

VILLAGE OF SISTER BAY

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VILLAGE OF SISTER BAY 20 YEAR COMPREHENSIVE PLAN

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Transmittal Letter (RESERVED)

RESOLUTION NO. _____

ADOPTION OF THE VILLAGE OF SISTER BAY
2020 COMPREHENSIVE PLAN

WHEREAS, Wisconsin Statutes 62.23 authorizes the adoption of a Comprehensive Plan for the general purpose of guiding and accomplishing coordinated, adjusted, and harmonious development of the Village;

AND WHEREAS, the Comprehensive Plan has been prepared by the Bay-Lake Regional Planning Commission which contains proposals, programs, descriptions, maps, and explanatory matter regarding natural resources, population, housing, economic development, transportation, land use, public facilities, outdoor recreation, and general plan design (land use plan) for the year 2020;

AND WHEREAS, the Comprehensive Plan has been prepared in accordance with the elements of a plan as defined in Wisconsin Statutes 66.1001 (Smart Growth);

AND WHEREAS, the Comprehensive Plan has been reviewed and recommended for approval by the Village of Sister Bay Plan Commission;

NOW, THEREFORE BE IT RESOLVED that the Village of Sister Bay Plan Commission hereby recommends to the Sister Bay Village Board that a Comprehensive Plan entitled: *Village of Sister Bay 20-Year Comprehensive Plan*, be adopted by the Village Board pursuant to Wisconsin Statutes Sections 62.23 and 66.1001(4).

Dated this _____ day of _____, 2003.

Resolution introduced and adoption moved by _____.

Motion for adoption seconded by _____.

Voting Aye: _____ Nay: _____

APPROVED:

Denise Bhirdo, Sister Bay Plan Commission Chair

ATTEST:

Ron Kane, Sister Bay Administrator

VILLAGE OF SISTER BAY
ORDINANCE NO. _____

An Ordinance to Adopt a Comprehensive Plan Pursuant to
Wisconsin Statutes Section 66.1001 (Smart Growth)

WHEREAS, on November 27, 2001 the Village Board for the Village of Sister Bay approved a contract with Bay-Lake Regional Planning Commission to prepare a Comprehensive Plan for the Village of Sister Bay under the guidelines of Section 66.1001 Wisconsin Statutes; and,

WHEREAS, the project included a public participation plan in every stage of the process for preparation of a Comprehensive Plan for the Village of Sister Bay, which addressed provisions for wide distribution of the proposed elements of the Comprehensive Plan, and provided an opportunity for written comments to be received from the public and for the Village to respond to such comments; and,

WHEREAS, on _____, 2003, the Village of Sister Bay Plan Commission recommended to the Village Board adoption of the Comprehensive Plan by resolution which passed by a majority vote of the entire membership of the Village Plan Commission, which vote is recorded in the official minutes of the Plan Commission; and,

WHEREAS, the Village of Sister Bay Village Board held a public hearing on _____, 2003, which was preceded by a Class 1 Notice provided as described in Wisconsin Statutes Chapter 985, that was published at least 30 days before the hearing was held, and the notice included all of the following information:

1. The date, time and location of the hearing;
2. A summary of the proposed Comprehensive Plan;
3. The name of the individual employed by the Village of Sister Bay who may provide additional information regarding the proposed ordinance;
4. Information relating to where and when the proposed Comprehensive Plan could be inspected before the hearing, and how a copy of the Plan could be obtained; and,

WHEREAS, the Village Board of the Village of Sister Bay, having carefully reviewed the recommendation of the Village Plan Commission, having determined that all procedural requirements and notice have been satisfied, having given the matter due consideration, including consideration of the Plan components relating to issues and opportunities, agricultural, natural and cultural resources, housing, economic development, transportation, utilities and community facilities, intergovernmental cooperation, land use and implementation, and having determined that the Comprehensive Plan will serve the general purposes of guiding and accomplishing a coordinated, adjusted and harmonious development of the Village of Sister Bay which will, in accordance with existing and future needs, best promote the public health, safety, morals, order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process of development.

NOW, THEREFORE, the Village Board of the Village of Sister Bay, Door County, Wisconsin, DOES ORDAIN AS FOLLOWS:

Section 1: The Comprehensive Plan recommended by the Village of Sister Bay Plan Commission to the Village of Sister Bay Village Board, attached hereto as Exhibit A, is hereby adopted.

Section 2: The Village Clerk is directed to file a copy of the attached Comprehensive Plan for the Village of Sister Bay with all the following entities:

1. Every governmental body that is located in whole or in part within the boundaries of the Village of Sister Bay;
2. The Clerk of every local governmental unit that is adjacent to the Village of Sister Bay;
3. The Wisconsin Land Council;
4. The Bay-Lake Regional Planning Commission;
5. The Coleman Area Public Library.

Section 3: SEVERABILITY Several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall only apply to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms in conflict.

Section 4: EFFECTIVE DATE. This ordinance will take effect immediately upon passage and publication as provided by law

Adopted this ____ day of _____ 2003, by a majority vote of the members of the Village Board of the Village of Sister Bay.

President

Attest: _____
Administrator

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Chapter 1 - ISSUES AND OPPORTUNITIES ELEMENT

INTRODUCTION

This comprehensive plan is an update to the *1995 Village of Sister Bay Comprehensive Plan*. The plan was prepared to meet the requirements of Wisconsin's "Smart Growth" law (1999 Wisconsin Act 9) and adopted under the authority granted by Section 66.1001 of the Wisconsin Statutes, which states in part that, "Beginning on January 1, 2010, any program or action of a local governmental unit that affects land use shall be consistent with that local governmental unit's comprehensive plan."

The comprehensive plan is a policy document that provides a specific guide as to where future conservation, growth and development should occur within the community. The plan should be consulted when the village makes decisions concerning land use and other issues impacting the development of the village including:

- Municipal incorporation procedures under s. 66.012, 66.013 or 66.014.
- Annexation procedures under s. 66.021, 66.024 or 66.025.
- Cooperative boundary agreements entered into under s. 66.023.
- Consolidation of territory under s. 66.02.
- Detachment of territory under s. 66.022.
- Municipal boundary agreements fixed by judgment under s. 66.027.
- Official mapping established or amended under s. 62.23 (6).
- Local subdivision regulation under s. 236.45 or 236.46.
- Extraterritorial plat review within a city's or village's extraterritorial plat approval jurisdiction, as defined in s.236.02(5).
- County zoning ordinances enacted or amended under s. 59.69.
- City or village zoning ordinances enacted or amended under s. 62.23 (7).
- Town zoning ordinances enacted or amended under s. 60.61 or 60.62.
- An improvement of a transportation facility that is undertaken under s. 84.185.
- Agricultural preservation plans prepared or revised under subch. IV of chapter 91.
- Impact fee ordinances that are enacted or amended under s. 66.55.
- Land acquisition for recreational lands and parks under s. 23.09 (20).
- Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351 or 62.231.
- Construction site erosion control and storm water management zoning under s. 59.693, 61.354 or 62.234.
- Any other ordinance, plan or regulation of a local governmental unit that relates to land use.

CONTRACT WITH BAY-LAKE REGIONAL PLANNING COMMISSION

The Sister Bay Village Board entered into a contract (#55091) with the Bay-Lake Regional Planning Commission (BLRPC) to prepare a comprehensive plan in accordance with Wisconsin's Smart Growth law in April 2001. An 18-month time period was initially established for the completion of the plan. The plan was prepared and approved by the Sister Bay Plan Commission, Village Board, and citizens of the Village of Sister Bay.

DESCRIPTION OF THE PLANNING AREA

The village of Sister Bay consists of approximately 1,663 acres (approximately 2.6 square miles) and is located in the northern part of Door County adjacent to the bay of Green Bay. Communities that surround Sister Bay include the town of Liberty Grove and the village of Ephraim.

COMMUNITY COMPREHENSIVE PLANNING PROCESS

The planning process was essentially completed in four stages. *Initially*, on Thursday, June 14, 2001 approximately 45 citizens of the village of Sister Bay, members of the Village Plan Commission and Village Board were involved in a Nominal Group Process in order to produce a list of issues and concerns regarding future development in the village of Sister Bay. The issues identified were used in the development of a community-wide survey and as a checklist to ensure that they were addressed within the plan, and discussed by the Plan Commission during the planning and research phase. The Bay-Lake Regional Planning Commission mailed a community wide survey to residents to identify issues and concerns relative to land use and development within the village.

The *second stage*, inventory and interpretation, began with the collection of data on existing conditions within the community. The data was then analyzed to identify existing and potential problem areas. Using results from the community wide survey, as well as background data compiled during the inventory stage, the Plan Commission developed a goals, objectives, policies and programs for each of the nine elements required in the comprehensive plan.

The *third stage*, was the development of the General Plan Design. The first two stages were combined to create a recommended land use plan to guide future conservation, growth and development within the village over the next twenty years. The preliminary General Plan Design was presented to the citizens of the community for their review and comment. The comments were considered and included in the final General Plan Design map and document.

The *fourth stage*, established the tools necessary for implementation of the plan. Recommendations for regulatory techniques including zoning, and an action plan were established to ensure that the intent of the plan will be achieved.

PLAN CONTENTS

This comprehensive plan contains nine chapters that generally correspond to the nine elements required by Section 66.1001 of the Wisconsin Statutes: **Chapter 1:** Issues and Opportunities Element, contains the background information on the Village and a statement of overall goals objectives and policies of the plan; **Chapter 2:** Agricultural, Natural and Cultural Resources Element, provides a description of the physical setting and cultural resources of the planning area; **Chapter 3:** Housing and Population Element, presents information on the demographics of the village and on future population, housing and economic growth; **Chapter 4:** Transportation, presents an inventory of the existing transportation system and an overview of transportation needs; **Chapter 5:** Utility and Community Facilities, contains an inventory of the village's community facilities, including schools, recreational opportunities and village utilities; **Chapter 6:** Economic Development, contains a development strategy regarding future and existing economic conditions within the village, including an inventory of the labor force and an analysis of the village's economic base; **Chapter 7:** Intergovernmental Cooperation, contains

objectives, goals and policies for joint planning and decision making with other jurisdictions, including school districts and adjacent local governmental units; **Chapter 8:** Land Use, contains a land use inventory for the village, a projection of future land use demands, and the General Plan Design for the village; **Chapter 9:** Implementation Element, contains a strategy and short-term action plan to ensure implementation efforts move quickly.

SURVEY RESULTS

The village of Sister Bay conducted a community wide survey in August and September 2001. A total of 1,175 surveys were distributed to both seasonal and permanent property owners of the village on August 24, 2001 with an initial return date of September 7. The return date was subsequently extended to September 21 due to the large number of property owners living outside the county and state. In all, 458 surveys were filled out and returned. In 137 surveys (30 percent), two people filled out the survey utilizing the additional spaces provided for a total of 595 responses in all. The village had a very good response rate with 39 percent of the property owners sending back a survey. The results of the survey are included in Appendix A.

PUBLIC PARTICIPATION

A major element of the comprehensive planning process is public participation. Wisconsin's Smart Growth law establishes adoption requirements that establish a base level of public participation. At the beginning of the comprehensive planning process, the Plan Commission expanded on these adoption requirements and made additional recommendations to the Village Board that were adopted as "Written Procedures to Foster Public Participation" throughout the comprehensive planning process. A copy the written procedures have been included in Appendix B.

On Thursday, June 14, 2001 approximately 45 citizens of the village of Sister Bay, members of the Village Plan Commission and Village Board were involved in a Nominal Group Process in order to produce a list of issues and concerns regarding future development in the village of Sister Bay.

The list is important to the planning process as it has been used in formulating goals and objectives for the Village of Sister Bay Comprehensive Plan Update. In addition, the issues identified have been used as a checklist to ensure that they are addressed within the plan, and discussed by the Plan Commission during the planning and research phase. An explanation of the Nominal Group Process and results of the Nominal Group workshop are included in Appendix C.

VISION STATEMENT

The Village Plan Commission conducted a visioning exercise in November 2001 to help define a vision for this plan. The initial exercise identified the aspects of the vision that were important to the Village. The Plan Commission then reviewed and edited the vision statement to come up with the following:

The village of Sister Bay is a friendly, thriving community where residents and visitors alike enjoy the natural beauty of its surroundings enhanced by well-maintained parks and the natural environment. The unique charm of the village's waterfront, library and businesses are enjoyed and utilized by all. As Northern Door's year-round village, the village balances the needs of a

growing retirement community, while attracting and supporting its younger population with a viable economy. The village has carefully controlled growth to maintain its unique charm and natural beauty.

GOALS, OBJECTIVES, POLICIES AND PROGRAMS

The following statements describe the village's intent regarding the overall growth and development over the next 20 years.

Goals, objectives, policies and programs each have a distinct and different purpose within the planning process:

- **Goals** describe desired situations toward which planning efforts should be directed. They are broad and long range. They represent an end to be sought, although they may never actually be fully attained.
- **Objectives** are measurable ends toward reaching a defined goal.
- **Policies** are a rule or course of action used to ensure plan implementation.
- **Programs** are a coordinated series of policies and actions to carry out the plan.

Comprehensive Plan

Goal:

The goal of the village will be consistency with that described in s.66.1001 of the Wisconsin State Statutes in order to best protect the interests of all of its residents as well as to develop the village in an orderly, cost efficient method.

Objectives:

1. Adopt and maintain a Comprehensive Plan under s66.1001, that reflects the needs of all current and future citizens of the village of Sister Bay for 20 years.
2. Keep the comprehensive plan current in order to provide for the greatest possible benefits regarding the future development of residential, commercial, industrial, and parkland expansion and development.
3. Update the village's zoning map to reflect current uses within the village and to reflect the village's future plan design.
4. Develop and utilize an Official Map ordinance to designate future road rights-of-way and parklands/trailways the village intends to develop.

Policies:

1. Consult this plan before making any decision regarding land use and land use policies by the Plan Commission, Village Board and other units of government.
2. Review existing village ordinances as they relate to the implementation of this plan.
3. Present the adopted plan to neighboring municipalities and Door County as described within the Implementation section of the plan.

4. Encourage cooperation and communication between the village, neighboring municipalities, and county government in implementing this plan.

Suggested Programs:

1. Hold Plan Commission meetings to periodically review the adopted comprehensive plan and make amendments to accommodate changing conditions following the guidance of s 66.1001.
2. Hold community planning related education efforts/meetings with local schools, the media, and private organizations to publicize on-going planning projects and plan implementation projects identified within the comprehensive plan to gain new insight, provide for new ideas, promote support, and to educate the public.

SUMMARY OF PLAN GOALS

The following is a list of the overall goal for each element of the comprehensive plan. A detailed list of the goals, objectives, policies and programs for each elements is included in each chapter.

Natural Resources

Goal:

To provide a safe, clean and orderly natural environment for the residents of the village of Sister Bay.

Objectives:

1. Reduce the excessive sprawl of development and segregation of land uses that results in the inefficient use of land, excessive infrastructure, construction and maintenance costs, and increased negative impacts on air and water quality.
2. Plan development adjacent to the lake, streams and wetlands carefully. The burden of proof shall be on the developer. The developer needs to prove that a negative result on the adjoining lake, streams, or wetlands will not take place. If this cannot be determined than the development shall not occur.
3. Preserve the natural beauty created by views of the lake, trees, bluffs, parks and vistas.

Agricultural and Open Space Development/Preservation

Goal:

To provide an aesthetically pleasing, relaxing, community character in the village.

Objectives:

1. Preserve and create environmental corridors which screen developed areas and provide for the integration of natural habitat into the village.
2. Set aside open space in the village to be maintained for the preservation of natural vistas.

3. Retain agricultural and open lands in the village as key components of the community and aesthetic character of the village.
4. Prevent the premature development of fringe lands in the village which could be incompatible with the long term best use of the land.
5. Identify potential long term uses for agricultural tracts to guide planning and design of development, and to give guidance to property owners as to possible future use of neighboring tracts.
6. Prevent the spread of development along Highway 57 prior to complete use of available highway frontage in other sections of the village.
7. Identify areas recommended for future development on the General Plan Design.

Parks and Recreational Lands

Goal:

To ensure residents have safe recreational sites within the village that provide a number of activities.

Objectives:

1. Increase the number of good, well maintained recreational sites and trails within the village, to include access to the waters of Green Bay.
2. Acquire, develop and maintain future recreational sites within the village.

Metallic and Non Metallic Resources

Goal:

To ensure that future mining sites will not negatively impact the village or its residents.

Objectives:

1. Prevent harm to views, the natural environment and aesthetics caused by mining operations.

Historic, Archeological and Cultural Sites

Goal:

To preserve the village's historic, archeological and cultural locations and structures for residents and visitors.

Objectives:

1. Preserve the village's historic, archeological and cultural locations and structures.
2. Identify these resources to the village residents for their information and possible use.
3. Maintain and update the village's information on all such locations.
4. Tie these locations to recreational sites to further enhance them and their access, when appropriate.

Housing

Goal:

To provide for a variety of quality housing opportunities for all segments of the village's current and future population in such a way that will minimize the adverse impacts on the environment and preserve the village's rural character.

Objectives

1. To develop and enforce policies and programs to assist citizens to obtain adequate housing.
2. Encourage new housing development in areas that will preserve the character of the village.
3. Discourage the development of housing in areas designated as environmental corridors.
4. To develop and enforce policies and programs to assist citizens in obtaining affordable quality housing.
5. Encourage new housing development in areas where it is needed and can be done in an environmentally and cost effective way.

Transportation

Goal:

To establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the village's adopted Year 2020 Comprehensive Plan.

Objectives:

1. Develop a transportation system that provides for all transportation modes, and is harmonious with surrounding land uses.
2. Assure that safety issues are addressed for all transportation modes.
3. Provide for adequate traffic controls and convenient efficient vehicular movement near all businesses located along the STH 42 and STH 57 corridors.
4. Provide a safe system of bicycle, walking and motorized recreational vehicle paths and trails.
5. Plan for and designate future road rights-of-way within the village.
6. Provide for and maintain safe, convenient launch and mooring of boats to access the major business district.

Public Facilities

Goals:

To balance the need for Village growth with the cost of providing public and private utilities and community facilities

To preserve clean water, establish programs to monitor on-site treatment systems, and plan for cost-effective treatment of waste as growth occurs

Objectives:

1. Provide for the orderly and economical development of safe water systems
2. Provide for the orderly development of sanitary sewers
3. Provide adequate power facilities to allow for the controlled growth of Sister Bay and promote alternative energy sources
4. Establish a waste disposal plan for future growth which will be cost effective, efficient and non-damaging to the environment
5. Provide future growth and back up for future growth, especially telecommunication, i.e. 911

Administrative Facilities

Goal:

To continue to supply an accessible and adequate village facility that will meet the needs of a growing community

Objective:

1. Create a village facility to better accommodate administrative functions

Recreational Facilities

Goal:

To supply and maintain a park, recreational and open space system which provides a variety of safe, passive and active opportunities for residents and visitors

Objectives:

1. Purchase properties adjacent to parks, water access points and scenic vistas when they become available as long as these expansions fit the long term growth plan and can be properly maintained
2. Professionally evaluate all parks, water access points and scenic vistas to determine the best safe and proper use and development
3. Preserve, protect and enhance all of Sister Bay's waterfront areas

Protective Services

Goal:

To provide adequate police and fire protection and work with the County to provide emergency medical services for all citizens of and visitors to the village of Sister Bay

Objectives:

1. Improve fire protection by increasing the amount of water available to fight fires

2. Keep stable or increase the size of the fire fighting crews
3. Improve fire station facilities and equipment
4. Encourage use of local health care facilities and services
5. Establish low cost transportation for citizens so that more use can be made of the local health care services

Economics

Goal:

To provide for development in the village of Sister Bay by seeking balanced economic growth in business, while providing jobs for residents, increasing personal income and protecting and enhancing the village's environmental assets.

Objective:

1. Specify locations for future business development in the Land Use chapter which will enhance and promote the character of the village of Sister Bay.

Intergovernmental Cooperation

Goal:

To promote cooperation between the village of Sister Bay and other units of government and governmental agencies that make decisions impacting the village.

Objectives:

1. Coordinate and share community facilities and services whenever possible.
2. Coordinate with adjacent communities on future planning projects to enhance and maintain the character of the surrounding area.

General Plan Design

Goal:

To promote future development that will meet the needs of the village while protecting and enhancing its visual character, promoting environmental protection, conserving natural resources, meeting the needs of social and economic forces, providing for adequate services and facilities, and ensuring compatibility of future land uses.

Objective:

1. Ensure that all growth and development occurs in a planned and coordinated manner that will maintain or improve the quality of life associated with the character of the village for both existing and future residents.

BACKGROUND INFORMATION SUMMARY

The following summary includes information regarding population and employment forecasts, as well as demographic trends, age distribution, education levels, income levels and employment characteristics that exist within the village.

Existing Conditions

Demographic Trends

Table 1.1 displays the historic population trends for the villages of Sister Bay and Ephraim, the town of Liberty Grove, and Door County. The village of Sister Bay has grown steadily in population since 1920. In 1920, the village of Sister Bay had a population of 190 persons, in 2000 the population was 886. The village's population dipped slightly in 1970, but then continued to climb. The village's population growth has been more consistent than its neighbors in the village of Ephraim and the town of Liberty Grove which have both seen increased population, just not at the same level.

Table 1.1: Population Trends, 1920-2000, Village of Sister Bay & Selected Areas

Year	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	No.	Percent Change	No.	Percent Change	No.	Percent Change	No.	Percent Change
1920	190	NA	NA	NA	1,410	NA	19,073	NA
1930	238	25.3%	191	NA	1,275	-9.6%	18,182	-4.7%
1940	309	29.8%	254	33.0%	1,358	6.5%	19,095	5.0%
1950	429	38.8%	244	-3.9%	1,332	-1.9%	20,870	9.3%
1960	520	21.2%	221	-9.4%	1,190	-10.7%	20,685	-0.9%
1970	483	-7.1%	236	6.8%	1,174	-1.3%	20,106	-2.8%
1980	564	16.8%	319	35.2%	1,313	11.8%	25,029	24.5%
1990	675	19.7%	261	-18.2%	1,506	14.7%	25,690	2.6%
2000	886	31.3%	353	35.2%	1,858	23.4%	27,961	8.8%

Source: Population Characteristics of the Bay-Lake Region, Bay-Lake Regional Planning Commission, August, 1993; General Population Characteristics 1840-1970, Bay-Lake Regional Planning Commission, December, 1975 and 2002.

Age Distribution

In 2000, approximately 42.4 percent of the village of Sister Bay's population was male while 57.6 percent were female (see Table 1.2). Some notable features to Sister Bay's population include lower percentages of school age children and a much higher percentage of retirement age persons when compared to the county and the state.

Table 1.2: Age Groups, 2000, Village of Sister Bay & Selected Areas

Age Groups	Village of Sister Bay				Door County Percent	Wisconsin Percent of Total
	Total	Male	Female	Percent		
School Age						
5-11	34	24	10	3.8	8.9	10.1
12-14	15	8	7	1.7	4.2	4.5
15-17	30	15	15	3.4	4.4	4.5
Working and Voting Age						
16+	806	331	475	91.0	80.8	77.5
16-64	397	196	201	44.8	62.1	64.4
18+	789	322	467	89.1	77.9	74.5
18-64	380	187	193	42.9	59.2	61.4
Retirement Age						
65+	409	135	274	46.2	18.7	13.1
Total Population	886	376	510			

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing SF-1; Bay-Lake Regional Planning Commission, 2002.

Education Levels

The level of education that is attained by the population of a community will often be an indicator of the type of jobs in the area and the standard of living. In 2000, the greatest percentage of persons age 25 and over in Sister Bay had achieved Some College, no degree educational level (see Table 1.3); however, the percentage of people with some college or a college degree represented nearly 48 percent of the population.

Table 1.3: Educational Attainment for Persons 25 Years and Over, 2000, Village of Sister Bay & Selected Areas, by Percent

Level of Attainment	Village of Sister Bay	Village of Ephraim	Town of Liberty Grove	Door County	State of Wisconsin
Less than 9th Grade	6.3	1.1	5.3	10.2	9.5
9th to 12th Grade, No Diploma	14.5	2.3	9.8	10.2	11.9
High School Diploma or Eq.	30.2	17.2	36.6	40.4	37.1
Some College, no Degree	24.0	31.0	19.4	16.7	16.7
Associate Degree	4.1	0.8	4.0	6.1	7.1
Bachelor Degree	17.9	29.5	15.9	12.0	12.1
Graduate or Professional Degree	3.0	18.0	8.9	4.4	5.6
Total Persons 25 Years and Over	100.0	100.0	100.0	100.0	100.0

Source: Wisconsin Department of Administration, Demographic Services, June 1992; and Bay-Lake Regional Planning Commission, 2002.

Income Levels

In 1989, the median household income in the village of Sister Bay was \$20,083. In 1999, this had increased to \$33,224 a 65.4 percent increase from 1989. This level was lower than all other compared areas.

Table 1.4: Median Household Income, Sister Bay and Selected Areas

Area	1989	1999
Sister Bay	\$20,083	\$33,224
Ephraim	\$27,500	\$52,500
Liberty Grove	\$26,957	\$43,472
Door County	\$26,259	\$38,812
State of Wisconsin	\$29,442	\$43,791

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing SF-3; Bay-Lake Regional Planning Commission, 2002.

Employment Characteristics

In 1990, the civilian labor force for Sister Bay was 457, with a unemployment rate of 6.7 percent. In 2000, the estimated labor force was 568 with an unemployment rate in the county of 4.6 percent. For Door County and the state the unemployment rate has been steadily declining while the total number of people in the workforce has been increasing (see Table 1.5). However, in the past year the state and the county experienced a decline in the total workforce.

Table 1.5: Civilian Labor Force, 1990-2000, Door County & State

	1990	1998	1999	Percent Change	
				2000	1990-2000
WISCONSIN					
CIVILIAN L.F.	2,581,079	2,951,967	2,889,812	2,934,931	13.7%
UNEMPLOYED	114,483	99,411	88,035	103,769	-9.4%
% CIV. L.F.	4.4	3.4	3.0	3.5	-20.5%
EMPLOYED	2,466,597	2,852,556	2,801,777	2,831,162	14.8%
DOOR COUNTY					
CIVILIAN L.F.	14,742	15,661	15,224	15,390	4.4%
UNEMPLOYED	995	821	661	704	-29.2%
% CIV. L.F.	6.7	5.2	4.3	4.6	-31.3%
EMPLOYED	13,747	14,840	14,563	14,686	6.8%

Source: Wisconsin Department of Industry, Labor and Human Relations, Civilian Labor Force Estimates, for years cited; and Bay-Lake Regional Planning Commission, 2000.

In 2000, the majority of people in the workforce in Sister Bay were employed by the arts, entertainment, recreation, accommodation and food service industry (see Table 1.6). The retail trade industry was the second highest employer for Sister Bay at 22.6 percent of total employment for 2000. This trend was consistent with the town of Liberty Grove and village of Ephraim, but substantially different than Door County where the manufacturing industry was the major industry group at 18.8 percent.

Table 1.6: Employment, 2000, Village of Sister Bay & Selected Areas

Industry	Sister Bay		Ephraim		Liberty Grove		Door County	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Agriculture, forestry, fishing and hunting, and mining	2	0.6	0	0.0	32	3.8	625	4.5
Construction	27	8.6	8	5.2	125	14.7	1,392	10.0
Manufacturing	18	5.7	5	3.2	35	4.1	2,607	18.8
Wholesale trade	2	0.6	0	0.0	9	1.1	200	1.4
Retail trade	71	22.6	31	20.1	132	15.5	1,881	13.5
Transportation and warehousing, and utilities	3	1.0	2	1.3	12	1.4	388	2.8
Information	0	0.0	0	0.0	10	1.2	198	1.4
Finance, insurance, real estate, and rental and leasing	24	7.6	8	5.2	71	8.3	717	5.2
Professional, scientific, mngmnt, admin, and waste mngmnt serv	8	2.5	20	13.0	64	7.5	865	6.2
Educational, health and social services	23	7.3	20	13.0	115	13.5	2,096	15.1
Arts, entertainment, recreation, accommodation and food serv	112	35.7	53	34.4	194	22.8	1,919	13.8
Other services (except public administration)	14	4.5	2	1.3	36	4.2	572	4.1
Public administration	10	3.2	5	3.2	16	1.9	441	3.2
Total	314	100.0	154	100.0	851	100.0	13,901	100.0

Source: 2000 Census of Population and Housing SF3, General Profiles; and Bay-Lake Regional Planning Commission, 2002

FORECASTS

Population

An area's future population provides an important basis for planning and public policy making. Population projections are an important factor necessary to assess the area's future need for housing, community facilities, transportation, and other population-related facilities. They can also be used to forecast the area's future expenditures, revenues, and tax receipts. Given the discrepancy between the Wisconsin Department of Administration (WDOA) population projections, the 2000 census count, and the fact that the WDOA projections do not go beyond the year 2015 to include the 2020 planning period, the Commission has prepared alternative population projections to determine an approximate growth rate for the village of Sister Bay.

Projections were found by using a ratio methodology, termed share-of-the-county, to distribute county projections to the village level. The limitations of population projections should be recognized. Population projections are not predictions, rather they extend past growth trends into the future and their reliability depends on the continuation of these past growth trends. Smaller communities are also subject to more error because even minor changes in the community can result in significant changes in population projection estimates.

A "Low Growth" projection was created from the share-of-the-county methodology. According to Commission projections, the projected 2005 population for Sister Bay will be 973 persons. The projected 2010 population is 1,024 persons, the projected year 2015 population is 1,069, and the 2020 projected population is 1,100 persons. The projected 2020 population is a 24.1 percent increase from the actual 2000 population. It should be noted that small changes in the community or the region in the future may cause significant changes to these projections.

A "High Growth" projection was developed by using the 1970, 1980, 1990 and 2000 Census figures and creating a growth trend series to the year 2020. This method identified a projected year 2005 population of 967 persons, a projected year 2010 population of 1,047 persons, a estimated 2015 population of 1,163, and a projected year 2020 population of 1,279. According to this "High Growth" projection, the village of Sister Bay's 2000 population will increase by 44.4 percent by the year 2020.

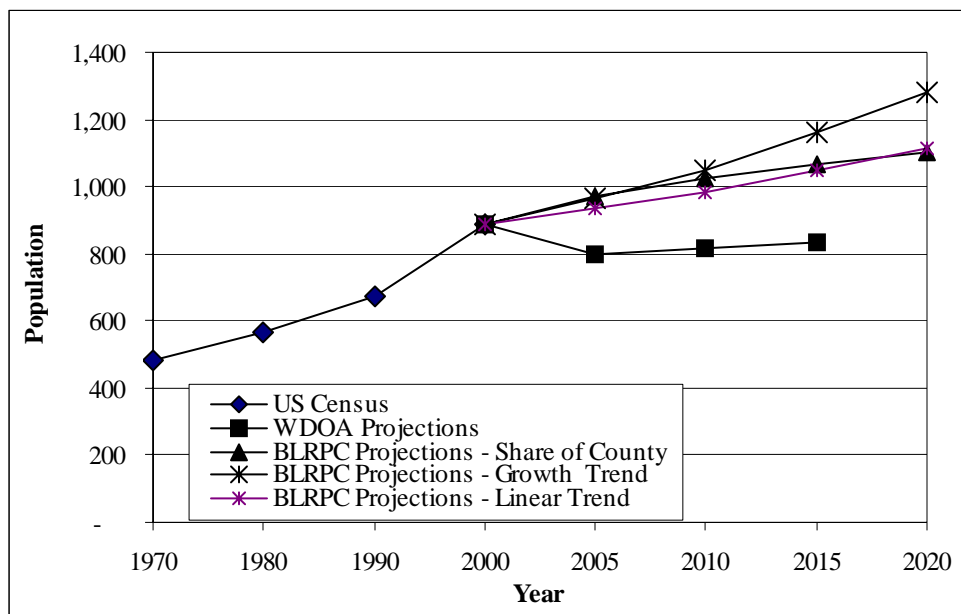
Table 1.7 and Figure 1.1 display the actual U.S. Census counts, WDOA projections, the “High Growth” growth series based off the Census counts, and the “Low Growth” BLRPC projections.

Table 1.7: Revised Population Projections, Village of Sister Bay, 2005-2020

	Year							
	1970	1980	1990	2000	2005	2010	2015	2020
US Census	483	564	675	886				
WDOA Projections				886	796	817	836	
BLRPC Projections - Share of County				886	973	1,024	1,069	1,100
BLRPC Projections - Growth Trend				886	967	1,047	1,163	1,279
BLRPC Projections - Linear Trend				886	934	982	1,048	1,114

Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2002.

Figure 1.1: Population Trends and Projections, 1970-2020



Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2002.

Housing

In formulating a “best guess” for the future residential needs of the community, two methods were looked at in order to determine the most likely population projection to 2020. The following are the methods looked at.

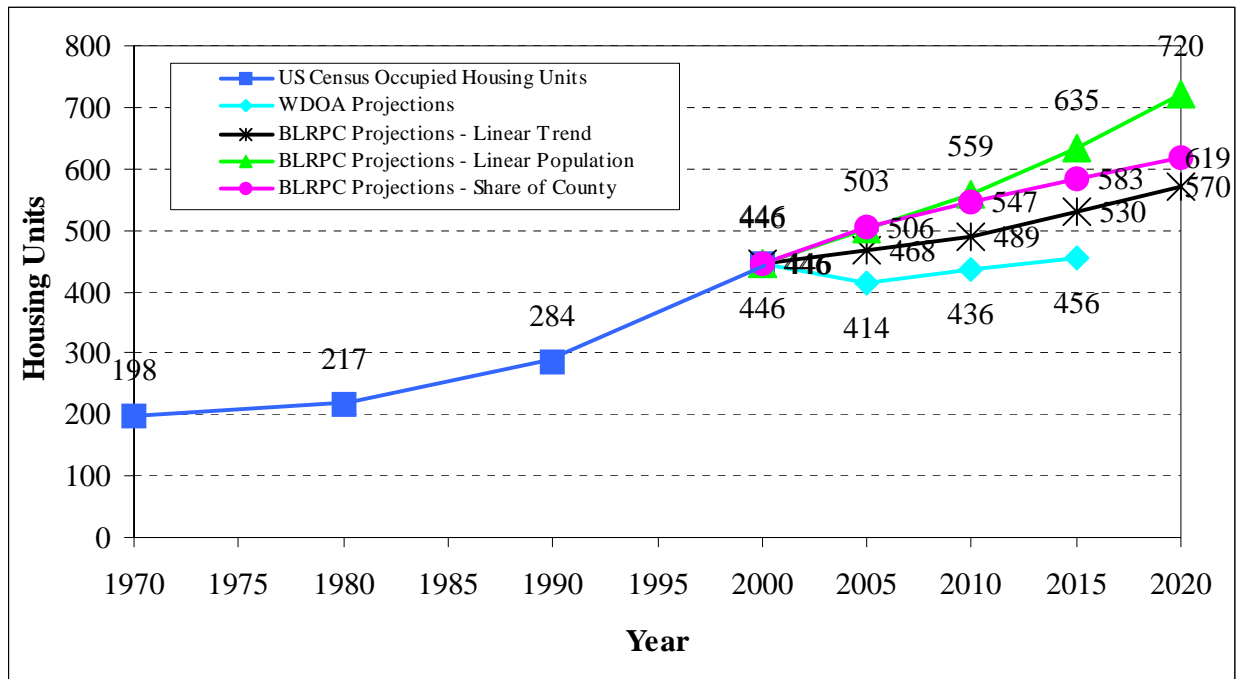
Method One:

Using the Census housing counts of occupied (non-seasonal) housing units from 1970 to 2000, a linear trend was created to the year 2020. This housing unit projection indicates that by 2020 the village of Sister Bay could have 570 occupied housing units or an increase of 124 occupied housing units (Figure 3.4). This represents an increase of 263 total housing units (1,208 total housing units) when adjusted for seasonal housing.

Method Two:

By using the High and Low population projections to 2020 and the projected Persons Per Household number to 2020, one can predict another range in the number of new occupied housing units needed by 2020. The High population projection predicts a population increase of 393 persons through 2020 (Table 1.7 and Figure 1.1). Using a persons per household projection of 1.6, this is equivalent to a new housing demand of 254 occupied (non-seasonal) units. The Low population projection indicates an increase of 214 people needing an additional 173 housing units for the permanent residents (Figure 1.2).

Figure 1.2: Projected Occupied Housing Units, Village of Sister Bay, 2000-2020



Source: Wisconsin Department of Administration, Wisconsin Household Projections, December 1993; and Bay-Lake Regional Planning Commission, 2001.

Employment

In 1996, the Wisconsin Department of Workforce Development created projections for industries, occupations, and the labor force called the *Northeast Wisconsin Projections: 1992-2005*. These projections are for all of Northeast Wisconsin, including Door County. The study concluded that overall employment is expected to increase by more than 20 percent in the region. Unemployment rates will remain low through 2005, and labor shortages may be common in some occupations.

In 2005, the manufacturing industry is projected to continue to be the industry with the largest share of employment. However, although manufacturing jobs will continue to increase, the rate of increase will slow down. Occupations in manufacturing are expected to move away from general labor positions to more semi-skilled and skilled operator and technician jobs. This is due primarily to production processes that are more efficient and new available technology.

Service industry employers will add approximately 18,400 jobs to the region’s labor market by 2005. The largest divisions within this industry group will be business and health services with a

similar growth in professional or technical jobs. With the aging of the population, the demand for such services will continue to increase. The overall health of the Northeast Wisconsin economy is projected to be strong with no major projected decreases in any occupation or industry.

Annual earnings in Door County are typically less than they are for similar jobs in other parts of Wisconsin. In addition, the seasonality of many Door County industries, especially tourism, means annual incomes often have to be earned in six months or less. Consequently, hourly wages that are above average still produce a below average annual earned income. In order for Door County businesses to compete globally, they may not have the option to simply raise wage rates without becoming price-uncompetitive.

Door County is experiencing an atypical relationship between wage rates and housing costs. Often areas that have low wage rates will have low housing costs. Unfortunately that is not the case in Door County, which has lower than average wages and higher than average housing costs. The housing issue is closely linked to the labor shortage problem because if new employees are indeed attracted to the area, they will be unable to afford housing.

Chapter 2 - AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

INTRODUCTION

The village of Sister Bay is located near the northern end of the Door County Peninsula at the intersections of State Highways 42 and 57. These highways provide access to the village of Sister Bay from the city of Sturgeon Bay which is located approximately twenty-seven miles south (Map 2.1 & Map 2.2).

Historically, the village has derived much of its revenue from fishing and tourism. Presently, the village serves as an important recreational and residential center for northern Door County.

The Sister Bay planning area, delineated on Map 2.2, contains a variety of natural resources. The natural resource base of the planning area is the primary determinant of its development potential and ability to provide a pleasant and habitable environment. The principal elements of the natural resource base are climate, topography, geology, soils, and natural areas, including woodlands, wetlands, and water resources. Knowledge and recognition of these elements and their interrelationships is essential so that human use and alteration of the natural environment does not advance at the risk of excessive costs in terms of major public expenditures and the destruction of nonrenewable or slowly renewable resources.

Statement of Purpose

This section is intended to provide an inventory of the agricultural, natural, and cultural resource features which may affect development within the village and surrounding planning area. An understanding of these features is needed before decisions about future development can be made by the village.

Natural Resources Strategy

The following Goals, Objectives, Policies, and Suggested Programs will help guide the village in protecting and utilizing the natural resources within the village. The following statements are a compilation of broad and specific statements reflecting many popular attitudes and beliefs of village residents, communities adjacent to the village, and state agencies. The following statements are not in conflict with approved plans within the adjoining communities or Door County.

