural experiences.
- Provide opportunities for recreation including such activities as hunting, fishing, wildlife viewing, and hiking.
- Preserve environmentally sensitive areas.



DEFINITION OF TERMS:

<u>Airfield Reserve Area:</u> Those areas adjacent to major airfield facilities that have land use compatibility issues due to excessive noise or safety concerns.

<u>Agricultural Area</u>: That area currently in agricultural production and anticipated to continue this land use for the next 20 years.

<u>Rural Residential Growth Area</u>: That area where urban services are not anticipated to be provided, which has already been largely developed at densities less than one per ten acres, where infrastructure is in place to support residential developments. These areas would focus future service demands where they are currently being provided to some extent.

<u>Commercial/Industrial Areas</u>: Those areas where existing businesses are located and which have previously been designated for this use. These areas will be allowed to accommodate additional development provided necessary infrastructure is provided. Areas are also identified which reserve future commercial/industrial uses, which are not anticipated to be developed for the next 10 years.

THE FOLLOWING GOALS AND POLICIES SERVE AS A REFERENCE FOR LAND USE PLANNING DECISIONS.

- 1. Develop a cohesive countywide land use pattern that insures compatibility and functional relationships among activities and between jurisdictions.
 - a. Provide for and encourage opportunities for public participation, especially township officials in the planning and development review process.

Reason: Input from many perspectives leads to high quality decisions.

- b. Build on strengths throughout the County such as the agricultural industry, environmental quality, public lands, strong industrial and commercial areas in cities, recreation/entertainment facilities, and quality local government, in defining the County's identity.
- Reason: Grand Forks County has many valuable resources. New development should be compatible with existing development, and compatible with the environment.
- c. To the maximum extent possible, development policies and regulations shall be applied consistently and uniformly.
- Reason: Inconsistently applied policies and regulations are not fair, result in inconsistencies with adopted policies, and open the door to legal challenges that question the entire system.
- d. Geographic land use designations and related zoning classifications shall be changed only when it can be demonstrated that such modifications are

in the best long-term interest of the County and will promote land use compatibility while meeting the goals and policies of the Land Use Plan.

Reason: Land use zoning should not be changed simply to accommodate a proposed use, but should be established and maintained to the extent necessary to assure compatibility of adjacent land uses.

e. Proactively address outstanding County issues or concerns that may detract from the County's identity.

Reason: There are a number of problems that currently face the County that should be addressed and which should not be exacerbated by future development. These are: private driveway accesses on functionally classified roadways, threats to surface and ground water resources, erosion and flooding problems, and land use incompatibilities.

- 2. Advocate land use development that is accompanied by a sufficient level of supportive services and facilities (roads, storm water management systems, parking, access, etc.).
 - a. Plan for and stage development to ensure it is accompanied by sufficient corresponding public infrastructure and support facilities such as roads, storm water management systems, parks, fire, medical and police protection, etc.

Reason: Premature development that occurs before roads, storm water management systems and public services are available presents an unnecessary risk to new residents and businesses and increased cost for tax payers for later provision of these services. Developers - not existing taxpayers, should pay for their proportionate share of costs for needed infrastructure related to or resulting from new developments.

- b. Control direct access to functionally classified roadways.

 Reason: Provide safe access to higher speed traffic conditions on roadways, which are designed to move traffic efficiently.
- c. Encourage development in areas which will minimize service costs to local government. (e.g., sewer and water extension, police and fire protection, schools and busing routes, and street and highway maintenance).

Reason: Increased service demands cost the County money and will in turn raise taxes or cut service in other areas. Development that minimizes service costs will provide tax base for the County without creating an unjust burden for the taxpayers.

d. Allow institutional uses provided that all traffic, infrastructure, storm water management and compatibility issues are addressed.

Reason: Institutional uses that entail large numbers of people with associated traffic, storm water runoff and wastewater treatment should be located where investments in these services have already been provided.

- 3. Maintain and, where necessary, upgrade the aesthetics and environmental quality within the commercial and industrial land use areas especially along the U.S. Highway 2 and I-29 corridors.
 - a. Inform local property owners of the regulations, programs or incentives that may assist them in the maintenance or renovation of their properties through community education, seminars, newsletters, and outreach programs.

Reason: Education is far less expensive than enforcement. Acceptance of policies and regulations by an informed public is easier to achieve than by a skeptical, uninformed public.

b. Support private redevelopment of commercial/industrial properties which display deteriorated building conditions, obsolete site design, non-conforming signs, incompatible land use arrangements and/or underutilization of the site, especially in the highly visible U.S. Highway 2 and I-29 corridors.

Reason: Land valuation is driven by market demand. Successful high visibility business and high value residential developments will not locate in an area appearing to be blighted.

c. Support code enforcement as it pertains to the junk and dangerous buildings section of the ordinance.

Reason: Code enforcement is one key aspect in achieving aesthetic and environmental quality, as well as protecting the health, safety, and general welfare of the County's residents.

- 4. Ensure that land use and development is to be compatible with features of the natural environment and can be accomplished without destroying natural amenities.
 - a. The preservation, restoration, and enhancement of native prairie and wetland environments in their natural state shall be encouraged. Where desirable and practical, development which complements these features and that which is in conformance with federal, state, and local regulations shall be promoted.

Reason: This is a federal and state policy supported by regulations. This reduces erosion caused by excessive storm water runoff, enhances the natural features of the environment, contributes to ground water recharge, and improves air quality.

- 5. Maintain, protect and, where necessary, upgrade the character of individual properties, which includes the elimination of non-conforming and incompatible uses.
 - a. Encourage the redevelopment of substandard, obsolete or blighted properties including the removal of obsolete structures inconsistent with the proposed land use changes.

Reason: Leaving old farm buildings that were designed for agricultural uses in a residential development that consists of more expensive construction often results in citizen complaints, attractive nuisances and property devaluation.

b. Provide land use transitions and/or proper buffering or screening between distinctly different types of land uses.

Reason: One of the major complaints across the nation from residents is that of noise incompatibility. Billions of tax dollars have been spent nationally to address noise problems. Odor complaints from incompatible rural land uses are increasingly becoming a problem. Traffic congestion from commercial and industrial areas especially on local roads that were not designed to accommodate such traffic intensity presents safety concerns.

c. Property values shall be protected through the harmonious relationship of land uses, roads, and natural features and the maintenance of properties.

Reason: Property values and taxable valuation are driven by market influences.

Properties with good access, adjacent natural amenities, and compatible land uses have higher market values.

d. Renewal, replacement, and redevelopment of substandard and grossly incompatible development shall be accomplished through public action and private means.

Reason: Grand Forks County desires nonconforming uses and structures to be brought into conformity with current standards.

e. Support minimum development standards of design, construction and maintenance to promote the general health, safety and general welfare of all county residents.

