

**WARREN
TOWNSHIP**

**CASS COUNTY
NORTH DAKOTA**

2004

COMPREHENSIVE PLAN

ADOPTED 10/29/2004

TABLE OF CONTENTS

CHAPTER	PAGE
Introduction	1
Goals & Objectives.....	1
Population	3
Housing.....	4
Economy	4
Employment	
Township Tax Valuation & Mill Levy	
Income	
Climate.....	5
Natural Resources.....	7
Geology	
Surface Materials & Soils	
Aquifers	
Public Facilities & Services	8
Transportation	
School District	
Fire Protection	
Land Use (existing)	9
Map #1 – Warren Township Ownership/Road System	

INTRODUCTION

Warren Township is located in Cass County. It is situated on the flat lake bottom of ancient Lake Agassiz (see Map #1). As a result of this, the surface soil of Warren Township is entirely rich clay and silt that produces high crop yields.

This plan examines the physical and social characteristics of Warren Township. It presents this information in the form of text, tables, and maps. The plan is designed to help guide responsible land use planning and control. In an effort to keep this document a useful and applied tool, it is being kept to a limited size. Additional information is available through Lake Agassiz Regional Development Corporation in Fargo, North Dakota.

GOALS AND OBJECTIVES

The Warren Township Comprehensive plan is to be used as a guide on which the development policies and regulations will be based. The plan was used to help develop goals, objectives and policies. As conditions change, so should the plan. Being a flexible document, this plan will reflect the changing goals of the citizens of the Township. For clarification, a “goal” is a broad, general concept that the Township wishes to attain in the future. An “objective” is a more specific, measurable step to be taken toward achieving a goal. A “policy” is a general principle that guides the actions taken to meet the goals and objectives.

Four goals have been established. Each addresses a particular subject. They all work together towards providing guidelines to ensure desired land use in the Township. The goals, objectives and policies are:

GOALS

GOAL #1

Preserve the Township’s agricultural heritage.

OBJECTIVES:

- A. Preserve prime farmland in an organized transition by using the land use controls provided in this comprehensive plan and its corresponding zoning ordinance when making all land use decisions.
- B. Support farms by being active in legislation affecting agriculture and industrial usage; send letters from the Township Officers to state and federal officials involved in the decision.

LARDC©

POLICIES:

1. Support agriculture and appropriate farm programs.
2. Support an equitable agricultural land taxation system.
3. Discourage and control residential developments which interfere with farming.
4. Encourage siting public facilities and utility easements in locations which would minimize interference with farming.

GOAL #2

Protect public health, safety and welfare by deterring incompatible land uses from harming conforming land uses.

OBJECTIVES:

- A. Refer to this plan to determine if land use requests are consistent with the natural resources.
- B. Adopt a zoning ordinance consistent with this plan.
- C. Use the zoning ordinance provisions to prevent incompatible land uses.
- D. Acquire soil surveys from the soil conservancy offices.

POLICIES:

1. Discourage nonagricultural development on fertile soils.
2. Prevent undesirable, incompatible land uses from locating in the Township unless they meet appropriate conditions.
3. Make land use decisions in accordance with this plan.
4. Deter offensive and incompatible land uses (such as hog barns) from locating near dwellings and communities.

GOAL #3

Provide an adequate, safe, and efficient system for the transportation of people, goods and services.

OBJECTIVES:

- A. Provide well maintained gravel roads for all mail routes, school bus routes, and other routes deemed "high priority" by the Township's elected officers.
- B. Appoint a "Road Overseer" who periodically inspects and maintains a record of the conditions of all Township roads, bridges and signs.

LARDC©

POLICIES:

1. Discourage developments which would create congestion and/or road hazards, or damage Township roads without compensation.
2. Encourage development to locate in areas served by adequate transportation facilities.
3. Downgrade priority, abandon, or close township roads and bridges when appropriate.
4. Use erosion/sediment control standards in road construction.
5. The "Road Overseer" shall promptly notify appropriate governmental units when their transportation facilities within the Township require repair.

GOAL #4

Ensure and maintain the public participation in land use decisions affecting the Township.