Map 2.1: Location Map

Map 2.2: Planning Area



Map 2.3: Village Map

Natural Resources

Goal:

To provide a safe, clean and orderly natural environment for the residents of the village of Sister Bay.

Objectives:

1. Control the sprawl of development and segregation of land uses that results in the inefficient use of land, excessive infrastructure, construction and maintenance costs, and increased negative impacts on air and water quality.
2. Plan development adjacent to the lake, streams and wetlands carefully. The burden of proof shall be on the developer. The developer needs to prove that a negative result on the adjoining lake, streams, or wetlands will not take place. If this cannot be determined than the development shall not occur.
3. Preserve the natural beauty created by views of the lake, trees, bluffs and vistas.
4. Preserve a clean pure groundwater supply through limitation of the number of in ground septic systems through appropriate zoning ordinances.

Policies:

1. Explore the use of an overlay district that would identify key natural resources and viewsheds the village wants to protect. Consider a set of standards to apply within the district.
2. Explore the use of an overlay district with setbacks for lakes, streams, and wetlands requiring additional care and proof that development will not have a negative effect on these resources.

Suggested Programs:

1. Establish a sub-committee that would work with the adjacent villages to further explore ways to best utilize or preserve natural features within the village.
2. Coordinate the village's efforts with adjoining municipalities and state agencies.

Agricultural and Open Space Development/Preservation

Goal:

To provide an aesthetically pleasing, relaxing, rural atmosphere in the village.

Objectives:

1. Preserve and create environmental corridors which screen developed areas and provide for the integration of natural habitat into the village.
2. Set aside open space in the village to be maintained for the preservation of natural vistas.

3. Prevent the spread of development along Highway 57 prior to complete use of available highway frontage in other sections of the village.
4. Explore the option of establishing a buffer strip between businesses and adjacent housing developments to minimize conflicts and to create natural sight shields from construction, lights and noise that compromise aesthetic goals.

Parks and Recreational Lands

Goal:

To ensure residents have safe recreational sites within the village that provide a variety of activities to serve various age and interest groups in the community.

Objectives:

1. Increase the number of good, well maintained recreational sites and trails within the village, to include access to the waters of Green Bay.
2. Acquire, develop and maintain future recreational sites within the village to include a sports complex.
3. Utilize identified environmental corridors for public parks and recreational use.

Policies:

1. The village should actively pursue the development of future recreational lands within the village.
2. Connect recreational areas with a trail system wherever possible.
3. Use the village's official mapping powers to preserve areas designated for future park and recreational uses.
4. Consider access for the disabled, elderly and very young when planning, designing, and constructing all new recreation projects, including parking, trails, etc.
5. Expand and enhance the public waterfront from Mill Road to the marina.

Suggested Programs:

1. Establish a sub-committee to identify future recreational areas.
2. Work with adjoining communities to design interconnecting trailways.
3. Explore available resources to further enhance the quality of the village's recreational systems.
4. Recognize the potential of public and private donations for funding park system improvements.

Metallic and Non Metallic Resources

Goal:

To ensure that future mining sites will not negatively impact the village or its residents.

Objectives:

1. Do not harm views, the natural environment and aesthetics through mining operations.

Policies:

1. The village will steer incompatible uses away from identified mining sites.

Suggested Programs:

1. The village will inform residents of any future mining sites.
2. The village will work with the county and land owners to ensure that incompatible uses do not develop adjacent to one another or in a location that will allow or foster conflict.

Historic, Archeological and Cultural Sites

Goal:

To preserve the village's historic, archeological and cultural locations and structures for residents and visitors.

Objectives:

1. Identify these resources to the village residents for their information and possible use.
2. Maintain and update the village's information on all such locations.

Policies:

1. The village will work to preserve these sites and structures.
2. The village will support tying these resources into recreational sites and trails.
3. The village will discourage the destruction of these sites and will not allow incompatible uses around them that would have negative impacts on the resource.

Suggested Programs:

1. The village will work with state, federal and county agencies to ensure such sites and structures are identified and properly protected.
2. A sub-committee will be formed that will identify sites within the village planning area.
3. The Sub-committee will explore the integration of these sites into any future trails or recreation sites.

CLIMATE

The climate of the village of Sister Bay and the surrounding town of Liberty Grove is modified by Green Bay and Lake Michigan. The cool waters of the lake and bay delay spring, while relatively warm water in fall retards early frost. Summers, on the average, are mild due to the community's proximity to water which moderates daily extremes.

The annual average temperature for Sister Bay is 42.5 degrees Fahrenheit. January has the lowest average monthly temperature of 16.5 degrees, while July has the highest average temperature of 65.7 degrees. Frost generally leaves by mid-May and reoccurs during the first week of October. The resultant growing season is about 135 days.

Ice forms on Green Bay in late December and generally covers the bay by mid-January. During mild winters, the bay may not freeze completely. Ice breakup usually occurs in early April.

The average annual heating degrees for the area, is 8,427 with July having the lowest average number of heating degree days at 47, while January has the highest with 1,502. A heating degree day is equal to the difference between the mean daily temperature and 65 degrees Fahrenheit. If the mean daily temperature is greater than 65 degrees, the number of heating degree days is considered to be zero.

The normal annual total precipitation is 28.92 inches. The lowest monthly average of 0.97 inches occurs in February, while the highest of 3.60 inches occurs in June. More than one-half the average annual precipitation falls between May and September. The first half of June and middle of August are likely to receive the heaviest summer rains. The end of August is normally the driest summer period.

GEOLOGY

Geology is divided into two categories, glacial or Pleistocene geology, and bedrock geology. Glacial geology plainly stated is the reminiscence of what the glaciers left behind. Bedrock geology is the material beneath the glacial geology.

Bedrock Geology

The bedrock units which underlie the Sister Bay planning area range in age from Precambrian to Silurian. The oldest are impermeable crystalline rock of Precambrian age at depths that average more than 1,500 feet below the land surface. These are overlain by consolidated sedimentary rocks of Cambrian, Ordovician, and Silurian ages. The sedimentary rocks are solidified marine sediments that dip to the southeast at approximately 45 feet per mile. The rock formations deepen toward the southeast.

Silurian dolomite, which is the uppermost bedrock, is exposed in outcroppings throughout the planning area but primarily along the bluffs near the waters of Green Bay. This dolomite reaches in thickness up to 580 feet. Below the dolomite, often referred to as Niagara, is a shale formation known as Maquoketa. It reaches a maximum thickness of 450 feet. The Maquoketa Shale overlies a dolomite formation, termed Platteville-Galena, which is approximately 500 feet in thickness. This rock formation, in turn, overlies Cambrian sandstones which are 450 feet thick. All of these formations overlie Precambrian igneous rocks that form the bottom, bedrock unit.

The Silurian or "Niagara" dolomite is perhaps the most notable and influential bedrock unit within the planning area. It composes the landform known as the "Niagara Escarpment". The Niagara Escarpment is a cuesta which is a gently sloping plain that is terminated on one side by a

steep slope (Map 2.4). The gentle slope of the Niagara Escarpment dips to the southeast throughout much of the planning area but is somewhat difficult to observe due to glacial deposits. It does emerge, however, along the waters of Green Bay as a prominent feature. Because of the dolomite's proximity to the surface, especially in the western portions of the planning area, little agriculture, with the exception of orchard cultivation, is practiced. The Silurian dolomite is also the primary source of groundwater for the planning area.

Glacial Geology

The last glacial ice, which left the planning area approximately 10,000 years ago, modified the bedrock surface by scouring highlands and depositing this material in lowlands created by pre-glacial erosion.

Three major types of glacial features are identifiable within the planning area. These include glaciolacustrine deposits, ground moraines, and end moraines (Map 2.4).

Glaciolacustrine deposits are composed primarily of sand, silt, and clay. These sediments were deposited by glacial predecessors of Green Bay and Lake Michigan. Shorelines of these early lakes fluctuated twenty to sixty feet above the present lake level. The eastern portion of the planning area is located upon glaciolacustrine deposits, indicating these areas were inundated by water several thousand years ago. Most of these deposits are located adjacent to Lake Michigan extending from the northeast to southeast area of the planning area.

End moraines are glacial landforms composed of unsorted sand, gravel, cobbles, and boulders that were deposited at the terminus of the glacial ice. Acting as an enormous bulldozer, the ice pushed and mounded this material into substantial hills. The area of end moraine deposits is located primarily within the northcentral portion of the planning area.

Ground moraines, like end moraines, are composed of unsorted material; however, ground moraines are considerably thinner deposits and have an irregular, gently rolling surface as compared to the more pronounced topography of end moraines. Ground moraines are scattered throughout the planning area. Sand dunes are also present along the Lake Michigan side of the village and drumlins have been identified in the east central portion of the village.

The dominant role glacial ice played in shaping the physical setting of the Liberty Grove area, both in terms of deposition, is evidenced by the various topographic features of the area.

SOIL LIMITATIONS

General Soils Description

Soils are grouped into general soil associations which have similar patterns of relief and drainage. These associations typically consist of one or more major soils and some minor soils. The general character of the soils of the planning area is largely the result of various types of glacial deposits overlying the Silurian dolomite. Within the village planning area, there are two general soils associations (Map 2.5):

Carbondale-Seelyeville-Markey:

Soils in this association consist of very deep, very poorly drained soils in outwash plains, lakes plains and glacial moraines. The Carbondale series consists of very deep, very poorly drained soils formed in organic deposits more than 51 inches thick on ground moraines, outwash plains and lake plains. These soils have moderately slow to moderately rapid permeability. Slopes range from 0 to 2 percent. The Seelyeville series consists of very deep, very poorly drained soils

that formed in organic materials more than 51 inches thick. These soils are on glacial outwash plains, valley trains, flood plains, glacial lake plains and glacial moraines. They have moderately rapid to moderately slow permeability. Slopes are 0 to 15 percent. The Markey series consists of very deep, very poorly drained organic soils. They formed in herbaceous organic material 16 to 51 inches thick overlying sandy deposits in depressions on outwash plains, lake plains, flood plains, river terraces valley trains and moraines. Permeability is moderately slow to moderately rapid in the organic layers and rapid or very rapid in the sandy material. Slopes range from 0 to 2 percent.

Longrie-Summerville-Kolberg:

These soils are shallow to deep, level to moderately steep, well drained, and have a sandy loam or loam subsoil over sandy loam or fine sandy loam till or dolomite bedrock. The Longrie series consists of moderately deep, well drained soils formed in loamy glacial deposits underlain by limestone bedrock at a depth of 20 to 40 inches on ground moraines, glacial lake benches and terraces. Permeability is moderate. Slopes range from 0 to 25 percent. The Summerville series consists of shallow, well drained soils formed in loamy materials overlying limestone on ground moraines, end moraines, and glacial lake benches. Permeability is moderate. Slopes range from 0 to 45 percent. The Kolberg series consists of well drained soils moderately deep to limestone. These upland soils formed in thin, loamy deposits and the underlying moderately fine or fine textured glacial till. Permeability is moderately slow or slow. Slopes range from 0 to 12 percent.

On-Site Sewage Disposal Systems

Map 2.6 depicts soil limitations for septic tank absorption fields. These are subsurface systems of tile or perforated pipe that disperse effluent from a septic tank into the natural soil. If the degree of soil limitation is slight, soils are favorable for absorption fields, and limitations are minor and easily overcome. Soils with a moderate rating indicate that soil properties or site features are generally unfavorable for absorption fields, but limitations can be overcome by special planning and design. A severe rating indicates that soil properties or site features are so unfavorable or difficult to overcome that major soil reclamation, special designs, or intensive maintenance are required. Soils that have slight limitations for absorption fields generally are well-drained and have sufficient depth before encountering bedrock or groundwater. They are located primarily in the western portion of the planning area, east of Old Stage Road. Soils with moderate and severe limitations generally have insufficient depths to bedrock or groundwater, percolate slowly, and are subject to flooding. Soils with moderate limitations are generally located throughout the planning area, while soils with severe limitations are encountered to the north and south of the village in the planning area. Without consideration of the properties of these soils, on-site wastewater treatment systems may fail and collection systems may require expensive and frequent maintenance. Factors which are considered when evaluating soils for on-site waste systems are:

High or Fluctuating Water Table - When groundwater is near the soil surface, proper filtering cannot take place and often results in on-site systems either backing up into the home or contamination of groundwater. In addition, construction techniques used to de-water systems are costly.

Bedrock - Large stones or bedrock near the soil surface may hinder excavation and considerably increase the cost of construction. In addition, conventional on-site septic systems cannot function

properly, which may result in wastewater passing through the cracked bedrock and contaminating the groundwater.

Soil Permeability - Permeability refers to the rate at which water flows through the soil. When passage is too rapid, groundwater can become polluted. If it is too slow, the soils can become saturated and effluent ponding may result.

Flooding - On-site waste disposal systems that are located within a floodplain can result in problems. As water levels rise during periods of flooding, the system becomes saturated and results in untreated solid and liquid waste being discharged into the ground or surface waters.

New technologies for private wastewater treatment systems are allowed under the revised COMM 83 health and safety code. The code will allow the use of soil absorption systems on sites with at least six inches of suitable native soil. The revised code also gives property owners the opportunity and flexibility to meet environmental performance standards with several treatment technologies. It allows for better planning and land use because it assures that every residentially-zoned lot can be used for the purpose intended by the local zoning board. The code will allow for infill development where it was not permitted previously due to lack of access to an improved septic system.

Housing and population density will likely increase due to the revised COMM 83 code. This in turn may increase the need for land use planning and integration of environmental corridors to address the adverse impacts related to development. Planning along with land use controls such as zoning, will help achieve more efficient development patterns.

Prime Agricultural Lands

Most of the land within the village's planning area is classified as prime agriculture land with minimal modifications. These lands are located all around the village, primarily away from the shoreline. Two classes of prime farmland are identified; those areas where all land is prime farmland and those areas that are considered prime farmland only where drained. The rest of the village planning area is classified as not prime farmland. Map 2.7 shows these areas of prime farmland.

Basements

Many of the soils in the village's planning area have severe limitations for dwellings with basements. According to the *Soil Survey of Door County* severe limitations indicate one or more soil properties or site features are so unfavorable or difficult to overcome that a major increase in construction effort, special design, or intensive maintenance is required. For some soils rated severe, such costly measures may not be feasible. In the village planning area, the main limitation for dwellings with basements is depth to bedrock or wetness. The soils in the planning area that have severe limitations are located along the in the southwestern portion of the planning area and in a band from the northwest to the south east in the planning area north of the village. The rest of the planning area is rated either moderate or slight. These areas are mostly located in the central part of the planning area. Map 2.8 shows these limitations.

TOPOGRAPHY

Topography of the planning area is controlled primarily by the underlying bedrock with two distinct types of relief. The first of these includes an area with relief in excess of 700 feet above mean sea level. It is located within the extreme southwest portion of the planning area. This area

is characterized by relatively level tops, similar to plateaus, with steep slopes to the west or north. Many of the steep slopes are near vertical bluffs, especially in the areas immediately adjacent to the waters of Green Bay (Map 2.9). These areas are undoubtedly the most obvious in terms of topographic expression within the village and planning area.

The second group of topographic features includes the eastern portions of the planning area. This large area is characterized by a flat to gently rolling land surface occasionally marked by small depressions. The area slopes gently to the southeast.

Map 2.4: Pleistocene Geology

Map 2.5: General Soils

Map 2.6: Soil Limitations for Septic Systems

Map 2.7: Prime Agricultural Lands



Map 2.8: Soil Limitations for Dwellings with Basements

WATER RESOURCES

There are no lakes or named streams within the planning area; however, the western edge of the planning area is adjacent to the bay of Green Bay. The direction of precipitation runoff is primarily southeasterly towards Lake Michigan for the majority of planning area. Runoff into Green Bay is limited to the village area and a zone along the coast.

Watersheds and Sub-Watersheds

The village of Sister Bay lies within the Upper Door County watershed. Within this watershed there are four sub-watersheds. The Lake Michigan watershed covers the eastern half of the planning area. The Green Bay watershed covers the village and the western part of the planning area. Three Springs Creek covers the northeastern part of planning area and the Ephraim Creek watershed covers a small portion in the southwest part of the town of Liberty Grove. Map 2.10 shows these sub-watersheds in the planning area.

Groundwater

In Wisconsin the primary sources of groundwater contamination are agricultural activities, municipal landfills, leaky underground storage tanks, abandoned hazardous waste sites, and spills. Septic tanks and land application of wastewater are also sources for possible contamination. The most common ground water contaminant is nitrate-nitrogen, which comes from fertilizers, animal waste storage sites and feedlots, municipal and industrial wastewater and sludge disposal, refuse disposal areas, and leaking septic systems.

Groundwater within the study area is derived primarily from the Silurian dolomite aquifer. Well depths range from 60 to 700 feet with yields as high as 1,200 gallons per minute. Water from the Silurian dolomite is a very hard calcium magnesium bicarbonate type with varying concentrations of iron and nitrate. The dolomite has numerous joints and crevices which allow water to move relatively easily through the rock. Pollutants may also enter the groundwater supply via these fractures. The dolomite aquifer is recharged by surface seepage of direct precipitation and snowmelt.

Shoreland Corridors

Coastal areas within the study boundaries include the steep dolomite bluffs adjacent to the waters of Green Bay. There are approximately seven miles of Great Lakes shoreline within the planning area. This large amount of shoreline makes residential development very desirable.

Map 2.9: Steep Slope

Map 2.10: Watersheds & Surface Water Features

Floodplains

Floodplains are often viewed as valuable recreational and environmental resources. These areas provide for storm water retention, ground water recharge, and habitat for various kinds of wildlife unique to the water. The planning area contains one small area of floodplain on the eastern edge of the planning area adjacent to Three Springs Creek (Map 2.11)

Development permitted to take place in these areas is susceptible to storm damage and can have an adverse effect on water quality and wildlife habitat. In addition, it can also result in increased development and maintenance costs such as: providing floodproofing, repairing damage associated with flooding and high water, increased flood insurance premiums, extensive site preparation, and repairing water related damage to roads, sewers, and water mains. Some communities have special ordinances for buildings within the floodplain for remodeling and expanding. New expansions may have to be compliant to the rules of floodplain construction.

As a result, the state of Wisconsin requires that counties, cities and villages adopt shoreland/floodplain zoning ordinances to address the problems associated with development in floodplain areas. Development in shoreland areas is generally permitted, but specific design techniques must be considered. Development in floodplain areas is strictly regulated and in some instances is not permitted. For planning and regulatory purposes, the floodplain is normally defined as those areas, excluding the stream channel, that are subject to inundation by the 100-year recurrence interval flood event. This event has a one percent chance of occurring in any given year. Because of this chance of flooding, development in the floodplain should be discouraged and the development of park and open space in these areas encouraged.

The authority to enact and enforce these types of zoning provisions in counties is set forth in Chapter 59.97 of the Wisconsin Statutes and Wisconsin Administrative Code NR 116. This same authority is also vested to cities and villages in Chapter 62.23 of the Wisconsin Statutes.

Wetlands

According to the Wisconsin Department of Natural Resources, wetlands are areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation. Other common names for wetlands are swamps, bogs, or marshes. Wetlands serve as a valuable natural resource. They provide scenic open spaces in both urban and rural areas.

Map 2.11: Floodplains

Wetlands act as natural pollution filters, making many lakes and streams cleaner and drinking water safer. They act as groundwater discharge areas, and retain floodwaters. Finally they provide valuable and irreplaceable habitat for many plants and animals.

Because of their importance, there are strict state and federal regulations regarding wetlands. Wisconsin Administrative Codes NR 115 and NR 117 fall under the jurisdiction of the Wisconsin Department of Natural Resources and mandate that shoreland wetlands be protected in both the rural and urban areas of the state. In the unincorporated areas, NR 115 provides the legislation to protect wetlands of five acres or more that are within the jurisdiction of county shoreland zoning ordinances. This wetland provision would be applicable in the village of Sister Bay planning area. NR 117 provides for the protection of wetlands within an incorporated community as provided by the village's zoning ordinance and state and federal regulations.

Wetlands within the planning boundaries include an extensive area along the eastern and southern boundaries and three small areas within the village. Map 2.12 shows the WDNR inventoried wetlands greater than two acres. It should be noted that all wetlands, no matter how small, are subject to WDNR and possible federal regulations if they meet the state definition of wetlands.

FORESTS AND WOODLANDS

Woodlands in the village and planning area are comprised primarily of sugar maple, yellow birch, American beech, Basswood, red oak and red pine in central Liberty Grove. These woodlands provide an aesthetic and natural purpose, providing habitat to many animals. Map 2.13 shows the woodlands, both upland and lowland, within the village and the planning area.

AIR QUALITY ISSUES

Door County is in a non-attainment zone for the ozone air quality standard. An area is designated as non-attainment when it does not meet the minimum standards for air quality (NAAQS) set by the Environmental Protection Agency (EPA). The clean air act classification is marginal which is derived from the pollutant concentration (in parts per million) recorded by air quality monitoring devices. Newport State Park is a monitoring station that records such data.

Door County is classified as a rural transport area. This means that industries in other cities may be contributing to the air quality in door county. According to the EPA, it was recently found that ozone formed in one area can drift on air currents to add to air quality problems elsewhere. Research shows that this "transported ozone" contributes significantly to high ozone levels in Wisconsin. Facilities wishing to move into the village may be subject to additional requirements because Door County is designated as a non-attainment area.

WILDLIFE HABITAT

Within the village of Sister Bay planning area there are no designated state or federal wildlife habitats. However, habitat for many species of wildlife is provided by woodlands, floodplains, wetlands, and surface water features within the village planning area. Wildlife habitat can be defined as areas that provide enough food, cover, and water to sustain a species. All large remaining wooded and wetland areas within the planning boundaries have been designated as Class I (most desirable) wildlife habitats by the Wisconsin Department of Natural Resources. The areas include:

Map 2.12: WDNR Wetlands

Map 2.13: Forest and Woodlands

The Lake Michigan coastal shoreline, including both the Three Springs Creek and Mink River areas, and the coastal shoreline adjacent to Green Bay are designated Class I wildlife areas. Scattered throughout the central portion of the planning area are remnant wildlife areas of Class I, II and III values.

Major wildlife species using these habitats include song birds, deer, ruffed grouse and squirrels. Other common species include snowshoe hare, coyote, gray fox, raccoon, skunk and porcupine.

Black bears have also been reported in this part of Door County. Muskrat, mink, beaver and otter have been identified in the wetland area. Several species of gulls, terns, geese, and ducks inhabit the area. Some of the old fields, depicted on the map as desirable habitat, provide habitat for pheasants. In addition, the planning area lies within an important migratory corridor for song birds, shorebirds, waterfowl, and raptors. These birds, possibly including some threatened or endangered species, use the wooded and wetland areas for food and rest.

The variety of habitat types within the planning area is a key to the number of species found in the area. The high bluff shoreline woodlands, the wetlands, the grassy fields and inland woodlands are each important to certain species.

The Wisconsin Department of Natural Resources has also designated the waters of Green Bay which border the planning area as Class 2 (desirable habitat) fish habitat. Fish species which may be found include small mouth bass, yellow perch, northern pike, rock bass, rainbow trout, lake trout and brown trout.

THREATENED AND ENDANGERED SPECIES

Door County has many rare, threatened, and endangered species. Exact locations of these species are not published, but care should be taken before development occurs to not disturb potential habitats for these flora and fauna. Appendix D lists all the rare, threatened, and endangered species and natural communities in Door County identified in the Wisconsin DNR Natural Heritage Inventory.

PARKS AND OPEN SPACES

Outdoor recreation facilities are important features of community life. Interest in providing good recreational facilities in the village of Sister Bay, Door County has been generated as the community experiences increasing needs for improvements to their recreation areas. The village is well aware of the need to have an organized plan for recreation improvement and development to meet the demands of both the resident and nonresident population using the recreation facilities in the area.

The following Village of Sister Bay parks were identified in the 1979-1984 Door County plan inventory and have been updated with information provided by village of Sister Bay officials (Map 2.14).

Map 2.14: Parks and Open Spaces

SCIENTIFIC AND NATURAL AREAS

The Wisconsin State Natural Area program was established to formally designate sites in natural or near natural condition for scientific research, the teaching of conservation biology and most of all, preservation of their natural values and genetic diversity for the future. These areas are not intended for intensive recreation use, but rather to serve the mission of the Natural Areas Program, to locate and preserve a system of State Natural Areas harboring all types of biotic communities, rare species, and other significant natural features native to Wisconsin.

Within the village there are no state designated natural areas. In addition to the state natural areas, the WDNR also did a natural area inventory in 1980. This study inventoried potential areas of natural significance based on plant and animal diversity, natural area community structure and the extent of human disturbance. These areas are placed into the following five categories:

SA State Scientific Areas-those natural areas of at least state significance which have been designated by the Scientific Areas Preservation Council.

NA-1 Natural Areas- tracts of land and/or water so little modified by man's activity, or sufficiently recovered, that they contain nearly intact native plant and animal communities believed to be representative of the pre-settlement landscape.

NA-2 Natural Areas- tracts of land and/or water slightly modified by man's activities or insufficiently recovered from past disturbances such that they are of county or multi-county natural area significance because of one or more of the following reasons: the degree of quality has been lessened by grazing, water level manipulation or pollution, etc.; the type may be the most abundant or a very common type in the region, only the very best of which might qualify for state scientific area recognition, or the area may be too small.

NA-3 Natural History Areas- tracts of land/or water modified by man's activities, but which retain a moderate degree of natural cover and often would be suitable for education use, such that exclusion from a natural area inventory would be an oversight. Two or more of the identifying natural area criteria may be substandard in natural history areas, but in time and with protection, most natural history areas will increase in "naturalness". Natural history areas may reflect patterns of former vegetation or show the influence of settlement on vegetation. An important value of some of the larger NA-3 sites is their role in watershed protection and environmental corridors.

NA-1 (RSH) Rare Species Habitats- sites where the primary natural value is the presence of one or more rare, threatened, or endangered species of plants or animals.

The village of Sister Bay planning area includes only one area designated in the natural area inventory (Map 2.16):

Sister Islands

T32N R28E Sec 30

2 to 15 acres depending on water level

Code: SA

Ownership: DNR

Two low-lying dolomite gravel islands in Green Bay considered to be important gulleries. An estimated 1350-1650 breeding pairs of herring gulls were present in 1964. Bird banding and several research projects on gulls have taken place on the islands. Vegetation is primarily composed of pioneering weedy herbs and shrubs.

ENVIRONMENTAL CORRIDORS

Environmental corridors serve many purposes. They protect local water quality and wildlife habitat through identification and preservation of environmentally sensitive areas. They can be used as a means of controlling, moderating, and storing floodwaters while providing nutrient and sediment filtration. Environmental corridors can provide fish and wildlife habitat, recreational opportunities, and serve as buffers between land uses while improving the aesthetics of the community. As part of its on-going effort to complete a regional master plan, the Commission has begun to compile and delineate region-wide data needed for land use planning within the region. The environmental corridor process is also used as part of the planning process for making planning and zoning decisions at the local level.

After reviewing existing definitions and regulations from federal, state and local levels, the Commission determined a need to define two sets of criteria for environmental feature delineation: one set for delineating “Environmentally Sensitive Areas” for sewer service area planning under NR 121; and, one set for delineating “Environmental Corridors” for all other community planning work. The following definition will be used to define and delineate Environmental Corridors for community planning work.

The Commission has defined its environmental corridors to include the following set of uniformly available information: Wisconsin Department of Natural Resources wetlands; 100-year floodplains; areas with slopes greater than or equal to 12 percent; lakes, rivers, streams and ponds; a 75-foot lake and river setback; and, a 25-foot buffer of wetlands. Other features that are considered as part of the environmental corridor definition on an area by area basis include: designated scientific and natural areas; unique and isolated woodland areas; scenic viewsheds; historic and archaeological sites; unique geology; wetland mitigation sites; isolated wooded areas; unique wildlife habitats; parks and recreation areas; and other locally identified features. Within the village planning area there are 6,740 acres of environmental corridors. (Map 2.15).

HISTORIC/CULTURAL AND ARCHEOLOGICAL RESOURCES

The 1989 Comprehensive Plan Update identified three structures within the village’s planning area of historical importance, additional sites were identified through research of State Historical Society files. The only site within the village presently listed as historically significant is the former Jischke's Meat Market (currently the Inn on Maple) on Maple Drive. Care should be taken when excavation is done within the village of Sister Bay, since there is the possibility of disturbing an historical or archeological site. The State of Wisconsin requires any findings of human bones to be reported (*Wisconsin Statute 157.70*) so an investigation can be done by the State Historical Society. Also, land developers trying to obtain state permits from the Wisconsin Department of Natural Resources or any development involving federal monies, are required to be in compliance with Section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties. Map 2.16 shows the approximate locations of these historic sites.

Map 2.15: Environmental Corridors

Map 2.16: Historic & Cultural Sites

METALLIC AND NON METALLIC MINING RESOURCES

Metallic mining in Wisconsin has occurred since the time it was settled. Metals mined in the state include copper, lead, iron, and zinc. Mining has economic value to multi-regional areas, but also has the ability to potentially harm natural resources. Any new mines need to have a permit granted by the WDNR, which includes a reclamation plan. This plan is a detailed technical document designed to meet the goals which lead to successful reclamation and will help reduce the effects to the environment once the mine is abandoned. The plan has minimum standards that must be met in order to be accepted. The WDNR defines successful reclamation as “the restoration of all areas disturbed by mining activities including aspects of the mine itself, waste disposal areas, buildings, roads and utility corridors”. Restoration is defined as, “returning of the site to a condition that minimizes erosion and sedimentation, supports productive and diverse plants and animal communities and allows for the desired post-mining land use”. There is currently no metallic mining in the village. According to Carl E. Dutton in Geological Survey Professional Paper 633, the future for renewed metallic mining is not favorable since “the available iron-bearing material is not currently competitive in quality or quantity”. Sand and gravel would be the most likely nonmetallic resource mined in the village’s planning area. There is currently one licensed stone quarry within the village.

COMMUNITY DESIGN

Community design deals with the large-scale organization and design of the community, particularly the organization of the buildings and the space between them. An evaluation of community design is often subjective and requires personal judgement. In an effort to remove this subjectivity, the community design resources of the village of Sister Bay have been inventoried according to the following six criteria that represent the building blocks and language of community design:

Landmarks

Landmarks are important reference points that represent a prominent feature of the landscape and have the ability to distinguish a locality, mark the boundary of a piece of land, or symbolize an important event or turning point in the history of a community.

- Village Hall
- Village Administrative Building
- Village Library
- Road Crossings
- Village Marina
- Parks and Beaches
- Cemeteries

Pathways

Pathways are linear features that represent both vehicular and pedestrian movement. Pathways provide connections between places, as well as along them. Whether a major arterial, local street, or undefined woodland trail, pathways are hierarchical and represent a degree of usage.

Major Pathways:

- State Highway 42/Bayshore Drive
- State Highway 57
- County Highway ZZ/Maple Drive
- Old Stage Road

Secondary Pathways:

- Mill Road
- Scandia Road
- Woodcrest Drive

Minor Pathways:

- Village Road network

Edges

Like pathways, edges are linear. Edges are important organizing elements that represent boundaries that can be either soft or hard, real or perceived. They become increasingly important as a community grows so as to visually distinguish the edges of the community. These edges do not necessarily coincide with jurisdictional boundaries.

- Country Lane
- Woodcrest Drive
- Hill Road
- Flint Ridge Road
- Bay of Green Bay

Districts

Districts encompass areas of commonality. Examples of districts may include a residential district or central business district. These areas represent buildings and spaces where clearly defined and separate types of activities take place.

- Central Business District - Bluffside Lane to Scandia Road
- Country Walk District

Nodes

Nodes are specific points of recognition. They are destinations and very often represent the core or center of a district. In addition, nodes are closely associated with pathways as they provide access to and from districts. An example of nodes within a district may include separate areas for government functions versus entertainment activities within a central business district.

- Mill Road/Bayshore Drive intersection

Community Entryways

Community entryways are associated with edges in that the entryway begins at an edge. Entryways can be unique and are very valuable assets for they help define a community to those using the entryway. In many cases these entryways are more correctly described as “Doorways” to a community and help define the community to its residents and its neighbors. How people perceive an entrance to a business area or doorway to a village will determine whether they stop or drive on through the community. These points of interest may need to be protected or enhanced through the use of zoning standards requiring landscaping, building design, signage, lighting, and public furnishings.

The **Primary** entryways into Sister Bay should be protected and enhanced. High quality public entry signs and or public art may be used to formally announce entry to the village. Around the village’s periphery, these entrances include:

- State Highway 42 entering from the village of Ephraim
- State Highway 57 entering from the south
- County Highway ZZ/Maple Drive entering from the east
- State Highway 42 entering from the north

The **Secondary** entryways into the village of Sister Bay are more subtle portals enjoyed by local village residents. The use of formal entry markers such as signage and artwork should be low key, if used at all, in order to maintain the rural/agricultural look of the area. Secondary entryways around the village’s periphery include:

- Fieldcrest Road entering from the south
- Orchard Drive entering from the south
- Scandia Road entering from the east

Chapter 3 - HOUSING AND POPULATION

INTRODUCTION

Population change is the primary component in tracking the past growth of an area as well as predicting future population trends. Population characteristics relate directly to the village's housing, educational, community and recreational facility needs, and to its future economic development. It should be noted that over time, there are fluctuations in the local and regional economy and population which generally cannot be predicted. These fluctuations and changes may greatly influence the village's population growth and characteristics. This chapter will identify population and housing trends which may affect the future of Sister Bay.

Housing includes information about the current housing stock, structural and occupancy characteristics, as well as details on projected housing demand. This section also includes a housing strategy which provides goals, objectives, and policies for future housing development within the village.

The majority of this information is based upon 1990 and 2000 Census information and serves as background data to help determine such things as; how much population growth the village can expect to accommodate over the next twenty years; the condition of the housing stock and what types of housing will be needed in the future.

SUMMARY AND IMPLICATIONS

1. The village experienced a 31.2 percent increase from the 1990 population level to 886 persons in 2000.
2. The village's population is projected to increase to at least 1,100 persons by 2020, a 24 percent increase from 2000.
3. The largest age grouping is age 65 and older, which is considered to be the retirement age group.
4. The village's median age in 2000 was 61.4 years which indicates an aging adult population and a low percentage of young people.

The village's population has risen and fallen and risen again over the course of the last four decades. Projections developed after the 1990 Census indicate that the village's population was likely to increase through 2015; however, the 2000 Census indicates a rise in population to just below the 2000 WDOA projection which indicates that Sister Bay is gaining new population at a faster rate than originally projected. The village has experienced (over the past three decades) a dramatic age structure shift towards the older age groups. This will lead the village to spend more on services to accommodate an aging population over the next twenty years. Likewise, the aging population can also mean additional business opportunities, especially for a village like Sister Bay. The elderly have been shown to import income into a community, living on prior savings or investments in the form of social security, private pensions, stocks, etc. This aging population requires basic services such as groceries, housing and health care, but they tend to spend their incomes locally. Well planned and financed services and programs directed towards the elderly can go a long way in keeping the buying power of the retired community within the village.

5. Overall the village has been increasing its number of housing units, at a rate comparable to surrounding communities.
6. The household size for the village is expected to decline over the next 20 years from 1.78 to 1.59 persons per household.
7. At approximately 1.59 persons per household, the village can expect a housing projection between 365 to 1,492 additional housing units.

Throughout the planning period there will be a demand for additional housing units within the village. An increased population, a demand for larger lot sizes and a trend of smaller household sizes will increase the demand for residential developments. The village will need to adequately identify areas to accommodate this change in land use while ensuring adequate services are provided. Additional housing does not always lead to a community making money. In most cases it can be shown that housing (though most preferred in many communities) is the most costly development based on the supporting services needed to accompany it.

8. Twelve percent (115 structures) of the housing within the village was built before 1940.
9. In 2000, approximately 56 percent of renters were living in “non-affordable” housing, due to their paying more than 30 percent of their incomes towards rent.
10. In 2000, 24 percent of home owners were paying more than 30 percent of their incomes towards housing payments.
11. According to the Wisconsin Department of Commerce the municipal per-return adjusted gross income for the village in 1999 was \$43,030.

The housing within the village is mostly residential single family, yet many homes are over 40 years old. A number of home owners as well as renters are considered to be living in non-affordable housing. Because of the above, it is likely that residents will need additional assistance regarding loans for housing rehabilitation as well as affordable housing. The village will need to support assistance efforts as well as look into actions that promote a mix of housing choices.

Due to the village experiencing an increase in population and because the village experienced 234 new housing units constructed within the last ten years, this plan’s future land use is projecting a range in the number of housing units to be between 365 and 1,492 new units over the twenty year planning period. Enough vacant land may not exist (allowing for a mix in densities and services provided) within the village to accommodate these growth forecasts.

Overall the village is expected to remain a seasonal community. The village supports the ideals of promoting housing for all residents, providing a range in housing, working towards gaining more financial assistance for its residents for rehabilitation of housing and rental assistance by working with county, state and federal agencies.

HOUSING STRATEGY

The current legislation on comprehensive plans under s66.1001 requires that the housing element will need to be integrated and made consistent with the other nine elements of the comprehensive plan. For example, implementing the goals and policies of the housing element

will need to correspond to actions undertaken in other elements such as land use, economic development, transportation, and community facilities.

The following stated Goals, Objectives, Policies, and Suggested Programs are based on the information provided and detailed later within this chapter of the comprehensive plan.

Goal

To provide for a variety of quality housing opportunities for all segments of the village's current and future population in such a way that will minimize the adverse impacts on the environment and preserve the village's rural character.

Objectives

1. Develop and enforce policies and programs to assist citizens to obtain adequate housing.
2. Encourage new housing development in areas that will preserve the character of the village.
3. Encourage housing styles, locations, colors, landscaping and grouping that will enhance the rural characteristics and natural beauty of the area and that will preserve open space and scenic vistas.
4. Develop and enforce policies and programs to assist citizens in obtaining affordable quality housing.
5. Encourage a variety of housing options in areas where it is needed and can be done in an environmentally and cost effective manner.

Policies

1. Provide adequate housing for all persons including low and moderate income, elderly, and handicapped residents of the village.
2. Rehabilitate and preserve the existing housing stock in the village.
3. Provide affordable housing for first time home buyers.
4. Regulate the construction of new homes through building codes and ordinances.
5. Encourage variety of housing options.
6. Identify unique natural areas that should be retained as open space prior to new development.
7. Explore new development ideas to minimize possible negative impacts on the water resources and other aspects of the environment.
8. Support the agencies and their programs that provide affordable housing to its residents.
9. Encourage the development of a housing trust fund, at the county level, to meet residential needs (see page 3-20).
10. Consider participating along with non-profit agencies to acquire and hold lands for future development of housing.

11. Assist residents by providing educational materials and information on financial programs and on home repairs.
12. Support local initiatives to improve the housing conditions within the village.
13. Consider using public or donated land for affordable housing development.
14. Provide adequate housing ranges for all persons including low and moderate income, elderly, and residents with special needs.
15. Work towards rehabilitating and preserving the existing housing supply within the village.
16. Provide affordable housing information and assistance to first time home buyers and to residents that rent housing.
17. Encourage new housing in areas in which community facilities already exist.
18. Carefully regulate development that has the potential to adversely affect the assessed value or livability of neighboring residential properties.
19. Regulate the construction of new homes through building codes and ordinances.
20. Encourage single family homes, and the adequate availability of apartments and elderly housing.
21. Identify locations in which new development should be restricted so as to maintain open space.
22. Explore new development ideas which encourage a responsible use of land and the retention of natural or unique areas.
23. Utilize the village's zoning ordinance to achieve the above goals.
24. Periodically review housing codes.
25. Explore development in areas provided with sewer. The village can assist in identifying lands by inventorying potential infill sites and distributing this list to developers.