Reason: Grand Forks County desires all new development to demonstrate the quality County residents have come to expect and require to maintain their quality of life.

- 6. Plan for growth through a phased basis, providing for a logical extension of rural growth patterns and related community services in a fiscally responsible manner.
 - a. Examine requested land use changes in relation to adjoining land uses, site accessibility, storm water management systems availability, and consistency with the Land Use Plan goals and policies.

Reason: An objective list of criteria needs to be used for consideration of proposed land use changes.

b. Adequate lot sizes and soundly constructed buildings of sufficient size shall be required for all types of development.

Reason: Lots which require on-site sewage systems, individual wells and storm water management facilities must be larger than those served by municipal services. Larger size lots also provide more flexibility and options for the changing needs of the owners which otherwise would encroach and jeopardize the areas needed for these basic facilities. Poorly constructed buildings require premature replacement, lead to blight conditions and adversely impact surrounding property market values.

c. Transitions between distinctly differing types of land uses shall be accomplished in an orderly fashion, which does not create a negative (economic, social, or physical) impact on adjoining developments.

Reason: Communities consist of many land uses, some of which are incompatible with others. Buffer areas between incompatible land uses reduce complaints, maintain the desired market values, and improve public safety and enjoyment of life for residents.

d. Incompatible land uses shall be properly regulated so that conflicts are minimized. This shall be achieved through the use of natural and manmade physical barriers (i.e., topography, drainage ways, transportation routes, etc.), distances, landscape screening, and/or proper physical orientation of lots and buildings.

Reason: A variety of land uses are necessary for the economic well being of a community. Achieving a compatible co-existence of these land uses is possible through a combination of physical separation and regulatory control.

- 7. Promote the continued development of high quality, high value industries where municipal services exist that enhance the economy through an improved tax base and expanded employment base for County residents.
 - a. Support collaborative actions with the ten cities to promote Grand Forks County as a great place to locate industries and job producing businesses. *Reason: Industry and large businesses should be located within urban service areas.*

V. GROWTH MANAGEMENT

The trend of population centralization also affects the County's population distribution and growth rate. The data suggests that the population in the western portion of the County is declining while the population in the eastern portion of the County is on the rise. The County is currently experiencing a new kind of growth. In the past, population growth was attributed to the agricultural economy and the subsequent service orientated jobs in the smaller communities. The centralizing trend of populations to urban centers now spurs growth in and around metropolitan areas. The rural residential growth being experienced in the eastern portion of the County consists primarily of people who live in the rural area and commute to the larger population centers for employment.

The new rural residential growth raises issues in regard to its impact on public services, including roads, storm water management, natural environment, ground water and compatibility of land uses. The Grand Forks County Board of Commissioners, recognizes these issues, and has identified the need for a growth management strategy. The following goals and policies are provided to define and guide Grand Forks County's growth management efforts, focusing on the unincorporated areas.

A. General Goals and Policies

- 1. Manage growth and land use development in a manner that is fiscally responsible and will result in staging of infrastructure investments to support growth.
 - a. Support growth patterns that stimulate development within cities and take advantage of in-place municipal infrastructure.
 - Reason: This provides for utilization of existing city services rather than costly duplication by the County or townships. It also results in better utilization of land and more tax value per acre to pay for services.
 - b. Support rural residential growth within the Rural Residential Growth Areas, to accommodate this sector of growth.
 - Reason: Staging growth allows for immediate interconnection of roads rather than long term cul-de-sacs. Staging significantly reduces the conflicts of land uses that currently exist between residential and agricultural uses
 - c. Require infrastructure improvements associated with new development to be financed by the developer.
 - Reason: Development should pay its fair share for required improvements. This is especially applicable to residential development that provides a relatively low tax return to cover the increased demand for services, roads, and storm water management systems.
 - d. The County will not approve a premature development or subdivision as defined as follows:

- is inconsistent with Grand Forks County's Land Use Plan;
- lacks necessary adequate local road system;
- lacks adequate sewer and water capabilities;
- lacks adequate storm water drainage or storm water treatment facilities either within the development site or downstream;
- is inconsistent with Grand Forks County's environmental regulations.

Reason: The County should have clear standards for approval of developments and subdivisions.

e. New development shall provide sufficient land area to accommodate a protected backup location for replacement of the proposed sewage treatment system in areas which are not anticipated to be served by urban services.

Reason: Sewage treatment systems have a limited functional life a backup location should be identified in the event the primary location be damaged or should the original system fail.

f. Maintain the Individual Sewage Treatment System (ISTS) permitting program.

Reason: This is consistent with State Plumbing Code and ensures the protection of public health and untimely and costly extension of municipal services.

- 2. Attracting, retaining and expanding businesses and industry is a priority for diversifying the local tax base and promoting local employment opportunities. The majority of new commercial and industrial uses should be concentrated where urban services are available.
 - a. Identify specific planned areas with appropriate standards for infrastructure and aesthetics where small businesses with a need for outside storage can locate within the County.

Reason: There is an unmet need for industrial/commercial areas where outside storage is allowed within the County. However, these types of businesses are not often aesthetically desirable along major transportation corridors without well-designed and maintained designs and landscaping.

b. Commercial/Industrial uses should only be allowed where compatible with existing and planned uses.

Reason: This type of land use often presents incompatibility problems such as noise, dust, traffic, odor, lighting etc.

 Land for future commercial/industrial uses should be identified and reserved until supplies of existing vacant commercial/industrial land are substantially depleted.

Reason: Areas that have been generally guided toward commercial/industrial development should be protected from being developed with land uses which would conflict with the future development to commercial/industrial. However, these areas could be developed with

compatible commercial/industrial developments provided all planning issues are addressed.

d. New commercial and industrial land uses shall be allowed within Business Reserve defined areas provided that all traffic, infrastructure, storm water management, and compatibility issues are addressed.

Reason: Commercial and industrial development is accompanied with relatively intensive demands best provided by municipal services. These include: storm water management, treatment of industrial/commercial wastewater not compatible with individual sewage treatment systems, fire protection, traffic and water supply.

- 3. Encourage commercial/industrial development of high architectural and aesthetic quality in order to enhance Grand Forks County's image, promote building durability, and expand the local tax base.
 - a. Develop standards with incentives that encourage businesses to construct aesthetically pleasing buildings especially along the high priory corridors.

Reason: Higher architectural and more aesthetic buildings hold their value longer, improve tax base and attract other higher value businesses to the area.

- 4. Promote a coordinated intergovernmental development review process between the County and Township boards.
 - a. Implement a development review system to actively involve Townships with Planning Commission reviews.

Reason: Better coordination of reviews, sharing of concerns and clear understanding of projects will lead to better development within the County.

B. Agricultural (1 per 5 acre density) Area Goals and Policies

- 1. Protect and preserve agricultural uses and the economic viability of farming operations by limiting residential density to one unit per 5 acres.
 - a. The preservation of agricultural uses within the agricultural area shall be a priority in all planning and development decisions.