OBJECTIVES:

- A. Maintain dialogue between citizens and elected officials by posting notices and by publishing public notices for all public hearings.
- B. Create public awareness of planning goals and objectives by making this document available to the public upon request, and publishing a statement to that effect.

POLICIES:

1. Give timely notice of all meetings and hearings.
2. Actively solicit public opinion about land use decisions.
3. Consider using citizen input when making public decisions.
4. Inform citizens of decisions and actions taken by officials.
5. Make public documents available for review.
6. Encourage education for officials and general public.

POPULATION

The population of Warren Township is growing. The 2000 population for the Township is 162 (Bureau of the Census, 2000). This has grown from 119 or 36% in the 1990 Census (see Table #1).

LARDC©

TABLE #1

**POPULATION OF WARREN TOWNSHIP
1990-2000**

		numeric	%
2000	162	43	36%
1990	119		

Source: U.S. Census of Population, 1990 – 2000

There are 115 non-farm resident units in Warren Township. About 71 percent of the households living the township are non-farmers (see Table #2).

TABLE #2

**RURAL FARM AND NON-FARM
POPULATION OF WARREN TOWNSHIP**

		Rural Farm	Rural Non-farm
Population	2000	47	115
	1990	19	100

Source: U.S. Census of Population

HOUSING

The housing stock of Warren Township is growing, as Table #3 illustrates.

TABLE #3

**NUMBER OF FAMILIES, HOUSEHOLDS AND HOUSING
UNITS IN WARREN TOWNSHIP, 1990, 2000**

	<u>1990</u>	<u>2000</u>
Total Housing Units	40	57
Rural	5	12
Rural non-farm	35	45

Source: U.S. Census of Population, 1990, 2000

ECONOMY

EMPLOYMENT

Cass County's unemployment rate has remained low for many years. The average 2000 unemployment rate was only 1.7% (see Table #4). Warren Township's major employer is the farming industry and commuters working in Fargo.

**TABLE #4
CASS COUNTY ANNUAL AVERAGE 2002 LABOR FORCE AND EMPLOYMENT**

Labor Force	Employment	Number Unemployment	Percentage
75,620	74,347	1,273	1.7

Source: Job Service North Dakota February, 2002

TOWNSHIP TAX VALUATION AND MILL LEVY

Warren Township total mill tax valuation is \$848,875, and the Warren Township mill levy varies by districts as follows:

**TABLE #5
WARREN TOWNSHIP MILL LEVY**

Mill Levies:			
State and County			81.04
Township/City Fire			18.6
School District	265.14*	254.02**	208.51***
Total Mill Levy:	1)365.81	2)355.52	3)310.11

*1) Mapleton School District

**2) West Fargo

***3) Kindred

INCOME

Per Capita income for Warren Township was \$20,877 in 2000.

**TABLE #6
WARREN TOWNSHIP
ESTIMATED PER CAPITA MONEY INCOME**

	1990 Income	2000 Income
Warren Township	10,227	20,877

Source: Current Population Reports U.S. Bureau of the Census, 2000

CLIMATE

The area has long, cold winters. Temperatures are usually below freezing, with an average of only six days per month having above freezing temperatures during the winter. Due to frequent blasts of cold arctic air, about half of the winter days have temperatures below zero.

Snowfall in the area averages 35 inches annually. However, strong winds frequently cause blizzard conditions even with light snowfalls, especially in open areas. Snow blowing and drifting is common. In an average year, there are 55 days where there is at least one inch of snow on the ground.

The frost-free growing season in the Township generally lasts between 117 and 147 days. The first freeze in the fall usually occurs around the third week of September.

Average monthly temperatures vary from 5.9 degrees in January to 70.7 degrees in July. Recorded temperatures in the county have been as high as 107 degrees and as low as -36 degrees. Monthly temperature data is presented in Table #7.