Suggested Programs:

1. Work with federal, state, and county agencies to assist village residents in achieving home loans.
2. Work with the state, county and Bay-Lake Regional Planning Commission (Bay-Lake RPC) to monitor the village's population characteristics to stay informed of changing demographics/characteristics within the village.
3. Periodically review and update the village plan which identifies areas within the village for a future mix of residential development with a variety of minimum densities.
4. Review existing zoning and subdivision ordinances to identify antiquated standards that limit certain housing choices and to measure impacts that current ordinances have on the village's housing stock and future choices.

Also work on any future controls affording more flexibility in regulations allowing for a greater variety of housing choices including considering Conservation Subdivisions and clustering.

5. Establish a group or committee to investigate the use and to establish a set of standards/criteria in order to best develop regulations regarding the future use of development practices, i.e. conservation subdivisions and traditional neighborhoods, etc. When appropriate, work with neighboring villages, towns, the county and Bay-Lake RPC to develop a set of ordinances designed to further these developmental practices.

POPULATION CHARACTERISTICS

Historical Population Levels

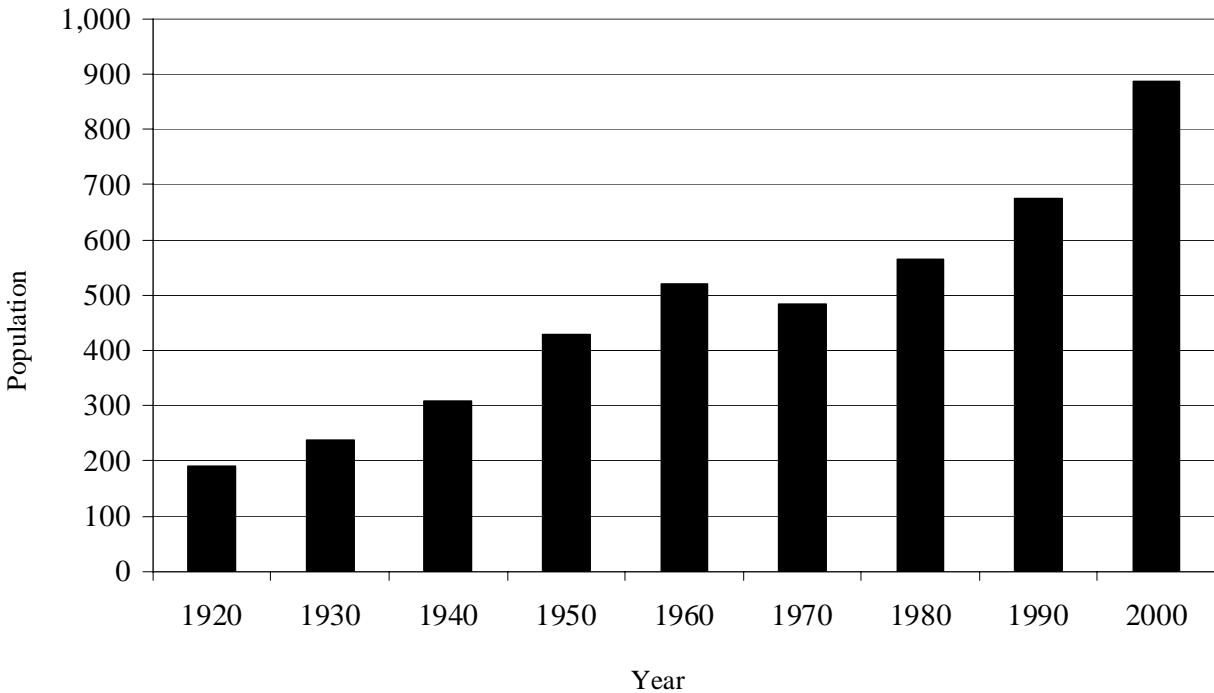
Table 3.1 displays the historic population trends for the villages of Sister Bay and Ephraim, the town of Liberty Grove, and Door County. The village of Sister Bay has grown steadily in population since 1920. In 1920, the village of Sister Bay had a population of 190 persons, in 2000 the population was 886. The village's population dipped slightly in 1970, but then continued to climb. The village's population growth has been more consistent than its neighbors in the village of Ephraim and the town of Liberty Grove which have both seen increased population, just not at the same level. Figure 3.1 displays the increases and decreases that Sister Bay's population has experienced since 1920.

Table 3.1: Historic Population Levels, 1920-2000, Village of Sister Bay & Selected Areas

Year	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	No.	Percent Change	No.	Percent Change	No.	Percent Change	No.	Percent Change
1920	190	NA	NA	NA	1,410	NA	19,073	NA
1930	238	25.3%	191	NA	1,275	-9.6%	18,182	-4.7%
1940	309	29.8%	254	33.0%	1,358	6.5%	19,095	5.0%
1950	429	38.8%	244	-3.9%	1,332	-1.9%	20,870	9.3%
1960	520	21.2%	221	-9.4%	1,190	-10.7%	20,685	-0.9%
1970	483	-7.1%	236	6.8%	1,174	-1.3%	20,106	-2.8%
1980	564	16.8%	319	35.2%	1,313	11.8%	25,029	24.5%
1990	675	19.7%	261	-18.2%	1,506	14.7%	25,690	2.6%
2000	886	31.3%	353	35.2%	1,858	23.4%	27,961	8.8%

Source: General Population Characteristics 1840-1970, Bay-Lake Regional Planning, December 1975; 1980 and 1990 U.S. Census; and Bay-Lake Regional Planning Commission, 2001.

Figure 3.1: Historic Population Levels, 1920-2000, Village of Sister Bay



Source: General Population Characteristics 1840-1970, Bay-Lake Regional Planning, December 1975; 1980 and 1990 U.S. Census; and Bay-Lake Regional Planning Commission, 2001.

Population Trends and Forecasts

All areas that are shown in Table 3.2 have been increasing in population since 1970, except Ephraim which experienced a decrease from 1980 to 1990. For the period 1970 to 1980, Door County and the communities shown had a substantially higher percentage of population growth when compared to the state and also the region. In the next decade, 1980 to 1990, the village of Sister Bay and the town of Liberty Grove still had a high percentage of population growth. Door County's rate of growth decreased substantially for the same period. For the period 1990 to 2000, Sister Bay experienced a growth of 31.3 percent, Ephraim increased 35.2 percent, and the town of Liberty Grove grew by 23.4 percent.

In 1993, the Wisconsin Department of Administration (WDOA) Demographic Services Center prepared population projections to the year 2015 for the communities and counties of the state, utilizing a projection formula that calculates the annual population change over three varying time spans. From this formula, the WDOA projections indicated that the village of Sister Bay has already surpassed its projected year 2015 population. The village of Ephraim and the town of Liberty Grove have also exceeded their projected year 2015 population.

Table 3.2: Population Trends, 1970-2015, Village of Sister Bay & Selected Areas

Year	Geographic Location					
	Village of Sister Bay	Village of Ephraim	Town of Liberty Grove	Door County	Bay-Lake Region	State of Wisconsin
Actual Population						
1970	483	236	1,174	20,106	440,926	4,417,731
1980	564	319	1,313	25,029	476,134	4,705,767
1990	675	261	1,506	25,690	498,824	4,891,769
2000	886	353	1,858	27,961	554,565	5,363,675
Population Projections						
2005	796	284	1,661	26,967	539,948	5,409,536
2010	817	287	1,685	27,101	546,261	5,512,313
2015	836	288	1,703	27,070	550,833	5,603,528
Number Change						
1970-1980	81	83	139	4,923	35,208	288,036
1980-1990	111	-58	193	661	22,690	186,002
1990-2000	211	92	352	2,271	55,741	471,906
2000-2015	-50	-65	-155	-891	-3,732	239,853
Percent Change						
1970-1980	16.8	35.2	11.8	24.5	8.0	6.5
1980-1990	19.7	-18.2	14.7	2.6	4.8	4.0
1990-2000	31.3	35.2	23.4	8.8	11.2	9.6
2000-2015	-5.6	-18.4	-8.3	-3.2	-0.7	4.5

Source: U.S. Bureau of the Census, Census of Population and Housing, 1970-2000; Wisconsin Department of Administration, Official Population Estimates and Projections, for years cited; and Bay-Lake Regional Planning Commission, 2001.

Seasonal Population

The estimated seasonal population was found by multiplying the number of seasonal housing units by the average number of persons per household (see Table 3.3). In 2000, the village of Sister Bay had 499 seasonal housing units. The 2000 Census population for Sister Bay was 886 persons, while the estimated seasonal population was 888. Areas which have seasonal populations over 100 percent of the year-round population indicate that there is a greater seasonal population than full time population. The village of Sister Bay had the smallest percentage of its population as being seasonal among those compared at 100.3 percent.

Table 3.3: Estimated Seasonal Population, 2000, Sister Bay & Selected Areas

	Geographic Location			
	Village of Sister Bay	Village of Ephraim	Town of Liberty Grove	Door County
Population	886	353	1,858	27,961
Persons Per Household	1.78	2.19	2.25	2.33
Total Housing Units	945	945	2,000	19,587
Total Seasonal Housing Units*	499	594	1,100	6,970
Percent of Housing Units Seasonal	52.8	62.9	55.0	35.6
Estimated Seasonal Population**	888	1,301	2,475	16,240
Percent Population Seasonal	100.3	368.5	133.2	58.1

*Seasonal Housing includes seasonal, recreational, or occasional use units, does not include other vacant

**Estimated Seasonal Population = Seasonal Housing Units x Persons Per Household

Source: U.S. Bureau of the Census, 2000; and Bay-Lake Regional Planning Commission, 2001.

Revised Population Projections

An area’s future population provides an important basis for planning and public policy making. Population projections are an important factor necessary to assess the area’s future need for housing, community facilities, transportation, and other population-related facilities. They can also be used to forecast the area’s future expenditures, revenues, and tax receipts. Given the discrepancy between the Wisconsin Department of Administration (WDOA) population projections, the 2000 census count, and the fact that the WDOA projections do not go beyond the year 2015 to include the 2020 planning period, the Commission has prepared alternative population projections to determine an approximate growth rate for the village of Sister Bay.

Projections were found by using a ratio methodology, termed share-of-the-county, to distribute county projections to the town level. The limitations of population projections should be recognized. Population projections are not predictions, rather they extend past growth trends into the future and their reliability depends on the continuation of these past growth trends. Smaller communities are also subject to more error because even minor changes in the community can result in significant changes in population projection estimates.

A “Low Growth” projection was created from the share-of-the-county methodology. According to Commission projections, the projected 2005 population for Sister Bay will be 973 persons. The projected 2010 population is 1,024 persons, the projected year 2015 population is 1,069, and the 2020 projected population is 1,100 persons. The projected 2020 population is a 24.1 percent increase from the actual 2000 population. It should be noted that small changes in the community or the region in the future may cause significant changes to these projections.

A “High Growth” projection was developed by using the 1970, 1980, 1990 and 2000 Census figures and creating a growth trend series to the year 2020. This method identified a projected year 2005 population of 967 persons, a projected year 2010 population of 1,047 persons, a estimated 2015 population of 1,163, and a projected year 2020 population of 1,279. According to this “High Growth” projection, the village of Sister Bay’s 2000 population will increase by 44.4 percent by the year 2020.

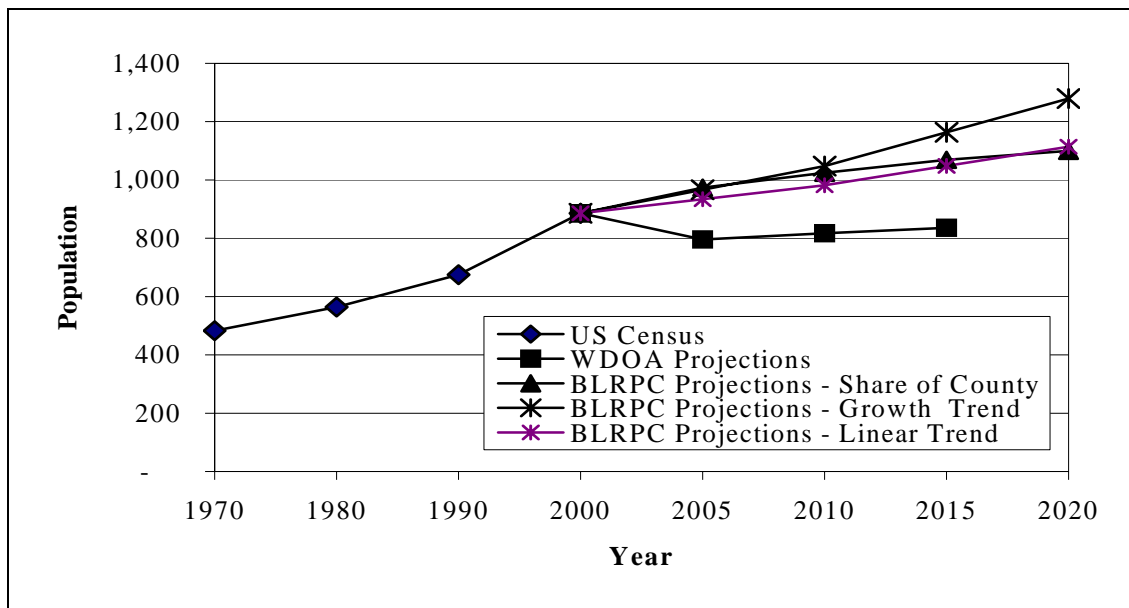
Figure 3.2 displays the actual U.S. Census counts, WDOA projections, the “High Growth” growth series based off the Census counts, and the “Low Growth” BLRPC projections.

Table 3.4: Revised Population Projections, Village of Sister Bay, 2005-2020

	Year							
	1970	1980	1990	2000	2005	2010	2015	2020
US Census	483	564	675	886				
WDOA Projections				886	796	817	836	
BLRPC Projections - Share of County				886	973	1,024	1,069	1,100
BLRPC Projections - Growth Trend				886	967	1,047	1,163	1,279
BLRPC Projections - Linear Trend				886	934	982	1,048	1,114

Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2000.

Figure 3.2: Population Trends and Projections, 1970-2020



Source: U.S. Department of Commerce, Bureau of the Census, 1970, 1980, 1990, 2000; Wisconsin Department of Administration, *Official Population Estimates*, for years cited; Bay-Lake Regional Planning Commission, 2000.

Population By Age and Sex

From 1970 to 1990, there have been moderate shifts in the distribution of the male and female population within age groups in the village of Sister Bay (see Table 3.5). Table 3.5 is also represented in Figure 3.3.

Table 3.5: Male and Female Distribution by Age and Sex, Village of Sister Bay, 1980-2000

1980								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	20	7.3	3.5	29	10.0	5.1	49	8.7
65-74	31	11.4	5.5	47	16.2	8.3	78	13.8
60-64	19	7.0	3.4	30	10.3	5.3	49	8.7
55-59	21	7.7	3.7	18	6.2	3.2	39	6.9
45-54	21	7.7	3.7	30	10.3	5.3	51	9.0
35-44	27	9.9	4.8	27	9.3	4.8	54	9.6
25-34	42	15.4	7.4	37	12.7	6.6	79	14.0
20-24	15	5.5	2.7	15	5.2	2.7	30	5.3
15-19	19	7.0	3.4	15	5.2	2.7	34	6.0
10-14	23	8.4	4.1	12	4.1	2.1	35	6.2
5-9	18	6.6	3.2	15	5.2	2.7	33	5.9
under 5	17	6.2	3.0	16	5.5	2.8	33	5.9
TOTAL	273	100.0	48.4	291	100.0	51.6	564	100.0

1990								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	44	15.1	6.5	111	29.0	16.4	155	23.0
65-74	39	13.4	5.8	53	13.8	7.9	92	13.6
60-64	18	6.2	2.7	24	6.3	3.6	42	6.2
55-59	11	3.8	1.6	18	4.7	2.7	29	4.3
45-54	32	11.0	4.7	29	7.6	4.3	61	9.0
35-44	38	13.0	5.6	37	9.7	5.5	75	11.1
25-34	33	11.3	4.9	47	12.3	7.0	80	11.9
20-24	8	2.7	1.2	6	1.6	0.9	14	2.1
15-19	21	7.2	3.1	16	4.2	2.4	37	5.5
10-14	12	4.1	1.8	14	3.7	2.1	26	3.9
5-9	17	5.8	2.5	16	4.2	2.4	33	4.9
under 5	19	6.5	2.8	12	3.1	1.8	31	4.6
TOTAL	292	100.0	43.3	383	100.0	56.7	675	100.0

2000								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	78	20.7	8.8	189	37.1	21.3	267	30.1
65-74	57	15.2	6.4	85	16.7	9.6	142	16.0
60-64	20	5.3	2.3	26	5.1	2.9	46	5.2
55-59	37	9.8	4.2	35	6.9	4.0	72	8.1
45-54	48	12.8	5.4	62	12.2	7.0	110	12.4
35-44	35	9.3	4.0	33	6.5	3.7	68	7.7
25-34	31	8.2	3.5	20	3.9	2.3	51	5.8
20-24	12	3.2	1.4	12	2.4	1.4	24	2.7
15-19	19	5.1	2.1	20	3.9	2.3	39	4.4
10-14	17	4.5	1.9	12	2.4	1.4	29	3.3
5-9	15	4.0	1.7	5	1.0	0.6	20	2.3
under 5	7	1.9	0.8	11	2.2	1.2	18	2.0
TOTAL	376	100.0	42.4	510	100.0	57.6	886	100.0

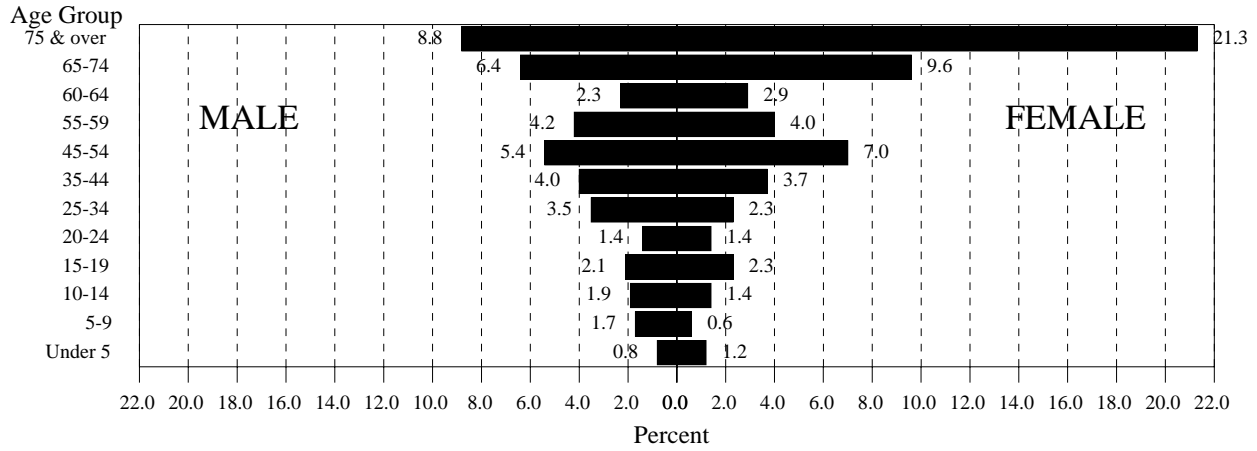
Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, STF 3A, Table 15; 1990 Census of Population and Housing, STF 1A, Table P012 and General Profile; 2000 Census of Population and Housing, Sf-1; and Bay-Lake Regional Planning Commission, 2002.

Decade Population Pyramids

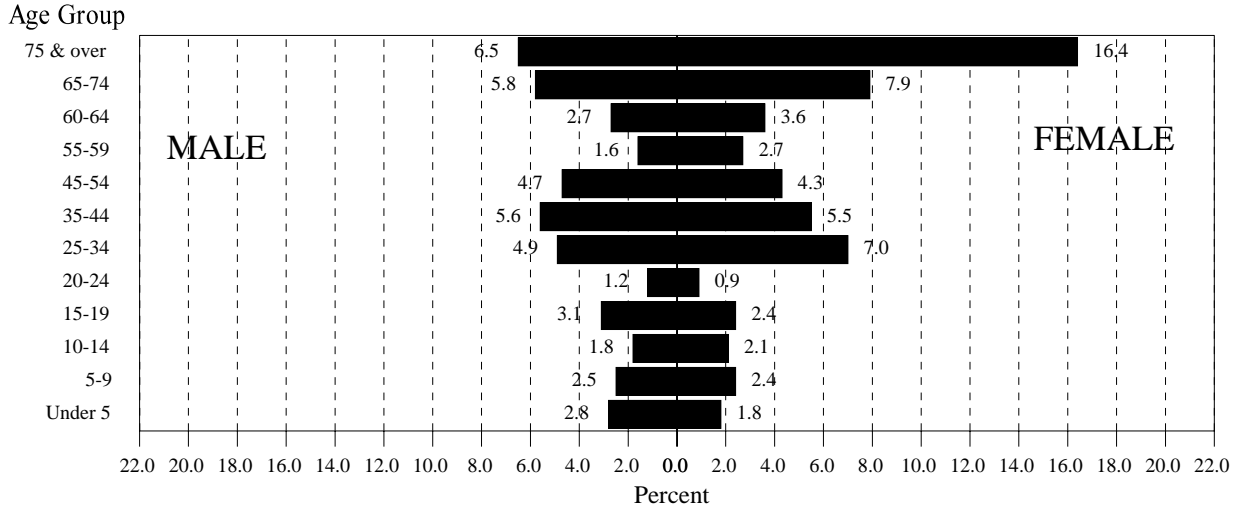
Figure 3.2 represents the distribution of the age and sex of the population of Sister Bay for 1980, 1990 and 2000. The number of persons under the age of 20 has dramatically decreased as a segment of Sister Bay's population. The oldest age group, 75 and older, has increased rapidly. This aging of the baby-boomers is similar to trends found in many areas. Anticipating this demographic change will require planning for the different needs of an older population.

Figure 3.3: Population Pyramids, 1980-2000, Village of Sister Bay

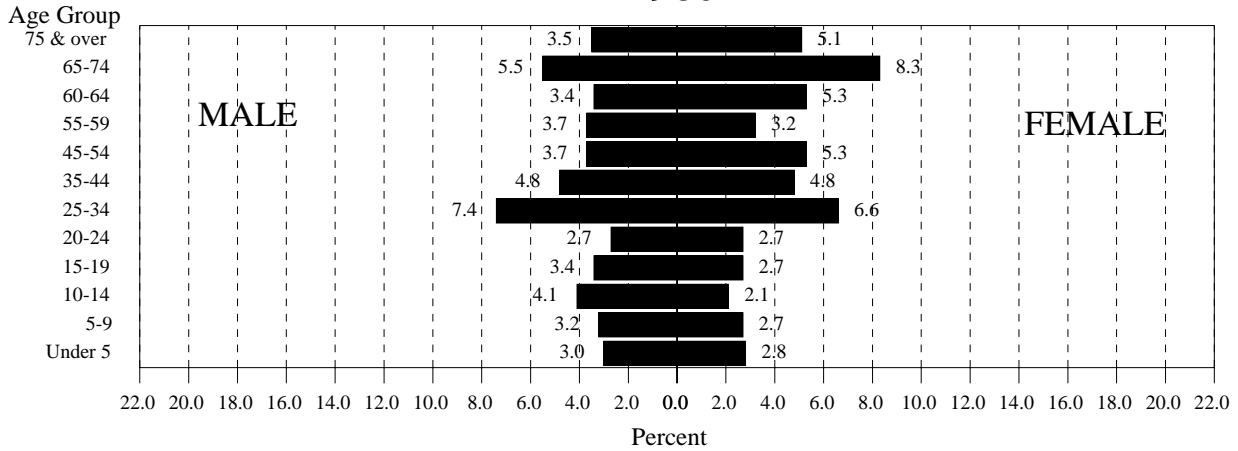
2000



1990



1980



Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, STF 3A, Table 15; 1990 Census of Population and Housing, STF 1A, Table P012 and General Profile; 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

School Age, Working Age, and Retirement Groups

In 2000, approximately 42.4 percent of the village of Sister Bay's population was male while 57.6 percent were female (see Table 3.6). Some notable features to Sister Bay's population include lower percentages of school age children and a much higher percentage of retirement age persons when compared to the county and the state.

Table 3.6: Population by Age Groups and Sex, 2000, Village of Sister Bay & Selected Areas

Age Groups	Village of Sister Bay				Door County	Wisconsin
	Total	Male	Female	Percent	Percent	Percent
School Age						
5-11	34	24	10	3.8	8.9	10.1
12-14	15	8	7	1.7	4.2	4.5
15-17	30	15	15	3.4	4.4	4.5
Working and Voting Age						
16+	806	331	475	91.0	80.8	77.5
16-64	397	196	201	44.8	62.1	64.4
18+	789	322	467	89.1	77.9	74.5
18-64	380	187	193	42.9	59.2	61.4
Retirement Age						
65+	409	135	274	46.2	18.7	13.1
Total Population	886	376	510			

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

Household Relationship

In 2000, 89.9 percent of persons in Sister Bay lived in a household (see Table 3.7). The trend in Sister Bay is different from Ephraim and Liberty Grove, where 100 percent of the persons lived in households. In Sister Bay more than 10 percent of the households were in group quarters indicating a population needing more care.

Table 3.7: Household Relationship, 2000, Village of Sister Bay & Selected Areas

Units	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Persons	886	100.0	353	100.0	1,858	100.0	27,961	100.0
In Households	793	89.5	353	100.0	1,858	100.0	27,580	98.6
Householder	446	56.2	161	45.6	824	44.3	11,828	42.9
Spouse	205	25.9	102	28.9	530	28.5	6,867	24.9
Child	109	13.7	71	20.1	427	23.0	7,329	26.6
Other Relative	12	1.5	8	2.3	38	2.0	545	2.0
Non Relative	21	2.6	11	3.1	39	2.1	1,011	3.7
In Group Quarters	93	10.5	0	0.0	0	0.0	381	1.4
Institutionalized	80	86.0	0	0.0	0	0.0	323	84.8
Other	13	14.0	0	0.0	0	0.0	58	15.2

Source: U.S. Bureau of the Census, 2000 Census; and Bay-Lake Regional Planning Commission, 2001.

Median Age

For the period 1970 to 2000, the median age for the areas shown has been steadily increasing. In general, the population of the entire U.S. is expected to continue to shift to an increasing older population. The village of Sister Bay has experienced a continuous increase in median age, with a median age substantially higher than the region and state median age (Table 3.8). The village of Sister Bay showed a very high median age in 1990 and again in 2000, with 51.5 years and

61.4 years of age respectively, nearly 20 years older than the 1980 median age of 41.2. This national trend, which can be seen in Door County and its communities, should be noted when planning for future needs for the area. There will most likely need to be adjustments in the housing stock, labor force, transportation, health care, as well as many other areas.

Table 3.8: Median Age, 1970-2000, Village of Sister Bay & Selected Areas

Geographic Area	1970	1980	1990	2000
Village of Sister Bay	40.1	41.2	51.5	61.4
Village of Ephraim	42.5	48.3	52.2	52.8
Town of Liberty Grove	43.9	42.3	42.2	49.1
Door County	33.8	31.4	36.5	42.9
Bay-Lake Region	29.6	30.7	34.6	38.6
State of Wisconsin	27.2	29.4	32.9	36.0

Source: U.S. Bureau of the Census, Census of Population, *General Population Characteristics*, Wisconsin, 1970 Tables 33,35; 1980 Table 44; 1990 STF 1A, General Profile, Census 2000; and Bay-Lake Regional Planning Commission, 2001.

HOUSING INVENTORY

Total Housing Unit Levels by Decade

The total number of housing units within the village of Sister Bay has steadily been increasing since 1970 (Table 3.9). Between 1970 and 1980, the rate of housing unit growth ranged from 26.6 percent for the state to 80.4 percent in Ephraim. For the period 1980 to 1990, the village of Sister Bay had the greatest percentage of housing unit growth, 74.2 percent. The village of Ephraim had the smallest percent increase in housing units for the period 1990 to 2000 while Sister Bay increased at a rate comparable to the region and state. If these trends continue in the county and its communities, planning will become increasingly important to ensure a wise use of land and resources.

Table 3.9: Total Housing Units, 1970-2000, Village of Sister Bay & Selected Areas

Area	Year				Percent Change			
	1970	1980	1990	2000	1970-80	1980-90	1990-00	1970-00
Village of Sister Bay	292	493	859	945	68.8	74.2	10.0	223.6
Village of Ephraim	475	857	954	1,029	80.4	11.3	7.9	116.6
Town of Liberty Grove	1,136	1,463	1,750	2,000	28.8	19.6	14.3	76.1
Door County	10,779	15,324	18,037	19,587	42.2	17.7	8.6	81.7
Bay-Lake Region	148,035	194,960	222,116	246,212	31.7	13.9	10.8	66.3
Wisconsin	1,472,466	1,863,897	2,055,774	2,321,144	26.6	10.3	12.9	57.6

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF1A, Census 2000; and Bay-Lake Regional Planning Commission, 2001.

Housing Unit Additions and Deletions

The village of Sister Bay had 236 additions and 2 deletions from their housing units stock. The number of housing unit additions which occur in Sister Bay appear to fluctuate from year to year. In 1996, the village reached a high of 48 additions in one year and then barely achieved half of that number the following year. The town of Liberty Grove had a total of 362 housing unit additions for the period 1990 to 1999 (Table 3.10). For the same period, the village of Ephraim had 39 housing unit additions, but 4 housing unit deletions.

Table 3.10: Housing Unit Additions and Deletions, 1990-1999, Village of Sister Bay & Selected Areas

Year	Village of Sister Bay	Village of Ephraim	Town of Liberty Grove	Door County
1990	17	5	27	257
1991	9	1	18	201
1992	36	1	26	252
1993	18	5	31	253
1994	12	1	44	301
1995	32	5	29	301
1996	48	2	40	360
1997	21	8	48	329
1998	19	7	62	360
1999	24	4	37	486
Total Additions	236	39	362	3,100
Total Deletions, 1990-1999	2	4	0	185
Net Change, 1990-1999	234	35	362	2,915

Source: State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys, July 18, 2000; and Bay-Lake Regional Planning Commission, 2001.

Historic and Projected Household Size

According to Wisconsin Department of Administration household projections for Door County, several trends are projected to occur from 1990 to 2015 (Table 3.11). The population is expected to continue to increase while the number of persons per household is projected to decrease to 2.24 by 2015. For the period 1990 to 2015, the greatest change in household type is expected in the living alone and older than 65 male householder category, projections indicate a 32.5 percent increase in this household type for Door County.

Table 3.11: Household Projections by Household Type, 1990-2015, Door County

Characteristics	Planning Year					
	1990	1995	2000	2005	2010	2015
Population	25,690	26,525	26,821	26,967	27,101	27,070
Persons Per Household	2.52	2.50	2.43	2.35	2.29	2.24
Households	10,066	10,472	10,851	11,263	11,630	11,891
Married Couple Family	6,262	6,550	6,801	7,092	7,367	7,500
Other Family	930	973	1,003	1,012	1,010	1,011
Male Householder	267	279	289	298	302	297
Female Householder	663	694	714	714	708	714
Householder Living Alone	2,529	2,606	2,688	2,792	2,891	3,031
Male	938	960	995	1,024	1,039	1,055
Age 65 and over	280	288	283	295	313	371
Female	1,591	1,646	1,693	1,768	1,852	1,976
Age 65 and over	1,064	1,103	1,084	1,092	1,125	1,253
Other Nonfamily Households	345	343	359	367	362	349

Source: Wisconsin Department of Administration, Wisconsin Household Projections, December 1993; and Bay-Lake Regional Planning Commission, 2001.

The village’s projected household size is also projected to continue to decrease over the next 20 years from 1.78 people per household in 2000 to 1.52 people per household in 2020.

Table 3.12: Persons per Household Projections, 2000-2020, Door County & Sister Bay

Area	Planning Year				
	2000	2005	2010	2015	2020
Sister Bay	1.78	1.72	1.68	1.64	1.59
Door County	2.43	2.35	2.29	2.24	2.17

Source: Wisconsin Department of Administration, Wisconsin Household Projections, December 1993; and Bay-Lake Regional Planning Commission, 2002.

Projected Housing Units

In formulating a “best guess” for the future residential needs of the community, two methods were looked at in order to determine the most likely population projection to 2020. The following are the methods looked at.

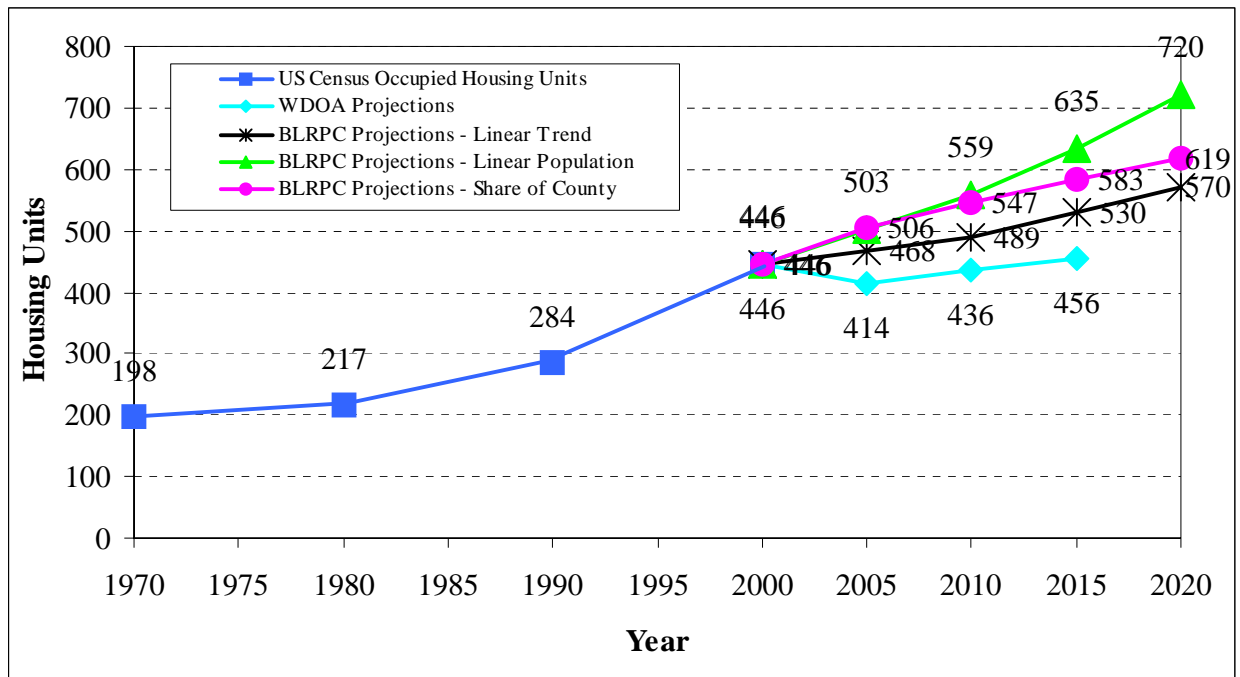
Method One:

Using the Census housing counts of occupied (non-seasonal) housing units from 1970 to 2000, a linear trend was created to the year 2020. This housing unit projection indicates that by 2020 the village of Sister Bay could have 570 occupied housing units or an increase of 124 occupied housing units (Figure 3.4). This represents an increase of 263 total housing units (1,208 total housing units) when adjusted for seasonal housing.

Method Two:

By using the High and Low population projections to 2020 and the projected Persons Per Household number to 2020, one can predict another range in the number of new occupied housing units needed by 2020. The High population projection predicts a population increase of 393 persons through 2020 (Table 3.4 and Figure 3.2). Using a persons per household projection of 1.6, this is equivalent to a new housing demand of 254 occupied (non-seasonal) units. The Low population projection indicates an increase of 214 people needing an additional 173 housing units for the permanent residents (Figure 3.4).

Figure 3.4: Projected Occupied Housing Units, Village of Sister Bay, 2000-2020



Source: Wisconsin Department of Administration, Wisconsin Household Projections, December 1993; and Bay-Lake Regional Planning Commission, 2001.

Housing Types - Units in Structure

The majority of housing types in Sister Bay and all other areas were one unit, detached structures in 2000 (Table 3.13). For the town of Liberty Grove and Door County the second greatest number of housing types are mobile homes. The village of Sister Bay had one unit, attached structures as being the second greatest housing type.

Table 3.13: Units in Structure, 2000, Village of Sister Bay & Selected Area

Units	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1, Detached	430	45.1	547	71.6	1,910	95.8	15188	77.5
1, Attached	210	22.0	73	9.6	12	0.6	737	3.8
2	16	1.7	5	0.7	11	0.6	529	2.7
3 or 4	122	12.8	44	5.8	10	0.5	619	3.2
5 to 9	70	7.3	14	1.8	8	0.4	601	3.1
10 to 19	36	3.8	10	1.3	12	0.6	269	1.4
20 or more	67	7.0	71	9.3	2	0.1	307	1.6
Mobile Home	2	0.2	0	0.0	27	1.4	1320	6.7
Other	0	0.0	0	0.0	2	0.1	17	0.1
Total	953	100.0	764	100.0	1,994	100.0	19,587	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, DP-3; and Bay-Lake Regional Planning Commission, 2002.

Housing Occupancy and Tenure

In 2000, there were 499 vacant housing units in the village of Sister Bay. Of those vacant units a majority were for seasonal, recreational, or occasional use (Table 3.14). There were 446 occupied housing units in Sister Bay (51.9 percent), of which 271 were owner occupied (31.5

percent). The village of Ephraim trends were very different from those of Sister Bay due to the very high numbers of seasonal units. The town of Liberty Grove had very similar trends, with a slightly lower number of owner occupied units and higher amounts of rental units, vacant and occupied. The county as a whole had approximately 39.6 percent of all housing units as being vacant; 35.6 percent for seasonal, recreational, or occasional use; and 60.4 percent as owner occupied.

Table 3.14: Housing Occupancy and Tenure, 2000, Village of Sister Bay & Selected Areas

Units	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied	446	47.2	161	20.9	824	41.2	11,828	60.4
Owner	271	28.7	141	18.3	727	36.4	9,394	48.0
Renter	175	18.5	20	2.6	97	4.9	2,434	12.4
Vacant	499	52.8	610	79.1	1,176	58.8	7,759	39.6
Seasonal, Recreational, Occasional Use	469	49.6	594	77.0	1,100	55.0	6,970	35.6
Other	30	3.2	16	2.1	76	3.8	789	4.0
Total Units	945	100.0	771	100.0	2,000	100.0	19,587	100.0

Source: U.S. Bureau of the Census, 2000 Census; and Bay-Lake Regional Planning Commission, 2001.

Age of Housing

Among the selected areas, the age of housing units varies greatly. In 2000, the village of Sister Bay and the county had the fewest number of housing units built prior to 1940 (Table 3.15). The town of Liberty Grove had the majority of housing units built between 1990 and 1994. Although a substantial number of housing units in Sister Bay were built before 1960, there were many housing units built between 1980 and 1999. With the population increasing and the need for affordable housing becoming more important, the need for additional housing units will become necessary, especially if older housing units are not maintained and are removed from the overall housing stock.