Reason: The agricultural industry and prime agricultural land are resources that should be protected at a priority reflective of its relative benefit to society.

b. Agricultural land use should be encouraged to observe conservation practices that prevent erosion and preserve natural resources.

Reason: Agriculture is an intensive land use because it has the potential for significant impacts on storm water conveyance systems, and ground

water resources. Agriculture is a necessary land use for society but can be accomplished with reduced adverse impacts by adhering to recognized best management practices. Failure to do so can destroy the long-term productivity of the land, contaminate ground water resources for future generations, and result in flooding and erosion problems.

c. New or expanding feedlots resulting in 500 animal units or more shall be regulated to minimize impacts on existing residences and the environment.

Reason: Large feedlots present the potential for greater impacts to the environment than traditional smaller labor intensive operations. Feedlots and resulting manure management present increased concerns for ground water protection, air quality, storm water runoff, insect control and public health. These intensive land uses should be controlled to prevent adverse impacts that are detrimental to society and the long-term economy of the area.

- 2. Development within the Agricultural Area shall be at a density that preserves land for continued agricultural use as presented in the following subdivision criteria:
 - Density 1 unit per 5 acres.
 - Lot area must contain a minimum of 2.5 acres of land.
 - Each lot must demonstrate ability to accommodate two individual sewage treatment system sites.

Reason: This would allow for development in the agricultural area while maintaining open space for continued agricultural use.

- 3. Allow for reasonable use of wooded and nonproductive agricultural land (based on soil classes IV-VIII soil types) for residential uses at one per 2.5 density where it can be demonstrated that it will not conflict with active farming operations.
 - a. Maintain provisions in the Zoning Ordinance that establish criteria allowing for residential use of nonproductive land within the Agricultural Area.
 - b. Encourage preservation of natural areas especially old growth woodland and wild life habitat when considering development of nonproductive land.
- 4. Support state and federal programs that assist farming operations to stay economically viable.
 - a. Support conservation and natural resource management programs provided by the Natural Resource Conservation Service.
 - b. Support educational and public informational services provided by the North Dakota State University Extension Office in Grand Forks County.

C. Rural Residential Growth Area Goals and Policies.

The Land Use Plan will promote reasonable residential growth in those areas where infrastructure and similar growth patterns exists. The staging concept provides a time element to growth management that allows for detailed planning to occur and emerging technology to be deployed in subsequent stages.

1. Support staged rural residential developments that respect the overall planned gross density of one unit per 2.5 acres of buildable land.

Reason: The areas proposed for rural residential growth have been selected because of the improbability of the extension of urban services into these areas. Development should, therefore, be limited to uses compatible with the existing low density housing in the area and uses which can sustain these basic services indefinitely.

2. Maintain and enhance the character of the established rural residential neighborhoods.

- a. New or expanding livestock operations in this area shall be restricted.

 Reason: Livestock operations more than crop production presents unique incompatibilities with residential housing. Those areas that are planned for transition from rural uses to residential uses should be regulated to phase out existing uses that are incompatible with the intended use. This will allow for continuation of existing uses while recognizing the tradeoff being afforded to farmers by increased land valuation for development in exchange for their inability to expand a feedlot operation.
- b. Allow accessory structures that are compatible with the overall land use in this area.
- Reason: Rural residential living affords opportunities not often allowed in city residential communities and is one of the reasons people seek this living option. However, accessory structures should be consistent with the surrounding land uses so as not to present incompatible land uses or decreased surrounding market values.
- c. Prohibit incompatible home-extended businesses within the Rural Residential Growth Area.

Reason: Home-extended businesses, depending on their nature can present incompatible land uses as surrounding areas develop to the intended use. Home-extended businesses can also present problems for on-site sewage treatment systems and traffic safety problems for surrounding residents.

D. Airfield Reserve Area

Aviation plays an integral role in Grand Forks County. The County is home to the Grand Forks Air Force Base, Grand Forks International Airport, Northwood Municipal Airport, Larimore Municipal Airport and many private airstrips. Map 6.2 shows the location of all the aviation facilities in Grand Forks County, including private airstrips. The Grand Forks Air Force Base has been a centerpiece in Grand Forks County since 1954. With a 2000 census population of 4,832 the base serves as its own community and facilitates thousands of flights every month. The base is home to the 319th Air Refueling Wing, which supports military flying missions all over the world.

Grand Forks International Airport (GFK) is one of the busiest airports in the nation. Based on daily operations, the airport is one of the top 50 busiest airports in the United States. With the addition of the University of North Dakota Aerospace program, GFK has a traffic total of almost 40,000 flights per month, according to the FAA.

The purpose of the Airfield Reserve Area is to prevent conflicting land uses in areas adjacent to major airfield facilities within the County. Noise associated with aircraft over flights and the increased potential for accidents around runways requires unique land use considerations. The following goals and policies work toward preventing incompatible uses within these areas.

Airfield Reserve Goals and Policies.

1. Limit rural residential developments in the Airfield Reserve Area that respect a density of one unit per 15 acres.

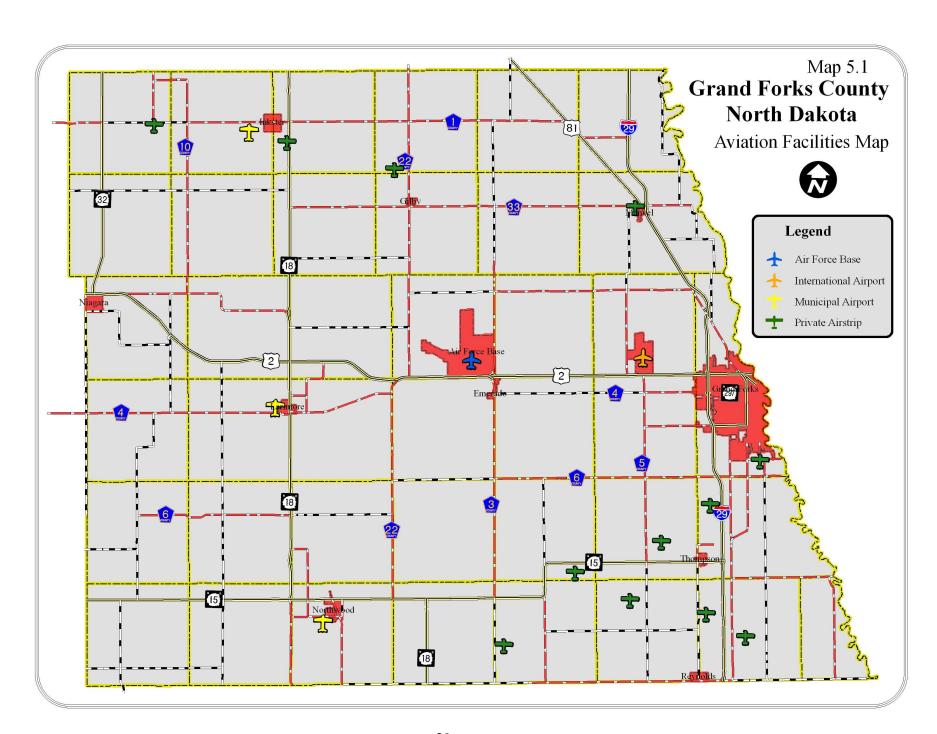
Reason: Residential development in the close proximity to existing airfields is a poor policy, as over flight noise provides future land use conflicts.