TABLE #7

AVERAGE MONTHLY TEMPERATURES

<u>Month</u>	<u>Daily High</u>	<u>Daily Low</u>	<u>Monthly Mean</u>
January	15.4	-3.6	5.9
February	20.6	0.8	10.7
March	33.5	14.9	24.2
April	52.6	31.9	42.3
May	66.8	42.3	54.6
June	75.9	53.4	64.7
July	82.8	58.6	70.7
August	81.6	56.8	69.2
September	69.6	46.2	57.9
October	58.4	35.5	47.0
November	37.2	20.0	28.6
December	21.9	4.1	13.0

A summary of the county's climate characteristics is presented in Table #8. It can be seen in this table that the area has a relatively dry, windy climate with widely varying temperatures.

TABLE #8

**CLIMATE CHARACTERISTICS
CASS COUNTY, NORTH DAKOTA**

Yearly Averages	
Rainfall	20 Inches
Snowfall	35 Inches
Wind-speed	12.7 mph
Relative Humidity	71%
Clear Days	87
Partly Sunny Days	112
Cloudy Days	166
Precipitation Days	102
Storm Days	33
Subzero Temperature Days	54
Subfreezing Temperature Days	181
Above 90 Degrees Temperature Days	15
Prevailing Winds: January to May	Northerly
June to December	Southerly

NATURAL RESOURCES

The key physical characteristics of the Township include clay and silt soils, and underlying sand formation, and a shallow aquifer. These natural resources were formed by the geological forces of the past. The geology, surface materials and soils, aquifers, and rivers are discussed below.

GEOLOGY

The regional slope in the township is to the northeast. Ridges and deltas are the principal relief features of the Sheyenne River bed.

SURFACE MATERIALS AND SOILS

The most important characteristic of the township is natural resources in its soils and river basin.

AQUIFERS

There are two types of aquifers in Cass County. Type I aquifers can produce large quantities of water, and probably can produce over a long period of time regardless of climatic conditions. Wells drilled into them reliably produce water. Type II aquifers produce moderate amounts of water, and are sensitive to short-term climatically controlled water-level variations. Water supplies fluctuate due to local variations.

PUBLIC FACILITIES AND SERVICES

TRANSPORTATION

Table #9 shows the mileage of the various types of road systems in the township. These highways are important for the transportation of agricultural equipment, services, and produce. Map #2 illustrates the township road system.

There are about 57 miles of township roads in the Township. Of these, 16 miles are rated by the Township as “high priority.” This means they are well-maintained gravel roads that are cleared soon after snowfalls. They are generally mail and school bus routes. “Low priority” roads are generally dirt roads that are not cleared in the winter.

TABLE #9

WARREN TOWNSHIP ROAD SYSTEM

Road Category		Miles in Township
State		---
County		12
Township	High Priority	16
	Low Priority	41
TOTAL		69

THE PUBLIC SCHOOL DISTRICT

Warren Township is located in the Kindred, West Fargo and Mapleton school districts.

FIRE DISTRICTS AND DEPARTMENTS

Fire districts are taxation districts to raise revenue for fire protection. Every fire district has a fire department, but not every fire department has a fire district. Some fire departments are funded through the general tax funds instead of a special fire district. All fire departments receive some money back from the fire insurance paid by property owners. The state collects the money from the insurance companies and distributes it back down to the local fire departments.

EXISTING LAND USE

The existing land use in Warren Township is agricultural. There are farm and non-farm dwellings in the township and commercial buildings.

TABLE #10

NONAGRICULTURAL LAND USES, WARREN TOWNSHIP, 2003

Type of Land Use	Number in Township
Farm	12
Non-farm Dwellings	45
Public & Semi-Public	--
Transportation, Communication & Utilities	3
Commercial Uses	3

For additional information, contact:

Lake Agassiz Regional Development Corporation
417 Main Avenue
Fargo, ND 58102
(701) 239-5373
Fax (701) 235-6706

ND State Health Department
1200 Missouri Avenue
Bismarck, ND 58505
(701) 221-5210
Fax (701) 221-5200

North Dakota State University
Census Department
(701) 237-7980
Fax (701) 237-7400

Warren Township Supervisor
Mark Brodshaug
4248 168th Ave SE
Fargo, ND 58104
(701) 282-2095
Fax# (701) 282-5645

LARDC©