

Local Assistance Project No. 121

Town of Brussels

Door County, Wisconsin

2020 Comprehensive Plan

November 2002



Prepared by:
Bay-Lake Regional Planning Commission



Town of Brussels, Wisconsin

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TOWN OF BRUSSELS - 2020 COMPREHENSIVE PLAN

PREPARED BY:

BAY-LAKE REGIONAL PLANNING COMMISSION

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Martin W. Holden, Executive Director

The regional planning commission for Northeastern Wisconsin serving communities within the counties of:

FLORENCE · MARINETTE · OCONTO · BROWN · DOOR · KEWAUNEE · MANITOWOC · SHEBOYGAN

January 31, 2003

Mr. George Delveaux Jr.

Chairperson of the Town of Brussels and Members of the Town Board

Ladies and Gentlemen:

The Bay-Lake Regional Planning Commission is pleased to present this Comprehensive Plan, entitled; *Town of Brussels 2020 Comprehensive Plan* to the Town Board. This Comprehensive Plan was prepared by the Bay-Lake Regional Planning Commission staff in accordance with contract #56073 and adopted by the Brussels Town Board on November 12, 2002, under Section 66.1001 of the Wisconsin Statutes.

This Comprehensive Plan represents the town's commitment to the long-term planning needs of the community. The Comprehensive Plan also provides the town with a framework for preserving its rural character, agricultural lands, and natural resources, while allowing for orderly development.

In addition to setting forth a land use plan and supporting plan implementation devices, this document presents pertinent information on many factors affecting land use development in the town of Brussels, including existing and probable future residential population levels, the natural resource base, existing land uses, intergovernmental cooperation and existing local plan implementation devices.

The delivery of this plan constitutes the completion of the Bay-Lake Regional Planning Commission's obligation regarding the town's request for assistance in developing the Comprehensive Plan. The Commission staff stands ready to assist the town in presenting the information contained in this report and in implementing, over time, the plan set forth herein.

Sincerely,

A handwritten signature in black ink that reads "Martin W. Holden".

Martin W. Holden
Executive Director

RESOLUTION NO. 1- 2002

ADOPTION OF THE TOWN OF BRUSSELS

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 Town;

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 Town of Brussels Plan Commission;

NOW, THEREFORE BE IT RESOLVED that the Town of Brussels Plan Commission hereby recommends to the Brussels Town Board that a Comprehensive Plan entitled: *Town of Brussels 2020 Comprehensive Plan*, be adopted by the Town Board pursuant to Wisconsin Statutes Sections 62.23 and 66.1001(4).

Dated this 16th day of September, 2002.

Resolution introduced and adoption moved by Don Decker.

Motion for adoption seconded by Wm. J. Geln.

Voting Aye: 5 Nay: 0

APPROVED:

Michael J. Kandelholz

Brussels Plan Commission Chair

ATTEST:

Wm. J. Geln

Brussels Plan Commission Secretary

TOWN OF BRUSSELS
ORDINANCE NO. 23

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

WHEREAS, on August 21, 2001, the Town Board for the Town of Brussels approved a contract with Bay-Lake Regional Planning Commission to prepare a Comprehensive Plan for the Town of Brussels under the guidelines of Section 66.1001 Wisconsin Statutes; and,

WHEREAS, the project included a plan for public participation in every stage of the process for preparation of the *Town of Brussels 2020 Comprehensive Plan*, 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 Town to respond to such comments; and,

WHEREAS, on September 16, 2002, the Town of Brussels Plan Commission recommended to the Town Board adoption of the Comprehensive Plan by resolution which passed by a majority vote of the entire membership of the Town Plan Commission, which vote is recorded in the official minutes of the Plan Commission; and,

WHEREAS, the Town of Brussels Town Board held a public hearing on November 12, 2002, 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 Town of Brussels 2020 Comprehensive Plan;
3. The name of the individual employed by the Town of Brussels 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 Town Board of the Town of Brussels, having carefully reviewed the recommendation of the Town 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 the coordinated and harmonious land use development of the Town of Brussels, 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 future land use development.

NOW, THEREFORE, the Town Board of the Town of Brussels, Door County, Wisconsin, DOES ORDAIN AS FOLLOWS:

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

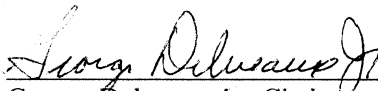
Section 2: The Town Clerk is directed to file a copy of the attached Town of Brussels 2020 Comprehensive Plan with all the following entities:

1. Every governmental body that is located in whole or in part within the boundaries of the Town of Brussels;
2. The Clerk of every local governmental unit that is adjacent to the Town of Brussels;
3. The Wisconsin Land Council;
4. The Bay-Lake Regional Planning Commission;
5. The Door County 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 27 day of Nov. 2002, by a majority vote of the members of the Town Board of the Town of Brussels.