Table 3.15: Housing Units by Year Structure Built, 2000, Village of Sister Bay & Selected Areas

Year Structure Built	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1999 to March 2000	80	8.4	0	0.0	2	0.1	17	0.1
1995 to 1998	154	16.2	19	3.3	140	8.4	702	4.7
1990 to 1994	79	8.3	23	3.9	310	18.5	1,878	12.5
1980 to 1989	232	24.3	30	5.1	247	14.8	1,373	9.1
1970 to 1979	98	10.3	174	29.8	240	14.3	3,033	20.1
1960 to 1969	72	7.6	177	30.4	264	15.8	3,246	21.5
1940 to 1959	123	12.9	63	10.8	135	8.1	1,510	10.0
1939 or earlier	115	12.1	97	16.6	335	20.0	3,316	22.0
Total	953	100.0	583	100.0	1,673	100.0	15,075	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, DP-4; and Bay-Lake Regional Planning Commission, 2002.

Substandard Housing

Determining the number of substandard housing units in Sister Bay will be an indication of the condition of the overall housing stock. Those units which are determined to be substandard should not be considered as part of the overall housing supply. The definition of substandard can vary from community to community. Often, determining a structure as substandard can be based solely on the age of the structure, however many older housing units have been remodeled or

renovated and should not be considered substandard. In 2000, there were 115 housing units built prior to 1940, many of which are not substandard. In 2000 there were no housing units in Sister Bay which lacked complete kitchen facilities and complete plumbing facilities.

Housing Values

In 2000, the majority of housing units in Sister Bay were valued between \$200,000 and \$299,999. This was also true for the village of Ephraim while the town of Liberty Grove had a majority of units in the \$100,000 to \$149,999 range. The majority of housing units in Door County were valued between \$50,000 and \$99,999 (Table 3.16).

Table 3.16: Value of Specified Owner-Occupied Housing Units, 2000, Village of Sister Bay & Selected Areas

Value	Village of Sister Bay		Village of Ephraim		Town of Liberty Grove		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$50,000	2	1.0	0	0.0	6	1.2	241	3.8
\$50,000 to \$99,999	17	8.2	5	6.5	48	9.8	2,181	34.2
\$100,000 to \$149,999	42	20.3	5	6.5	150	30.7	1,613	25.3
\$150,000 to \$199,999	48	23.2	19	24.7	109	22.3	850	13.3
\$200,000 to \$299,999	64	30.9	31	40.3	92	18.9	776	12.2
\$300,000 to \$499,999	23	11.1	9	11.7	44	9.0	447	7.0
\$500,000 to \$999,999	9	4.3	4	5.2	33	6.8	238	3.7
\$1,000,000 or more	2	1.0	4	5.2	6	1.2	28	0.4
Total Units	207	100.0	77	100.0	488	100.0	6,374	100.0
Median Value	\$190,800		\$225,000		\$167,200		\$120,800	

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, DP-4; and Bay-Lake Regional Planning Commission, 2002.

Housing Costs-Rents and Mortgage

In March 2000, the Door County Workforce Development Taskforce created a report on the current Door County employment crisis. The report found that there is an atypical relationship between wage rates and housing costs in Door County. Often areas of low income in Wisconsin also are areas where housing costs are low. Door County, on the contrary, suffers from lower than average resident income and higher than average housing costs. The housing problem is not limited to entry level positions. Professionals employed by the county and school districts do not expect to be able to live where they work due to the high housing costs.

In an employer survey, done by the Door County Economic Development Corporation (DCEDC) in 1999, approximately 30 percent of respondents listed the lack of affordable housing as a factor making it difficult to fill positions. The with the highest percentage in the survey indicating a need for additional employee housing was the restaurant business. It should be noted that although the report and survey done by the DCEDC covered all of Door County, many of the trends found in the county apply to Sister Bay as well. Census information and other data provided earlier show that many of the trends found in the county are also found with individual communities, but on a smaller scale.

Providing affordable housing which meets the needs of future Sister Bay residents is an important element of planning because housing also effects the economy, transportation, infrastructure and various other aspects of a comprehensive plan. According to the U.S. Department of Housing and Urban Development (HUD), housing affordability is defined as paying no more than 30 percent of household income for housing. According to the 2000 Census

the median household income was \$33,224 in Sister Bay. Therefore, assuming individuals made the median household income, the monthly amount a household can afford for housing is approximately \$830. Due the great amount of fluctuation which occurs in the Door County housing market, 2000 Census data may not present an accurate measure for determining housing affordability.

Rent and Income Comparison

According to the 2000 Census, the median gross rent for renter-occupied housing units was \$634. Approximately 97 out of 173 renter-occupied housing units, 56.0 percent, paid 30 percent or more of their income in rent in Sister Bay.

In August of 1999, the DCEDC surveyed rental housing in Door County and only 9 units were available, out of 385 units. It should be noted that the survey may have been undertaken at a time of the year when supply is the most limited.

Owner Costs and Income Comparison

The 2000 Census indicates that 50 out of 207, or 24 percent, of owner-occupied housing units paid 30 percent or more for monthly owner costs. This 24 percent is considered as living in non-affordable housing. For owner-occupied housing units with a mortgage in 2000, the median monthly owner cost was \$978 for the village. For owner-occupied units without a mortgage the median monthly cost was \$336.

ANALYSIS AND DEVELOPMENT OF COMMUNITY POLICIES AND PROGRAMS

The village of Sister Bay currently does not have any policies or programs which solely focus on housing in the community. However, there are several programs and agencies that assist with various housing issues at the county level. There is assistance available to local housing projects through federal, and state housing programs, however all have a limited amount of resources available.

Local Programs and Revenue Sources

Lake Shore Community Action Program

The Lake Shore Community Action Program offers a Home Buyer Education and Assistance Program, available to Door county residents, in which low income eligible families can receive low interest loans and counseling on purchasing a home. The Door County Housing Authority also provides a listing of several moderately priced apartment complexes as well as public housing units located in Door County, however most of those units are located in Sturgeon Bay.

The Lake Shore CAP has two assistance programs available to residents in Door County and Liberty Grove. One program is the emergency housing assistance program which aids those that are threatened with homelessness. There are strict qualifications that people must meet in order to receive assistance. Most often rental assistance is offered or short-term assistance to prevent homelessness. Assistance that is offered is most often short-term. A second program that is offered is called continuation of care for those that are already homeless, as defined by HUD. Assistance that is offered is used to provide a stabilization mechanism to aid people in getting housing. This can include job training, referrals to low-income housing, and other things that a particular qualifying individual needs to be able to provide themselves with housing.

Housing trust fund

A housing trust fund is a pool of money available for housing projects for middle or lower income households. The fund is used to fill financial gaps to make projects feasible. Trust funds may be replenished yearly or they may be designed to be perpetual and self-sustaining. Revolving funds are sustained by the payments of loan recipients which are then used to supply additional loans. Sources of revenue to begin or replenish housing trust funds include escheated or abandoned funds, sale of public land, general obligation bonds, general appropriations, endowments and grants, and surplus reserve funds.

Housing trust funds are particularly well-suited to meet the large and long-term capital investment needs of projects. Unlike funds that rely on the vagaries of state or local annual appropriations, a housing trust fund is a permanent dedication of a specified amount for housing. Trust fund money can be used in a number of ways. It may assist in home purchase, down payment assistance, security deposit assistance, housing construction, rehabilitation, maintenance, and operation, technical assistance for housing organizations, homeless shelters, debt or equity financing, and second mortgages. The City of Stevens Point, in central Wisconsin, is one example of a community that has established a housing trust fund. For information on how this fund was established and how it is used, contact the Housing Authority of the City of Stevens Point (715) 371-3444.

Housing linkage programs

Voluntary housing linkage programs encourage developers of office, commercial, retail, or institutional development to construct or make financial contributions towards affordable housing. The underlying rationale is that new non-residential development creates a need for housing by attracting employees to an area. Therefore, the developers should contribute towards satisfying this need. Linkage programs usually apply to new construction but they may also apply to expansion of existing space. The programs are popular with developers when they either reduce costs or add value to the project. Examples of incentives are density bonuses, reduced setbacks, and reduced parking requirements.

These programs benefit businesses, the developer, and the community. Developers benefit from the incentives while communities benefit from more affordable housing. Businesses benefit from a well-housed and accessible labor force. Office/housing linkage programs will be most useful in communities experiencing high growth rates where developers are more willing to take advantage of incentives and where linkage programs can reduce the pressure for housing.

Private Programs

Non-profit housing development corporations

A non-profit corporation is an organization that may qualify for tax-deductible donations, foundation grants, and public funds. To be eligible, the organization must apply for and receive non-profit status from the IRS. Non-profits build and maintain housing in many areas of Wisconsin. Their projects help communities improve their range of housing opportunities.

Non-profits are eligible for state and federal financial resources, making them an important vehicle for publicly desired housing. They often work in collaboration with local governments, civic organizations, citizens groups, and for-profit developers. This improves communication and coordination in the community and creates an atmosphere for future projects. Municipalities

too small to have their own housing staff or programs may contract with non-profits to provide services such as housing management and grant-writing. They may also be able to pool resources with the non-profit and other area communities. Non-profits can develop technical expertise and skills with regard to finance, construction, rehabilitation, and project management.

Wisconsin is unique in that it has a program to specifically assist nonprofit housing organizations. The program is called the Local Housing Organization Grant (LHOG) Program. It provides grants to nonprofits to increase their capacity. To find out if there is a non-profit housing developer serving your area or about LHOG, contact the Department of Administration, Division of Housing and Intergovernmental Relations at (608) 266-0288.

Housing Plan

Below is a detailed discussion of how the community can achieve their desired housing for all of their residents utilizing information provided by the UW-Extension along with state programs. The three housing requirements as defined by s66.1001(2)(b) are detailed below - along with options/actions presented to meet these state requirements. An overall recommended community strategy is formulated at the beginning of this chapter which states specific policies and programs the village is encouraged to follow to meet these requirements.

Requirement 1. Promoting the development of housing which provides a range of housing choices to meet the needs of persons of all income levels and of all age groups and persons with special needs.

An increasing number of people cannot find housing in their community that is suitable for their stage of life - from young wage earners to couples with grown children. Local communities and their governments need to pursue strategies that encourage the development of a range of housing choices to meet the needs of people with different income levels and with various needs. People with special needs typically include the elderly, physically and mentally disabled persons and may include other classifications such as farm workers and migrant laborers. As the general population of Wisconsin ages, affordability, security, accessibility, proximity to services, transportation, food, and medical facilities will all become very important.

Specific local actions

Local governments affect the type and cost of housing available in their community through their regulations and policies. While most government regulations are implemented in order to serve specific community health, safety, and welfare needs they may have unintended adverse impacts on affordability. A review of local regulations may reveal areas where changes can be made to decrease the impact on affordability without compromising the protection of public health, safety, and welfare.

Some specific strategies to promote a range of housing choices to meet a variety of needs include the following:

Zoning and subdivision regulations for smaller lot size

One technique for insuring a range of housing is to provide a range of densities and lot sizes. Traditional zoning ordinances may only allow a limited variety of lot sizes throughout a community for single-family residential development.

Land costs can be 25 percent or more of the total cost for a home. One way to reduce land costs is to reduce lot size. First, lot prices are less expensive for smaller parcels. Second, land development costs are less because they may be spread over a larger number of units. Third, less infrastructure is needed because development on smaller lots requires fewer miles of roads, sidewalks, gutters, and shorter utility runs. In a competitive market, reduced land development costs are passed on to consumers.

Smaller lot sizes which seek to increase overall density within the community can also be linked to other community planning objectives. For example, higher density development can (1) preserve farmland, open space, and environmentally sensitive areas by reducing the overall amount of land needed for housing; (2) improve the viability of mass transit, provide opportunities for residents to live near their jobs, and thereby help reduce vehicle miles traveled; (3) use existing infrastructure more efficiently than less compact development thus reducing service costs and saving tax dollars.

Increasing density may meet with opposition from existing area residents. To address these concerns attention must be given to site design characteristics. For example, design elements such as the layout of streets, lots, mixing of lot and house sizes, variation in building setbacks and elevations, variation in exterior designs, and quality landscaping to provide privacy. The development must be attractive if it is to be accepted by the larger community.

A word of caution: Concentrating the very lowest income households together in high densities has proven to have a negative effect upon the community, the residents, and the condition of the housing. A broader mix and range of housing choices throughout a community is, therefore, important.

Standards in zoning and subdivision ordinances

Many communities have zoning and/or subdivision ordinances that contain building requirements that may unnecessarily increase the cost of housing thereby limiting the range of housing choices available in the community. These include requirements setting forth minimum floor area size. By removing minimum floor area sizes, communities can increase the range of housing opportunities.

Many local subdivision regulations also include standards for how subdivisions are designed (e.g., road widths, sidewalks, tree plantings, setback, materials, land dedication, sidewalks or paths, location of the structure on the site, garages). Communities should review their subdivision ordinances to identify provisions that constrain housing. Old ordinances in particular may be in need of revision to meet current needs. Current neighborhood design emphasizes social, economic, and environmental aspects and endeavors to create neighborhoods that are more energy efficient and that have a greater range of housing options.

The following are some suggestions for reviewing subdivision regulations:

Setbacks - Large setbacks increase housing costs. They originated as a means of fire protection. Subdivision regulations should establish maximum front yard setbacks, either in addition to or instead of minimum setbacks. Side yard setbacks may also need to be decreased.

Streets - Narrower streets can reduce development costs.

Lot layout - Traditional platting design has been to site large, one-sized lots without regard to local climate, topography, or hydrology. Current practice emphasizes variety in lot size, shape, and use to increase housing options within the development.

Lot design and vegetation - Using breezes and topography and trying to capture winter sun and block summer sun can save residents money on fuel costs.

References/Additional Resources

Removing Regulatory Barriers to Affordable Housing in Wisconsin: A Report by the Governor's Task Force on Regulatory Barriers to Affordable Housing (1994).

Affordable Housing Techniques: A Primer for Local Government Officials by the Municipal Research and Services Center of Washington (1992).

Changing Development Standards for Affordable Housing by Welford Sanders and David Mosen (American Planning Association, PAS Report # 371, 1982).

Planning for Affordable Housing by the Vermont Department of Housing and Community Affairs (1990).

A Citizen's Guide to Conserving Land and Creating Affordable Housing by the Burlington Community Land Trust and the Vermont Land Trust (1990).

Smart Growth: Creating Communities for People by Allison Semandel and Mike Kinde (Citizens for a Better Environment, 1999).

Model Code Provisions - Urban Streets & Subdivisions Washington State Department of Community, Trade and Economic Development (1998).

Innovative zoning and subdivision techniques

Innovative development techniques, such as ***mixed-use development***, ***zero lot lines***, and ***cluster development***, can also encourage a broader range of housing choices.

Mixed-use development allows different land uses, such as commercial and residential, and allows several different housing densities within a single development. Mixed-use developments can range in size from single buildings with apartments located over retail uses, to large-scale projects that include office and commercial space along with housing.

With mixed uses, commercial uses may make housing development economically feasible when it otherwise would not be. Higher density housing in commercial zones may be more politically acceptable than increasing densities in established single-family areas. Sensitive design and site planning is critical with mixed-use developments.

Mixed-use developments can be regulated in various ways. Some communities allow residential uses by-right in certain identified commercial zones. Other communities consider housing in commercial areas as conditional uses. Other communities allow mixed uses within a planned

development district (also commonly referred to as planned unit development or PUD) or in special mixed-use districts.

Zero-lot-line. Conventional zoning requires that the home be set back from every lot line. However, for small lots the "yards" created on each side of the house are very small, and usually useless. Zero-lot-line ordinances place the house on one of the side-lot lines and/or on the rear or front-lot line. By placing a house on the lot lines, the amount of useable space on the other sides is doubled.

Some communities permit houses to be sited on a common lot line so that they resemble duplexes. Other communities require that they be sited on alternate lot lines, to give the appearance of housing in a conventional development. The advantage of zero lot line is that it offers the lower costs associated with high-density development while still maintaining the privacy and appearance of traditional single-family detached housing.

Cluster development allows housing units to be grouped within a residential development on lots smaller than those normally allowed. Clustering can help reduce housing costs because of decreased lot sizes and because of decreased development costs. But, cluster development may increase site planning, design, and engineering costs. It can create common open space and protect environmentally sensitive land. It is a technique has been used in developing urban areas and in rural areas. Cluster developments are regulated in a number of ways. Zoning ordinances can specify zones in which cluster developments are permitted and/or allowed by special permit. Subdivision regulations can outline development standards for clustering. Cluster development may also occur as part of a planned development district.

References/Additional Resources

Southeastern Wisconsin Regional Planning Commission, *Rural Cluster Development Guide* (Planning Guide No. 7, 1996).

East Central Wisconsin Regional Planning Commission, *Rural Development Guide for East Central Wisconsin Governments and Landowners* (1999).

Randall Arendt, *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks* (Island Press, 1996).

Density bonuses

A *density bonus* allows a developer to build more units in a project than would otherwise be permitted. Bonuses may be offered in exchange for preservation of open space or other things valued by the community. Density bonuses increase the value of the overall project and may therefore make certain projects economically feasible when they otherwise would not be. Density bonuses offer a positive alternative to mandatory programs that may be resisted by developers. Developers may decide for themselves whether participation will be cost effective.

The community will need to decide the amount of increased density given in exchange for the desired development features. Because the market ultimately determines the success of density bonus programs, program designers will need a thorough understanding of the local and regional real estate market. For example, if current zoning already allows enough density to satisfy market demand, developers will have no interest in a density bonus. Density bonus programs may be implemented through zoning or subdivision ordinances, or both.

Inclusionary zoning

Inclusionary zoning requires that a certain number of units in a new development be set aside as affordable. Inclusionary programs may apply to both rental and owner-occupied units and may be mandatory or voluntary. Some communities have found that mandatory programs impose costs on developers that are too heavy and actually retard new construction of both affordable and market-rate units by making them economically unfeasible. If requirements are imposed, they should be modest enough to ensure developers an adequate return on their investment. Voluntary programs are preferable to mandatory programs if developers will use the incentives.

Voluntary programs provide incentives to allow developers to determine for themselves whether participation will be cost effective. Incentives may be density bonuses, waiving development fees, and financial assistance through federal, state, and local programs.

References/Additional Resources

Affordable Housing Techniques: A Primer for Local Government Officials by the Municipal Research and Services Center of Washington (1992).

Planning for Affordable Housing by the Vermont Department of Housing and Community Affairs (1990).

Affordable Housing: Proactive and Reactive Planning Strategies by S. Mark White (American Planning Association, PAS Report #441, 1992).

Accessory or "granny" apartments

An *accessory or "granny" apartment* is a living unit separate from the primary residential unit. It includes separate kitchen, sleeping, and bathroom facilities. Accessory apartments may be attached to the primary dwelling or detached. Attached accessory units typically involve some space in the existing home, such as an attic, garage, or basement family room. Detached units are sometimes also referred to as "accessory cottages." They may be guest or servant quarters, converted sheds, or garages.

Accessory apartments benefit elderly persons with limited resources living in large single-family homes with under-used space; households with an older relative who is still able to live substantially independently but requires some degree of assistance; and young adults who want to live independently while still being near to their parents.

Accessory units may already exist in the community without ordinances. Communities may want to adopt regulations to address the size of units, their concentration, their exterior appearance, and parking requirements. In some communities accessory units can only be used for a frail elderly person or caretaker and the kitchen must be removed when this permitted use ends.

References/Additional Resources

Accessory Apartments: Using Surplus Space in Single-family Houses by Patrick H. Hare, Susan Conner, Dwight Merriam (American Planning Association, PAS Report #365, 1981).

Streamlined permitting processes

The land use permitting process affects the cost of housing. Delays in the review of proposed housing developments can add to development costs. A more efficient land use review process can also result in a more cost-effective way to administer land use regulations.

The following are ideas for streamlining the land use permitting process. Because each of these reform measures is designed to accomplish different objectives, they are best used in combinations:

Self-assessment - Begin by taking stock of the permitting process. For example, how long does a typical development review take from start to finish? Are there places where the system bogs down? Are there ways to eliminate or consolidate some of the steps in the approval process?

Centralized one-stop permit desk - This saves applicants from needlessly backtracking to different offices and departments. Include interdepartmental review to help coordinate the numerous departments that may be involved in the development process.

Checklists and flow charts - Consider publishing guidebooks that outline the local permit process.

Zoning and subdivision ordinances should describe the application process from start to finish - Ordinance language should be simple and direct and the sections and standards that relate to one another should be cross-referenced. Doing so benefits applicants and those who administer and enforce the ordinance.

Pre-application conferences - Formal or informal meetings with community staff to present concept or sketch plans, address requirements and save money by clarifying expectations before the expensive technical and engineering work begins.

Concurrent review - Concurrent review allows different steps in an application to proceed at the same time (like a petition for a zoning change and review of a subdivision plat) thus reducing the overall time needed.

Staff discretion on administrative matters - Minor subdivision approvals and issues involving mostly technical and minor changes to submittals can be handled by planning staff. Plan commission time should not be wasted on such matters.

Encourage innovation - Innovative techniques may be encouraged by an expedited permit process and by allowing them as conditional uses or as overlays to existing zoning districts.

References/Additional Resources

Streamlining the Development Approval Process by Debra Bassert (Land Development, Winter 1999, pp. 14-19).

Streamlining Land Use Regulations: A Guidebook for Local Governments by John Vranicar, Welford Sanders, and David Mosena (American Planning Association, 1982).

Affordable Housing: Proactive and Reactive Planning Strategies by S. Mark White (American Planning Association, PAS Report #441, 1992).

Impact fees

Impact fees are fees imposed on development to mitigate the capital costs of new public facilities necessitated by the development. Public facilities include infrastructure for transportation, water, stormwater, parks, solid waste, and fire and police. However, impact fees cannot be used for school facilities. Under section 66.0617(7) of the Wisconsin Statutes, impact fee ordinances must provide for an exception from or a reduction in the amount of impact fees on developments that provide low-cost housing.

Requirement 2. Promoting the availability of land for the development or redevelopment of low-income and moderate-income housing

Communities must promote the availability of undeveloped or underused land as one way to meet the low and moderate-income housing needs identified in the housing element of s66.1001. Several options are available to communities. For example, communities should insure an adequate supply of land is planned and zoned for multifamily housing and for development at higher densities to meet forecasted demand.

Promoting the availability of land for low and moderate-income housing also can be integrated with other planning issues. For example, urban communities may try to identify areas near transit lines or where new transit might be feasible because of higher density and mixed-use development.

Additional strategies for promoting the availability of land for the development or redevelopment of low and moderate-income housing include the following.

Specific local actions

Community land trust

Community land trusts protect housing by keeping land from the speculative market. They typically work by owning the land and selling or leasing the buildings. Buyers or lessors agree to a limited appreciation should they decide to later sell or lease to another. The model works to preserve both existing residential units and new units built on the land. Also, it can be used to preserve affordable space for such things as community centers, health care facilities, small businesses, or day care centers. Community land trusts are similar to conservation land trusts which protect natural resources and open space.

Community land trusts provide the following benefits:

Lower land costs - Because land trusts remove land costs from the purchase price of a property, housing units can be sold or rented for less;

Permanent affordability - Removing land costs and limiting the amount of appreciation means that land trust housing will always be more affordable than market-rate housing for as long as the trust exists (which may be indefinitely);

Retention of investment - Grants, loans and other investments in a land trust are effectively recycled year after year through rents or sale prices, instead of requiring continuous financial support;

Community stability - Community land trusts are non-profit organizations controlled by local personalities. They are committed to stabilizing local housing costs for the long term and preserving a community's social fabric;

Speed - Land trusts can more quickly purchase properties that become available than can government.

The Madison Area Community Land Trust has been active since 1990 working with the City of Madison. For more information about the Madison Area Community Land Trust call (608) 255-6442.

References/Additional Resources

Institute for Community Economics, 57 School Street, Springfield, MA 01105-1331. 413-746-8660.

A Citizen's Guide to Conserving Land and Creating Affordable Housing by the Burlington Community Land Trust and the Vermont Land Trust (1990).

Use of public or donated land for housing

Development of housing on publicly owned land or land donated for affordable housing can substantially increase the financial feasibility of many housing projects. Communities can also seek to encourage the donation of land for affordable housing.

Lands acquired by the community through tax forfeiture may be appropriate for affordable housing. Local governments and nonprofits may also engage in a program to acquire land and hold it until the community is ready to develop housing. Funding to acquire land may be available from federal and state programs.

Infrastructure improvements reserved for affordable housing

Giving priority for sewer and water extension to projects that include housing units affordable to middle- and lower-income households can increase the likelihood that such housing will be built. The priority may be formalized in an ordinance or informally as a plan policy.

Infill development

Infill refers to development on vacant or under-used land within built-up urban areas. Infill can range from construction of single-family housing on one or two adjacent lots to development of entire city blocks containing both residential and commercial uses.

Infill development has several advantages. Infill areas are already served by public facilities, including roads, sewer and water, police, fire, utilities, schools, and transit. Infill opportunities may sometimes be located on higher-cost urban land. If this is the case, then multi-family housing and/or mixed-use projects which have lower per-unit development costs may be most appropriate. Density bonuses or faster permitting may also add to an infill project's economic feasibility.

Communities may encourage infill development by preparing an inventory of potential infill sites and distributing it to developers; adopting flexible regulations which allow development of irregular or substandard infill lots; allowing mixed uses for infill developments, which may enhance the economic feasibility of projects; assisting in the consolidation of infill lots into

larger, more easily developed sites; and acquiring abandoned property and demolishing structures beyond rehabilitation.

To minimize neighbor concerns infill units should be designed to fit in with the massing and density of the existing neighborhood as much as possible. For example if the neighborhood is all two story houses with steep pitched roofs the infill units would probably be more acceptable if they had two stories with steeply pitched roofs. The Wisconsin Housing and Economic Development Authority has had a special financing program to support the development of infill housing. They used this program in several cities where they successfully added new structures to existing neighborhoods using modular homes.

Adaptive reuse

Adaptive reuse involves the conversion of surplus and/or outmoded buildings to economically viable new uses such as housing. Examples of outmoded buildings include old schools, hospitals, warehouses, and factories. It is one method for introducing housing into non-residential areas. Projects that involve historically or architecturally significant buildings may qualify for preservation tax credits.

Communities can facilitate adaptive reuse by developing flexible ordinances to facilitate adaptive reuse, by arranging for possible property transfers of publicly-owned buildings, and by providing assistance in obtaining sources of funding such as loans, grants, and rent subsidies.

Manufactured Housing

Manufactured housing can be an important source of low and moderate cost housing in a community. Communities may want to encourage manufactured housing as a means of expanding the range of housing opportunities. Manufactured housing is less expensive to build than site-built housing because of lower production costs. The term *manufactured housing* describes housing that is constructed in a factory and delivered to the site as a finished product. While these homes are often referred to as "mobile homes" fewer than five percent of manufactured homes are moved once placed on a site.

Local communities often try to prohibit the siting of manufactured housing due to concerns about the effect on the tax base since manufactured housing is often taxed as personal property. However, a study by the University of Wisconsin-Extension suggests that manufactured home communities may actually have a positive impact on local taxes. There also may be concerns about the effect on adjacent property values and the visual quality of manufactured homes. A University of Michigan study, however, concluded that manufactured home parks have little or no impact on adjacent residential property values.

Communities may want to review their zoning ordinances to be sure that their regulations do not unduly restrict the use of manufactured homes. For additional information regarding manufactured housing and integrating them into single-family neighborhoods, contact the Wisconsin Manufactured Housing Association at (800) 236-4663.

The Foundation for rural housing located in Madison has developed a program with the Wisconsin Manufactured Housing Association and the Department of Corrections to obtain donated manufactured homes, rehabilitate them with prison labor and make them available for low income housing. For information contact the Foundation at (608) 238-3448.

References/Additional Resources

Manufactured Housing: Regulation, Design Innovations, and Development Options by Welford Sanders (American Planning Association, PAS Report #478, 1998).

Manufactured Housing Impacts on Adjacent Property Values by Kate Warner and Jeff Scheuer (University of Michigan, 1993).

Municipal Revenue Impact of Tax Exempt Mobile Homes: A Methodology for Extension Agents by Richard Stauber (University of Wisconsin-Extension, 1995).

Product Report: 'Manufactured Housing' available from the American Association of Retired Persons website at www.aarp.org/manhov1.html.

Manufactured Housing and Standards: Fact Sheet for Purchasers of Manufactured Homes (1999) available from the U.S. Department of Housing and Urban Development website at hud.gov/fha/sfh/mhs/mhssht3.html.

Regulating Manufactured Housing by Welford Sanders (American Planning Association, PAS Report # 398, 1986).

Requirement 3. Maintaining or rehabilitating existing housing stock

It is important that the communities housing plan consider conservation of the communities existing housing. The existing housing often is the primary source of affordable housing. In many communities this existing housing is aging and may need investment to maintain its utility. Communities and local governments should develop strategies that prevent neglect and encourage reinvestment in the existing housing.

Specific local actions

Building code

The State of Wisconsin has a uniform dwelling code which must be followed for the construction and inspection of all one- and two-family dwellings in the state. Local communities in the state have certain responsibilities for enforcement of the code. The uniform dwelling code is administered by the Wisconsin Department of Commerce and is found in the Administrative Rules for the Department of Commerce (COM 20 - COM 25).

Historic building code

The standard state building codes may make rehabilitation of certain older homes prohibitively expensive or impractical. Communities in Wisconsin which have adopted historic preservation ordinances certified by the State Historical Society of Wisconsin can use the Wisconsin Historic Building Code for locally designated historic buildings. The Historic Building Code, administered by the Wisconsin Department of Commerce, permits a flexible and cost-effective approach to rehabilitating historic buildings. The code is found in the Administrative Rules for the Department of Commerce (COM 70). Information is also available from the Division of Historic Preservation at the State Historical Society of Wisconsin at (608) 264-6500.

Housing code

All communities in Wisconsin can enact housing codes under their general authority to protect public health, safety, and welfare. Housing codes provide standards for how a dwelling unit is to be used and maintained over time.

It is important for communities to review housing code enforcement efforts to determine if they need to be increased or modified to make them more effective. Communities can intensify housing code enforcement programs to help maintain housing and upgrade deteriorating housing stock. In some communities code enforcement capacity is so limited that routine inspections are scheduled only once in ten years. Communities could consider focusing enforcement efforts on select neighborhoods, publicizing code provisions, and complaint procedures.

Community paint/fix up events

Local governments should target home maintenance/rehabilitation programs at the neighborhood level because the visibility can help create peer pressure to motivate others to fix up their homes. One strategy is to organize painting/fix-up events in partnership with local professional and civic groups to encourage volunteers to help with exterior maintenance of target residences.

Rehabilitation loans and grants

Code enforcement can be supplemented with financial and technical assistance to homeowners and tenants. Communities may establish loan or grant programs to assist owner occupants with repairs. Such programs are commonly funded by federal Community Development Block Grant dollars. The programs often focus on specific census tracts or neighborhoods where the concentration of deferred maintenance is highest. In addition to keeping housing units functioning, maintenance and rehabilitation are also worthwhile because they build pride among residents, stimulate others to repair their homes, encourage long-term investment and maintenance, and reduce potential neighborhood problems.

Occupant education and cooperation

Many repairs are simple enough that most homeowners can help if given some guidance. Educational programs to train homeowners and renters can help ensure that the homes are rehabilitated and maintained in good condition. These educational programs help property owners better understand the responsibilities

Chapter 4 - ECONOMIC DEVELOPMENT

INTRODUCTION

Throughout the planning process, many factors contribute to economic development opportunities and needs within a community. For this reason, labor force characteristics and economic base indicators were analyzed at the local, county, regional and state level to determine trends, opportunities and needs for the village of Sister Bay.

SUMMARY AND IMPLICATIONS

1. Federal, state, regional, county, and local programs exist to promote opportunities within the village.
2. Employment opportunities for village residents exist within the village of Sister Bay, nearby village of Ephraim, city of Sturgeon Bay, village of Egg Harbor, and other communities that are within an hour drive of the village. The 1990 Census details that 100.0 percent of village workers chose to remain in Door County for employment.
3. The greatest number of job types that existed for village residents were sales and office occupations. The most employed numbers of village residents was in the arts, entertainment, recreation, accommodations and food services industry.
4. For the period 1990-2001, the Door County civilian labor force ranged from a high of 9.5 percent in 1994 to a low of 4.4 percent in 1999, the number of employed persons grew 13,747 in 1990 to 15,299 in 2001.
5. According to the Department of Workforce Development, the manufacturing group occupation is expected to increase; however the rate of increase will slow down.
6. In 1997, the village had a median household income of \$27,092, resulting in a 35 percent increase from 1989.
7. In 1999, the village had a median household income of \$33,224, resulting in a 65 percent increase from 1989. The Per Return Income of the village in 2000 was \$36,090 for the same period which was lower than all other comparable areas.
8. Financially, the village had an existing debt of \$1,740,188 as of January 2000, and \$12,200,532 available to borrow.

The village is in a good position for limited business development given its many positive attributes including:

- existing sewer and water infrastructure,
- access to state and county highways,
- an abundance of natural features.

With limited growth, the village can look to expand its tax revenue, plus capitalize on future growth in nearby communities to afford greater job opportunities to its village residents.

Knowing location and how much of a type of business the village wants is going to be the key to the village's long range planning regarding its vision. Therefore, the Village Board will need to

closely monitor this type of growth, its impacts on existing infrastructure and determine the needed regulations to minimize any negative impacts they may have. A cost benefit analysis should be conducted in order to determine all aspects of future development of industries throughout the planning period.

The plan will direct development to designated commercial and industrial areas in the future, in order to steer incompatible uses away from the village's defined residential and agricultural areas (See General Plan Design Map). This will help to enhance other land uses by minimizing and controlling likely nuisances.

Goal:

Plan for development in the village of Sister Bay by seeking balanced economic growth in business and industry, while providing jobs for residents, increasing personal income and protecting the village's environmental assets.

Objective:

To continue to enhance and promote the character of the village of Sister Bay, future businesses will be located in areas specified in the general plan design map, found in Chapter 8 of this document.

Policies:

1. Consolidate commercial growth near major highways in order to establish specific service areas and to prevent incompatible uses.
2. Locate commercial development dependent on automobile traffic and easy access, such as gas stations and restaurants, along major highways in order to provide commercial service to local and through traffic.
3. Strengthen the local economy by encouraging economic development projects that involve one or more of the following: public and private participation; an increase in productivity; utilize modern technology; employment of persons with low to moderate skills; and the upgrading of jobs and training of employees to improve job skills.
4. Work to expand services to future commercial businesses or industries that locate within the village.

Suggested Programs:

1. Work with the county to monitor closely the capacity of existing infrastructure, roads, electricity, public safety services, etc, to accommodate new development and weigh the costs to potential benefits.
2. Work with the county in promoting the types of commercial development wanted by the village.
3. Work with businesses to apply for grants and loans to establish or expand a business.

4. Work with the county, future developers and local residents to approve established compatible hours of operation, signage, lighting, parking, and landscaping to meet the village's desire for well planned growth.
5. Support standards to minimize pollution and adverse impacts on the environment.

PROGRAMS

Local

Currently the village does not contain any economic development programs.

County

The Door County Economic Development Corporation (DCEDC) considers itself the single point contact for development assistance in Door County. Through this agency, the village of Sister Bay would have access to a county-wide revolving loan fund. The DCEDC Board of Directors ranked Workforce development as its top priority in 1999 and created a committee to address this issue. In addition, the entire county has been designated as a community development zone by the Department of Commerce and is entitled to tax credits. For additional information about this agency, please contact the corporation's Executive Director at (920) 743-3113.

Regional

The Bay-Lake Regional Planning Commission annually creates a Comprehensive Economic Development Strategy (CEDS) report that evaluates local and regional population and economic activity. Economic development trends, opportunities and needs are identified within the CEDS report. All communities that are served by the Commission, including the village of Sister Bay, are invited to identify future projects for economic development that the community would like to undertake. Those projects are included within the CEDS and may become eligible for federal funding through the Economic Development Administration (EDA) (See Federal).

State

The Wisconsin Department of Commerce has several grant programs that would be available to the village of Sister Bay. The federally funded Community Development Block Grant (CDBG) program can be used for housing, economic development and public facility improvements. The program is designed to assist economically distressed smaller communities with improvements to such things as utilities and streets, fire stations, community centers, and housing rehabilitation, as well as many other improvements needed by a community. Specifically, the CDBG-Public Facilities for Economic Development (PFED) program is designed to assist communities with expanding or upgrading their infrastructure to accommodate businesses that have made a firm commitment to create jobs and invest in the community. The CDBG-Economic Development (ED) program assists businesses that will invest private funds and create jobs as they expand or relocate in Wisconsin. Funds are awarded to a community, which then loans the funds to a business. The community may retain the repaid loan to capitalize a local revolving loan fund.

Federal

Some examples of federal programs that could assist the village of Sister Bay in economic development include:

USDA Wisconsin Rural Development Programs

- **Rural Business Opportunity Grants Program**

Rural Business Opportunity Grant Funds provide for technical assistance, training, and planning activities that improve economic conditions in rural areas of 50,000 people or less. A maximum of \$1.5 million per grant is authorized.

- **Rural Economic Development Loans and Grants**

Zero interest loans may be made to any Rural Utilities Service (RUS) to promote economic development and/or job creation projects including, but not limited to: project feasibility studies, start-up costs, incubator projects, and other reasonable expenses. Grants can be provided to rural communities through RUS borrowers to be used for revolving loan funds for community facilities and infrastructure and for assistance in conjunction with rural economic development loans.

- **Rural Business Enterprise Grants Program (RBEG)**

The Rural Business-Cooperative Service makes grants under the RBEG Program to public bodies and private nonprofit corporations to finance and facilitate development of small and emerging private business enterprises located in rural areas. The small or emerging business to be assisted must have less than 50 new employees, less than \$1 million in gross annual revenues, have or will utilize technological innovations and commercialization of new products and/or processes to be eligible for assistance. Funds can be used for a variety of things including, but not limited to: construction of buildings and plants, equipment, access streets and roads, parking areas, utility and service extensions, and a variety of other costs.

US Department of Commerce, Economic Development Administration Programs

- **Public Works and Economic Development Program**

The Public Works Program empowers distressed communities in economic decline to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs and investment.

LABOR FORCE CHARACTERISTICS

The labor force is comprised of employed persons and those seeking employment, and excludes persons in the armed forces and those under age 16. Variations in the number of persons in the labor force are the result of many factors. Shifts in the age and sex characteristics of the population, changes in the number of residents age 16 and over, the proportion of this group working or seeking employment, and seasonal elements are all factors affecting the size of the labor force.

Place of Work

In 1990, 100 percent of workers who were 16 years and older in the village of Sister Bay worked in Door County (see Table 4.1). When looking at the whole county, 93.3 percent of county residents worked within the county. These percentages indicate either that there are a sufficient number of employment opportunities within the county or that residents are not near any other

center of population in which commuting becomes an option. The city of Green Bay, located to the south, is likely the greatest source of out of county employment for Door County residents.

Table 4.1: Place of Work, 1990, Village of Sister Bay & Selected Areas

Place of Work	Village of Sister Bay	Village of Ephraim	Town of Liberty Grove	Door County	State of Wisconsin
Worked in state of residence	242	112	579	11,580	2,271,607
Worked in county of residence	242	112	572	10,808	1,846,382
Worked outside county of residence	0	0	7	772	425,225
Worked outside state of residence	2	0	7	81	78,084

Source: U.S. Bureau of the Census, Census of Population and Housing 1990, STF3A, Table P045; and Bay-Lake Regional Planning Commission, 2001.