- 2. Prevent any additional rural development in the Airfield Protection Zones.

 Reason: Airfield Protection Zones are those areas that are direct extensions of runways.

 Aircraft over flights occur at very low altitudes and the highest potential for aviation accidents exist in these zones.
- 3. Support the air transportation needs of the United States Military, the State of North Dakota, the County, and local communities.
 - a. Enact land use regulations that restrict uses in the airfield areas that would create hazards or conflicts with safe and effective airport operations.
 - b. Include airfield districts within the zoning code to regulate land uses adjacent to existing airport facilities. The aircraft accident safety zone and compatible land use recommendations will be consulted during formulation of standards to follow in the districts. Due consideration shall be given to adopted airport master plans when considering airfield district standards.

- c. Require deed declarations for all new subdivisions within airfield zones, which would disclose information regarding airport proximity and the existence of aircraft over flights.
- d. Height limitations for new construction near airports will be developed consistent with Federal Aviation Regulations (FAR) Part 77. Proposed structures that would penetrate any of the County's airspace surfaces as defined by these regulations will be prohibited.
- 4. Maintain and enhance the character of the area adjacent to the Air force Base to preserve an important sector of the County's economy.
 - a. Enforce setback requirements for incompatible uses that could threaten the current or future missions of the Air Force Base.
 - b. Discourage the rezoning of Airfield Districts to prevent incompatible uses that would be a detriment to the operations of the Air Force Base.



E. NATURAL RESOURCES GOALS AND POLICIES

Allowing rural development that does not utilize municipal services requires the protection of natural resources. The two major impacts that rural development has on the natural resources involves ground water quality and surface water drainage.

The regulation of Individual Sewage Treatment Systems (ISTS) protects the ground water quality, which also may serve as a water supply to these same residents. Grand Forks County will adopt an ordinance to regulate ISTS in the County's Planning Area. The ISTS ordinance will be based on the North Dakota State Plumbing Code Chapter 62-03.1-03. (as amended). Chapter 62-03. 1-03 was established and is maintained by the State Plumbing Board and Public Health to protect surface water, ground water, and promote public health, safety, and general welfare. County designated staff is responsible for the implementation of the ISTS program.

The second major impact of rural development is increased runoff and the alteration of surface water drainage patterns. To protect neighboring property owners from these impacts, and the County from costly litigation, a goal of this plan is to manage rural storm water systems based on state stormwater regulations. This goal encourages the preservation of the natural drainage system in recognition of the absence of expensive engineered alternatives.

Currently, public resources are not available to maintain the degrading natural conveyance system. Constructing new storm water management systems to accommodate development in the rural areas is cost prohibitive. Relying on existing natural storm water conveyance systems is the most cost effective method of managing storm water. The key to utilizing and preserving the existing stormwater conveyance systems is to provide erosion control measures, which buffer changes in run-off rates and volumes and prevent stream erosion and wetland degradation from siltation.

Natural Resource Goals and Policies

1. Maintain surface water quality and the integrity of stormwater conveyance systems.

- a. Identify all natural wetlands, existing artificial drainage systems, ponding areas, drainageways and all areas proposed for rural subdivision.
- b. Implement EPA's Stormwater Phase II regulations and Best Management Practices as required by the North Dakota State Health Department.
- c. Developments shall be allowed only where there is assurance of compliance with wetland regulatory programs such as the Wetland Conservation Act.
- d. Restrict development of wetlands, floodplains, natural conveyance systems and other natural features that perform environmental functions.

- e. Prohibit development along or alteration of the natural environment where it adversely affects the stormwater conveyance systems.
- f. Require that all building permits and subdivisions comply with county floodplain standards.
- g. Minimize water erosion and sedimentation by encouraging the utilization of effective soil conservation practices and wetland management practices.

2. Improve ground water quality and protect it from degradation by surface water contaminants.

- a. Work with the Grand Forks County Public Health Department to protect ground water recharge areas for existing and proposed municipal and rural water wells.
- b. Promote ground water recharge of adequately treated stormwater runoff rather than discharge to major bodies of surface water.
- c. Regulate ISTS, feedlots, and stormwater management systems to protect ground water from contamination.
- d. Require local floodplain regulations to include a provision that new septic systems must be constructed above the flood-prone areas to avoid causing surface water contamination.
- e. Cooperate with federal and state water quality programs.

3. Protect human life, property and surface water systems that could be damaged by flood events.

- a. Manage local floodplain areas to maintain critical 100-year flood storage volumes.
- b. Implement local floodplain zoning regulations consistent with this Land Use Plan.
- c. Ensure that new plats demonstrate the impacts of stream and overland flooding based on a 100-year 24-hour storm event.
- d. Require local floodplain regulations to include a provision that new structures must be constructed above the flood-prone areas to avoid causing an increase in the critical flood levels that could affect both the new construction and nearby structures.

- e. Seek ways to increase infiltration by increasing vegetated areas and reducing impervious areas.
- f. Maintain the proper function and performance of current stormwater conveyance systems and storage facilities.
- g. Support enhanced data sources including updated FEMA Flood Insurance Rate Maps.
- 4. Encourage developments to fit the natural landscape through appropriate design and ensure the protection and enhancement of natural physical features such as floodplains, wetlands, vegetation and steep slopes.
 - a. Promote the use of native grasses, forbs, shrubs, and trees in development site restoration.
 - b. Establish compatible land use patterns that relate to the County's environmental features.
 - c. Promote the preservation of natural vegetation including prairies, woodlands, and wetlands as a design consideration for new subdivisions and developments.
 - d. Promote restoration and utilization of natural stormwater storage areas for wildlife, aesthetics, and stormwater management.
 - e. Encourage natural vegetative buffer areas along all bluffs, wetlands, coulees, and drainage ways.
- 5. Identify and preserve historic sites, scenic areas, valuable natural resources, and wildlife areas.
 - a. Preserve and enhance places of historic and cultural importance.
 - b. Promote the growth of tourism by preserving and publicizing local features of interest and by conserving the natural beauty of the region.