George Delveaux Jr., Chairperson

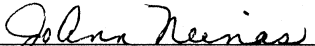
Attest: 
Jo Ann Neinas, Clerk

TABLE OF CONTENTS

CHAPTER 1 - ISSUES AND OPPORTUNITIES ELEMENT	1-1
INTRODUCTION	1-1
CONTRACT WITH BAY-LAKE REGIONAL PLANNING COMMISSION	1-1
DESCRIPTION OF PLANNING AREA	1-2
COMMUNITY COMPREHENSIVE PLANNING PROCESS	1-2
PLAN CONTENTS	1-2
<i>Community Survey Results</i>	1-3
PUBLIC PARTICIPATION	1-3
COMMUNITY VISION STATEMENT	1-4
<i>Town of Brussels Vision Statement</i>	1-4
GOALS, OBJECTIVES, POLICIES, & PROGRAMS	1-4
BACKGROUND INFORMATION	1-6
<i>General Physical Setting - Agricultural, Natural And Cultural Resources</i>	1-6
<i>Population and Housing</i>	1-7
<i>Economics</i>	1-8
<i>Transportation</i>	1-8
<i>Public Facilities</i>	1-9
<i>Land Use</i>	1-9
TRENDS AND FORECASTS	1-9
<i>Population Trends and Forecasts</i>	1-9
<i>Demographic Trends</i>	1-9
<i>Housing</i>	1-9
<i>Employment</i>	1-10
<i>Land Use</i>	1-10
SUMMARY	1-10
CHAPTER 2 - NATURAL, AGRICULTURAL AND CULTURAL RESOURCES.....	2-1
INTRODUCTION	2-1
STATEMENT OF PURPOSE.....	2-1
SUMMARY AND IMPLICATIONS.....	2-1
NATURAL RESOURCES STRATEGY	2-4
<i>Goal: Natural Resources</i>	2-4
<i>Goal: Agricultural Preservation</i>	2-5
<i>Goal: Metallic and Non- Metallic Resources</i>	2-6
NATURAL RESOURCE INVENTORY	2-7
CLIMATE.....	2-7
GEOLOGY	2-8
<i>Glacial Geology</i>	2-8
<i>Bedrock Geology</i>	2-8
SOIL.....	2-12
<i>General Soils Description</i>	2-12
<i>Soils and On-Site Sewage Disposal Systems</i>	2-14
<i>Basements</i>	2-16
<i>Prime Agricultural Lands</i>	2-18
TOPOGRAPHY	2-18
WATER RESOURCES.....	2-18
<i>Watersheds and Sub-Watersheds</i>	2-18
<i>Surface Waters</i>	2-18
<i>Groundwater</i>	2-23
<i>Floodplains</i>	2-23
<i>Wetlands</i>	2-25
WOODLANDS.....	2-25

AIR QUALITY	2-28
WILDLIFE HABITAT	2-28
THREATENED AND ENDANGERED SPECIES.....	2-28
PARKS AND OPEN SPACES.....	2-28
SCIENTIFIC AND NATURAL AREAS	2-29
ENVIRONMENTAL CORRIDORS.....	2-29
OTHER LOCAL KEY NATURAL FEATURES.....	2-30
<i>Brussels Hill</i>	2-30
<i>Red Hill Woods - Brussels Grassland</i>	2-30
<i>Dark Skies</i>	2-30
HISTORIC AND ARCHEOLOGICAL SITES	2-34
CULTURAL RESOURCES.....	2-36
<i>Metallic and Non Metallic Mining Resources</i>	2-36
<i>Community Design</i>	2-38
<i>Signage</i>	2-38
<i>Landmarks</i>	2-38
<i>Pathways</i>	2-38
<i>Edges</i>	2-38
<i>District</i>	2-38
<i>Nodes</i>	2-39
<i>Community Entryways</i>	2-39
CHAPTER 3 - POPULATION AND HOUSING.....	3-1
INTRODUCTION	3-1
SUMMARY AND IMPLICATIONS.....	3-1
HOUSING STRATEGY	3-3
POPULATION CHARACTERISTICS.....	3-4
<i>Historical Population Levels</i>	3-4
<i>Population Trends and Forecasts</i>	3-5
<i>Population By Age and Sex</i>	3-8
<i>Decade Population Pyramids</i>	3-8
<i>School Age, Working Age, and Retirement Groups</i>	3-11
<i>Household Relationship</i>	3-11
<i>Median Age</i>	3-12
HOUSING INVENTORY.....	3-12
<i>Total Housing Unit Levels by Decade</i>	3-12
<i>Housing Permits Current Decade</i>	3-13
<i>Historic and Projected Household Size</i>	3-14
<i>Projected Housing Units</i>	3-15
<i>Housing Types - Units in Structure</i>	3-16
<i>Housing Occupancy and Tenure</i>	3-17
<i>Age of Housing</i>	3-17
<i>Substandard Housing</i>	3-18
<i>Housing Values</i>	3-18
<i>Housing Costs-Rents and Mortgage</i>	3-18
ANALYSIS AND DEVELOPMENT OF COMMUNITY POLICIES AND PROGRAMS	3-19
<i>Housing Programs</i>	3-19
<i>Local Programs and Revenue Sources</i>	3-20
<i>Housing Plan</i>	3-21
CHAPTER 4 - ECONOMIC DEVELOPMENT.....	4-1
INTRODUCTION	4-1
SUMMARY AND IMPLICATIONS.....	4-1
COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGIES	4-2
PROGRAMS.....	4-4