Occupation

In 2000, the majority of employed persons in the village of Sister Bay were in sales and office occupations (28.7 percent) and management, professional and related occupations (27.1 percent). In addition, there was 23.6 percent employment in service occupations and more than 13 percent in construction, extraction and maintenance (see Table 4.2). In comparison to the selected communities, the village of Sister Bay had about the same percentage of employment by occupation in sales. For all the compared areas, trends in employment by occupation were somewhat similar.

Table 4.2: Employed Persons by Occupation, 2000, Village of Sister Bay & Selected Areas

Occupation	Sister Bay		Ephraim		Liberty Grove		Door County	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Management, professional, and related	85	27.1	69	44.8	254	29.8	3,828	27.5
Service	74	23.6	36	23.4	146	17.2	2,172	15.6
Sales and office	90	28.7	30	19.5	250	29.4	3,285	23.6
Farming, fishing, and forestry	0	0.0	0	0.0	15	1.8	267	1.9
Construction, extraction, and maintenance	43	13.7	12	7.8	135	15.9	1,847	13.3
Production, transportation, and material moving	22	7.0	7	4.5	51	6.0	2,502	18.0
Total	314	100.0	154	100.0	851	100.0	13,901	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

Industry

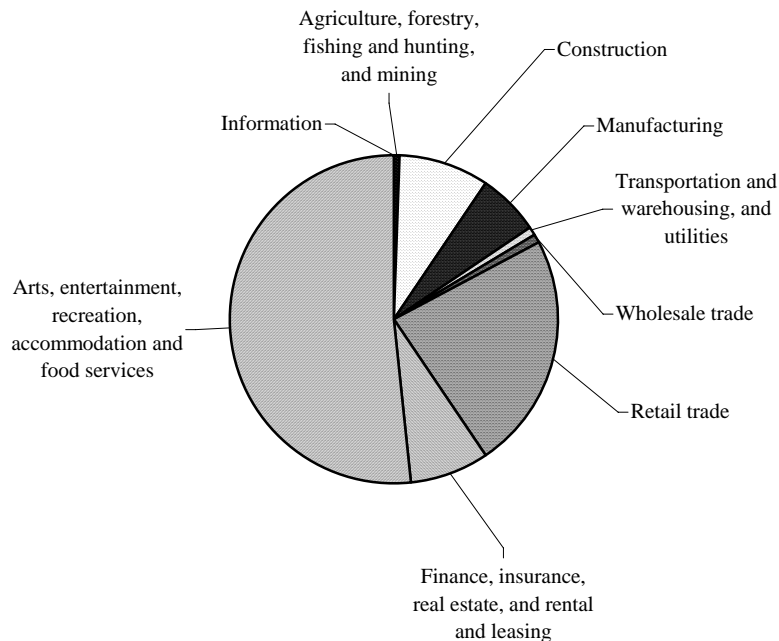
Table 4.3 displays the number and percent of employed persons by industry group in the villages of Sister Bay and Ephraim, the town of Liberty Grove, and Door County for 2000. The greatest percentage of employment for the village of Sister Bay was in the arts, entertainment, recreation, accommodations and food services industry with 35.7 percent, which is higher than any area compared. The village of Sister Bay had the second greatest employment group in the retail trade industry with 22.6 percent. All communities compared and the county listed the arts, entertainment, recreation, accommodations and food services industry as the biggest employment group except Door County which had manufacturing as the highest percent. High percentages of employment in the service and retail industry are to be expected due to the strong tourism industry within the county. Figure 4.1 represents the percent employment by major industry group for the village of Sister Bay in 2000.

Table 4.3: Employed Persons by Industry Group, 2000, Village of Sister Bay & Selected Areas

Industry	Sister Bay		Ephraim		Liberty Grove		Door County	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Agriculture, forestry, fishing and hunting, and mining	2	0.6	0	0.0	32	3.8	625	4.5
Construction	27	8.6	8	5.2	125	14.7	1,392	10.0
Manufacturing	18	5.7	5	3.2	35	4.1	2,607	18.8
Wholesale trade	2	0.6	0	0.0	9	1.1	200	1.4
Retail trade	71	22.6	31	20.1	132	15.5	1,881	13.5
Transportation and warehousing, and utilities	3	1.0	2	1.3	12	1.4	388	2.8
Information	0	0.0	0	0.0	10	1.2	198	1.4
Finance, insurance, real estate, and rental and leasing	24	7.6	8	5.2	71	8.3	717	5.2
Professional, scientific, mngmnt, admin, and waste mngmnt serv	8	2.5	20	13.0	64	7.5	865	6.2
Educational, health and social services	23	7.3	20	13.0	115	13.5	2,096	15.1
Arts, entertainment, recreation, accommodation and food serv	112	35.7	53	34.4	194	22.8	1,919	13.8
Other services (except public administration)	14	4.5	2	1.3	36	4.2	572	4.1
Public administration	10	3.2	5	3.2	16	1.9	441	3.2
Total	314	100.0	154	100.0	851	100.0	13,901	100.0

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

Figure 4.1: Percent Employment by Industry Group, 2000, Village of Sister Bay



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; and Bay-Lake Regional Planning Commission, 2002.

Unemployment Rate

The civilian labor force for Door County has experienced both moderate increases and decreases since 1990 (see Table 4.4). The unemployment rate and the number of unemployed in 1999 was the lowest its been during the whole decade. For the period 1990 to 2001, the civilian labor force increased 9.4 percent, the number of unemployed decreased 16.3 percent, and the number of employed increased 11.3 percent.

If trends continue, as they are expected to, the county will continue to face a labor shortage. While only 2.5 percent more people entered the workforce in Door County between 1990 and

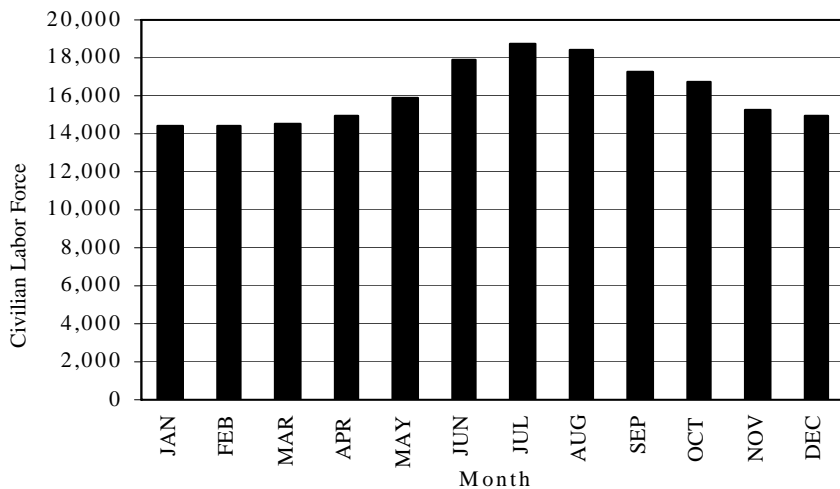
2001, numbers indicate that the need for more employees is much greater. There are many factors which may be contributing to the labor shortage, such as the geographic location of the county, a lack of attainable housing, non-competitive wages, the aging of the population and the age of immigrating residents, the seasonality of employment, as well as many other possible factors. Figure 4.2 displays the civilian labor force in 2001 by month to reiterate the seasonality of employment in the county.

Table 4.4: Average Civilian Labor Force Estimates, 1990-2001, Door County

Year	Civilian		% Civilian	
	Labor Force	Unemployed	Labor Force	Employed
1990	14,742	995	6.7	13,747
1991	14,419	1120	7.8	13,299
1992	14,665	1142	7.8	13,523
1993	14,498	1226	8.5	13,272
1994	14,837	1412	9.5	13,425
1995	14,847	1002	6.7	13,845
1996	15,599	971	6.2	14,628
1997	15,717	948	6.2	14,769
1998	15,665	821	5.2	14,844
1999	15,107	662	4.4	14,445
2000	16,033	802	5.2	15,231
2001	16,132	833	5.2	15,299

Source: Wisconsin Department of Workforce Development, Civilian Labor Force Estimates, for years cited; and Bay-Lake Regional Planning Commission, 2001.

Figure 4.2: Civilian Labor Force, 2001, Door County



Source: Wisconsin Department of Workforce Development, Civilian Labor Force Estimates, 2001; and Bay-Lake Regional Planning Commission, 2002.

Labor Shortage Problems

Door County mirrors the State in its labor shortage problems. The causes of this problem for the State are the growth of the economy, and the declining number of people entering the labor

force. In Door County, the peninsular geography, lower than average Wisconsin annual earnings, and the differences between wage rates and housing costs, intensify the labor shortage problems.

Because of its peninsular geography, Door County cannot attract commuting employees from the north, east, or west. In addition, some commuting employees from the south must travel through the Green Bay area, where wages are usually higher than the in Door County (see Table 4.5).

Table 4.5: Annual Average Wage by Percent of State Average, 1997, Door and Brown Counties

Industry	Door Co. Annual		
	Average Wage	Door County	Brown County
All Industries	\$19,046	69.7%	105.8%
Construction	\$26,589	79.2%	98.8%
Manufacturing	\$26,981	76.0%	109.9%
Retail Trade	\$12,107	89.7%	112.5%
Services	\$16,268	70.4%	110.6%

Source: *The Current Door County Employment Crisis*, Door County Economic Development Corporation, 2000.

Annual earnings in Door County are typically less than they are for similar jobs in other parts of Wisconsin. In addition, the seasonality of many Door County industries, especially tourism, means annual incomes often have to be earned in six months or less. Consequently, hourly wages that are above average still produce a below average annual earned income. In order for Door County businesses to compete globally, they may not have the option to simply raise wage rates without becoming price-uncompetitive.

Door County is experiencing an atypical relationship between wage rates and housing costs. Often areas that have low wage rates will have low housing costs. Unfortunately that is not the case in Door County, which has lower than average wages and higher than average housing costs. The housing issue is closely linked to the labor shortage problem because if new employees are indeed attracted to the area, they will be unable to afford housing.

Employment Forecast

In 1996, the Wisconsin Department of Workforce Development created projections for industries, occupations, and the labor force called the *Northeast Wisconsin Projections: 1992-2005*. These projections are for all of Northeast Wisconsin, including Door County. The study concluded that overall employment is expected to increase by more than 20 percent in the region. Unemployment rates will remain low through 2005, and labor shortages may be common in some occupations.

In 2005, the manufacturing industry is projected to continue to be the industry with the largest share of employment. However, although manufacturing jobs will continue to increase, the rate of increase will slow down. Occupations in manufacturing are expected to move away from general labor positions to more semi-skilled and skilled operator and technician jobs. This is due primarily to production processes that are more efficient and new available technology.

Service industry employers will add approximately 18,400 jobs to the region's labor market by 2005. The largest divisions within this industry group will be business and health services with a similar growth in professional or technical jobs. With the aging of the population, the demand for

such services will continue to increase. The overall health of the Northeast Wisconsin economy is projected to be strong with no major projected decreases in any occupation or industry.

Local Employment Forecast

In 1990, employment data was available for each business within the village of Sister Bay that included the number of employees each employer had. This data is now suppressed to ensure confidentiality of the individual employers. Census information only provides the employment status of residents in the village, not the employment numbers of the businesses in the village.

To determine the economic health of the village, it is important to determine the number of jobs available in the village. Therefore, the following methodology is used to determine an estimated number of people who are employed by businesses in the village of Sister Bay. In 1990, businesses in the village employed a total of 457 persons. Businesses in Door County employed a total of 8,958 persons in 1990. To determine the village of Sister Bay's share of total county employment, the 1990 village employment number (457) is divided by the county employment number (8,958). The resulting number is 5.1 percent. Since employment data for 2000 is not available, multiplying this number by the available year 2000 employment figure for Door County (11,141), we can calculate an estimated year 2000 employment figure for the village of 568 persons. The resulting figure reveals a 24.4 percent increase in village employment from 1990. It should be noted that in using this forecast, the assumption is made that the village's share of total county employment in 1990 will remain the same in 2000.

Median Household Income

In 1999, the median household income in the village of Sister Bay was \$33,224 (see Table 4.6). This was less than all areas compared, including the county and the state of Wisconsin's median household income. The greatest percentage of households was in the income range of \$15,000 to \$24,999 for the village of Sister Bay. The village of Ephraim was significantly higher than Sister Bay with the majority of the household incomes between \$50,000 to \$74,999. The town of Liberty Grove, the county and the State also had the greatest percentage of households in this range in 2000.

In 1997, the Wisconsin Department of Commerce (WDOC) released figures for median household income. According to the WDOC, the median household income in the village of Sister Bay in 1997 was \$27,092, which is a 34.9 percent increase from 1989.

Table 4.6: Household Income, 1999, Village of Sister Bay & Selected Areas

Annual Household Income	Sister Bay		Ephraim		Liberty Grove		Door County		Wisconsin	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	37	8.5	3	2.0	46	5.5	824	7.0	148,964	7.1
\$10,000 to \$14,999	40	9.2	12	7.9	44	5.2	847	7.2	121,366	5.8
\$15,000 to \$24,999	87	20.0	18	11.8	118	14.0	1,857	15.7	264,897	12.7
\$25,000 to \$34,999	67	15.4	14	9.2	108	12.8	1,717	14.5	276,033	13.2
\$35,000 to \$49,999	54	12.4	25	16.4	178	21.1	2,208	18.7	377,749	18.1
\$50,000 to \$74,999	71	16.3	44	28.9	203	24.1	2,482	21.0	474,299	22.7
\$75,000 to \$99,000	48	11.0	12	7.9	65	7.7	855	7.2	226,374	10.9
\$100,000 to \$149,000	23	5.3	12	7.9	44	5.2	741	6.3	133,719	6.4
\$150,000 to \$199,000	4	0.9	5	3.3	18	2.1	122	1.0	30,598	1.5
\$200,000 or more	4	0.9	7	4.6	18	2.1	158	1.3	32,305	1.5
Total Households	435	100.0	152	100.0	842	100.0	11,811	100.0	2,086,304	100.0
Median Income	\$33,224		\$52,500		\$43,472		\$38,812		\$43,791	

Source: U.S. Bureau of the Census, Census of Population and Housing 2000, DP-3; and Bay-Lake Regional Planning Commission, 2002.

Personal Income

The per return income for residents in the village of Sister Bay has increased 49.2 percent for the period 1995 to 2000 (see Table 4.7). This percent increase is greater than any other area for the same period. However, the village of Ephraim had a higher 1999 personal income than any other area compared with \$74,967. Per return income is based on income tax returns filed in the year cited to the Wisconsin Department of Revenue.

Table 4.7: Municipal Per Return Income, 1995-2000, Village of Sister Bay & Selected Areas

Area	(Dollars)						Percent Change 1995-2000
	1995	1996	1997	1998	1999	2000	
Village of Sister Bay	24,189	31,158	38,222	35,542	43,030	36,090	49.2
Village of Ephraim	50,806	47,129	57,940	59,161	60,195	74,967	47.6
Town of Liberty Grove	30,964	28,895	37,807	37,868	39,693	40,341	30.3
Door County	26,206	27,696	30,471	31,937	34,816	36,435	39.0
Wisconsin	31,427	32,793	34,716	36,996	38,930	40,570	29.1

Source: Wisconsin Municipal Per Return Income Report, for years cited, Wisconsin Department of Revenue, Division of Research and Analysis; and Bay-Lake Regional Planning Commission, 2001.

ECONOMIC BASE

Employment by Economic Division

The future of village of Sister Bay's population requires an understanding of the local and county economy. The Economic Base Analysis technique divides the economy into basic and non-basic sectors. The basic sector is made up of local businesses that are dependent on external factors. Manufacturing and local resource-oriented firms (like logging or mining) are usually considered to be basic sector firms because their fortunes depend largely upon non-local factors, and they usually export their goods. The non-basic sector, in contrast, is composed of those firms that depend largely upon local business conditions. Economic Base Theory asserts that the means of strengthening and growing the local economy is to develop and enhance the basic sector.

There are nine basic economic divisions that are used for Economic Base Analysis. There are four goods-producing sectors: agriculture, forestry, and fishing; mining; construction; and

manufacturing. There are five services-producing sectors: transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services.

Location Quotient Analysis

The Location Quotient analysis technique compares the local economy, Door County, to the United States. This allows for identifying specializations in the Door County economy (see Table 4.8). If the Location Quotient (LQ) is less than 1.0, all employment is considered non-basic; therefore that industry is not meeting local demand for a given good or service. An LQ equal to 1.0 suggests that the local employment is exactly sufficient to meet the local demand for a given good or service, employment is still considered non-basic. An LQ greater than 1.0 suggests that local employment produces more goods and services than the local economy can use, therefore these goods and services are exported to non-local areas, which makes them basic sector employment.

Table 4.8: Employment by Industry Group, 1990-1998, Door County and United States, Location Quotient Analysis

Item	Door County		United States		Percent Change 1990-1998		Door Location Quotient	
	1990	1998	1990	1998	Door	U.S.	1990	1998
Total full-time and part-time employment	16,273	18,229	139,426,900	160,198,700	12.0	14.9		
Farm employment	1,351	1,022	3,153,000	3,127,000	-24.4	-0.8	3.67	2.87
Nonfarm employment	14,922	17,207	136,273,900	157,071,700	15.3	15.3	0.94	0.96
Private employment	13,272	15,455	115,077,900	135,123,700	16.4	17.4	0.99	1.01
Ag. Services, forestry, fishing, & other	245	395	1,453,000	2,042,600	61.2	40.6	1.44	1.70
Mining	23	(D)	1,044,100	855,500	NA	-18.1	0.19	NA
Construction	916	1,458	7,260,800	8,799,100	59.2	21.2	1.08	1.46
Manufacturing	3,128	2,167	19,697,200	19,568,500	-30.7	-0.7	1.36	0.97
Transportation and public utilities	294	(D)	6,568,600	7,668,300	NA	16.7	0.38	NA
Wholesale trade	286	338	6,711,500	7,351,900	18.2	9.5	0.37	0.40
Retail trade	3,507	4,152	22,920,500	26,710,200	18.4	16.5	1.31	1.37
Finance, insurance, and real estate	732	1,178	10,712,600	12,229,900	60.9	14.2	0.59	0.85
Services	4,141	5,438	38,709,600	49,897,700	31.3	28.9	0.92	0.96

Source: U.S. Department of Commerce, Bureau of Economic Analysis, REIS 1969-98; and Bay-Lake Regional Planning Commission, 2001.

Threshold Analysis

Export Base (Basic Employment)

There are four areas within the 1998 Door County economy that can be considered basic employment areas: farm employment; agricultural services, forestry, and fishing; construction; and retail trade. These four areas produce more goods and services than the local economy can use. When LQs increase over time, this suggests that the Door County economy is getting closer to reaching and exceeding local demand. For example, construction had gone from 1.08 in 1990, to 1.46 in 1998. Having basic employment also suggests that if a downturn in the local economy occurs, these sectors will not be strongly affected because they are dependent more on non-local economies. Having strong basic sector employment and industry will strengthen the local economy.

Non-Basic Employment Industry

Under private employment, there are four areas that can be considered non-basic: manufacturing; wholesale trade; finance, insurance, and real estate; and services. These industries are not meeting local demand for a given good or service. For example, the manufacturing industry LQ actually decreased since 1990, however the Door County economy could support more of this industry. There is currently no industry with an LQ equal to one, which would indicate that local demand is being met and services are not being exported. However there are several industries that are very close.

STRENGTHS AND WEAKNESSES ANALYSIS

An economic development workshop was held on March 18, 2002 at the Village of Sister Bay Village Hall with representatives from the business community in the village. The participants were divided into three groups and asked to list the strengths and weaknesses of the local economy. A round-robin format was used in each group to develop a list of issues. These issues were then consolidated by the Bay-Lake Regional Planning Commission into a single issues list. The results of the workshop are listed below.

Strengths

1. Good variety of businesses, very diverse
2. Year-round business hub of Northern Door
3. Good sewer and water system
4. Well-maintained streets and public properties
5. Natural beauty of the area
6. Waterfront and marina
7. Strong business group - Sister Bay Advancement Association
8. Lots of recreational facilities
9. Good community leadership
10. New library

Weaknesses

1. Not enough parking - especially downtown
2. Need affordable housing for: workforce, seniors, younger people
3. Street and intersection safety issues - Mill Road, Country Walk, etc.
4. Need to bury overhead utility lines
5. Need a place for industry
6. No pedestrian link between “uptown” and “downtown” Sister Bay
7. Restrictive sign regulations
8. Lack of year-round workforce and businesses

An analysis was then conducted of community assets and liabilities in four major areas.

Physical Capabilities

Utilities

Strengths:

Electric services are provided by Wisconsin Public Service. The village currently has a public sewer and water system.

Weaknesses:

Electrical service at the northern end of the Door County peninsula is not always consistent, the area has occasionally experienced periods of low power. The village sewer and water system does not serve the southern part of the village.

Telecommunications

Strengths:

Telephone service (local and long distance) are provided with digital switching provided. There are no major differences in the quality of telephone service between the village and other municipalities within the county. Cable and fiber optics are also available to the village.

Weaknesses:

Cable and fiber optic services do not reach to all areas of the village.

Transportation

Strengths:

The village has access to STH 42 and STH 57 which are a pathway that provides highway exposure to the village.

Weaknesses:

The village does not have its own access to rail or air service. The village is geographically isolated on the end of a peninsula.

Local Labor Force Characteristics

Strengths:

The unemployment rates (4.4 percent) within the county are low. The employment rates for the county grew approximately five percent over the last ten years.

Weaknesses:

The village is experiencing an aging structure shift due to the baby boomers reaching retirement age. Current and future labor shortages are due to low numbers in the age group of 16-24, and due to the large number of seasonal businesses within the area employing and needing large numbers of young workers. In addition, more of these younger individuals are moving away to find year round employment and housing opportunities elsewhere.

Commercial Site Availability

The village has space for commercial development along STH 42 Sister Bay and along STH 57.

Programmatic Capabilities

Existing Business Base Analysis

The village has approximately 130 acres dedicated to commercial uses, or approximately 18 percent of its developed lands. Business within the village include retail, restaurants, hospitality, wholesale, manufacturing, storage, etc.

Available Government Services

The village has an adopted Comprehensive Plan, a Sub-Division Ordinance, Zoning Ordinance, Floodplain Ordinance, and Shoreland Wetland Ordinance. Police services are provided by Door County, fire and ambulance services are provided by a joint Sister Bay-Liberty Grove Fire Department. Postal services are provided by the Sister Bay post offices. Government assistance comes from a Village Board, Plan Commission, Village Administrator and Clerk, and various planning agencies who assist the village on writing grant applications and monitoring these grants (park acquisitions/improvements, community developments, housing improvements, etc).

Specific Inhibitors To Economic Development

Infrastructure does not exist in planned areas of commercial growth. Rail and air services do not exist within the village. The geographic isolation and lack of a redundant telecommunication and power systems contribute to the specific inhibitors.

Training Programs

Strengths:

The village has access to training from UW-Green Bay, the UW-Extension services (providing education and training seminars and courses), and Northeast Wisconsin Technical College.

Weakness:

Many of the formal training sites are between 30 minutes and two hours (by automobile) away.

Quality of Life

Housing Prices

Approximately 38 percent of the village residents paid more than 30 percent of their incomes towards housing costs in 2000. In 1999 the median household income was \$33,224. Based on the household income median, a median housing payment would be \$830 or approximately a home valued around \$130,000 at 6.5 percent interest. As of May 2001, the median price of a home in northern Door County was \$243,000, and approximately \$200,000 in Liberty Grove.

Aesthetics

The village consists of a small residential and business community with bluffs and open shoreline along the bay of Green Bay. The abundance of shoreline and sloping terrain make up much of the village's prominent views.

Environment

Within the village, there are still areas of woodlands, farm fields, miles of waterfront along the bay and some wetlands. The waters are open to fishing and boating. The village has ordinances and plans protecting and enhancing the environment. The water supply in areas without municipal water supply is subject to degradation due to the shallow soils, fractured bedrock, karst features, and high groundwater contamination susceptibility.

Education And Health Care

The village is within the Gibraltar School District. Health care is available in Sister Bay, as well as Gibraltar, and Sturgeon Bay. Dental services are located within Sister Bay and Sturgeon Bay. Chapter 5 of this document provides a detailed list and discussion of the health care and educational facilities available to village residents.

Evaluation of Environmentally Contaminated Sites

According to the WDNR list of Leaking Underground Storage Tanks (LUST) sites, there are ten sites listed within the village of Sister Bay. This is a site where a tank has contaminated soil and/or groundwater with petroleum, but has since been cleaned up. There are also seven spill sites listed. Spill sites have experienced a discharge of hazardous substances that may adversely impact, or threaten to adversely impact public health, welfare or the environment. Spills are usually cleaned up quickly. Lastly, the village has two sites that are designated as part of the WDNR Environmental Repair Program (ERP). These sites are sites other than LUST sites that have contaminated soil and/or groundwater. Often, these are old historic releases to the environment.

COMMUNITY FINANCES

A community must be concerned about its ability to generate sufficient public revenues to provide the types and levels of services demanded by its citizens.

Financial Capabilities

Tax Base Comparisons

Tables 4.9 and 4.10 provide a history of the taxes levied in the village of Sister Bay. The full assessed value has increased 173.4 percent for the period 1990 to 2000. The total property tax has increased 104.3 percent for the same period. The taxing jurisdiction share that has increased the most for the period was the category described as Other, which has increased by 173.4 percent.

The taxing jurisdiction share of the tax that has increased the most for the period from 1990 to 2000 was the vocational category which increased by 164 percent and the county category which increased by 157 percent. The village had a 2000 Full Value equal to \$278,814,400 which was an increase of 173 percent from 1990. The Full Value Effective Rate for the village in 2000 was .01191.

Incentives For Development

The village of Sister Bay has no local incentives for development.

Banking Capability And Capacity

The village and its residents have access to numerous lending firms throughout the county, state and nation. With today's linking of lending agencies via telecommunication's networks and other "high speed" services a borrower can have a lender in distant locations to include other nations.

Table 4.9: Comparative Tax Appropriations, 1990-2000, Village of Sister Bay

Year Levied	Full Assessed Value	Percent Assm't Level	Total Property Tax	State Tax Credit	Full Value Rate		Taxing Jurisdiction				
					Gross	Effective	School	Vocational	County	Local	Other
1990	101,970,800	100.35	1,693,299	117,679	0.01660	0.01545	554,190	146,764	370,693	601,257	20,394
1991	106,387,300	100.08	1,840,835	75,981	0.01730	0.01658	599,835	154,035	429,912	635,773	21,277
1992	110,305,100	97.27	1,984,905	74,172	0.01799	0.01732	671,921	165,566	464,225	661,132	22,061
1993	117,547,300	100.67	2,096,847	74,846	0.01783	0.01720	697,718	175,549	493,120	706,950	23,509
1994	123,078,200	98.54	2,134,134	74,646	0.01733	0.01673	705,923	177,811	513,924	711,860	24,616
1995	136,108,000	93.05	2,377,148	74,864	0.01746	0.01691	745,733	187,371	558,129	858,693	27,222
1996	164,991,400	84.87	2,583,401	111,684	0.01565	0.01498	776,428	212,962	637,443	923,569	32,998
1997	193,450,300	76.73	2,805,753	121,998	0.0145	0.01387	803,615	242,726	707,214	1,013,508	38,690
1998	212,747,500	73.51	2,913,012	133,639	0.01369	0.01306	770,286	276,512	756,622	1,067,042	42,550
1999	223,692,900	122.05	3,063,199	139,943	0.01369	0.01306	784,996	300,934	771,150	1,161,381	44,739
2000	278,814,400	100.91	3,458,960	135,818	0.0124	0.01191	880,399	387,815	954,050	1,180,934	55,763

Source: Wisconsin Department of Revenue, *Village, Village and City Taxes*, for years cited; and Bay-Lake Regional Planning Commission, 2001.

The ability to finance community projects is measured by general obligation debt capacity. According to the Wisconsin Constitution there are limits on how much a municipality may borrow. They are limited to an amount equal to five percent of the equalized value, or full value, of the unit of government. The village's existing debt as of January 10, 2000, was \$1,740,188 with a debt margin of \$12,200,532.

Table 4.10: Public Indebtedness, 1999-2000, Village of Sister Bay

Year	Full Value	Debt Limit*	Existing Debt	Debt Margin
1999	223,692,900	11,184,645	1,560,091	9,624,554
2000	278,814,400	13,940,720	1,740,188	12,200,532

*Debt Limit equals five percent of full value.

Source: Wisconsin Department of Revenue, Bureau of Local Finance Assistance, *Equalized Value and Debt Limit Value*, for years cited; and Bay-Lake Regional Planning Commission, 2001.

Chapter 5 - TRANSPORTATION

INTRODUCTION

This section of the village's comprehensive plan focuses on the various transportation elements that comprise the village of Sister Bay's transportation system. Chapter 5 presents the village's transportation goals, objectives, and policies and also includes identification of various programs that provide funding assistance for the village's transportation facilities and services. This chapter also presents an inventory of the existing transportation facilities that serve the village of Sister Bay in Door County and addresses the future transportation needs and concerns of the community. The inventory includes descriptions of the various modal elements of the village's transportation system. Those elements include (where applicable) transit systems, the elderly and disabled transportation system, intercity bus transportation, bicycle transportation, pedestrian transportation, waterborne, rail, air service, trucking, and, most importantly, a detailed description of the village's highway and street system. The detailed description of the highway and street system includes the functional classification of roads within the village, traffic counts, traffic flow capacity, vehicle crashes, access controls, and an evaluation of the current internal traffic circulation system. This chapter also includes an inventory and analysis of applicable transportation plans, including: the state airport plan, state railroad plan, state bicycle plan, as well as any other special transportation plans that are applicable to the village. At the conclusion of the chapter, specific transportation system recommendations are presented and include design standards, recommended improvements, capacity additions to existing facilities, new road alignments, highway expansion projects, and improvements to other transportation modes.

SUMMARY AND IMPLICATIONS

Through its comprehensive planning program the village of Sister Bay seeks to establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the village's adopted Year 2020 Master Plan.

The transportation facility inventory conducted for the village has established that the village currently has jurisdiction over and responsibility for approximately 13.5-miles of local streets. The primary funding source for maintaining, rehabilitating and reconstructing the local road system in the village of Sister Bay is the state's disbursement of general transportation aids. The state provides a payment to the village for costs associated with such activities as road and street reconstruction, filling potholes, snow removal, grading shoulders, and marking pavement. In addition, the town's local transportation system is complimented by STH 42, STH 57, and the county trunk highway system, which provide access to the county, the region and the state.

TRANSPORTATION STRATEGY

Transportation System Development Goals, Objectives, Policies and Programs

Transportation in its many forms is the link that connects the village's land uses into a cohesive pattern. The following transportation objectives have been adopted to represent and define the importance of transportation in achieving the goals of the *Village of Sister Bay 2020 Comprehensive Plan*.

Goal:

To establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the village's adopted Year 2020 Comprehensive Plan.

Objectives:

1. Develop a transportation system that provides for all transportation modes.
2. Develop transportation system that is harmonious with surrounding land uses.
3. Provide for convenient and efficient vehicular movement near all commercial, industrial, and public facility locations.
4. Provide and maintain aesthetically pleasing transportation corridors.
5. Improve the flow of traffic along STH 42 through better organization of entry points onto the road, maintaining a Service Level of C.
6. Develop an additional east-west collector as an alternative route through the village
7. Improve the functioning of problem intersections.
8. Create an interior street system which links sections of the village and establishes connections to future development areas.
9. Establish special setbacks and landscaping for certain identity streets in the village to assure that future development does not detract from the attractive qualities of the present routes.
10. Make standards for biking and walking routes part of new road construction and reconstruction.
11. Provide a safe system of bicycle paths and designated bicycle routes throughout the village.
12. Provide safe and convenient pedestrian traffic movement.
13. Plan for and designate future road rights-of-way within the village.
14. Develop an integrated multi-modal transportation system which, through its location, capacity, and design, will effectively serve the existing village land use development pattern and promote implementation of the village land use and transportation plan, meeting the anticipated transportation demand generated by existing and planned land uses.
15. Develop a balanced transportation system which will provide the appropriate types of transportation needed by all residents, regardless of income, physical ability or age, businesses, and industries at a level of service which will permit ready adaptation to changes in transportation demand and technology including travel needs and transportation management.
16. Develop a transportation system which reduces accident exposure and provides for increased travel safety.
17. Develop a transportation system which is economical and efficient, satisfying other objectives at the lowest possible environmental, social and financial public cost.

18. Develop a transportation system which minimizes adverse effects upon the property tax base and the natural and cultural resource base.
19. Develop a transportation system which preserves a high aesthetic quality and possesses a positive visual relation to the land.
20. Develop a transportation system that facilitates energy conservation while minimizing associated pollution effects.
21. Develop a transportation system that identifies and preserves multi-use utility and transportation corridors.

Policies:

1. The proper use of land for, and adjacent to, transportation facilities should be pursued in accordance with the village's land use development objectives. The disruption of future development should be minimized by utilizing transportation corridor preservation techniques.
2. The total amount of land used for transportation facilities should be minimized.
3. The dislocation of households, businesses, industries, and public and institutional buildings as caused by the reconstruction of existing or the construction of new transportation facilities and terminals should be minimized.
4. The destruction of, or negative impacts to, historic buildings and of historic, scenic, scientific, archaeological, and cultural sites as caused by the reconstruction of existing or the construction of planned transportation facilities and terminals should be minimized.
5. Transportation facility construction plans should be developed using sound geometric, structural, erosion control and landscape design standards which consider the aesthetic quality of the transportation facilities and the areas through which they pass.
6. Transportation facilities should be located to minimize impacts on visually pleasing buildings, structures, and natural features; and to enhance vistas to such features.
7. The location of transportation facilities in or through environmental corridors and natural areas should be avoided.
8. The loss of wetlands and environmental corridor land to transportation facility construction should be avoided.
9. Adverse impacts on significant natural habitat, with special attention to endangered species should be avoided.
10. Use of the natural resource base in the development of transportation facilities should be minimized.
11. Abandoned utility right-of-way corridors should be preserved for future transportation facilities such as bicycle and pedestrian trails, and/or arterial streets where such need is shown in the county and village land use plan.

12. Full use of all existing transportation facilities should be encouraged through low- and non-capital intensive techniques cooperatively fostered by government, business, and industry, prior to any capital-intensive or disruptive construction of new facilities.
13. The amount of transportation system operating and capital investment costs should be minimized.
14. The direct benefits derived from transportation system improvements should exceed the direct costs of such improvements using life-cycle costing methods.
15. The transportation system should provide access and service with choices of modes throughout the town in a way designed to reduce overall average travel times to destinations within the village and county.
16. Bicyclists and pedestrians should be accorded a comfortable margin of safety on all streets and highways by ensuring compliance with American Association of State Highway and Transportation Officials (AASHTO) and Manual of Uniform Traffic Control Devices (MUTCD) guidelines and standards.
17. Bicycle lanes or wide curb lanes should be constructed on arterial streets and highways.
18. Bicycle and pedestrian paths should be constructed to serve corridors not served by streets and highways.
19. Bicycle routing should direct bicyclists to suitable highways and streets without significantly compromising directness. Established bicycle suitability models should be used.

Suggested Programs:

1. Work with the Door County Highway Commission, the Wisconsin Department of Transportation, and the Bay-Lake Regional Planning Commission to develop a long-range maintenance and improvement program for village roads.
2. Work with the Door County Highway Safety Commission and the Wisconsin Department of Transportation to provide an ongoing assessment of village road safety and efficiency.
3. Work with the Door County Highway Commission and the Wisconsin Department of Transportation to ensure safe and efficient access to STH 42 and STH 57, as well as other major collector roads.
4. The village or a designated committee should conduct an annual assessment of village street pavement conditions, drainage and maintenance needs, adequacy of existing driveways and culverts relative to safe access and to and from adjoining parcels of land, and to determine the adequacy of sight triangles at all road intersections.

TRANSPORTATION FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

The following section of this chapter identifies agencies and programs established and administered by those agencies that may provide financial and technical support for the operation, maintenance and planning of the village's transportation system.

Wisconsin Department of Transportation

General Transportation Aid (GTA)

Village road improvements, construction and maintenance is funded, in part, through the state's disbursement of general transportation aids. The state provides a payment to each county and municipality in the state that pays a portion of local governments' costs for such activities as road and street reconstruction, filling potholes, snow removal, grading shoulders, marking pavement, and repair of curb and gutters. General Transportation Aids help defray the costs of constructing, maintaining, and operating roads and streets under local jurisdiction.

Connecting Highway Aids reimburse municipalities for maintenance and traffic control of certain state highways within municipalities. Beginning in 2000, each municipality was required to establish and administer a separate segregated account from which moneys may be used only for purposes related to local highways and must deposit into that account all state or federal money for local highway purposes.

Local Mileage Certification

Each local government that increased or decreased the mileage of its roads and streets is required to file a certified plat with DOT by December 15 of each odd-numbered year. Local governments that have no changes in total local road miles are required to file a certified plat or a certified statement that no mileage statements have occurred. Beginning in 2001, the requirement for local governments to file certified plats with county clerks is eliminated and the mileage certification process is changed from an every other year activity to an annual activity. State GTA payments is based on the certified mileage of each local unit of government.

Local Roads Improvement Program (LRIP)

This program provides funding to local units of government for the costs associated with improving seriously deteriorating county highways, village roads, and municipal streets in cities and villages under the authority of the local unit of government. Projects are required to have a minimal design life of 10 years. This a biennial program and all funds are distributed the first year. Applications are submitted through the county highway commissioners by November 15 of the odd numbered years.

There are three entitlement components for funding road improvements: 1) County Highway Improvement component (CHIP); 2) Town Road Improvement component (TRIP); and 3) cities and villages under Municipal Street Improvement component (MSIP).

In addition LRIP funds three statewide discretionary programs; County Highway Discretionary Improvement Program (CHIP-D); 2) village Road Discretionary Improvement Program (TRIP-D); and 3) Municipal Street Discretionary Improvement Program (MISD-D) for cities and villages.

All LRIP projects are locally let, with up to 50 percent of the costs reimbursed by WisDOT upon completion, and the remainder matched by the local unit of government. Eligible projects include but are not limited to design and feasibility studies, bridge replacement or rehabilitation, reconstruction, and resurfacing. Ineligible projects include, but are not limited to: new roads, seal coats, ditch repair, and/or curb and gutter construction.

Flood Damage Aids

This program provides local governments with financial assistance for replacing or improving roads or roadway structures that have had major damages caused by flooding.

County Forest Aid Program

This program provides assistance to counties that have eligible roads located within county forests. It is intended to defray the costs for the improvement and maintenance of public roads within a county forest.

Rural and Small Urban Area Public Transportation Assistance Program - Section 5311

Allocations to the State are set at the federal level. Funds may be used for operating assistance, and capital assistance. Eligible public transportation services include public transportation service operating or designed to operate in non-urbanized areas (a non-urbanized area is one that has a population of 50,000 or less).

Specialized Transportation Assistance Program for Counties - Section 85.21

Allocations under this formula program are based upon the proportion of the state's elderly and disabled population located in each county, subject to two minimums: no county can receive less than a ½ percent pf the total annual appropriation; and no county can receive an allocation smaller than they received in 1992. A local match of 20 percent is required.

Eligible expenditures include:

- directly provided transportation service for the elderly and disabled;
- purchase of transportation service from any public or private organization;
- a user-subsidy for the elderly or disabled passenger for their use of the transportation service;
- volunteer driver escort reimbursement;
- performing or purchasing planning or management studies on transportation;
- coordinating transportation services;
- performing or purchasing in-service training relating to transportation services; and/or
- purchasing capital equipment (buses, vans etc.) for transportation services.