VI. Public Facilities.

A. Transportation Plan Goals and Policies.

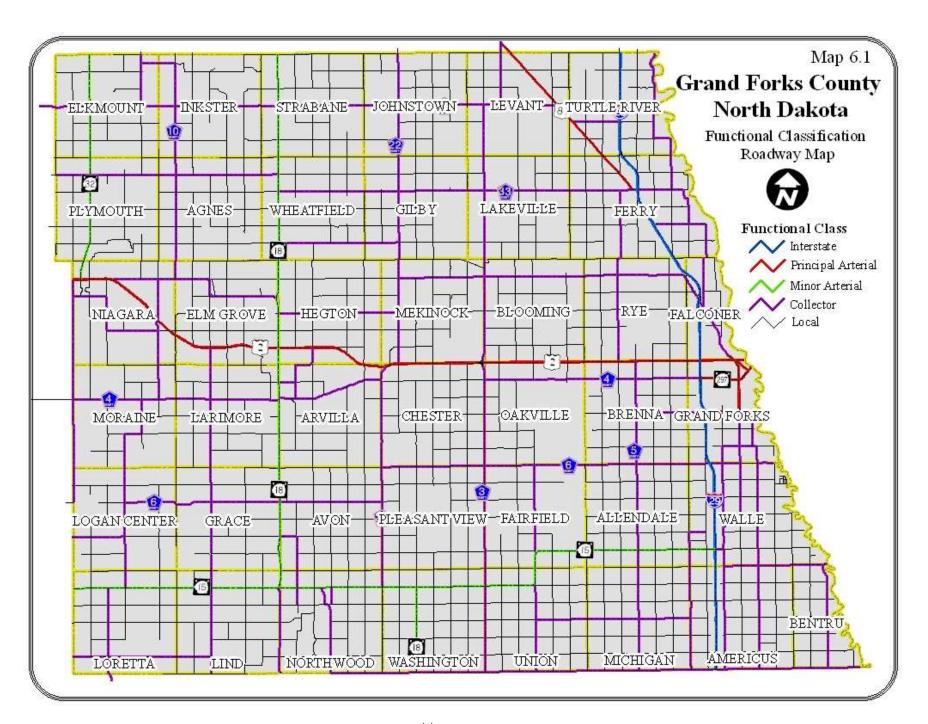
The Grand Forks County Transportation Goals and Policies are included because of the relevancy to the Land Use Plan. The proposed roadway functional classification system for Grand Forks County is shown in Map 6.1. This system was developed using the functional classification criteria from the North Dakota Department of Transportation. The functional classification categories are: Principal Arterial, Minor Arterial, Collector, and Local. The functional classification of roadways depends primarily on the roadway's ability to serve the two competing functions of land access and mobility. The physical design required for each functional classification depends primarily on the traffic volume carried by the roadway. Since principal and minor arterials carry the highest traffic volumes, higher roadway designs are indicated. Collector and local streets, which carry lower traffic volumes, may require lower design standards. This relationship is somewhat flexible and functional classifications may overlap specific design types.

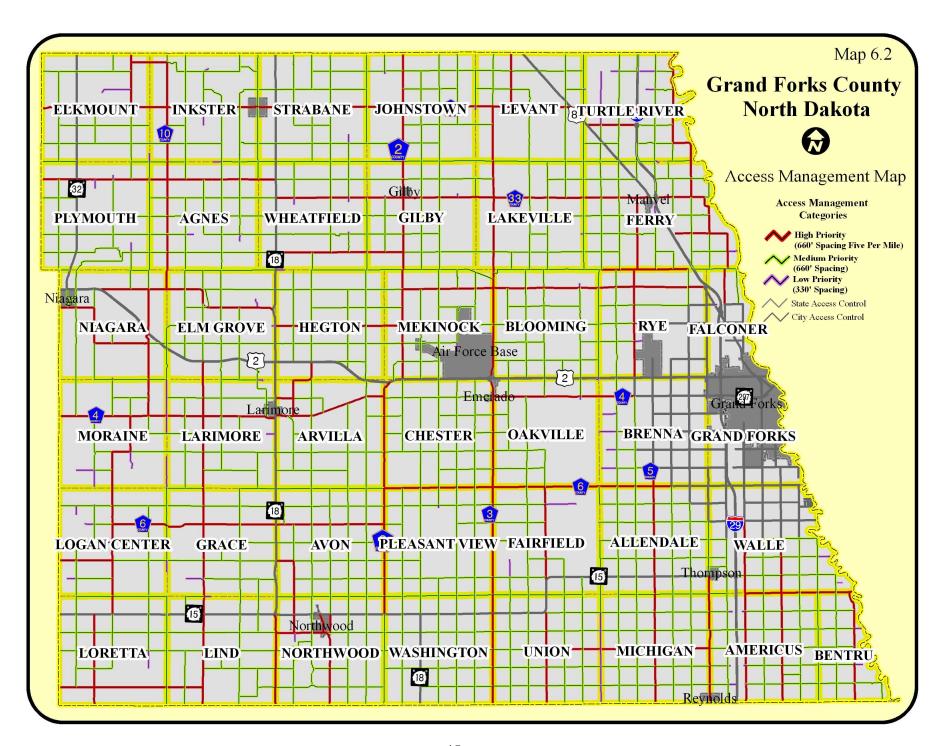
The roadway access management system for Grand Forks County is shown in Map 6.2. This system was developed on the basis of functional classification criteria. The Grand Forks County access management guidelines will be based on the concept of low, medium, and high priority designations. The guidelines allow the County to reserve the right-of-way and access control that will be necessary to enable the highways to provide mobility as traffic volumes increase.

Grand Forks County is committed to providing a safe and efficient transportation system for current and future residents and businesses in a cost-effective manner. The Land Use Plan includes the following goals and policies in order to carry out this commitment:

1. A goal of this land use plan is a safe, cost effective, efficient transportation system within Grand Forks County.

- a. Implement the approved County Land Use Plan to establish a transportation system that effectively moves traffic within and through the County.
- b. Approach transportation in a comprehensive manner, giving attention to all modes and related facilities.
- c. Work with state, regional, city and township agencies to outline both local and regional measures to address transportation system problems including but not limited to traffic congestion and safety concerns on transportation corridors in Grand Forks County.
- d. Coordinate transportation planning and implementation with North Dakota DOT, Grand Forks County cities, townships, and neighboring jurisdictions and encourage coordinated investment in transportation facilities to support development.





- e. Comply with applicable county, state, and federal standards in planning, designing, constructing, and operating County transportation facilities.
- f. Minimize the reliance on County property tax levy by maximizing the use of available local, regional, state and federal funds for transportation improvements.

2. To preserve the existing transportation infrastructure in order to protect the significant investment already made, and to reduce unnecessary premature costs of replacement of existing facilities.

- a. Implement the Grand Forks County Zoning Resolution and Approach Permit Program to properly manage all work within County and Township right-of-ways.
- b. Implement access guidelines to provide safe and efficient access to the County's and Township's roadway system.
- c. Implement regulations to protect the integrity of the County highway system from overweight and oversized loads.

3. To manage the existing transportation system to maximize safety and efficiency.

- a. Support city, township, and County planning efforts to reduce the need for expanded transportation facilities by combining or concentrating various land use activities when and where feasible.
- b. Review and comment, on all proposed plats on land adjacent to existing and proposed County roadways. Encourage Cities to involve the County early in the planning process on plats and related road projects adjacent to or which impact County roads.
- c. Periodically review and update the County's functional classification system and work with other agencies to develop a regional functional classification system for planning and funding purposes.
- d. Cooperate with affected units of government in identifying and implementing appropriate roadway jurisdictional changes.
- e. Strive to maintain appropriate spacing of intersecting local streets and driveways in accordance with the Grand Forks County Minimum Access Spacing Guidelines.

- f. Install intersection traffic controls at locations where the traffic characteristics satisfy the prescribed engineering warrants as set forth in the North Dakota Manual on Uniform Traffic Control Devices and as justified by the County Highway Engineer.
- g. Encourage the design of a network of local roadways to properly direct traffic to collector or arterial roadways.
- h. Support local roadway networks that reduce the need for neighborhood traffic on arterial and collector roadways for local trips.
- i. Require proper visibility, design (which may include turn lanes) and control of all intersections to promote safety.
- j. Reserve roadway rights-of-way based on the transportation needs of the County, as identified by the Grand Forks County Engineer.
- k Increase the safety of streets and highways through proper design, and by requiring proper setbacks for structures and vegetative plantings.
- Preserve the functional capacity of County roadways in order to carry traffic in a safe and efficient manner through:
 - (1) Allow direct access onto County Roadways in conformance with the County's Minimum Access Spacing Guidelines.
 - When and where appropriate, require intersection improvements along County Roadways such that additional traffic (at new or existing intersections) generated by development (i.e. subdivisions, SUPs, commercial/industrial) can be safely and effectively accommodated.
 - (3) As opportunities arise, work with cities to manage driveway access that are inconsistent with the County's Minimum Access Spacing Guidelines.
 - (4) Provide only warranted and justified traffic controls on the County Highway System.
 - (5) Support adequate performance standards for public and private infrastructure to ensure the physical well-being of residents.
- 4. To improve and expand the existing transportation system as necessary to meet current and future transportation needs.
 - a. Identify, analyze and plan for enhancements of the County highway system at spot locations to improve traffic flow and safety.

- b. Continue to improve to acceptable levels, the traffic capacity, safety, and load capacity of structurally and geometrically deficient bridges.
- c. Coordinate with the cities in requiring right-of-way dedication for plats adjoining County roads in order to minimize right-of-way acquisition for future roadway construction.
- d. When appropriate, assure that plat right-of-way dedication requirements are consistent with right-of-way needs for roadway construction projects.
- e. Encourage cities to consider appropriate future County right-of-way needs when authorizing land use changes, whether platting changes are occurring or not.
- 5. To provide transportation planning that results in a local transportation system that will safely serve the needs of current and future residents and businesses, support the County's development plans, and complement the regional transportation system.
 - a. Promote combined driveways where feasible to reduce the impact on existing transportation facilities.
 - b. Support new developments paying appropriate costs based on increased impact on the existing roadway system.
 - c. Coordinate transportation planning efforts between neighboring townships and cities.
 - d. Require proper visibility, design (which may include turn lanes) and control of all intersections to promote safety.
 - e. Preserve/improve the functional capacity of all roadways to carry traffic in Grand Forks County in a safe and efficient manner with the following strategies:
 - (1) Encourage the design of all local roadway networks to be interconnected to discourage or minimize direct access to major collector or arterial roadways.
 - (2) Require intersection improvements that provide for safe turning movements.
 - (3) Support regional corridor studies and coordinate with County land use planning for preservation of right-of-way needed for recommended improvements.
 - (4) Support local efforts for the acquisition of right-of-way to promote proper interconnection and access for development.

- (5) All access to the County highway system shall be in conformance with the County's Minimum Access Spacing Guidelines.
- f Support studies and planning efforts to address existing and future transportation issues/corridors which are anticipated to address future traffic needs.

C. Other Community Facilities

The following section focuses on Community Facilities throughout Grand Forks County. For purposes of this report, Community Facilities consist of Schools, County buildings, public safety and utilities. It is necessary to periodically take inventory of facilities within the County in order to assure that the needs of the community will be met as the population and its characteristics change over time. This Plan promotes the establishment of mechanisms to provide these services in a cost-effective, fair and equitable manner.

Grand Forks County recognizes the benefits of having diverse attractions within the County for the benefit of local and regional residents. This Plan acknowledges the need for careful consideration of the location and operation of large attractions and community facilities to ensure that transportation, storm water drainage and land use compatibility issues are properly addressed.

Provided here is a brief overview of some of the community facilities offered in the County.

1. SCHOOLS

Twelve school districts serve Grand Forks County residents. Portions of Dakota Prairie, Central Valley, and Hatton School Districts lie within the County, however the schools which serve the district are located outside the County. A summary of each district is given in Table 6.1. District locations are illustrated on Map 6.3.