The following provides a brief description of competitive (transportation related) grant programs that are federally and state funded:

Local Transportation Enhancement Program (TE)

Administered by WisDOT the TE program provides funding to local governments and state agencies for projects that enhance a transportation project. There are 12 eligible project categories;

- providing facilities for bicycles and pedestrians;
- providing safety and educational activities for pedestrians and bicyclists;

- acquiring scenic easements and scenic or historic sites;
- sponsoring scenic or historic highway programs; including the provision of tourist and welcome centers;
- landscaping and other scenic beautification;
- preserving historic sites;
- rehabilitating and operating historic transportation buildings and structures;
- preserving abandoned railway corridors;
- controlling and removing outdoor advertising;
- conducting archaeological planning and research;
- mitigating water pollution due to highway runoff or reducing vehicle caused wildlife mortality; and
- establishing transportation museums.

Federal funds will cover up to 80 percent of the project, while the project sponsor is responsible for providing at least a 20 percent match.

Surface Transportation Program - Discretionary (STP-D)

This program encourages projects that foster alternatives to single occupancy vehicle trips. Such as rehabilitation and purchase of replacement vehicle for transit systems, facilities for pedestrians and bicycles, system-wide bicycle planning, and a wide range of transportation demand management (TDM) projects. Communities over 5,000 are eligible to apply for the funds through the competitive application process.

Transportation Demand Management Programs

Transportation Demand Management consists of policies and programs designed to reduce the number of single occupant vehicles (SOV) trips in a region, especially during peak travel periods.

There are two grant programs: TDM Grant Program; and Wisconsin Employment Transportation Assistance Program (WETAP).

Transportation Demand Management Program (TDM) provides funding to successful grant recipients to implement projects that encourage innovative solutions and alternatives to reducing SOV trips. WisDOT accepts applications annually. Eligible applicants may include local governments, chambers of commerce, and others as defined by the program. The required local match is 20 percent of the project costs.

The Wisconsin Employment Transportation Assistance Program (WETAP) is a joint program between the Wisconsin Department of Workforce Development (DWD) and WisDOT, it provides funding to help low-income people access, or retain or advance in employment with the goal of meeting the entire population's transportation needs. This program is funded with combined federal and state dollars, and requires a local match.

Application requirements include the development of regional job access plans that identify the need for transportation services and illustrate the alternatives proposed for the program. Plans should be developed between public transit providers, local units of government, transportation planners, human service agencies, low-income individuals and other interested parties

Transportation Economic Assistance (TEA Grant) Program

This program provides a 50 percent state grant to governing bodies, private businesses, and consortiums for road, rail, harbor and airport projects that are necessary to help attract employers to Wisconsin, or to encourage business and industry to remain and expand in Wisconsin.

Federal Highway Administration

Transportation and Community and System Preservation Pilot Program (TCSP)

The TCSP program is an initiative that assist communities as they work to solve interrelated problems involving transportation, land development, environmental protection, public safety and economic development. It was established in the Transportation Equity Act for the 21st Century (TEA-21), the six-year surface transportation law signed into law by President Clinton on June 9, 1998.

The TCSP program is administered by the U.S. Department of Transportation's Federal Highway Administration in partnership with the Environmental Protection Agency and the Department's Federal Transit Administration, Federal Railroad Administration, and Research and Special Programs Administration. Funding for this program has been authorized through 2003.

TCSP funds are used to help achieve locally determined goals such as improving transportation efficiency; reducing the negative effects of transportation on the environment; providing better access to jobs, services and trade centers; reducing the need for costly future infrastructure; and revitalizing underdeveloped and brownfield sites. Grants also can be used to examine urban development patterns and create strategies that encourage private companies to work toward these goals in designing new developments. The grants will help communities become more livable by preserving green space, easing traffic congestion and employing smart growth strategies while promoting strong, sustainable economic growth.

Grants may be awarded to improve conditions for bicycling and walking; better and safer operation of existing roads, signals and transit systems; development of new types of transportation financing and land use alternatives; development of new programs and tools to measure success; and the creation of new planning tools and policies necessary to implement TCSP-related initiatives. Implementation activities may include community preservation activities to implement transit oriented development plans, traffic calming measures or other coordinated transportation and community and system preservation practices.

There is no local match required under this program, projects are fully funded although priority is given to those applications that demonstrate a commitment of non-Federal resources.

INVENTORY OF TRANSPORTATION PROGRAMS AND FACILITIES

Elderly and Disabled Transportation System

Elderly and disabled transportation systems refer to those programs that provide rides through scheduled bus services, volunteer programs with private vehicles etc. Current transportation services for elderly and disabled persons living within the village of Sister Bay are provided through programs administered by the Door County Commission on Aging. Transportation is provided by wheelchair accessible buses, an eight-passenger van and by volunteer drivers using personal vehicles. The Door County Department of Human Services also provides limited

transportation service to the county's disabled population. Service is provided by appointment, and involves door-to-door transportation.

Medical related and nutritional related trip purposes receive priority, followed by work related and recreational and/or business related trip needs. A four member advisory committee to the County's Commission on Aging provides coordination of the special transportation services that are available within the village. The committee sets policy and oversees transportation services. The transportation is provided by paid and volunteer staff utilizing both publicly and privately-owned vehicles. The cost of the special transportation services is borne by state subsidy through the Wisconsin Department of Transportation's Section 85.21 (*Special Transportation for the Elderly and Disabled Transportation*) grant program, county funds (20 percent of the state grant), donations and fares collected from passengers.

The following section consists of general operational profiles for the two agencies that are now providing the primary transportation services to the elderly and disabled population of Door County.

The Door County Senior Resource Center

The Door County Senior Resource Center is a public agency which operates one-vehicle, a fifteen passenger minibus, on a fixed schedule, door-to-door, demand responsive basis for elderly persons throughout the county. The program is available to elderly persons who are 55 years or older. Trips are provided for medical appointments, nutrition programs, personal business and to various service agencies (social security office, etc.). The bus operates on a dial-a-ride system for people living in Sturgeon Bay and the immediate urban area. The bus provides transportation for those living in or near the city of Sturgeon Bay on Monday, Wednesday, and Friday. Elderly residents of northern Door County are provided service on Tuesday. Currently, there is no regularly scheduled transportation service to the residents of southern Door County.

The agency operates a single, 15-passenger bus, which logs an average of 57,000 miles annually. Donations, which range in cost depending on the distance of the trip, are requested from riders, although not required. The agency provides service to the more economically disadvantaged and isolated elderly persons residing in the rural areas of Door County. This agency provides transportation primarily to the urban areas of the county.

Sunshine House

The Sunshine House is a sheltered employment facility which is located in the city of Sturgeon Bay. The facility provides services to persons 16 years old or older who have mental and/or physical disabilities. The services provided include sheltered employment, education, recreation therapy, day services, and community support.

Financial support for activities conducted by the Sunshine House is derived from the county, sales of goods manufactured by clients, government service contracts, and United Way donations.

The facility operates two passenger buses, both equipped for wheelchairs and two vans, one of which is wheelchair accessible. The service is provided within the framework of a fixed route system, with the route determined by the home location of the clients. Although the primary area of operations is in the immediate area of the city of Sturgeon Bay, Sunshine House does provide transportation to clients throughout the county.

Other Related Special Transportation Services

In addition to the Senior Resource Center and the Sunshine House, there are at least three private (for-profit) entities providing transportation services within Door County. These companies are primarily providing transportation for medical purposes, with the cost of the ride borne by fares and state/federal medical assistance. Northeast Wisconsin Transportation Service Inc (NEW Transport) operates four (wheelchair accessible) vans within Door County and is also under contract with the Door County Senior Resource Center to provide rides to Door County residents to medical facilities and services located in Green Bay. In addition, Medivan of Green Bay operates four (wheelchair accessible) vans, and Para Tran of Sturgeon Bay operates one van and one minivan which is also wheelchair accessible.

Additionally, there are currently four taxicab services operating within the county which include one which provides service to the Ephraim area, one which services Washington Island, and two companies which provide service in the city of Sturgeon Bay. These companies operate on a minimum per trip and mileage based fare system

Intercity Bus

In the past, nearly every small community in the state was connected by an intercity bus service which traditionally served the elderly, those who could not drive, students, and those individuals unable to afford alternative forms of transportation. Following World War II, intercity bus systems helped to fill a void for “affordable transportation” that was created by the decline of passenger rail service. Unfortunately, intercity bus service suffered the same fate as passenger rail; as intercity bus ridership decreased, the number of intercity bus routes operating within the state also declined drastically. Currently, intercity bus routes only serve the largest urban centers and those smaller urban areas that just happen to be adjacent to a route that connects two larger cities. Currently intercity bus service is available to village and county residents only from the city of Green Bay.

Bicycle Transportation System

At this time, there are no county or village facilities (bicycle paths or lanes excluding state recreational trails) dedicated solely to the use of bicyclists. However, the *Wisconsin Bicycle Transportation Plan 2020* does identify general bicycling conditions on state and county highways within the village of Sister Bay and Door County. The volume of traffic and the paved width of roadway were the two primary variables by which roads were classified for cycling. The state bike plan indicates that STH 42 is classified as “not recommended for bicycling” because of relatively high traffic volumes, moderate to high truck traffic volumes, and narrow road shoulder CTH ZZ is designated as “suitable for bicycling” based on the light traffic volumes and roadway width. The state’s Bicycle Plan only assesses conditions on state highways and county trunk highways. The plan assumes that all local village roads are suitable for bicycling, basing that assumption on the low traffic volumes present on average village roads.

The *Bay-Lake Region - Bicycle Facility Transportation Plan* identified a system of connecting routes and needed improvements connecting all municipalities and major destination points throughout the eight-county region including Door County and the village of Sister Bay. The Regional Plan recommends construction of wide paved shoulders (paving shoulders to a width of four to five feet) where feasible. The plan recommends construction of wide paved shoulders to

STH 42, STH 57 and CTH Z. The Regional Plan did not identify specific recommendations for road and street systems located within the village.

Village Multi-Purpose Path

The village has designed and is implementing (in two phases) a path for use by bicyclist and pedestrians that, when completed, will extend from Country Lane to the STH 42/STH 57 intersection.

Phase I of the project entails construction of a ten-foot wide multipurpose path beginning at Country Walk Drive extending east (where the path will narrow to six-foot wide) to Gateway Drive. The path will continue along the north side of Gateway Drive to STH 57 and then continue along a short segment of STH 57 to STH 42.

Phase II of this project entails construction of a ten-foot paved surface within the south right-of-way of STH 42 from Country Lane to Country Walk Lane. The segment of the path from Country Lane to the Lampert property will be separated from STH 42 by a narrow grass or landscaped strip.

Rail Transportation

There are no operating rail facilities located within the village of Sister Bay, or for that matter in Door County.

Port, Harbor and Marina Facilities

The village Sister Bay provides both private and public docking and launching facilities. The Sister Bay Public Dock provides 65 permanent slips and approximately 35 transient slips that accommodate boats up to 70 feet in length.

In addition to the village's public dock, other nearby dock, launching and marina facilities are located at Ephraim, Ellison Bay, Gills Rock, Northport, Rowleys Bay, and North Bay.

Gills Rock is located on the southeast corner of Hedgehog Harbor at the tip of the peninsula. The harbor is at the northwest point of the southern mainland peninsula which separates Green Bay from Lake Michigan. Hedgehog Harbor is sheltered from the south and enclosed on the east by Table Bluff and on the west by Deathdoor Harbor.

Northport, is an area at the very tip of the peninsula and consists of a ferry dock facility that is leased from the county by the Washington Island Ferry Line.

Rowleys Bay is located about six miles northeast of Sister Bay on the lake side of the peninsula. The east side of the bay is bordered by the Newport State Park. On the northwest corner of Rowleys Bay lies the mouth of the Mink River, a small inlet which extends approximately one mile inland. Rowleys Bay is approximately 1.5 miles in length by 1.25 miles in width. The Wagon Trail Resort maintains boat launch facilities at Rowleys Bay.

North Bay is located north of Cana Island and provides a limited area of deep water close to its mouth which affords good anchorage and protection from all but east winds.

Air Transportation

The inventory of air transportation systems and facilities includes both public airports that service the region and also the private or semi-public airport facilities that service private

commercial and recreational interest. The Wisconsin Department of Transportation Bureau of Aeronautics classifies airport facilities according to the function that they serve and the size and type of aircraft that they are capable of handling.

At the regional level, the primary commercial-passenger and air freight service for residents of the village of Sister Bay is provided by Austin Straubel International Airport, owned and maintained by Brown County and located near the city of Green Bay. Door County Cherryland Airport located in Sturgeon Bay provides a seasonal passenger service as well as corporate service for Door County. Smaller airports in the area include the Washington Island Airport and Ephraim-Fish Creek Airport. In addition to the three public use airport facilities, there are also eight privately owned airstrips or helicopter landing pads located within Door County. Two of the eight airport facilities are located near the village of Sister Bay, including the Hill Road Airport which has a 2,300 foot long turf covered runway and the Nor-Door Clinic Heliport located within the village.

Roads and Highways

There are several basic considerations useful in assessing the road system within a community. Those considerations include the functional classification of the existing road system, the annual average daily traffic on roads within the village, and an evaluation of the system's capability to handle present and projected future traffic volumes. In addition, vehicle crash data is useful in determining problem areas relative to road safety. This information can provide an indication of the road improvements that may be needed during the planning period.

Functional Class

Roads, which are the principal component of the circulation system, may be divided into three categories: arterial, collector and local. The three categories of roads are determined by the function that the road serves in relation to traffic patterns, land use, land access needs and traffic volumes. The mileage of the highway and street system within the village of Sister Bay is shown in Table 5.1. The functional classification of the road and street system for the village of Sister Bay is shown in Map 5.1, with criteria upon which the road and street system has been functionally classified identified in Table 5.2.

Arterial Roads

The function of an arterial road is to move traffic over medium to long distances, often between regions as well as between major economic centers, quickly, safely and efficiently. To improve safety and to enhance efficiency, land access from arterial roads should be, as much as is possible, limited. Arterial roads are further categorized into either *principal* or *minor* arterial roads based on traffic volumes. There are two minor arterial highways located within the village of Sister Bay, STH 42 and STH 57.

Collector Roads

The primary function of those roads classified as *collectors* is to provide general *area to area* routes for local traffic. Collector roads take traffic from the local roads (and the land based activities supported by the local roads) and provide relatively fast and efficient routes to farm markets, agricultural service centers and larger urban areas. With an overall socioeconomic trend that is characterized by the decline of small and medium agricultural concerns, and a significant increase in the number of rural single-family residential properties, collector roads generally serve the same function but with different trip purposes. Collector roads typically serve low to moderate vehicle volumes and medium trip lengths between commercial centers at moderate speeds. Collector roads serve to distribute traffic between local and arterial roads, between home and the work place, home and the place of worship, home and school and between the home and those places where business and commerce are conducted. Collector roads are further delineated by classification as *major* or *minor* collectors.

In the village of Sister Bay, CTH ZZ from the village of Sister Bay to Rowleys Point is classified as a *major collector*.

There is slightly more than 8-tenths miles of county trunk collector road located in the village of Sister Bay.

Local Streets

The primary and most important function of local streets is to provide direct access to land adjacent to the road. Local streets are constructed to serve individual parcels of land and properties. They also tend to serve the ends of most trips within the rural area. All streets that are not classified as arterial or collector facilities within the village are classified as local streets.

Local streets should be designed to move traffic from an individual lot (more often than not, a person's home or cottage) to collector roads that in turn serve areas of business, commerce and employment. Local streets should not be designed or located in such a manner that they would or might be utilized by through traffic. In total, there are more than 13 miles of local streets under the jurisdiction of the village.

Table 5.1: Road Function, Total Mileage and Percent of Total Road Mileage, village of Sister Bay, 2002

Road/Function	Mileage	Percent
STH 42 - Minor Arterial	2.16	12.24%
STH 57 - Minor Arterial	1.20	6.80%
CTH ZZ - Major Collector	0.82	4.65%
Local Streets	13.46	76.30%
Total Mileage	17.64	100.00%

Source: Wisconsin Department of Transportation, *Village Plat Record*, 2001; and the Bay-Lake Regional Planning Commission, 2002

Map 5.1: Functional Classification of Roads, Village of Sister Bay



Table 5.2: Functional Classification Criteria for Rural Roads and Highways

Rural Principal Arterials (RPA)						
County Population Density (Rural)	Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
	Must meet any 2 of these				OR must meet both of these plus 90% of Traffic Volume	
	Population Service	Land Use Service	Spacing	Current ADT		
>43	Connect places $\geq 50,000$ to $\geq 50,000$ and 5,000-49,999 to $\geq 50,000$	Provide access to major recreation areas of the state.	Maximum 30 miles Between Principal Arterials	>6,000		2.0-4.0% statewide
<43				>2,000		
Rural Minor Arterials						
>43	Connect places 1,000 -4,999 to $\geq 50,000$ 5,000-49,999 to 5,000-49,999	Serve all traffic generating activities	Maximum 30 miles	$\geq 2,000$	1. Alternate population connection 2. Major river crossing/ restrictive topography	4.0-8.0% statewide
<43	1,000-4,999 to $\geq 50,000$ 1,00-4,999 to 5,000-49,999 or with principal arterials	with an annual visitation of 300,000 if not served by a principal arterial.		$\geq 1,000$		

Table 5.1: Functional Classification Criteria for Rural Roads and Highways, continued.

Rural Minor Collectors						
County Population Density (Rural)	Basic Criteria				Supplemental Criteria	Mileage
	Must meet any 2 of these OR the Parenthetical Traffic Volume Alone				OR Must meet 2 of these plus 90% of Traffic Volume	Percent of System Range
	Population Service	Land Use Service	Spacing	Traffic Volume		
>43	Connect places 115 with other places 115.	Land Use Service Index > or = 8.	Maximum 10 miles	>400 (>1,600)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchanges with a freeway 5. Parallel to a principal arterial.	5.0-10.0% countywide
<43	Connect places 60 with places 115 or with higher function route.	Land Use Service Index > or = 5.		>200 (>800)		
Locals						
All public roads not classified as arterials or collectors						65.0-75.0% countywide Most counties should be at 68.0 - 72.0%

* Note: Loop routes and stub ended routes less than 5 miles long and meeting the basic criteria for a major collector should be limited to a minor collector classification.

Minor Collectors in Communities under 5,000 (RMIC)			
Must meet one of the below Traffic Volume or Parenthetical Traffic Volume Alone:			
Land Use Service	CBD Circulation	Current ADT	System Mileage Percentage
<p>The following land uses should be within 1/8 mile:</p> <ul style="list-style-type: none"> a. Type 1,2,3,4, & 5 airport b. Regional, community or neighborhood shopping center c. College and school (high, middle, intermediate, or elementary) d. Community/regional, sub-community, or neighborhood park e. Industrial plant f. Office buildings g. Hospital or clinic h. Golf course i. Warehouse j. Marina k. Arena or stadium 	<p>Should include the logical street system for circulation in the CBD</p>	<p>≥ 450</p> <p>(≥1,750)</p>	<p>Minor collectors in communities under 5,000 in population should be included as part of the total minor collector mileage for the affected county.</p>

Source: Wisconsin Department of Transportation, *Wisconsin Administrative Code, Chapter Trans 76*, 1984; and Bay-Lake Regional Planning Commission, 2001.

Traffic Counts

An analysis of past and present traffic volumes is beneficial in determining the traffic conditions in a community. Traffic volumes are usually presented as an *Annual Average Daily Traffic (AADT)* figure, and are calculated for a particular intersection or stretch of roadway. The Wisconsin Department of Transportation, as part of its traffic count program, provides highway traffic volumes from selected roads for all state communities on a rotating basis, providing those counts for a community once every three years. For the village of Sister Bay, traffic volumes were last counted in 2001. Counts were also taken in 1998 and 1985. The annual average daily traffic volume on principal and minor arterial roadways within the village for those years are listed in Table 5.3, and are shown on Map 5.2. The daily rural traffic counts are taken for 48 hours, and are reported as a 24-hour average weekday count for a specific data collection period.

Table 5.3: Average Daily Traffic Counts, 1998, 2001.

Highway - Counter Location	ADT 1998	ADT 2001	Number Increase 1998 - 2001	Percent Increase 1998- 2001
STH 42 - south of Sister Bay	5,800	5,800	0	0.0
STH 42 - north of Sister Bay	4,400	4,700	300	6.8
STH 57 - at Sister Bay	2,000	2,100	100	5.0
CTH ZZ - at Sister Bay	1,300	1,300	0	0.0

Source: Wisconsin Department of Transportation, *Wisconsin Highway Traffic Volume Data*, 1998, and 2001; Bay-Lake Regional Planning Commission, 2002.

Average traffic volumes on STH 42 between 1998 and 2001 have remained fairly constant. Average daily traffic volumes on STH 42 increased by nearly 7 percent at the southern counter location and remained unchanged at the northern counter location. Traffic volumes on STH 57 and CTH ZZ during that same time period remained relatively constant with a increase of 100 vehicles per day recorded on STH 57 just south of the village and no change reported on CTH ZZ at a point just east of the village.

Map 5.2: Traffic Volumes, Village of Sister Bay

Traffic Flow Capacity

The roads that serve the state, the region and the local community are designed and engineered to accommodate a maximum level of traffic (Table 5.4). The maximum total capacity of a two-lane, two-way road (such as STH 42, STH 57, and CTH ZZ) under ideal conditions is 2,000 vehicles per hour, as determined by the Peak Hourly Traffic (PHT), regardless of traffic distribution by direction. The maximum capacity values given should be considered as the average maximum volume on various types of roads under ideal conditions.

Table 5.4: Uninterrupted Traffic Flow Capacities Under Ideal Conditions

Highway Type	Capacity Peak Hourly Traffic
Multi-Lane and Divided Highways	2,000 vehicles per lane
Two-Lane, Two-Way Highways	2,000 vehicles both lanes
Three-Lane, Two-Way Highways	4,000 vehicles both lanes

Source: *Highway Capacity Manual*, Highway Research Board of the Division of Engineering and Industrial Research, 1985; Bay-Lake Regional Planning Commission, 2002.

As the comparison of the recorded annual average daily traffic, peak hourly traffic and the traffic flow capacities indicate, at present, there are no roads or road segments located within the village that have approached or appear to be approaching the roads design capacity.

Traffic Crashes

Vehicle crash reports, are filed with the Door County Sheriff's Department and also with the Wisconsin Department of Transportation. The reports provide the detail of the time, location, type and severity of the crash that has occurred. These reports may serve to indicate problems with the road's vertical and horizontal alignment, roadway construction, and the geometric design of the road. The number, location and severity of crashes can often indicate problem areas (in terms of traffic safety) which may be alleviated through a variety of measures. Alterations in the road geometry, enlargement of the intersection turning radii, and placement of more prominent signs or warning devices, relocation of accesses and/or speed limit changes are just a few of the physical alterations and adjustments that can be made to make a specific intersection or road area safer.

Between January 1, 2000 and December 31, 2001, there were a total of 34 crashes reported in the village of Sister Bay. There were no fatalities resulting from the crashes and a total of 11 persons were injured in seven crashes. A total of 27 crashes resulted in property damage only, with no injuries reported.

Table 5.5: Vehicle Crash Severity - Village of Sister Bay, 2000 and 2001

Village of Sister Bay	2000	2001	Total
Intersection Crashes	2	5	7
Non-Intersection Crashes	12	15	27
Vehicle/Deer Crashes	3	4	7
Fixed Object/Tree Crashes	2	4	6
Fatalities	0	0	0
Injuries (Number of Persons Injured)	3	8	11
Property Damage Only	13	14	27
Crashes Causing Injury and or Fatality	1	6	7
Multi-Vehicle Crashes	9	14	23
Total Reported Crashes	14	20	34

Source: Wisconsin Department of Transportation, 2002; Bay-Lake Regional Planning Commission, 2001.

The crash data are further delineated by non-intersection and intersection crashes and by highway jurisdiction. Non-intersection crashes typically include deer/vehicle crashes, vehicles leaving the road and sliding into a ditch, vehicles striking fixed-objects such as trees, fence post and signs; and crashes between a vehicle travelling on the roadway and another vehicle entering or exiting the roadway at a private property access. Intersection accidents are typically characterized by angle crashes, rear-end accidents and head-on crashes within the immediate area of a particular intersection. Intersection accidents often may be indicators of a problem with the sight triangle at the intersection (visibility), location of and visibility of signs, and/or the geometric configuration of the roadway itself.

Table 5.6: Intersection/Non-Intersection Crashes by Highway Jurisdiction, Village of Sister Bay, 2000 and 2001

Crash Location	Total	Intersection		Non-Intersection	
	Crashes	Crashes	Percent	Crashes	Percent
State Highway 42	17	4	11.76	13	38.24
State Highway 57	1	0	0	1	2.94
County Highways	1	0	0	1	2.94
Village Streets	15	3	8.82	12	35.29
Total	34	7	20.59	27	79.41

Source: Wisconsin Department of Transportation, 2002; Bay-Lake Regional Planning Commission, 2002.

The crash data indicates that in the two year period between 2000 and 2001 that there were a total of seven intersection crashes which accounted for slightly more than 20 percent of the total crashes recorded. A significant majority of the reported crashes (79.41 percent) were recorded as non-intersection vehicle crashes that occurred at mid-points on the local street system. More than 50 percent of all crashes recorded during 2000 and 2001 occurred on STH 42/Bay Shore Drive.

There were a total of 24 multiple-vehicle crashes reported in 2000 and 2001, and of these, 17 or 70.83 percent were non-intersection crashes. The preponderance of non-intersection crashes (eight of which occurred on STH 42) may be attributed to the design attributes of the local street system which is generally characterized by a narrow curvilinear road pattern and the amount a traffic on and parked adjacent to existing travel lanes. Nearly 46 percent of the multiple-vehicle crashes reported were vehicles striking the rear of a stopped or slower moving vehicle.

Access Controls

Access management is a means to maintain the safe and efficient movement of traffic along arterial highways by controlling the number and location of intersecting roads and driveways.

Driveway Permits

Driveways to local village streets may also impair vehicle safety, if improperly sited and/or designed.

Wisconsin State Statutes allow villages to issue permits for all new driveways which can allow the village to prohibit driveways which due to location (at the base or top of hills, within a specified distance from an intersection, etc.) are unsafe. The permit process can also regulate the size and design of driveway culverts. Improperly designed and sized culverts can pose traffic safety problems, and impede drainage from the road surface.

Speed Limit Controls

Local units of government can change speed limits for their roads under authority and guidelines in the Wisconsin Statutes. Local officials play a key role in setting speed limits. They must balance the competing concerns and the opinions of a diverse range of interest including drivers (who tend to choose speeds that seem reasonable for conditions) and land owners or residents (who frequently prefer and request lower speed limits than those posted), law enforcement agencies with statutory requirements, and engineering study recommendations.

The prevailing speed, the one which most drivers choose - is a major consideration in setting appropriate speed limits. Engineers recommend setting limits at the 85th percentile speed, where 85 percent of the freely flowing traffic travels at or below that speed. An engineering study measuring average speeds is required to determine the 85th percentile speed limit. Other considerations include the roads design limit. This is the highest and safest speed for which the road was designed, and takes into account the road type, geometry, and adjoining land use.

Speeds should be consistent, safe, and reasonable; and enforceable. When 85 percent of the drivers voluntarily comply with posted speed limits, it is possible and reasonable to enforce the limits with the 15 percent who drive too fast. Unreasonably low speed limits, tend to promote disregard for the posted limits and make enforcement much more difficult. They may also promote a false sense of security among residents and pedestrians who may expect that posting lower limits will change driver's speed behavior.

EVALUATION OF CURRENT INTERNAL TRAFFIC CIRCULATION SYSTEM

The village's internal traffic circulation system is greatly influenced by the existing natural resource base and its coastal features. The primary transportation service for the village is provided by STH 42 and STH 57, which provide essential north to south access through the county and the village. For the most part, the county trunk system, including CTH ZZ serve as east to west collectors. The village street system tends to be somewhat circuitous, with numerous non-through or stub-end roads serving areas of residential development along the shoreline.

Although the local street system in the village of Sister Bay is essentially non-direct and in many cases extremely circuitous, the village streets do provide their intended service in providing access from the arterial and collector system to properties located adjacent to the shoreline and the village's interior residential development.

STH 42, STH 57 and CTH ZZ converge along with several local streets at the village's center, and then proceed via STH 42 along a narrow corridor northward to Gills Rock. The area where the arterial and collector streets converge is a destination point for the small shops, restaurants, bed and breakfast and seasonal rental properties, the tourist information cabin, the village beach and park, Hendrickson Park, and the village docks. STH 42 also must serve its basic function of providing through service for the traffic traveling north and south through the county. There is insufficient right-of-way width at this location to accommodate widening of the street. In addition there is insufficient parking and pedestrian facilities for the many businesses and attractions in this small area. The problem is further exacerbated by a narrow and steep ridge that lies along the west side of STH 57 as it nears and intersects with STH 42.

INVENTORY AND ANALYSIS OF APPLICABLE TRANSPORTATION PLANS AND PROGRAMS

The following section of this chapter presents information on existing state, regional, county, and local transportation related plans that apply within the village.

Six-Year Highway Improvement Plan

The Wisconsin Department of Transportation develops a *Six-Year Highway Improvement Plan* which addresses the *rehabilitation* of Wisconsin's state highways. Rehabilitation falls into three major categories (*resurfacing, reconditioning and reconstruction*) giving it the often used abbreviation 3-R Program.

Resurfacing entails provision of a new surface for a better ride and extended pavement life

Reconditioning entails addition of safety features such as wider lanes, or softening of curves and steep grades

Reconstruction entails complete replacement of worn of roads including the road base and rebuilding roads to modern standards.

State Airport Plans

The Wisconsin State Airport System Plan 2020 (SASP 2020) provides a framework for the preservation and enhancement of the system of public-use airports adequate to meet current and future aviation needs of Wisconsin. The plan determines the number, location and type of aviation facilities required to adequately serve the state's aviation needs over a 21-year planning period, 2000 through 2020. The plan defines the State Airport System and establishes the current and future role of each airport in the system.

State Railroad Plan

An update of the State Rail Plan is in progress. The State Rail Plan includes a passenger service component for northeastern Wisconsin. When and if it is fully developed and implemented the state rail system will include high speed passenger rail service to Milwaukee and Chicago from the city of Green Bay through the Fox River Valley. At the regional level, the passenger service would be accessed by intercity bus from those areas (such as Door County) that have no existing rail infrastructure or where the population base does not warrant expansion or extension service, such as northern and northeastern Wisconsin.

State, Regional and Local Bicycle Plans

The *Wisconsin Bicycle Transportation Plan 2020* has as its two primary goals

- Increase levels of bicycling throughout Wisconsin, doubling the number of trips made by bicycles by the year 2010 (with additional increases achieved by 2020).
- Reduce crashes involving bicyclists and motor vehicles by at least 10 percent by the year 2010 (with additional increases achieved by 2020)

Recommended actions include 1) developing local bicycle transportation plans; 2) providing suitable space for bicyclists when designing roadway projects; 3) following accepted bikeway guidance and standards; and 4) routinely considering bicyclists when developing roadway projects.

Regional Bicycle Plan

The *Bicycle Facility Transportation Plan for the Bay-Lake Region* identified a system of connecting routes and needed improvements connecting all municipalities and major destination points throughout the eight-county region including Door County. The plan did not propose facility improvements within the village of Sister Bay, or for that matter any incorporated villages or cities in the region. The regional plan proposes transportation facility improvements (paving road shoulders to a width of four or five feet) to provide safe and efficient travel paths between communities located within Door County including the village of Sister Bay. The plan recommends the addition of five-foot paved shoulders to CTH ZZ from the village east to its terminus; five-foot paved shoulders on STH 57 and on STH 42 along their entire length.

Funding the Village Road System

The cost of constructing, maintaining and operating roads under local jurisdiction (village roads) is defrayed through the provision of General Transportation Aids (authorized in Section 86.30 of the Wisconsin Statutes). General Transportation Aids are distributed to all Wisconsin villages

through a highway aids formula administered by the Wisconsin Department of Transportation. Under the formula, local aid is distributed either as a share of eligible highway-related expenditures incurred by the village or on a per-mile basis, whichever is higher.

Eligible expenditures generally include all road construction and maintenance within the right-of-way, as well as a percentage of eligible law enforcement, street lighting maintenance and construction, and storm sewer construction. The share of cost rate is determined by the available funding and the average costs reported by the village. The 2001 funding level has resulted in a share of cost percentage of 20.8 percent for villages. Each village's share of costs is determined by multiplying the six-year average costs by the percentage rate.

The 2001 flat rate has been set at \$1,740 per mile. Transportation Aids for villages, as well as all other local units of government and counties, are derived primarily from motor fuel taxes and vehicle registration fees

TRANSPORTATION RECOMMENDATIONS

1995 Master Plan Recommendations

The village of Sister Bay's 1995 Master Plan included recommendations for new streets, official map revisions, biking and walking accommodations, intersection improvements, sign control at key intersections, design improvements to the STH 42 Corridor, parking and access (see Appendix E).

Maintain a Pavement Management Program

Village roads are rehabilitated, repaired and maintained with funds provided by the State's Local Roads Program (LRP). This program provides each local unit of government in the state with financial support derived from state taxes on gasoline and other transportation/vehicle related surcharges for local road maintenance and repair.

It is recommended that the existing "pavement management" system be updated annually. The system provides a detailed inventory and description of all roads within the village, provides a detailed surface condition survey of those roads, defines the goals and objectives of the village with respect to its road maintenance and repair, and establishes a long-term maintenance schedule which would prioritize the road maintenance and repair needs.

A pavement management program is simply a Capital Improvement Program geared specifically to the village's roads. The pavement management program provides the village with a detailed, defensible document, which assists elected and appointed officials in making informed decisions regarding road maintenance and repair.

Employ Adequate Design Standards

New highways and roads, in the optimum setting, should be designed for their projected and desired use. Design standards should be applied to all new construction and, where possible, existing roads which are to undergo major repair and reconstruction shall undergo this work according to the standards set forth in this plan.

In examining the design of village roads, the "road-scape" of these facilities also should be considered as well. The "road-scape" includes the area adjacent to the road and within the

established right-of-way or the ditch that serves as a vegetative buffer between the road and the adjacent lots, a location for traffic signs and for utility lines.

Apply Traffic Considerations

Traffic considerations which the village should take into account when planning for and approving future development may include the following:

- Adequate vehicular and pedestrian access should be provided to all parcels of land.
- Local road systems should be designed to minimize through traffic movement.
- The road pattern should minimize excessive travel.
- A simple and comprehensible system of road names and house numbering should be provided.
- Traffic generators located within new subdivisions (such as schools, churches and parks) should be considered in the local circulation pattern.
- The planning and construction of local residential roads should clearly indicate their function.
- The local roads should be designed for a relatively uniform and low volume of traffic.
- Local roads should be designed to discourage excessive speeds.
- Minimize intersections.
- Devote a minimal but adequate amount of space to road uses.
- Roads are a function of land use, and therefore should not unduly hinder the development of land.

Assess Special Transportation Needs

Transportation services for elderly and disabled persons are provided by the county and by private nonprofit and for profit carriers. The village should play as active a role as possible in the support, development and maintenance of special transportation services for the elderly and disabled population of the village.

Bicycle Transportation

Develop and identify a system of bicycle trails, paths and road accommodations to facilitate safe and efficient travel within the village and to outlying areas of the village.

Assess Rural Transit Needs

An insufficiency of accessible and affordable housing in northern Door County coupled with dependence on high school and college student age employees, who due to age and economic condition may not own or have access to reliable transportation; there is a need to transport workers from the population center (Sturgeon Bay) to jobs in northern Door County. An economical and efficient transportation system is essential to attracting a sufficient workforce. The village may wish to have the county explore development of a rural transit (bus) system to provide service between the city and villages located within the county.

The county could develop a county bus transit system to operate in a coordinated fashion with an urban shared-ride taxi system. Public Transit (s 85.20/Sections 5307 & 5311 USC) funding is available to local public bodies and federally recognized Indian governing tribal bodies. State funding is for operating assistance only and is available to communities of at least 2,500

population. Federal funding, if viewed under both the urbanized and non-urbanized area programs noted above, has no population limitation. The federal transit funds can be used for operating and capital assistance, with certain limitations. In addition to the normal transit programs such as Section 18 (5311) and Section 9 (5307), several other federal programs fund transit capital needs. These consist of the Section 3 (5309) Discretionary Capital Program, Congestion Mitigation/Air Quality Program and the State Surface Transportation Discretionary Grant Program (STP) for projects to reduce single occupancy vehicles.

Chapter 6 - UTILITIES AND COMMUNITY FACILITIES

INTRODUCTION

As part of the comprehensive planning program, the village of Sister Bay utilities and community facilities were reviewed and evaluated as to their current condition and adequacy to meet the present and future needs of the community. Data and information were obtained through discussions and questionnaires filled out by the village clerk/administrator, village employees, and other representatives throughout the community.

To maintain a high level of public services, the community must continually monitor and upgrade their existing facilities as population increases. The recommendations contained in this section are based on general long-range planning considerations and should not be substituted for detailed architectural or engineering studies required before expending substantial community resources and undertaking specific public works projects.

UTILITY AND COMMUNITY FACILITY STRATEGY

Goal:

Balance the need for village growth with the cost of providing public utilities and community facilities.

Objectives:

1. Provide for adequate and convenient park sites including trail linkages between parks and other activity centers within the village.
2. Provide for the continuous availability of public utility capacity and provide those areas for identified development with adequate water, sewer and stormwater facilities.
3. Pursue state and federal funding which can aid in the purchase of parklands and green space, or other acquisition and development projects.
4. Provide safe and convenient Americans with Disability Act accessibility to all public buildings.
5. Provide for adequate fire protection and emergency care facilities and programs.
6. Continue to provide adequate public services throughout the planning period in order to reach the desired vision of this plan regarding future land use development.

Policies:

1. Provide public sewer and water for all new developments.
2. Utilize the environmental corridors defined in the comprehensive plan to identify areas sensitive to development and potential wildlife habitat and trail corridors.
3. Continue to monitor services provided to village residents and explore options for maintaining or improving upon the level of existing services.

4. Work with the village of Ephraim, the town of Liberty Grove and Door County to help provide future services as effectively and efficiently as reasonably possible.
5. Continue to monitor and address the facility and program needs of the elderly population and those approaching senior status.

Suggested Programs:

1. The village should establish committees with specific functions. These committees should establish action programs that will detail their needed steps in making progress on issues.
2. Work with the adjoining municipalities in updating the village's Official Map.
3. Encourage development of health care facilities such as nursing homes, medical clinics, day care centers, along with appropriate densities that allow for efficient and effective distribution of public utilities.
4. Consider additional elevated water storage capacity in the north end of the village as recommended by Robert E. Lee and Associates in January 2000.
5. Plan for updated fire protection and emergency care facilities.
6. Plan and build a new fire station facility.
7. Identify a location for a new fire station to better serve the village and surrounding town of Liberty Grove.
8. Explore the space needs required for a combined village administration building, village hall and post office in a single service center.
9. Review and update the General Plan Design to ensure it continues to meet the stated goals and objectives stated above as well as those stated goals and objectives outlined in previous elements of the plan.

BOARDS AND COMMITTEES INVENTORY

Village Board - seven member board composed of a village president and six trustees

Village Plan Commission - seven member board appointed following Wis. Stats. s. 62.23

Fire Commission

Marina Committee

Sewer & Water Committee

Board of Appeals – five member board appointed by Village President

Historic Preservation Commission – regular standing committee with five members

Finance Committee

Personnel Committee

Law Enforcement Committee

Solid Waste Committee

UTILITIES

Electric Service

Wisconsin Public Service Corporation provides Sister Bay with electric power. Electrical power is transmitted through a 69,000-volt transmission line extending from Sturgeon Bay to a substation located on Country Lane in the town of Liberty Grove.