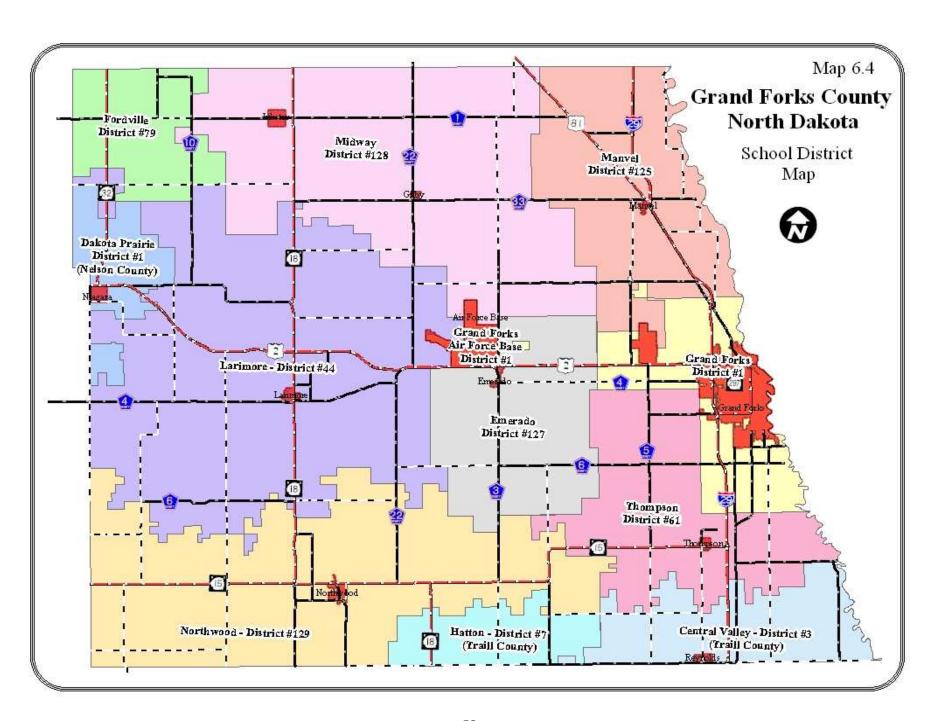


Table 6.1 PUBLIC SCHOOLS

School District	2000	School Inventory
	Enrollment	
Central Valley #3	290	1- Jr./Sr. High School (7-12)
		1 - Elementary (PK-6)
Dakota Prairie #1	324	1- Jr./Sr. High School (7-12)
		1- Elementary (K-6)
Emerado #127	102	1- Elementary (PK-8)
Fordville #79	86	1- High School (9-12)
		2- Elementary (K-8)
Grand Forks #1	7,543	2- High School (9-12)
		3- Junior High (6-8)
		10 – Elementary (K-5)
Grand Forks Air Force	498	1- Elementary (PK-3)
Base #1		1- Intermediate (4-5)
II 117	250	1 1 /0 11 1 0 1 1 /7 12)
Hatton #7	259	1- Jr./Sr. High School (7-12)
	7 00	1 - Elementary (PK-6)
Larimore #44	580	1- High School (9-12)
1.1105	1776	1- Elementary (K-8)
Manvel #125	176	1- Elementary (PK-8)
Midway #128	323	1- High School (9-12)
Wildway #128	323	1- Junior High (6-8)
ı		1 – Elementary (K-5)
Northwood #129	315	1 - Elementary (K-3) 1- Jr./Sr. High School (7-12)
1\01\til\wood #129	313	1 - Elementary (PK-6)
Thompson #61	481	, , ,
Thompson #61	401	1- Jr./Sr. High School (7-12)
		1 - Elementary (PK-6)

2. INVENTORY OF BUILDINGS

County Courthouse:

The construction of County buildings began in the late 1870's with the construction of the first Courthouse. The second courthouse was constructed in 1912 and went through a large addition in 1960. As time passed a complete upgrade was needed of the mechanical, electrical and plumbing components. In 2002 the County Courthouse was totally refurbished to carry its functionally well into the 21st Century.

County Office Building:

The administrative services of the County moved out of the Courthouse in 1995, due to lack of space. The County utilized a vacant office building across the street from the Courthouse. The County Office Building was inundated during the 1997 flood. The

County started construction of the new County Office Building in 1998 and it was completed in 2000.

Grand Forks County Correctional Center:

The facilities for the County Jail were constructed in 1960 as part of a major addition to the County Courthouse. In 2005 the construction of a new jail at the County Fair Grounds began.

County Highway Building:

The Grand Forks County Highway Department currently utilizes nine buildings. The central shop, located at the Grand Forks County Fair Grounds in Grand Forks, and maintenance garages located in Emerado, Gilby, Inkster, Larimore, Manvel, Niagara, Northwood, and Thompson.

3. PROTECTION

Sheriff

The Sheriff is responsible for maintaining order and is the Chief Peace Officer in the County. The term of office is four years. The Sheriff's office is responsible for administrative services and for responding to accidents, answering calls, providing preventative patrol to unincorporated areas, and assisting municipalities upon request. The Sheriff's Office is also responsible for regulating boating and snowmobiling within the County.

911 – PSAP / Communications:

The County's 911 Emergency Telephone System and Emergency Radio Communications System facility is located in Grand Forks, and is shared with the City of Grand Forks, and the University of North Dakota Security Force.

Grand Forks County Correctional Center:

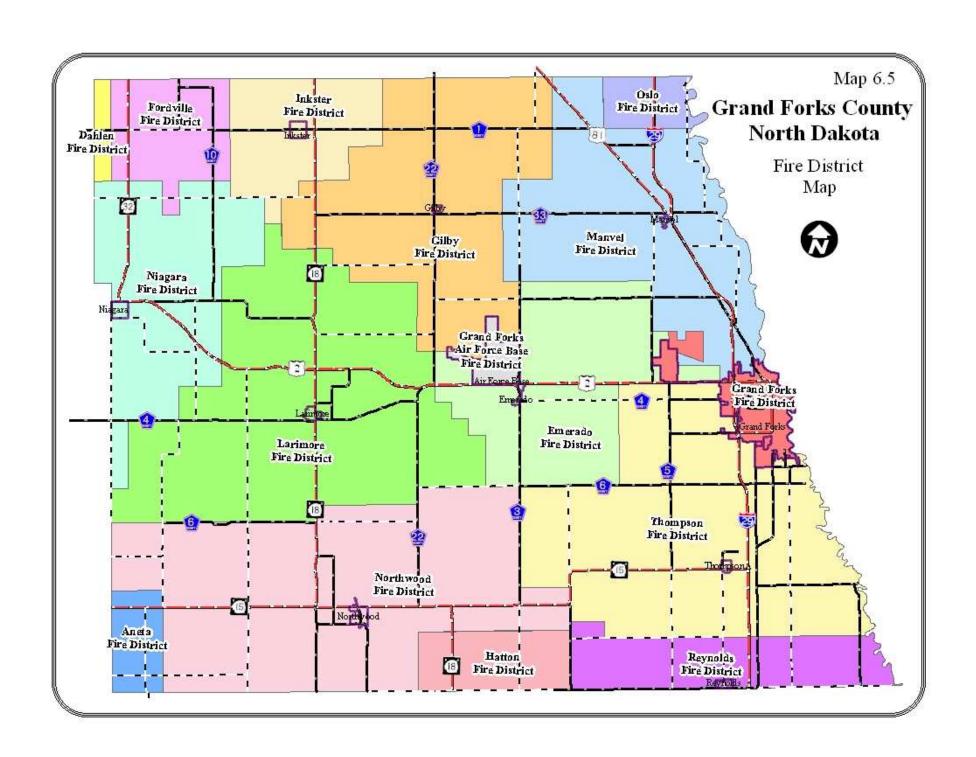
The correctional center houses all prisoners that are held for a pending court appearance, or have been sentenced to the jail. The County is authorized to transport law offenders and those persons committed to state institutions. The Correction Center is also responsible for housing federal prisoners on a contract basis.

Emergency Management:

The Emergency Management department provides an integrated emergency management system for mitigation, preparedness, response, and recovery from disasters and/or emergencies. Coordinates local, state, federal response and assistance. The department also ensures compliance of filing Tier II Grand Forks County addressing for emergency response needs and ensures efficient operation of the E-911 system and the accuracy of the E-911 database for automatic location identification purposes.

Fire Protection:

Fire Protection is carried out by various rural and municipal fire departments throughout the County. Four of the fire departments overlap from other Counties. Map 6.4 shows the 16 Grand Forks County Fire District.



4. PUBLIC WORKS

The County Highway department is responsible for planning, designing, constructing and maintaining all County State Aid Highways and County Roads. The Department is responsible for road repairs as well as snow removal. The Highway department does contract with the townships for roadway maintenance.

5. GAS AND ELECTRICITY

Electricity is provided to the County by private utility companies. Nodak Electric Cooperative, Ottertail Power Company, and XCEL Energy are among the companies that serve the County. Gas Service where available, is provided primarily by XCEL Energy.

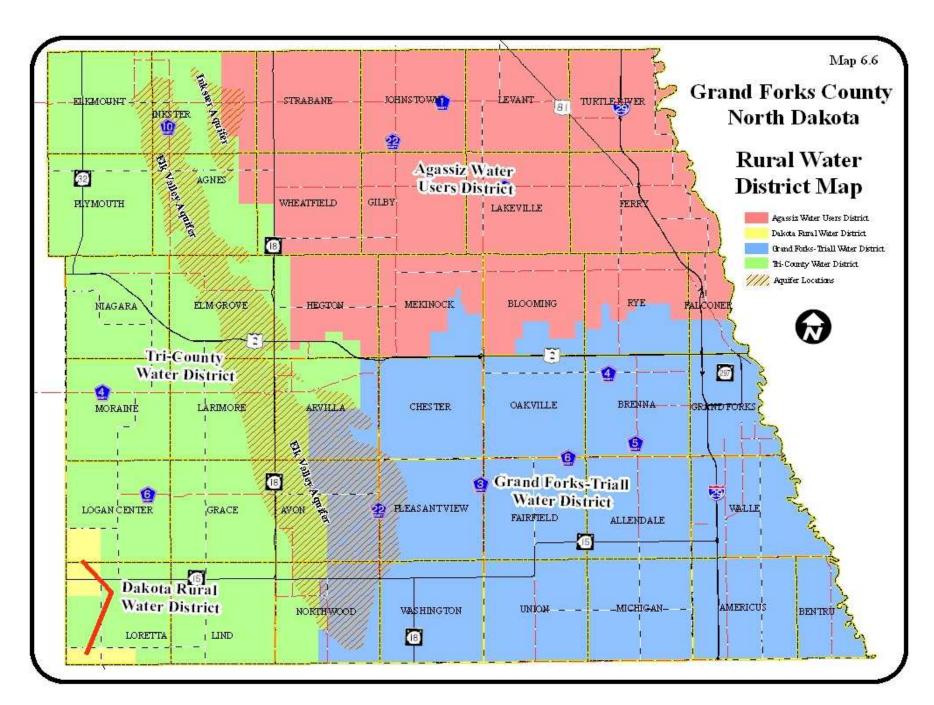
6. WATER SYSTEM

There are three separate rural water providers that serve Grand Forks County. Their Service Areas are shown on Map 6.5. Grand Forks Traill Water Users, Inc. serves the eastern and southwestern portion with approximately 2100 rural members, five (5) communities and the Grand Forks Air Force Base as their customers. Grand Forks Traill rural water utilizes the Elk Valley Aquifer.

Agassiz Water Users Inc. services the northern one third of Grand Forks County. Agassiz taps the smaller Inkster Aquifer.

Tri County Water District supplies rural water to Western portions of the County. Tri County Water also utilizes the Elk Valley Aquifer.

There are also two small areas in the Southwest corner of the County that are served by Dakota Rural Water District, which is headquartered in Finley. The Dakota Rural Water District has no wells in Grand Forks County.



VII. Implementation Program Narrative

Key to success is the decision makers understanding and support for the plan from draft to public hearing. As a consequence of the implementation aspects of the Grand Forks County 2035 Land Use Plan, operational and administrative goals and policies are of a prime concern. All involved need to have a clear understanding of how development and redevelopment in the County will be achieved. To this end, the following text provides statements of the administrative goals and policies.

A. The Grand Forks County Government / Administration Goals and Policies

- 1. Ensure that all developments and/or redevelopments that occur within the jurisdictional areas of the County are in accordance with the Land Use Plan. The Land Use Plan and related Zoning/Subdivision Resolutions shall be periodically reviewed and amended as necessary to reflect changing needs and priorities.
 - a. The Grand Forks County Land Use Plan shall be reviewed at least every ten years to ensure that it is current and reflects the County's interests and changing needs.
 - b. The County Zoning/Subdivision Resolutions will be updated to reflect the needs identified in the Land Use Plan. Development policies shall be reviewed on a periodic basis to ensure the most advanced standards and that full compliance with legislative requirements is maintained.
 - c. Annually monitor land use and development patterns to determine if new growth is fulfilling the County's benchmark objectives pertaining to tax base composition, local tax rates, development quality, and project staging.

2. Operate the County within a fiscally sound philosophy.

- a. Federal, State and Regional programs shall be monitored for assisting the County with implementing the Land Use Plan.
- b. Annually review the County's financial position and debt service to ensure proper fiscal programming and management.
- c. Promote a development review processing procedure that assigns all related project costs to the applicant in a timely manner.
- 3. Allocate administrative and improvement costs to those generating the demand or utilizing the service.

- a. Establish a system in which the County assigns costs for development proposal review and necessary public infrastructure to the benefiting property owner or their agent, rather than the County as a whole bearing the burden through the general fund.
- b. Require land use dedications, easements, and other such requirements at time of subdivision and/or development to insure the physical capability for necessary public/semi-public utilities and improvements.
- c. Require that all analysis and basis for decision-making on development proposals be thoroughly substantiated and documented.
- 4. Maintain a strong level of confidence in the County's Planning Commission and Committees through member selection, continuing education, and open lines of communication with the County Commission.
 - a. Provide continuing education opportunities for planning commission and committee members through seminars and presentations.
 - b. Maintain strong lines of communication between the County Commission and its advisory commissions, committees, and township boards.
- 5. Pursue cooperative intergovernmental arrangements for sharing facilities and services to avoid duplication and provide for the cost-effective delivery of services.
 - a. Promote cooperative arrangements to share facilities and services with the townships, cities, and adjoining counties to avoid duplication and to economize on limited financial resources.
 - b. Promote and maintain open communication between the municipalities, townships, County Commissions, State and Federal Agencies.
- 6. Remain proactive in the pursuits and utilization of new technologies that may contribute to more effective County operation and delivery of services.
 - a. Encourage staff involvement in opportunities such as professional associations where exchange of information about new relevant technologies often occurs.
- 7. Maintain high standards for proactive communication with County residents and businesses on County issues and services.

- a. Maintain good communication with County residents and businesses through direct contact, open meetings, the County's website, outreach programs, and news releases.
- b. Periodically conduct surveys to obtain citizen feedback on development, and other local issues.