Natural Gas

Natural gas service is not available in the village of Sister Bay; however, liquid propane service is provided by a number of private vendors.

Public Water System

The village of Sister Bay provides public water throughout most of the village except for the southeast portion of the village (Map 6.1). The system consists of three wells, a 100,000 gallon standpipe, a 150,000 gallon water tower with a pumping capacity of approximately 1,450 gallons per minute. The system was constructed in 1972 and is currently adequate for the village's needs. Long range plans call for additional storage on the north end of the village. The remainder of the village residents have individual wells that are owned and maintained by the property owner.

Groundwater

The Silurian dolomite system, containing the Niagaran and Alexandrian aquifers, is the major source of groundwater in the area. Well yields are highly variable and the primary problems are hardness, locally high iron concentrations, and contamination from surface sources.

System Needs

In order to provide enough water for fire flow purposes and to improve the distribution of water throughout the system, several upgrades to the system have been recommended by Robert E. Lee & Associates, Inc. in a January 2000 Water System Study. An additional 150,000 gallons of elevated storage capacity was recommended for the north end of the village, and a new well was recommended on Hill Road. The well has subsequently been constructed on Hill Road.

Sanitary Sewer Service

A sanitary sewer system covers a majority of the village except for the southeast portion of the village (Map 6.2). The system is a gravity system with four lift stations. The system was constructed in 1972 and consists of a wastewater treatment plant, four sewage lift stations and more than 94,000 feet of mains. The Liberty Grove Sanitary District No. 1 is connected to the village system. The wastewater from the village and LGSD No. 1 is pumped to the wastewater treatment plant. The treated effluent is then discharged to the bay of Green Bay. The remainder of the village residents are served by private sewage disposal systems or holding tanks.

The Wastewater Treatment facility has the capacity to treat the village of Sister Bay, the Liberty Grove Sanitary District No. 1 and the remainder of the village of Sister Bay. The treatment plant was built in 1990 and continues to meet the needs of the community.

Map 6.1: Water Distribution System, Village of Sister Bay

Map 6.2: Sanitary Sewer System, Village of Sister Bay

System Needs

There are no plans to upgrade the system within the next several years.

Private Onsite Wastewater Treatment Systems (POWTS)

Private systems in the village include a combination of holding tanks, conventional septic systems, and mound systems.

Storm Sewer System

The village of Sister Bay allows stormwater to drain through a series of ditches and culverts along the village roads. There are no plans to add a storm sewer system to the village.

Solid Waste & Recycling Facilities

Refuse pick-up and disposal is provided by a private contractor, Going Garbage. A recycling depot and local transfer station for solid waste are located on Old Stage Road, south of CTH ZZ in the town of Liberty Grove. Waste is transported to Sturgeon Bay and Manitowoc County for final disposal.

Telecommunications Facilities

Verizon, formerly General Telephone Company of Wisconsin, provides telephone service to the area. Verizon maintains a telephone facility on STH 57 just south of the STH 42-57 intersection in the village of Sister Bay, and provides service for residential and commercial customers of the area. Cellular phone services are provided by Cellcom with local affiliates at Hammersmith TV & Radio Shack and Northern Door Communications.

Cable Television

Charter Communications provides cable television to subscribers in northern Door County.

COMMUNITY FACILITIES

Cemeteries

There are two cemeteries in the village of Sister Bay including: Little Sister Cemetery, and St. Rosalia's Cemetery.

Child Care Facilities

Northern Door Children's Center is the only child care facility in the village.

Emergency Services

Ambulance and emergency medical service are provided by a Door County rescue squad which is headquartered at the Sister Bay fire station. The squad serves Sister Bay, Liberty Grove, Gibraltar, Baileys Harbor and portions of Jacksonport and Egg Harbor. The Northern Door First Responders supports and assists County emergency medical personnel.

Fire Station

The village is protected by a local fire department capable of receiving calls from the County 911 dispatch center. The fire department is overseen by a joint Fire Commission between the village of Sister Bay and town of Liberty Grove. The department also has a mutual aid agreement with Ephraim, Baileys Harbor, Gibraltar, Egg Harbor and Jacksonport. The fire department is housed in two locations one in Sister Bay, the other in Ellison Bay. The village of Sister Bay is protected by a municipal water supply via fire hydrants.

Future Growth Considerations

As a community grows, the need for adequate fire protection increases. Normally, newly developing residential and commercial areas are located further from the existing fire protection facilities, thereby increasing response times. A plan for the installation of new facilities should be determined prior to this growth. Property location/acquisition and water system improvements can be determined utilizing the Official Mapping and Capital Improvement Program procedures.

The location of a new fire protection facility can be based on several aspects. The rule utilized by the National Board of Underwriters recommends a maximum four-mile radius for service to a fire district, but different standards exist. The fire protection facility needs in the village of Sister Bay can be evaluated with the standards given in Table 5.1.

Table 6.1: Recommended Distribution Standards for Fire Protection

Type of Land Use	Suggested Service Radius	
	Engine or Pumper Company	Ladder Company
Commercial/Industrial	0.75-1.0 miles	1.0 miles
Medium/High Density Residential (<100 ft between structures)	2.0 miles	3.0 miles
Scattered Residential (>100 ft between structures)	4.0 miles	4.0 miles

Source: Small Village Planning Handbook, American Planning Assoc., 1988; and Bay-Lake Regional Planning Commission, 1999.

Library

The library is one of seven branches of the Door County Library System and a member of the Nicolet Federated Library System.

A 7,500 sq. ft. facility was completed in 2002 and is located on Mill Street, east of STH 42. A joint library commission of the village of Sister Bay and the town of Liberty Grove hold title to the building and is responsible for operation and maintenance of the building and furnishing.

Health Care Facilities

Medical treatment is available in the village of Sister Bay at the Nor-Dor Clinic and Partners in Health. While Sister Bay does not have a hospital, major medical services are available at the Door County Hospital in Sturgeon Bay 35 miles south of the village. Dental care is provided in Sister Bay at two locations. Hearthside-Cordial Care and Scandia Good Samaritan Village are located in Sister Bay to provide services to the elderly.

Municipal Building

Sister Bay's administrative facilities are housed in the Village Administrative Building on Maple Drive in the central portion of the village. The Clerk/Treasurer and Administrator offices are housed in the building. There is parking provided adjacent to the Administrative Building.

Facilities in the Administrative Building include a meeting room; a vault; voting booths; a copy room; two office areas; kitchen and restroom facilities. The Administrative Building was built in 1972 and is currently too small. The village has a separate village hall located on the waterfront on Bay Shore Drive which contains a large meeting hall and restroom facilities. Parking is available on the street.

Parks and Open Spaces

There are currently three village parks in the village of Sister Bay. A complete discussion of the parks and open spaces in the village of Sister Bay can be found in *Chapter 2: Agricultural, Cultural and Natural Resources*. Private recreational facilities include Bay Ridge Golf Course, Pirate's Cove mini golf, and Johnson Park mini golf and go-karts.

Police Protection

Police protection is provided by the Door County Sheriff's Department. The Sheriff's Department is located in the city of Sturgeon Bay, 35 miles to the south of Sister Bay.

Schools

Gibraltar Area School District

Sister Bay belongs to the Gibraltar Area School Districts whose facilities are located in the unincorporated village of Fish Creek approximately ten miles south of the village hall. The school district provides high school, middle school, elementary and preschool facilities to students in the northern half of Door County.

Other Facilities

Postal Service

The post office is located in Sister Bay on STH 42 adjacent to the Village Hall.

Chapter 7 - INTERGOVERNMENTAL COOPERATION

INTRODUCTION

The village of Sister Bay's relationship with neighboring communities and the school district can impact village residents in terms of planning, the provision of services, and siting of public facilities. An examination of these relationships and the identification of existing or potential conflicts can help the Village address these situations in a productive manner.

INTERGOVERNMENTAL COOPERATION STRATEGY

Goal:

Promote cooperation between the village of Sister Bay and any other governmental agency that makes decisions impacting the village.

Objectives:

1. Coordination and sharing of community facilities and services whenever possible.
2. Coordination with adjacent communities on future planning projects to maintain the character of the surrounding area.

Policies:

1. Work with neighboring communities to discuss any unique natural features and other land uses which lie across village boundaries.
2. Explore the possibility of jointly developing and managing future recreational facilities.
3. Work with surrounding municipalities to address possible boundary issues to minimize conflicts.

Suggested Programs:

1. Promote cooperation and coordination with Door County regarding any county plans.
2. Work with the Wisconsin DNR, Army Corps of Engineers and the Environmental Protection Agency to insure compliance with water quality regulations.
3. Continue to work with the Bay-Lake Regional Planning Commission or other planning agencies on village planning activities, and county and/or regional planning activities.
4. Continue to make the Plan Commission or Village Board aware of any planning activities that may impact the village of Sister Bay.

EXISTING ACTIVITIES

Adjacent Governmental Units

The village of Sister Bay shares borders with two other municipalities including the town of Liberty Grove and the village of Ephraim

Relationship

The village of Sister Bay and the town of Liberty Grove have a good working relationship. Periodic conflicts do occasionally occur, and efforts have been made to better the cooperation between the two municipalities on land use issues. The village of Sister Bay, being an incorporated municipality, also has the power to annex land from the town. This power can strain relations between the Town and the Village.

Siting Public Facilities

Sister Bay shares several facilities with neighboring communities. The Northern Door First Responders and the Fire Department, serving Liberty Grove and the village of Sister Bay have facilities located in the village and the town. Library facilities for northern Door are located within the village of Sister Bay and serve the surrounding communities. Currently, the village of Sister Bay and the town of Liberty Grove have plans to jointly site a new fire station within the village.

Sharing Public Services

Currently the village of Sister Bay has several intergovernmental agreements with neighboring communities regarding public services. The village has an agreement with the Fire Department to provide the town of Liberty Grove with fire services. Sister Bay's ambulance services are shared with the towns of Liberty Grove, Gibraltar, Baileys Harbor and portions of Jacksonport and Egg Harbor. The library facility located in village of Sister Bay is maintained by the village of Sister Bay and the town of Liberty Grove. Law enforcement is provided by the Door County Sheriff's Department.

School District

The village of Sister Bay is located within the Gibraltar Area School District.

Relationship

The village of Sister Bay's relationship with the Gibraltar Area School District is limited. The School District tends to operate rather independently and interaction with the village tends to be minimal.

Siting School Facilities

The siting of new school facilities is mainly conducted by the School Districts. The village has historically had little input into the location of new school facilities. However, as the District continues to discuss facility improvements, the village may want to become more involved to ensure that the goals and objectives of this plan can be met.

Sharing School Facilities

The village has no formal agreement with the School District for shared use of the school's facilities.

County

Though the village of Sister Bay is located in Door County, the village enforces its own zoning, sub-division and other ordinances. Therefore, the county has little jurisdiction within the village. In particular, the county has jurisdiction in the village's planning area in the town of Liberty

Grove over zoning, land divisions, on-site sanitary systems, etc. The Village and County need to continue to maintain open communication with each other in order to build a good working relationship of both general agreement and respect.

Region

The village of Sister Bay is located in Door County, which is located in the northeast region of the State of Wisconsin. The village of Sister Bay is a member of the Bay-Lake Regional Planning Commission (BLRPC) which is the regional entity that the village is involved with. The BLRPC has a number of programs and plans in place covering natural resources, population projections, community plans, transportation plans, bike plans, etc.

State

The village's relationship with the State of Wisconsin is one which deals mainly with issues related to economic development (EDA), transportation (WisDOT) and natural resources (WDNR).

INVENTORY OF PLANS AND AGREEMENTS

State Statutes 66.0307 and 66.0301 allow municipalities to enter into agreements regarding the location of municipal boundaries. The Cooperative Boundary Plan is any combination of cities, villages, and towns that may determine the boundary lines between themselves under a cooperative plan approved by the DOA. The cooperative plan must be made with the general purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory covered by the plan which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity or general welfare. Cooperative boundary plans cover at least a 10-year period. Additionally, Cooperative boundary agreements are a tool that could also be used for service sharing between local units of government.

The majority of Municipal Boundary Plans or Agreements are conducted between a town and a city or village. In order to promote harmonious development in the area, the village should discuss Boundary Agreements with adjacent municipalities in the future.

Extra-territorial subdivision regulation

State Statutes allow an incorporated village or city to extend Extra Territorial Plat review over surrounding unincorporated areas. The extra territorial area extends for 1.5 miles for villages and cities under 10,000 people, for cities over 10,000 the area extends to 3 miles. The village of Sister Bay has extra territorial jurisdiction extending into the town of Liberty Grove which it shares with the village of Ephraim on the western border of the village. Both villages currently have populations of less than 10,000 and have a right to exercise extra territorial plat review jurisdictions and thereby influence the division of land within 1.5 miles of their borders with the town.

Extra-territorial Zoning

State Statutes allow an incorporated village or city to extend Extra Territorial Zoning over surrounding unincorporated areas. The extra territorial area extends for 1.5 miles for villages and cities under 10,000 people, cities over 10,000 the area extends to 3 miles, however the entire

jurisdiction does not need to be included in the zoning. Extra Territorial Zoning requires a joint effort between the town and the city or village to develop a plan for the area to be zoned. The extra-territorial zoning is then established according to the developed plan. Extra territorial zoning is not currently being administered by the village of Sister Bay.

INVENTORY OF EXISTING OR POTENTIAL CONFLICTS

On December 10, 2001, the village of Sister Bay participated in a nominal group process held at the Liberty Grove Town Hall with surrounding municipalities, school districts, WDNR, WisDOT, etc. to identify existing or potential conflicts in and around the area. Participants generated conflicts or issues and voted on the issues to reveal the top ten conflicts facing the town and surrounding areas. The issues as identified and ranked were:

1. Sharing/Duplication of services (including younger workers)
2. Lack of attainable housing
3. Ground and surface water quality protection
4. NWTC
5. Lack of communication between local units of government
6. Economic development
7. County land use decision making vs. local control
8. Common goals for conservation areas across political boundaries
9. Annexation
10. Taxes

A complete listing of the issues discussed, and the attendance list from the workshop can be found in Appendix F.

PROPOSED CONFLICT RESOLUTION PROCESS

After the participating individuals identified the existing or potential concerns, they also began to generate a list of possible solutions to address the issues mentioned at the nominal group session. The following ideas were developed by reviewing the list of concerns and issues, and then “brainstorming” for possible solutions.

Possible Conflict Resolutions

1. Create a central database to share data or info. gathered by local units of government
2. Sharing of services
3. Sharing meeting agendas/minutes
4. Monthly meeting between chairs of units of government
5. Access to clearinghouse for information on: project funding, creating solutions, alternative technologies, ordinances / laws
6. Joint meeting among boards every two to three months
7. Regular meetings of town and village administrators
8. Township federation or alliance within county
9. Determine common areas of development between communities before development or annexation

10. More common projects

Summary and Conclusions

In general, the identification workshop could be characterized as successful given the number of attendees and the fact that all participated in the process. Issues were identified and alternative solutions to resolve conflicts were generated.

It is anticipated that the intergovernmental cooperation meeting and this summary could serve as the starting point for future collaborative planning efforts in and around the village of Sister Bay. This plan recommends that the village continue to pursue sharing resources and personnel with neighboring communities as was recommended. Communication between the villages of Sister Bay and Ephraim and the town of Liberty Grove will help ensure the success of future joint projects in a more cost effective manner.

Chapter 8 - LAND USE

INTRODUCTION

The Land Use portion of this plan is intended to present information on the current (2001) land use within the village and to articulate the direction for future growth and development. The General Plan Design, contained within this chapter, identifies the wishes of the community on how development should occur within the plan's timeframe and it provides direction to residents, the business community, and government officials. The General Plan Design will serve as a detailed guide to the members of the Village Board in their decision making process.

The goals, objectives and information within this chapter, along with the demographic trends detailed earlier within this document, were utilized to develop a projection of future land use demands and assisted in guiding the selection of future locations for specific types of land uses. Existing land use controls were also inventoried and assisted in the development of the General Plan Design.

LAND USE STRATEGY

Goal: General Plan Design

Promote future development that will meet the needs of the village while protecting and enhancing its visual character, promoting environmental protection, conserving natural resources, meeting the needs of social and economic forces, providing for adequate services and facilities, and ensuring compatibility of future land uses.

Objective:

Ensure that all growth and development occurs in a planned and coordinated manner that will maintain or improve the quality of life associated with the rural character of the village for both existing and future residents.

Policies:

1. Utilize the Comprehensive Plan as an illustration of the village's overall development policy.
2. Work with the neighboring towns and villages to update the village's Code of Ordinances, to be consistent with the village's Comprehensive Plan.
3. Allow future development in an orderly way to allow for proper distribution of community services.
4. Work with the town of Liberty Grove and the village of Ephraim, to ensure compatible growth within the village's border areas.
5. Work with the town of Liberty Grove on any future design standards and ordinances that are to be used for developments within or adjacent to the village, including landscaping, signage, lighting to be used within business or industrial parks and in areas identified for highway commercial development with these standards to be implemented by developers in planning their projects.

6. Prior to designating new areas for growth, it shall be shown that the new development is consistent with the village's Comprehensive Plan.

Objective: Residential

Strive to maintain the stability and integrity of the existing open space areas while encouraging the development of new residential areas sufficient to meet the housing needs of the projected population. A village that is characterized by a variety of housing types and densities, pedestrian accessibility of neighborhoods and parks/parkways, inclusion of open green spaces within developments, new trailways, and environmental protection is ultimately desired.

Policies:

1. Protect residential neighborhoods from impacts of non-residential uses not appropriate for the neighborhood. Residential areas should be distanced, buffered, or otherwise mitigated from physical hazards, unhealthy conditions, and protected from traffic, noise, and incompatible uses.
2. Infill development needs to be designed to be compatible with the established residential districts through transitions in housing density, screening, or other appropriate method.
3. Provide for sufficient densities within the planning area to meet the current and future needs of the local population.
4. Provide, through land use regulations, the potential for a broad range of housing choices to meet the needs of the community.
5. Housing developments shall conform to the zoning districts that they are contained within. Modified conformance standards will be considered in areas that have been designated for conservation subdivision designs or open space designs such as:
 - within the village's identified Sewer Service Area; and
 - adjacent to environmental corridors; and
 - along major transportation corridors i.e. State Highways 42 and 57.

Objective: Commercial

Encourage harmonious and well-planned commercial developments that will serve the needs of the village and area residents, as well as STH 42 and STH 57 users.

Policies:

1. Areas already characterized by commercial development and where village services and facilities are available should be given preference over scattered non-serviced areas.
2. Points of vehicle ingress and egress should be properly located and controlled to prevent safety problems and traffic congestion on adjacent arterial streets. Adjacent streets should be capable of accommodating the increased traffic associated with the commercial development.

3. Adequate landscape screening “buffer” should be provided between commercial uses and adjacent noncommercial uses.
4. Appropriate building setbacks should be provided from abutting streets and highways.
5. Designate appropriate area(s) that can accommodate commercial expansion without creating continuous commercial frontage along all major highways.

Objective: *Natural and Cultural Resources*

Encourage preservation of water resources, unique open spaces, and other cultural and natural resources while considering the future integration of existing natural areas (contiguous woodlands, meadows, open spaces, wetlands, etc) into site designs creating environmental corridors throughout the village for wildlife habitat and/or pedestrian linkages.

Policies:

1. Encourage residential subdivisions that relate to natural and cultural features.
2. Utilize the environmental corridor designation of the General Plan Design to promote and preserve wildlife habitat and trails where appropriate.
3. Consider a future trail system within the village that would utilize natural corridors linked with a number of connecting points to existing pedestrian paths/sidewalks.
4. Carefully consider the impacts of allowing greater use of lands within and adjacent to the comprehensive plan’s identified environmental corridors (depicted on the General Plan Design). Consider limiting the intensity of a use through additional controls which can be depicted within an overlay district.

Objective: *Government/Utilities*

Provide for future land use designated to fulfill the public services goals of this plan.

Policies:

1. Identify areas of the village designated for future public services.

INVENTORY OF EXISTING LAND USE CONTROLS

This section inventories and discusses the land use controls which currently exist within the Village of Sister Bay, which may affect, or restrict, the use of land for specific purposes. These controls should be reviewed periodically to make sure that they assist in implementing the general plan design for future development within the village.

Existing Comprehensive Plans

This is an update to an existing comprehensive plan for the Village of Sister Bay. Surrounding communities have completed or are in the process of developing plans. This plan and Liberty Grove’s plan update existing plans. These plans should be referenced to gather ideas as to how surrounding communities are progressing with “smart growth”, and to help avoid any conflicts in future land use decisions.

Door County Comprehensive Plan

The *Door County Development Plan* was adopted in March of 1994. *The Door County Development Plan* provides guidelines for future land use and development within the county in the town of Liberty Grove within the village's planning area, outside the village limits. Three of the underlying principals of the county's development plan are particularly germane to the transportation/land use issues explored within this study. Those three principal policies are as follows:

- Discourage commercial sprawl beyond established or planned businesses areas.
- Maintain the function of the county's principal arterial roads.
- Promoting development within well defined communities and growth areas where such development can more easily be serviced by public facilities.

The County Plan separates the county into twelve general land use categories, each with different land use and development objectives. Those categories include:

1. Development Core Areas
2. Crossroads Communities
3. Business Development Areas
4. Resort/Residential Areas
5. Shoreline Residential Areas
6. Rural Residential Areas
7. Suburban Residential Areas
8. Open Agricultural Areas
9. Open/Rural Areas
10. Natural Areas
11. Airport areas
12. Highway Corridor Areas

Village of Sister Bay Master Plan Update 1995

The *1995 Village of Sister Bay Master Plan Update* was adopted by the Village of Sister Bay Plan Commission on February 16, 1995. The primary purpose of the plan was to review development trends and conditions in the village, assess whether previous plan policies were working, and to make recommendations on new development issues. The plan provided recommendations in eight areas:

1. The Residential Development section of the plan recommended that the village initiate housing development in new areas of the village while establishing standards for the type and density of the developments. New residential development areas were identified in the Sister Bluff Area, the southwest Quad Area, the Koessl Lane Area, and the Woodcrest Road Area.
2. The Commercial Development section of the plan established as its major priority a need to "regroup" and redirect some the commercial development to provide more convenient groupings for shopping. The two retail locations outside the downtown identified for these groupings were the Country Walk Land area and the Krist Shopping Center area.

3. The Downtown Sister Bay section provided a focus on the redevelopment and preservation of all of the commercial, resort, governmental and recreational functions in the downtown area of Sister Bay. Recommendations were made for opening up and maintaining the waterfront, in-filling/redeveloping downtown areas, establishing standards for parking, and establishing street design standards.
4. The Industrial Development section of the plan recommends that the village identify areas for future light industrial, warehousing, and outside storage. No specific areas were identified for concentrated industrial development because it was not a goal of the village to establish an industrial park. State Highways 42 and 57 were identified as locations for potential industrial uses.
5. The Agricultural Lands section of the plan identified 280 acres of land in the southeast portion of the village as lands in agricultural use that should not be developed within the planning timeframe. These lands were recommended as potential future growth areas only if the village were to develop other available areas of the village first.
6. The Parks and Open Space section of the 1995 Master Plan Update identified a heightened need for the village to acquire and develop land for recreational and open space purposes. The plan made specific recommendation's for parks along the waterfront and marina, and the addition of neighborhood and community parks to serve newly developed areas of the village. Several area of the village were recommended for public acquisition to allow long-term maintenance of these natural areas.
7. The Institutional Uses and Community Facilities section of the plan recommended that the village continue to maintain community facilities in or near the downtown area. The plan recommended that the Village Administration Building and Village Hall be consolidated into a new building along with a new library and other services at the intersection of Highways 42 and 57.
8. The final section of the plan dealt with Transportation and Corridor Design elements of the village. The section includes a discussion of biking and walking corridors and special street designs for Highway 42.

Door County Farmland Preservation Plan

The Door County Farmland Preservation Plan, adopted November, 1983, identifies areas, which are of prime agricultural importance for which the landowners may partake in allowable tax credits under the Farmland Preservation Program. The Farmland Preservation Plan is in effect in the town of Liberty Grove within the village's planning area, outside the village limits.

Agricultural Preservation Areas

Areas that are currently cultivated (in agricultural use) that are part or wholly consist of 100 contiguous acres at a minimum. This definition is intended to include all types of farmland and agricultural uses in order to provide the option of participating in the preservation program to the greatest number of farmers as possible. Farmers in agricultural preservation areas are eligible to sign contracts for ten to twenty years.

Transitional Areas

Transitional areas are those areas that are currently in agricultural use, but in the short-term are expected to convert to non-farm uses, such as residential, commercial or industrial uses. Transitional areas include incorporated areas in agricultural use and areas around developed unincorporated areas that are serviced by existing roads and public services. Transitional areas must be a minimum of 35 acres in size. Farmers whose lands are in a transitional areas may sign a contract agreeing not to develop their lands for a period of five to twenty years.

Environmental Areas

The following areas are considered to be environmental areas: wetlands, woodlands, cultural, historic, or archaeological sites, the 100 year floodplain, public lands, lakes, rivers, and streams. Environmental areas are eligible for Wisconsin Farmland Preservation tax credits if the cultivated area of the farm unit, of which they must be a part of, are eligible for a tax credit.

Excluded Areas

Excluded areas are considered ineligible for the Wisconsin Farmland Preservation Program. They include airports, landfills, quarries, developed incorporated and unincorporated areas, platted subdivisions, quasi-public lands (gun clubs, golf courses, etc.) cemeteries, transitional areas under 35 acres, all ten acre or larger non-agricultural related uses, and all land zoned for non-agricultural use.

Zoning Ordinances

The Wisconsin enabling legislation requires that zoning ordinances be made in accordance with a comprehensive plan. This has been interpreted by planning professionals to mean that the zoning ordinance must be based on a master plan or land use plan and that the ordinance must seek to implement that plan.

Village of Sister Bay Zoning Ordinance

The village of Sister Bay Zoning Ordinance was last revised in 1995 upon completion of the Master Plan Update. The purpose of the ordinance is to promote the public health, safety, morals, comfort, prosperity, aesthetics, and general welfare of the Village of Sister Bay. In addition, the ordinance is designed to control building sites, placement of structures and land use, prevent and control water pollution and preserve shore cover and natural beauty. The ordinance divides the village into districts for the purpose of regulating: 1) the location and use of land, water, buildings, and structures, 2) the height and size of building structures, 3) the percentage of a lot that may be occupied, and 4) the size of lots.

Map 8.1: Sister Bay 1995 General Plan Design

Map 8.2: Sister Bay 1995 General Plan Design - downtown

The village of Sister Bay is divided into the following zoning districts with the purpose and intent of each of the zoning districts established by the ordinance.

- Single Family Residence (R1) - This district is intended to provide a residential area of moderate density at a minimum of 20,000 sq ft. It is intended for areas with public sewer and water service.
- Multiple Family Residence (R2) - This district is intended for a mix of multiple family and single family residences in areas with public sewer and water. Densities range from a minimum of 20,000 sq ft for single family residences to a maximum of six units per acre for multiple family residences.
- Large Lot Residence (R3) - This district is intended for residential uses that protect the natural environment and reflect the open, country character of the fringe areas of the community.
- Retail Commercial (C1) - This district is intended for groupings of retail and personal service activities outside the Central Business District. Compact development, pedestrian access and coordinated site planning and design are encouraged.
- Resort Commercial (C2) - This district is intended to provide ample area for resorts, recreational and service facilities.
- Business Commercial (C3) - This district is intended to provide areas for business, commercial, office and other non-retail uses outside the Central Business District. Orderly, compact and attractive groups are encouraged along highways.
- Central Business District (C4) - This district is intended to apply to the Central Business District of the village and to provide for small lots and nominal setbacks. Re-use of buildings and lots and new development consistent with the existing scale of the area are encouraged.
- Industrial (I) - This district is intended to provide for industrial and manufacturing uses in areas separated from other sections of the village.
- Agricultural and Open Space (A) - This district is intended to provide for the continuation of existing non-intensive agricultural and related uses. It is intended to conserve areas for farming and to preserve the rural landscape.
- Lowland Conservancy/Wetland (W) - The purpose of this district is to maintain safe and healthful conditions, prevent water pollution, protect fishing spawning grounds and aquatic life, preserve shore cover and natural beauty, and preserve, protect, and enhance lakes streams, swamps, marshes, bogs and other wetlands in the village.
- Planned Unit Development Overlay District(PUD) - This district is intended to allow for Planned Unit Developments within all underlying districts except for the Industrial District.
- Highway 42/57 Landscape Setback Overlay District - This overlay district establishes special setback requirements for parking and structures along portions of Highways 42 and 57.
- Identity Street Setback Overlay District - This overlay district is intended to maintain and protect the existing natural environment and maintain the historic rural character of portions of the village.

Map 8.3: Zoning



The ordinance provides site design and engineering requirements for the development of areas within the village, and defines how the ordinance is administered and enforced. Map 8.3 displays the zoning for the village of Sister Bay.

Door County Zoning Ordinance

The surrounding town of Liberty Grove does not have a zoning ordinance of its own. Rather, it falls under the jurisdiction of the Door County Zoning Ordinance. The purpose of the ordinance is to promote and protect public health, safety, aesthetics, and other aspects of the general welfare of the County. In order to accomplish this purpose, the ordinance regulates and restricts the use of property. The ordinance divides the county, and therefore the town, into districts for the purpose of regulating: 1) the location and use of land, water, buildings, and structures, 2) the height and size of building structures, 3) the percentage of a lot that may be occupied, 4) the density of the population, and 5) the size of lots.

The Door County Zoning Ordinance, which was adopted in 1995 and revised in 1998, is based on a county-wide development plan, while several towns and villages within the county have individual plans.

The county adopted a revised zoning ordinance in 1995 which is in effect in all but six of the villages located within the county. Within Door County, the towns of Forestville, Egg Harbor, Union, Gardner, and Nasewaupee do not currently have zoning in place other than in shoreland areas which are zoned under the county ordinance.

The unincorporated areas of Door County are divided into the following zoning districts with the purpose and intent of each of the zoning districts established by the ordinance.

- **Wetland (W).** This district is intended to prevent the destruction and depletion of Door County's wetlands; to protect water courses and navigable waters and the public rights therein; to maintain the purity of water in lakes and streams and to prevent pollution thereof; and to protect spawning grounds, fish, and habitats for wild flora and fauna. Furthermore, this district is intended to prevent the changing of the natural character of wetlands. Lot sizes of at least 10 acres are required for new lots.
- **Natural Area (NA).** This district is intended to conserve the existing, mostly undeveloped natural areas of Door County. To conserve these areas, commercial and industrial uses are disallowed, but general agriculture, very low density residential, recreational, and institutional uses are permitted. Lot sizes of at least 15 acres are required for new lots.
- **Exclusive Agricultural (EA).** This district is intended to protect the agricultural industry from scattered nonagricultural development that may displace agricultural uses and is, therefore, not intended to accommodate future nonagricultural growth. This district is intended to help implement recommendations of the *Door County Farmland Preservation Plan-1982*. It is intended that this district apply to lands included in productive farm operations and which have historically exhibited good crop yields, or are capable of such yields; have demonstrated productivity for dairying, livestock raising, and grazing; have been used for production of specialty crops such as tree and plant materials, fruits, and vegetables; or have been integral parts of such farm operations. Lot sizes of at least 35 acres are required for new lots.

- Prime Agricultural (PA). This district is intended to maintain and preserve agricultural lands which have historically demonstrated high agricultural productivity. Lands eligible for designation in this district shall generally include those designated as primary or secondary farmland preservation areas in the *Door County Farmland Preservation Plan-1982*. This district is also intended to provide farmland owners with additional management options by allowing limited residential development, but with residential density limits and other requirements set so as to maintain the rural characteristics of this district. Lot sizes of at least 20 acres are required for new lots.
- General Agricultural (GA). This district is intended to maintain agricultural lands which have historically demonstrated high agricultural productivity and to accommodate certain nonagricultural uses which require spacious areas to operate or where natural resource exploitation occurs. Lands eligible for designation in this district shall generally include those designated as primary or secondary farmland preservation areas in the *Door County Farmland Preservation Plan-1982*. Lot sizes of at least 20 acres are required for new lots.
- Countryside (CS). This district is intended for mostly rural areas of the interior of the county where a mixture of low density residential, agricultural, and rural commercial activity exists or is desirable. The district provides for residential development at modest densities consistent with a generally rural environment and allows for nonresidential uses which require relatively large land areas and/or which are compatible with surrounding rural land. Lot sizes of at least 10 acres are required for new lots.
- Heartland-3.5 (HL3.5). This district is intended for mostly rural areas of the interior of Door County where agricultural activity has been declining, or where a mixture of rural residential and agricultural activity is desirable or existing. Lot sizes of at least 3.5 acres are required for new lots.
- Heartland-5 (HL5). This district is intended for mostly rural areas of the interior of Door County where agricultural activity has been declining, or where a mixture of rural residential and agricultural use is desired or existing. Lot sizes of at least 5 acres are required for new lots.
- Heartland-10 (HL10). This district is intended to help maintain the rural character of areas of the interior of Door County, particularly cleared and other open areas where agricultural activity has been diminishing. Lot sizes of at least 10 acres are required for new lots.
- Estate (ES). This district is intended to provide for single family residential and planned residential developments on large lots. Lot sizes of at least 5 acres are required for new lots.
- Single Family Residential-20,000 (SF20). This district is intended to provide for exclusive single family residential and planned residential development at fairly high densities. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer. Generally, these districts will be located along the waterfront and in or near existing communities where smaller lots are the norm.
- Single Family Residential-30,000 (SF30). This district is intended to provide for single family residential and planned residential development at slightly lower densities than in SF20 district. Lot sizes of at least 30,000 square feet are required for new lots. Generally, this district will be located along the waterfront and in or near existing communities.

- Small Estate Residential (SE). This district is intended to provide for single family residential and planned residential development on smaller lots than allowed in the Estate district. Lot sizes of at least 1½ acres are required for new lots.
- Rural Residential (RR). This district is intended to provide for single family and two family residential development on medium-sized lots. Lot sizes of at least 40,000 square feet are required for new lots. This district also permits manufactured home parks and home businesses. It will generally be located within the interior of the county.
- High Density Residential (HD). This district is intended to provide areas for a variety of residential uses, including multiple occupancy developments, manufactured home parks, and single family residential development at fairly high densities. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer.
- Commercial Center (CC). This district is intended to provide centers for commercial and mixed use development and redevelopment. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer.
- Mixed Use Commercial (MC). This district permits both residential and commercial uses and is designed to accommodate those areas of Door County with an existing desirable mixture of uses, or where such a mixture of uses is wanted. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer.
- Recreational Commercial (RC). This district is intended for Door County's resort areas, particularly areas where high concentrations of recreational uses are located or are appropriate. Lot sizes of at least 20,000 square feet are required for new lots.
- Light Industrial (LI). This district is intended to provide for manufacturing, warehousing, and other light industrial operations. This district can also be used for industrial or business parks. Lot sizes of at least 60,000 square feet are required for new lots.

Refer to the Door County Zoning Ordinance for a detailed explanation, and information on the restrictions of each of the zoning districts.

Sister Bay Subdivision Ordinance Number 99

The *Village of Sister Bay Subdivision Ordinance No. 99* was adopted in November of 1973 and updated in 1975 and 1984, and regulates the division of land to promote and protect the public health, safety, convenience, and general welfare. The ordinance provides for minor land divisions, major land divisions, design standards and the dedication and improvement of a parcel of land to be developed.

Ordinance No. 99 regulates the subdivision of land within a five year period where the act of division creates five or more parcels or building sites which are one and one-half acres or less in size. The ordinance also contains design standards for streets, curb and gutter, sidewalks, drainage, erosion control, utilities, and easements that must be complied with in order for the subdivision to be approved by the Village. The ordinance also contains requirements for park and public land dedication. The land division ordinance in conjunction with other tools, provides a means of implementing the village's zoning.

Official Map

Section 62.23(6)(b) of the *Wisconsin Statutes* provides that village may establish an official map for the precise designation of right-of-way lines and site boundaries of streets, roads, highways, parkways, parks, and playgrounds. The village may also include on its official map the locations of railway rights-of-way, public transit facilities, and those waterways which have been included in a comprehensive surface water drainage plan. Such a map has the force of law and is deemed to be conclusive with respect to the location and width of both existing and proposed streets, highways, waterways, and parkways and the location and extent of existing and proposed railway rights-of-way, public transit facilities, and parks and playgrounds shown on the map. It is important to note that in Wisconsin the official map enabling legislation is a subsection of the basic local planning enabling legislation, Section 62.23 is entitled "City planning," and as such is made applicable by references in other statutes to towns and villages as well as to cities.

An official map is intended to implement a town, village, or city master plan for streets, highways, parkways, parks and playgrounds, and drainageways. Its basic purpose is to prohibit the construction of buildings or structures and their associated improvements on land that has been designated for current or future public use. The village of Sister Bay does not currently maintain an official map.

Erosion Control Plan

Under s. 92.10, Wis. Stats., those counties that are designated as priority counties by the Department of Agriculture, Trade and Consumer Protection (DATCP) must prepare and adopt erosion control plans. The county land conservation committee prepares plans to conserve long-term soil productivity, protect the quality of related natural resources, enhance water quality and focus on severe soil erosion problems.

Shoreland and Floodplain Ordinances

Shoreland/Floodplain ordinances have jurisdiction over all shorelands and identified wetlands in the unincorporated areas of a county. Door County administers its shoreland/floodplain ordinance in the unincorporated areas of the county. Shoreland zones are those areas within 300 feet of a navigable river or stream, 1,000 feet of a navigable lake, pond or flowage or to the landward side of the 100-year floodplain, whichever distance is greater. Shorelands are often viewed as valuable recreational and environmental resources in both urbanized and rural areas. As a result, the State of Wisconsin requires that counties adopt shoreland/floodplain zoning ordinances to address the problems associated with development in floodplain areas. Development in these areas is strictly regulated but may be permitted with specific design techniques. The authority to enact and enforce these types of zoning provisions is set forth in Chapter 59.692 of the *Wisconsin Statutes* and Wisconsin Administrative Codes NR 115,116, and 117 and is established in the Door County Zoning Ordinance.

Floodplains within Door County are under the jurisdiction of the *Door County Floodplain Zoning Ordinance*. The areas regulated by this ordinance include all areas within the unincorporated portions of Door County which would be covered by the regional (100-year) flood. The areas within the regional flood are designated as such, on F.E.M.A. Flood Insurance Rate Maps, *100-Year Dam Failure Map* by Mead and Hunt Consulting Engineers, and the

revisions in the Door County Floodplain Appendix. Uses within areas designated as the regional floodplain are regulated through a permitting process.

The Door County Setback Ordinance is included in Chapter 3 of the *Door County Zoning Ordinance*, and requires that the setback from all navigable water shall be 75 feet from the ordinary high water mark. Navigable waters which the setback ordinance regulates include lakes, rivers, ponds, sloughs, flowages, and other waters which have a level of flow sufficient to support navigation by a recreational craft on an annually recurring basis.

These three ordinances are in force within the extraterritorial planning area of the village.

Sign Ordinance

The village adopted a separate sign ordinance in 1995 to “provide the legal framework and minimum standards to safeguard life, property, public welfare and Village aesthetics by regulating and controlling the design, number, size, quality of materials, construction, location, electrification, installation and maintenance of all signs in the Village...” and “The signs shall protect, preserve, and enhance the unique aesthetic character, beauty and charm of the Village, and thereby encourage the continued development of tourism within the village.”

The ordinance identifies that types of signs that are permitted and prohibited, setbacks, and the size of permitted signs. It also establishes enforcement mechanisms and penalties for non-compliance.

CURRENT LAND USE INVENTORY

A detailed field inventory of land uses in the village of Sister Bay was conducted in the summer of 2001 by the Bay-Lake Regional Planning Commission. This land use information was then compiled into generalized land use categories and is presented in Table 8.1 and Map 8.4 (Appendix G contains the detailed land use calculations). As a result of this inventory, a number of conclusions and issues have been identified, and recommendations have been made to help guide future land use planning efforts (See summary page 8-21).

Table 8.1: Village of Sister Bay 2001 Land Use Summary

Land Use Type	Total Acres	Percentage Total Land	Percentage Developed Land
DEVELOPED			
Residential	313.6	18.82%	44.23%
Single Family	230.2	13.81%	32.46%
Two Family	2.4	0.14%	0.34%
Multi-Family	80.6	4.83%	11.36%
Residential Development	0.5	0.03%	0.07%
Commercial	120.4	7.22%	16.97%
Industrial	11.3	0.68%	1.59%
Transportation	164.9	9.89%	23.25%
Communications/Utilities	4.6	0.28%	0.65%
Institutional/Governmental	21.4	1.28%	3.01%
Recreational	67.7	4.06%	9.55%
Agricultural Structures	5.3	0.32%	0.75%
Total Developed Acres	709.2	42.56%	100.00%
UNDEVELOPED			
			Percentage Undeveloped Land
Croplands/Open Space	237.0	14.22%	24.76%
Woodlands	357.0	21.43%	37.30%
Other Natural Areas	362.8	21.77%	37.91%
Water Features	0.3	0.02%	0.03%
Total Undeveloped Acres	957.2	57.44%	100.00%
Total Land Area	1,666.3	100.00%	

Source: Bay-Lake Regional Planning Commission, 2001.

Source: Bay-Lake Regional Planning Commission, 2002.

Village Area

The village of Sister Bay encompasses approximately 1,666 total acres of land. Of this, 709 acres, or 42 percent of the village, are developed, leaving 957 acres (57 percent) of undeveloped land. Of these undeveloped lands, a majority of the acreage are in woodlands and other undeveloped natural areas with a significant number of acres in agricultural use.

Residential Land

Residential land accounts for approximately 44 percent of the developed land, and 19 percent of the total land. It is the largest developed land use in the village. The 313 acres of residential land are scattered throughout the village with concentrations in the northern portion of the village and along the bay. The majority of the residential land (13.8 percent) is classified as single family, with the remainder being two family, and multi-family.

Commercial Land

Commercial land in the village of Sister Bay totals 120 acres of land, or about 17 percent of the developed land in the village. There are two commercial areas in the village one in the downtown and one along Highway 42 with a few commercial structures scattered throughout the village. Establishments within the village include motels, restaurants, shops, two grocery stores and galleries.

Industrial Land

Land uses under this category primarily include a gravel pit, and private storage sheds. Within the village, approximately 11 acres or 17 percent of the developed land are under this category.

Transportation

Transportation accounts for the second largest developed category at 23 percent of the developed land or 165 acres. Transportation uses in the village include the entire local road network and off-street parking

Communication/Utilities

Uses under this category include land used for the generation, processing and/or transmission of electronic communication of water, electricity, petroleum or other transmittable products, plus for the disposal, waste processing and/or recycling of byproducts. Land in this category accounts for only 4.6 acres. Uses in this category in the village of Sister Bay include several radio towers, a water tower, a standpipe and the wastewater treatment facility.

Institutional/Governmental

Institutional/governmental uses are defined as land for public and private facilities for education, health or assembly; for cemeteries and/or related facilities; and for all government facilities used for administration or safety, except public utilities and areas of outdoor recreation. Within the village this accounts for 21.4 acres of land including the village hall, library, administration building, post office and several churches and cemeteries.

Parks and Recreational Uses

Land under this category accounts for 68 acres or 9.6 percent of the developed land and 4.1 percent of the total land uses within the village. Included uses in this class are the village parks, marinas and golf courses.

Agricultural Structures

Agricultural structures include sheds, silos and other farm structures. These uses account for 5.3 acres of land, or just less than one percent of the developed land in the village. Agricultural structures are located in the southern and southwestern portions of the village.

Croplands/Pasture

Land under this category includes use of land for the cultivation of plants, including grasses for grazing, pastures, orchards, land used for growth, husbandry or housing of plants and animals, and their products. This is one of the larger undeveloped land uses within the village at 231 acres, or 24.2 percent of the undeveloped land (13.9 percent of the total land). Agricultural land is concentrated in the southern and southwestern portions of the village.

Map 8.4: 2001 Village Land Use

Map 8.5: 2001 Planning Area Land Use

Undeveloped Open Space

Land uses within this category are primarily lands that have been disturbed in the past either for agricultural purposes or cleared for development and allowed to go fallow. These lands are similar in character to agricultural pastures, but are not in active agricultural use. Less than one percent (5.6 acres) of the total undeveloped uses within the village fall into this category.

Natural Areas

Uses in this category include lands primarily in a natural state including non-wooded wetlands, grasslands and prairies. This category is the largest undeveloped use in the village with 363 acres or 37.9 percent of the undeveloped land in the village and 21.8 percent of the total area. These areas are found in large tracts throughout the village primarily adjacent to water features and woodlands.

Woodlands

Woodlands account for the second largest undeveloped use in the village at 357 acres or 37.3 percent of the undeveloped land in the village of Sister Bay. Woodlands are found in the southern portion of the village, adjacent to the bay as well as scattered throughout the village.

Water Features

Water features account for just 0.3 acres (less than one percent of the undeveloped uses) within the village. The majority of this comes from various ponds in the village. Water resources are discussed in more detail in Chapter 2 of this document.

LAND SUPPLY

Amount

The amount of land available for development within Sister Bay is determined by factoring in the existing development and areas not recommended for development such as environmental corridors (wetlands with a 25 foot setback, floodplains, areas of steep slope, water resources with a 75-foot setback from the water resources, designated natural and scientific areas, parks and recreation areas, etc.). Taking into account the various factors which may affect development, it is determined that there are approximately 594 acres of developable lands within the village of Sister Bay.

The General Plan Design has identified areas to accommodate future growth projections along with market force considerations thus looking to develop within identified natural areas for residential, commercial, industrial or similar uses is not needed throughout the planning period. Developments, within this plan, will be afforded enough land options to incorporate open spaces, buffering, additional landscaping, etc.

Price

The prices of residential and commercial lands vary depending on the surrounding land uses, location, access, services, along with other subjective factors. For example, residential prices can depend on whether a parcel has water frontage, is wooded, or has a vast amount of open space in and around it. Waterfront properties attract significantly higher price listings. The pricing trend for the village of Sister Bay is increasing on land as development pressures continue due to

demand for additional seasonal property. Specific pricing information is too volatile to report within this plan.

Demand

Based on building permit information from the Wisconsin Department of Administration and Door County, the Village of Sister Bay experienced 234 housing permits for new residential construction from 1990 to 1999. If this trend were to continue, the village could expect nearly 500 new homes by the year 2020. Additionally, the demand for additional seasonal housing in Door County and the village of Sister Bay is likely to continue putting greater pressure on the village to develop new residential areas.

LAND USE ISSUES

The village will need to update its zoning map upon completion of its plan to provide consistency between its land use plan and its land use controls. The village's zoning map needs to be updated to reflect current uses within the village of Sister Bay and to reflect the village's plan design.

There are opportunities for a variety of land uses in the future, especially as residential growth takes place in the historically agricultural areas, and commercial and industrial development takes place adjacent to residential areas. Requiring adequate screening, setbacks and buffering will alleviate much of the incompatibility as will additional village controls within the subdivision ordinance.

The General Plan Design addresses areas for uses with regards to their neighboring parcels and in many cases there are recommendations for additional steps to make the development practicable while limiting potential incompatibilities. For example, should an area be identified for a possible industrial park, additional design standards would be determined by the village, and the location set to allow the least impact on neighboring uses not conducive to industry.

ANTICIPATED LAND USE TRENDS

Analyzing data within past presented chapters, the following land use trends were developed for the planning period. It is expected that these trends will influence the village's future growth and preservation. The Village Board will need to address these trends over the next two decades in order to reach the village's desired vision. The following trends were used to provide direction in the development of the General Plan Design, along with the village's goals, objectives, and policies, the issue identification and the village wide survey results. Many of these trends are prevalent throughout the county and within adjacent communities.

1. The demand for larger lot sizes will increase and the ratio of persons per household will decrease resulting in greater acreage needs to accommodate future residential growth.
2. The demand for residential developments adjacent to the village of Sister Bay are likely to increase to receive adequate services and to preserve the rural nature of the surrounding town.
3. The village of Sister Bay can expect a minimum of 500 additional dwelling units through the year 2020.

4. The village's character will continue to feel pressure for conversion of agricultural and open space lands requiring additional mechanisms for preserving the natural vegetative structure resulting in the protection of wildlife and fish spawning habitats.
5. As computer technology continues to advance in global information (Internet), home occupations will likely increase.
6. Commercial uses are likely to increase, with primary locations being adjacent to Highways 42 and 57.
7. The village will experience a demand for services, as the median population age continues to increase and additional people relocate to the village from areas with greater services.

DEVELOPMENT STANDARDS

Environmental and Public Utility Considerations

The population projections found in Chapter 3 of this document can be used to provide the village with an adequate measure of the number of acres that will be needed to accommodate future growth. The following environmental and public utility considerations should be utilized to provide the village with an indication of which acreage of the municipality is best suited for development.

Undeveloped lands exist within the village that will make it unnecessary to propose development within the village's remaining "environmental corridors" as defined within the General Plan Design Map. These areas need to be preserved and integrated into the overall development of the village for future generations to enjoy. There are very few of these unique areas in the village, including wetlands, floodplains, and steep slopes, which can add significantly to the aesthetic appeal of the community while providing important ecological and environmental functions such as stormwater retention, groundwater filtration and flood control.

The village currently provides municipal sewer and water to its residents. The plan indicates that individual property owners should continue to link to the village's wastewater and water systems to continue to protect the watersheds and aquifers within the village in order to provide village residents with safe, usable water.

The existing network of arterial, collector, and local roads in place throughout the village will need to be upgraded so that it could readily serve future traffic flows generated from any increased growth.

Planning Criteria

Planning criteria are developed in order to give the community a sense in which to base their land use recommendations. Criteria make the planning process defensible when presenting scenarios to the general public and when modifying or developing alternative sites for land use developments. The criteria used by the village, when developing the general plan design, was based upon values identified by the State, Door County and the Village of Sister Bay.

The following *State of Wisconsin criteria* are based upon Smart Growth criteria (s. 66.1001) highly encouraged within community plans:

1. Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.
2. Encouragement of neighborhood designs that support a range of transportation choices.
3. Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.
4. Protection of economically productive areas, including farmland and forests.
5. Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.
6. Preservation of cultural, historic and archaeological sites.
7. Encouragement of coordination and cooperation among nearby units of government.
8. Building of community identity by revitalizing main streets and enforcing design standards.
9. Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.
10. Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses.
11. Promotion of the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels.
12. Balancing individual property rights with community interests and goals.
13. Planning and development of land uses that create or preserve varied and unique urban and rural communities.
14. Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens.

The Door County Zoning Ordinance has identified the following criteria for all the unincorporated areas within Door County:

1. Promote planned and orderly land use development.
2. Protect property values and the property tax base.
3. Fix reasonable dimensional requirements to which buildings, structures, and lots shall conform.
4. Prevent overcrowding of the land.
5. Advance uses of land in accordance with its character and suitability.
6. Provide property with access to adequate sunlight and clean air.
7. Aid in protection of groundwater and surface water.
8. Preserve wetlands.

9. Protect the beauty of landscapes.
10. Conserve flora and fauna habitats.
11. Preserve and enhance the county's rural characteristics.
12. Protect vegetative shore cover.
13. Promote safety and efficiency in the county's road transportation system.

The *Village of Sister Bay* has identified the following criteria from the issue identification process, the village wide survey results, and the plan's goals and objectives:

Community Growth

1. To maintain the village's character;
2. To provide for appropriate development while preserving the integrity of the environment;
3. To protect all future growth areas from incompatible development;
4. Cooperate with the town of Liberty Grove, the county, and other surrounding villages and towns on future planning projects and boundary issues to minimize conflicts.

Residential

5. Direct new development to appropriate locations to maintain the character of the village;
6. Situate higher density residential development in and adjacent to areas that minimize impacts upon the environment;
7. Residential developments should be directed to areas which will allow for compatible uses;
8. Direct multi-family developments toward areas that have the adequate facilities and services that they need;
9. Provide for a variety of quality housing opportunities for all segments of the village's current and future population including the disabled and the elderly.

Commercial/Parks

10. Identify key locations for limited commercial development that addresses both its impacts on surrounding uses and the environment to minimize adverse impacts;
11. Consider both neighborhood commercial and highway commercial business ensuring they have adequate room to develop off-street parking and landscape buffers;
12. Cooperate with Door County, town of Liberty Grove, adjacent villages, and property owners on the maintenance of existing parks and any development of additional recreational opportunities.

General Plan Design Classifications

The classifications listed below closely follow a set a standards developed in the village's 1995 Comprehensive Plan Update and are utilized by the Regional Planning Commissions of eastern Wisconsin (Bay-Lake RPC & Southeastern Wisconsin RPC). These classifications were utilized in the beginning of the development of the General Plan Design to assist the village with allocating various areas for the different types of land use. The village in some cases follows the

standards set by the RPCs, and in other cases set village specific standards which the village believes are a better representation of the community's character and more fully meet the wishes of the village's citizens.

The General Plan Design uses **12 classes** of land use. The intent of the plan is for these classifications to be consistent with the zoning districts within the village's zoning ordinance that are in existence within the Village of Sister Bay, to ease future implementation of the plan and coordination with the county. The General Plan Design Map's classifications, along with the village's land use strategy for each of the classifications is identified below:

- Low Density Residential Development
- Medium Density Residential Development
- High Density Single Family Residential
- High Density Multi-Family Residential
- Lodging/Resort Commercial
- Mixed Commercial
- Commercial/Retail Development
- Governmental
- Institutional
- Recreational/Open Space
- Natural Areas
- Wetlands

Low Density Residential Single-Family

Permitted uses are recommended to be single family residential development at a low density of one (1) acre or greater for sewered lots and five (5) acres or greater for unsewered lots. The intent of this classification is to maintain larger lot, single-family residential areas as transitional areas to open spaces outside the village.

Medium Density Residential

Permitted uses are recommended to be single family residential development at a medium density of 30,000 sq ft to one (1) acre. The intent of this classification is to maintain good quality single-family residences to best utilize existing services.

High Density Single Family Residential

Permitted uses are recommended to be single family residential development at a high density of 20,000 sq ft to 30,000 sq ft. The intent of this classification is to maintain good quality single-family residences existing in higher densities to best utilize existing services. This category is also designed to allow for smaller, more affordable housing units.

High Density Multiple-Family Residential

Permitted uses are single family residential developments and condominiums of six (6) dwelling units per acre at high densities. It is the intent of this classification for uses to be compatible within the area and that there be a minimum of 500 feet of open space per dwelling unit.

Commercial

Due to the different types of commercial uses allowed in this classification, three categories will describe the uses and what is allowed in those categories based on the Village Plan Commission's recommendations.

1. **Lodging/Resort Commercial:** The category is primarily intended for existing lodging and resort commercial areas of the village that are expected to remain throughout the 20 year planning period.
2. **Mixed Commercial:** Mixed commercial uses will be allowed in these areas of the village through building scale, building appearance, landscaping and signage. These locations are envisioned to fulfill the needs of the residents and capitalize on high traffic volumes, good visibility, access on a major state highway, and have ease of access and enough area to accommodate off-street parking and landscaping.
3. **Commercial:** This plan recognizes these areas as existing commercial businesses that are expected to remain as a commercial use throughout the 20 year planning period. Other Commercial also incorporates home occupational businesses.

Governmental

This plan identifies a government services area, the library, churches and museums as governmental uses within this classification.

Institutional

Scandia is identified as the major institutional use throughout the planning period.

Utilities

This classification identifies the village of Sister Bay sewage treatment facility as the uses within the village throughout the planning period.

Recreational/Open Space

This classification is meant to encourage the preservation of woodlands and valuable open spaces within the Village of Sister Bay as well as to provide for existing and future park areas.

Environmental Corridors

Environmental corridors are represented by five elements including; 100-year floodplains as defined by the Federal Emergency Management Agency (FEMA), WDNR wetlands, steep slopes of 12 percent or greater, a 75-foot setback from all navigable waterways as defined by the village of Sister Bay Shoreland Zoning Ordinance, and buffer between conflicting use areas. This plan encourages preservation and protection of these natural areas in order to maintain the rural character of the village. Additional sensitive woodland areas and open spaces are included.

DESIGN YEAR LAND USE PROJECTIONS

Map 8.6 was developed based on the information contained in previous chapters of this document including demographics, land use projections, physical characteristics, the goals, objectives, policies and programs, and village-wide survey results. Over a 24 month period, the

Village Plan Commission met more than 20 times to review village data and growth options. From these meetings and presentation to the public, a 2020 General Plan Design was developed and approved.

One noticeable difference that needs to be taken into consideration is the visual representation of the 2001 Land Use map and the 2020 General Plan Design map. The General Plan Design was developed by the village utilizing the parcel mapping. As mentioned previously in this chapter, the existing land use was done by specific structural or feature basis rather than parcel-by-parcel. In order to more accurately determine on a parcel basis, the amount of land developed and how much land is available for growth, the Commission's GIS system was utilized. Parcels that have existing development on them were tagged as developed, and the remaining parcels are available for future development. However, there are rare instances where the designated land use did not precisely match the parcel. Overall, by converting the existing land use acreages into parcel acreages gives a better representation of the amount of land that is developed and how much land is available for future development in the village of Sister Bay.

FIVE YEAR INCREMENTAL LAND USE PROJECTIONS

Wisconsin statues require Comprehensive Plans to include projections, in five-year increments, for future residential, commercial, and industrial land uses in the community over the twenty year planning period.

The methodology used to project the Village's future residential land use acreage employed the projected housing needs presented in Chapter 3 of this document, an assumed dwelling unit per 1.8 acres ratio for each housing type, and a multiplication factor of (2.0) to allow for market flexibility. Based on this methodology, the Village would need to accommodate approximately 300 acres for future residential development over the next five years, 312 acres between 2005 and 2010, 325 acres between 2010 and 2015, and 350 acres between 2015 and 2020.

To calculate commercial land use projections, the Commission compared the current ratio of residential acreage to commercial land use acreage by parcel in the Village (3:1) based on the 2000 land use inventory. Based on this methodology, the Village would need to accommodate about 100 acres for future commercial development over the next five years, 104 between 2005 and 2010, 108 acres between 2010 and 2015, and 116 acres between 2015 to 2020. The village has allocated approximately 265 acres for commercial uses on the 2020 General Plan Design. The larger commercial acreage allocation on the plan design is due in large part to the highway exposure and the close proximity to the village of Sister Bay. It is the hope that this will attract more commercial businesses to the area and help create more jobs. These areas designated as commercial will also allow for proper parking facilities and adequate buffers between the different business types.

Industrial lands are projected in the same manner as the commercial lands. According to the 2000 land use inventory, the current ratio of residential acreage to industrial land use acreage in the Village is 17:1. Therefore the village would need to accommodate about 15 acres for future industrial development over the next five years, 18 between 2005 and 2010, 20 acres between 2010 and 2015, and 25 acres between 2015 to 2020. The village has not allocated any land for industrial uses on the 2020 General Plan Design. The village does not wish to encourage industrial uses within the village. The village has recommended that any future light industry locate outside the village within the town of Liberty Grove.

DEVELOPMENT STRATEGY

The classifications detail the type, location and density of use. This portion of the plan will detail further recommendations on the land uses within the village. The following text discusses each of the major future land use classifications as depicted on the General Plan Design Map 8.6. It should be noted that the specified classification does not designate individual areas within the classification for development, rather, it designates the entire area for that use to occur. Also, it is not the intent of the plan to see the entire area within a classification develop, rather the specified uses be allowed if consistent with the type, location, and density of the development in the event of a land conversion. The type and density of the land use is identified within each classification.

Residential Development

As residential development pressures continue, the town must closely monitor the proposed types of development regarding their impacts on the natural resources and rural character of the village. The General Plan Design includes four primary residential types of growth. The village is recommended to develop with higher densities (20,000 to 30,000 square feet per dwelling unit) as in-fill in existing neighborhoods while developing with medium densities (30,000 square feet to one acre per dwelling unit) and low density residential areas nearby and adjacent to the identified open spaces in the village.

Low Density Single Family Residential

The Low Density Single Family Residential development areas are intended to promote orderly and efficient growth that is consistent to the land uses in the southern areas of Sister Bay. These areas are intended to remain at relatively low densities throughout the planning period as transitional areas to open spaces outside the village. Sewer services are not expected to be extended into these areas. It is the intent that these areas develop at minimum lot sizes of one (1) acre or greater for sewered lots and five (5) acres or greater for unsewered lots to maintain larger lot, single-family residential areas. This will help to preserve the open spaces, viewsheds and natural settings that are prevalent around the edges of the village

Medium Density Residential

The Medium Density Single Family Residential development areas are intended to promote infill development in those areas of the village that have already seen some development. Development is recommended at a medium density of 30,000 square feet to one (1) acre in order to maintain good quality single-family residences and to best utilize existing services.

High Density Single Family Residential

The High Density Single Family Residential areas are designated in those areas of the village designed to allow for smaller, more affordable housing units. Single family residential development at a high density of 20,000 square feet to 30,000 square feet is intended to maintain good quality single-family residences existing in higher densities to best utilize existing services, and in cases where sewer is not available, to provide for the placement of private on-site wastewater treatment septic systems. Much of the eastern area of the village and the joint planning area are identified as high density single family residential development.

Map 8.6: 2020 General Plan Design

High Density Multiple-Family Residential

Permitted uses are single family residential developments and condominiums of six (6) dwelling units per acre at high densities. It is the intent of this classification for uses to be compatible within the area and that there be a minimum of 500 feet of open space per dwelling unit. As part of the village's goals for the future, providing good affordable housing to its residents is key. The intent of multi-family is to provide for rental housing needs of the community at a comparatively high density in areas that have community water and sewers available. Few multi-family uses exist within the village, therefore the village is looking to develop additional locations. The multi-family uses that are existing are recommended to continue without change.

Commercial Strategy

Mixed Commercial

These sites are envisioned to fulfill the needs of the residents plus capitalize on high traffic volumes, good visibility, access on a major state highway, and have ease of access and enough area to accommodate off-street parking and landscaping. These sites will promote highway as well as neighborhood type businesses such as restaurants, gas stations, grocery store, etc. The areas classified as commercial on the 2020 General Plan Design map shall have identified standards for the commercial uses allowed within them. The village will have minimum sign, landscaping, lighting, parking and access standards that fit the village's atmosphere. Business hours shall be regulated as well so as not to detract from the rural, natural environment of the village.

Commercial/Retail

The Commercial/Retail category accounts for businesses such as restaurants, shops and other existing commercial uses found within the village. It is the intent of this plan that these existing establishments continue throughout the 20 year planning period. In addition, home occupational businesses also fall into the Commercial/Retail category. The village will need to ensure that what home occupational businesses exist do not outgrow their current location or become nuisances to adjoining land owners. Those home occupational businesses that expand should be encouraged to locate their business in the areas designated as commercial, or in the village of Sister Bay with the services capable of sustaining their business.

Any new commercial businesses, or expanding businesses should be directed toward these areas. Overall, as with any kind of development, when commercial development is proposed within the village, the Village Plan Commission and Village Board must closely monitor the capacities of the infrastructure and community services that accommodate this new development and weigh the future costs to benefits. The village shall **not** encourage the development of commercial businesses in areas specified within the plan. More intensive commercial businesses shall be directed to the village of Sister Bay, or other adjacent communities that currently have adequate infrastructure and services.

Governmental/Institutional

It is the intent of this plan to see that the Village Plan Commission and Village Board continue to monitor services provided to the village residents. These officials will work with adjoining communities and Door County to help provide future services as effectively and efficiently as reasonably possible. The village should continue to monitor private wells throughout the village, and explore options for maintaining the level of services from the fire department, the Door County Sheriff's Department and other service providing entities. It is recommended that the village continue to cooperate with the town of Liberty Grove, other nearby communities and Door County in maintaining and enhancing the recreational facilities in the area.

The village should utilize the Pavement Management Program developed by BLRPC to assist in maintaining the roads in the future. Grant and aid programs shall be explored by the village when considering improvements to any of the village services. The village will continue to work with adjoining villages and Door County in order to best protect the residents' quality of life.

Utilities

The village should ensure that services such as sewer, water and electric services provided to village residents are adequate and will be available through the planning period.

Recreational/Open Space

Future recreational development should be planned in areas along the waterfront and in any new subdivisions and developments.

Environmental Corridors

The preservation and protection of natural areas within the Village of Sister Bay will become increasingly important as population and development pressures increase. Many natural features are either unsuitable for development, enhance the appearance of the community, improve natural processes such as flood control, water retention or groundwater recharge. The Village of Sister Bay has a number of significant natural features including wetlands, large stands of trees, and the bluffs associated with the Niagara escarpment. This plan recommends that the natural features within the village remain in their natural state or be minimally modified for possible recreational use.

Environmental corridors are represented by four elements including; 100-year floodplains as defined by the Federal Emergency Management Agency (FEMA), DNR wetlands, steep slopes of 12 percent or greater, and a 75-foot setback from all navigable waterways as defined by the Village of Sister Bay Shoreland Zoning Ordinance. These four elements provide serious limitations to development and the floodplains, wetlands and the 75-foot building setback are generally regulated by either the federal, state, or county government. Together, these elements represent the areas of the village that are most sensitive to development and should be preserved.

The 2000 survey results indicate that residents feel strongly about preserving natural resources. Using the environmental corridors as a guide when reviewing proposed developments will give the village background information on what areas the village residents believe are important to maintaining the village's rural character and the quality of its natural resource base. The village should direct development away from environmental corridors as much as possible. The plan should serve as a guide for the preservation of these areas and alert the village that more detailed

studies need to be done, if and when developments are proposed in and around these areas. Impacts should be minimized to the fullest extent possible when developments are permitted.

Additionally, it is encouraged that the village preserve large natural areas and or features within possible subdivisions to enhance/retain buffers between residential uses and transportation routes, plus that agricultural operations should be buffered from waterways by adequate natural vegetation. The village should also explore adding a 25 to 50 foot buffer around existing wetlands to further protect water quality and watersheds.

Transportation

The transportation network in the Village of Sister Bay is adequate, given the two State highways and the County highway that are found within the village. The local road system that is in place provides limited traffic flow within the village from north to south, and could be upgraded to provide more connections from east to west. If any new subdivisions are proposed within the village, the Plan Commission and Village Board should require Area Development Plans. This will allow the village to review and ensure that future roads are well designed to promote efficient traffic flow and to avoid unnecessary cul-de-sacs and loops that can increase the village's future maintenance costs.

It is also recommended that the Pavement Management Plan (PMP), prepared in conjunction with this plan by the Commission be utilized by the village. The PMP provides a detailed inventory and description of all the village roads; provides a detailed surface condition survey of those streets; defines the goals and objectives of the village with respect to their street maintenance and repair; and ultimately establishes a long-term maintenance schedule that prioritizes road maintenance and repair needs.

IDENTIFIED "SMART GROWTH" AREAS

During the planning process, the Village of Sister Bay Plan Committee developed a recommended land use plan (Map 8.6) which identifies how the village will develop and preserve its lands throughout the planning period. During this process the Plan Commission identified areas that are considered "smart growth areas". According to s. 16.965, Wis. Stats., a "smart growth area" is "an area that will enable the development and redevelopment of lands within existing infrastructure and municipal, state and utility services, where practicable, or that will encourage efficient development patterns that are both contiguous to existing development and at densities which have relatively low utility and municipal and state governmental costs." The "smart growth areas" within the village of Sister Bay are found adjacent to State Highway 57 in the south central part of the village and the ballfield area on top of the hill. Locating these areas near existing development within the village allows for more orderly and efficient development patterns. In addition, these lands will allow for a mixture of uses (residential, industrial, commercial, recreational, etc.), and are provided with urban services such as public sewer and water. Locating higher density development adjacent to major highway corridors and existing high density development also assists the village in maintaining its community character. Allowing lower densities throughout the remainder of the village offers the opportunity to preserve the community character that helps define the Village of Sister Bay's landscape.

SUMMARY

Overall, the Village of Sister Bay 2020 General Plan Design is the result of approximately 24 months of preparation and work done by the Village of Sister Bay Planning Commission which generally works towards several issues including:

- finding a balance between individual property rights and community wide interests and goals;
- steering developments to areas within the village with existing facilities and access in order to minimize land use conflicts;
- understanding the value of environmental corridors and wildlife habitats by steering development away from these areas;
- promoting environmental corridors to serve as natural buffers which will help lessen conflicts;
- maintaining the village's community character;
- steering more intensive development toward the north end and east side of the village of Sister Bay in order to promote more efficient development patterns;
- cooperation with the town of Liberty Grove and surrounding communities;
- identify enough land to accommodate a variety of development over a 20 year planning period.

The effect that this comprehensive plan will have on the village is twofold: first, it identifies a responsible program to improve the overall condition and delivery of public facilities and services; and second, it provides a future development scheme which is not only cost-effective but is also compatible with the village's existing development pattern and provides for the achievement of the village's vision and goals outlined within the plan. In simple terms, the village must not only plan for new development that may occur, but must also plan on the timing and location of the new development that is within the framework of this plan design. To accomplish this, the Village Board, Village Plan Commission and all village residents must work together in an organized and cooperative manner on all future planning efforts within the community. This may require cooperative agreements and joint planning with the adjoining villages and the county.

Table 8.2 contains a summary of the year 2020 land uses which have been designated in the General Plan Design for the Village of Sister Bay along with their approximate acreage totals. It is important to note that the 2020 acres are by parcel and not by individual land uses, resulting in larger acreage calculations than those acreage totals found in the 2000 land use inventory.

Table 8.2: 2020 General Plan Design Acreage Calculations, Village of Sister Bay

Type	Acres
Low Density Single Family	403.7
Medium Density Single Family	502.7
High Density Residential	300.3
High Density Multi-Family	177.2
Mixed Commerical	38.4
Lodging/Resort Commercial	113.4
Commercial/Retail	95.2
Institutional	33.2
Govenrmental	27.8
Utilities	22.4
Park and Recreation	141.3
Environmental Corridors	87.7
Road	154.7
Grand Total	2,097.9

Source: Bay-Lake Regional Planning Commission, 2003.

Chapter 9 - IMPLEMENTATION

INTRODUCTION

The final element in a comprehensive planning program is the implementation of the approved Year 2020 Comprehensive Plan. Implementation can take the form of:

1. Carrying out the recommendations in the plan for specific projects, for example, creating an Official Map;
2. Using the plan as a guide to public and private decision-making on matters that relate to the development of the village, for example, a rezoning request or a capital expenditure, and;
3. Reviewing and amending the plan as changes in the demographics, economy or political climate changes.

This chapter provides information on the comprehensive plan amendment/update process and its overall use by the village of Sister Bay. More specific information on various statutory powers which the village may utilize to implement the Year 2020 Comprehensive Plan are also included in this chapter.

Role of the plan

The comprehensive plan must be in conformance with land controls governing within the village. When reviewing any petition or when amending any land controls within the village, the plan shall be reviewed, and a recommendation will be derived from its identified statements, goals, objectives, vision statement and General Plan Design. If a decision is one that needs to be made in which it is inconsistent with the comprehensive plan, then before the decision can take effect, the comprehensive plan must be amended to include this change in policy.

Role of the Elected Officials

The elected officials must make their decisions from the standpoint of overall community impact-tempered by site specific factors. In this task they must balance the recommendations made by plans and policies, the objectives of the applicant, the technical advice of staff, and the politically neutral recommendations of advisory boards, with their own judgement on the matter at hand.

LAND USE PLANNING CONTROLS RECOMMENDATIONS

Zoning

The village of Sister Bay administers its own zoning ordinance. Many of the future land uses may need re-zoning in order to take place. The village will also need to stand firm on minimum zoning standards regarding natural features and should veto any attempts to relax regulations.

- A comparison between the preferred land uses and the Village Zoning Ordinance to determine compatibility of text and realignment of boundaries within various districts should take place. The village of Sister Bay should work in amending the Zoning to reflect the citizen's desires, which may mean the development of additional zoning districts.

Official Maps

Under §62.23(6), the city council/village board/town board (under village powers) "...may by ordinance or resolution adopt an official map showing the streets, highways, parkways, parks and playgrounds laid out, adopted and established by law." "The council/board may amend the map to establish the exterior lines of planned new streets, highways, parkways, parks, or playgrounds, or to widen, narrow, extend or close existing streets, highways, parkways, railroad rights-of-way, public transit facilities, waterways, parks or playgrounds. " Once an area is identified on an official map, no building permit may be issued for that site, unless the map is amended.

The official map serves several important functions:

1. It helps assure that when the village acquires lands for streets, etc., it will be at a lower vacant land price;
2. It establishes future streets that subdividers must adhere to unless the map is amended; and,
3. It makes potential buyers of land aware that land has been designated for public use.
 - It is recommended that the village begin the official map process in specific areas where more intensive development is to take place and to designate future road locations to provide for the efficient movement of traffic.

Sign Regulations

Many communities are finding themselves having to regulate signage especially along transportation corridors, in order to preserve a sense of place and community character. As signs become more bold, have greater illumination placed on them, and have greater square footage, the sides of roadways and within community centers become places of growing confusion as each sign attempts to get your attention.

Erosion and Storm Water Control Ordinances

Under § 61.354 of the Wisconsin Statutes, the village may enact a construction site erosion control and storm water management zoning ordinance. The purpose of such an ordinance is to protect water quality and to minimize the amount of sediment and other pollutants carried by runoff or discharged from construction sites to lakes, streams, and wetlands.

- The village of Sister Bay should support this type of ordinance and work with the county to develop, adopt, and ensure compliance by developers. In the future, the village may wish to enforce such an ordinance themselves, though it is not recommended that the village undertake this responsibility within the planning period.

Design Review Ordinances

Design review can accompany many different development aspects and will assist communities in achieving the identified look and character they expressed within their vision statements and goals. These ordinances however, need to be based upon well defined sets of criteria. The village may wish, in the future, to explore the use of such ordinances to promote a specific look for an identified area within the village. Such areas may be along lands designated as industrial or along areas that have established commercial businesses (which are identified in this plan).

Signage, lighting, exterior building material types and colors would be specifically identified within the ordinance.

Economic Development Committee

An Economic Development Committee (EDC) is a not-for-profit organization representing the interests of both the public and private sectors within a community. EDCs have been formed in a number of communities to handle the municipality's economic development activities and bridge the communication gap that oftentimes exists between the public and private sectors. Typical activities undertaken by an EDC include commercial and industrial development, business retention and recruitment, and tourism. EDCs consist of a Council of Directors and professional staff members. Council members typically depict a broad representation of the community's business, labor and educational sectors and are jointly appointed by the community and its Chamber of Commerce or other existing business associations. The Council sets policy for the EDC and is responsible for all actions undertaken.

- Door County has an Economic Development Corporation. It is recommended that the commercial and industrial needs of the village be expressly conveyed to this agency in order to attract the desired commercial and industrial growth.

Sanitary Codes

The village will need to ensure that strict compliance with all sanitary codes is adhered to within the village. Groundwater protection is of great importance to the village and surrounding communities. Uncontrolled waste can have detrimental and wide ranging impacts on health and property values. The village will stay informed on any future changes to code minimum standards which may effect residents and their lands.

COMPREHENSIVE PLAN INTERNAL CONSISTENCY

The comprehensive plan was developed sequentially in order to develop a plan with supportive goals, objectives, policies, and programs. Utilizing a community survey as a base, key issues were identified within each of the nine elements of the plan. Using these issues along with factual information regarding natural features, past population and housing data and infrastructure, a set of goals, objectives, policies and programs were developed in order to determine a desired vision which would be used throughout the planning period. The identified vision, goals and strategies expressed within this plan were utilized to determine the final General Plan Design as well as the specified implementation actions the town will undertake throughout the planning period. Any amendment to the plan shall be accompanied with an overall review of the nine elements along with their identified goals, objectives, policies and programs, in order to ensure that inconsistency within and between elements does not occur in the future.

IMPLEMENTATION STEPS

Implementation Timeline										
Category	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Planning Elements			Review Chapter's Goals Evaluate Against WDOA Estimates		Review Chapter's Goals Evaluate Against WDOA Estimates				Plan Commission Gather Needed Information to Update The Plan	Review & Update Plan
Governmental					Review Chapters Projections & Compare to Latest Information			Contact Consultant to Update Plan		Adopt Plan By Ordinance
Ordinances	Initiate Ordinance Update	Complete Ordinance Update								Review And Amend Ordinances
Intergovernmental	Establish Committee to work with County/Towns	Evaluate Shared Goals			Evaluate Shared Goals					Continue Intergovernmental Cooperation

PROCESS FOR UPDATING PLAN

As directed by s66.1001, any plan commission or other body of a local governmental unit authorized to prepare or amend a comprehensive plan may recommend the adoption or amendment of a comprehensive plan only by adopting a resolution by a majority vote of the entire commission (or governmental unit). This plan shall be amended/updated following s66.1001 (4)(b) and the adopted written community procedures for fostering public participation.

ACTION PLAN

The following is a summary of the key implementation activities needed to be followed to ensure initial progress is made after the adoption of the comprehensive plan. The Action Plan identifies the activity (**What**) and the appropriate body (**Who**) that would have the responsibility for carrying out the activity. The timeframe the activity needs to be initiated (**When**) is also identified and should begin within the first year of the plan's adoption or reviewed for continued applicability. The actions are as follows:

Village of Sister Bay Action Plan

1. Activity Discuss the village's intentions regarding future commercial development within the village with the town of Liberty Grove and the Door County Economic Development Corporation.

Who: Plan Commission and Chief Elected Officials

When: Fall 2003

2. Activity Administer the Comprehensive plan's recommendations, and monitor/update the statistical projections within the comprehensive plan.

Who: Plan Commission
When: Ongoing/ Minor Update of Plan's Components Every 3 to 5 Years,
Complete Update of Plan at 10 Years

3. Activity Communicate with the town of Liberty Grove and near-by communities in an effort to identify shared goals, visions, and efforts to further the communities developments.

Who: Chief Elected Officials, Plan Commission
When: Fall 2003

4. Activity Modify the Village of Sister Bay Code of Ordinances to reflect the recommendations of the *Village of Sister Bay 2020 Comprehensive Plan* General Plan Design.

Who: Chief Elected Officials, Plan Commission, Assistance From Door County Planning and Zoning Department, UW-Extension and other planning agencies.
When: Fall 2003

5. Activity Develop and adopt an Official Map
Who: Plan Commission and Chief Elected Officials
When: On-going

6. Activity Work on educating the community on non-traditional methods of development such as Conservation Subdivisions, Cluster Districts, Traditional Neighborhoods - that will promote the plans of the village to allow creative development opportunities while preserving, protecting and enhancing the natural resources of the area.

Who: Chief Elected Officials, Plan Commission/UW-Extension
When: On-Going

7. Activity Implement transportation improvements contained in Appendix E

Who: Plan Commission and Chief Elected Officials
When: On-going