<i>Local</i>	4-4
<i>County</i>	4-4
LABOR FORCE CHARACTERISTICS.....	4-6
<i>Place of Work</i>	4-6
<i>Occupation</i>	4-6
<i>Industry</i>	4-7
<i>Unemployment Rate</i>	4-8
<i>Employment Forecast</i>	4-9
<i>Median Household Income</i>	4-10
<i>Personal Income</i>	4-11
ECONOMIC BASE.....	4-11
<i>Employment by Economic Division</i>	4-11
<i>Location Quotient Analysis</i>	4-12
<i>Threshold Analysis</i>	4-12
STRENGTHS AND WEAKNESSES ANALYSIS.....	4-13
<i>Introduction</i>	4-13
<i>Marketing</i>	4-13
<i>Infrastructure</i>	4-13
<i>Programmatic Capabilities</i>	4-15
<i>Financial Capabilities</i>	4-16
<i>Quality of Life</i>	4-16
SITES FOR BUSINESS AND INDUSTRIAL DEVELOPMENT.....	4-17
<i>Existing Site Inventory and Analysis</i>	4-17
COMMUNITY FINANCES.....	4-17
CHAPTER 5 - TRANSPORTATION.....	5-1
INTRODUCTION.....	5-1
SUMMARY AND IMPLICATIONS.....	5-1
TRANSPORTATION STRATEGY.....	5-2
<i>Transportation System Development Goals, Objectives, Policies and Programs</i>	5-2
FUNDING AND TECHNICAL ASSISTANCE PROGRAMS.....	5-5
<i>Wisconsin Department of Transportation</i>	5-5
<i>Federal Highway Administration</i>	5-8
<i>Comparison of Transportation Strategy to State and Regional Transportation Plans</i>	5-9
INVENTORY OF TRANSPORTATION PROGRAMS AND FACILITIES.....	5-9
<i>Highways</i>	5-9
<i>Waterborne</i>	5-9
<i>Air Transportation</i>	5-9
<i>Rail Transportation</i>	5-10
<i>Transit</i>	5-10
<i>Intercity Bus</i>	5-10
<i>Trucking</i>	5-11
<i>Elderly and Disabled Transportation System</i>	5-11
<i>Recreational and Bicycle Trail System</i>	5-12
<i>Pedestrian</i>	5-13
INVENTORY AND ANALYSIS OF ROAD SYSTEM.....	5-13
<i>Roads and Highways</i>	5-13
<i>STH 57</i>	5-14
<i>Traffic Counts</i>	5-22
<i>Level of Service</i>	5-27
<i>Funding The Town Road System</i>	5-28
<i>Internal Traffic Circulation System</i>	5-28
<i>New Road Alignments</i>	5-28
<i>Highway Expansion Impacts</i>	5-28
INVENTORY AND ANALYSIS OF APPLICABLE TRANSPORTATION PLANS.....	5-29

<i>County Functional and Jurisdictional Studies</i>	5-29
<i>Transportation Corridor Plans</i>	5-29
<i>Rural Transportation Plans</i>	5-29
<i>State Highway Plan</i>	5-29
<i>Six-Year Highway Improvement Plan</i>	5-30
<i>Airport Master Plans</i>	5-30
<i>State Airport Plans</i>	5-30
<i>Wisconsin State Railroad Plans</i>	5-30
<i>State, Regional and Local Bicycle Plans</i>	5-30
TRANSPORTATION RECOMMENDATIONS	5-31
<i>Employ Adequate Design Standards</i>	5-31
<i>Apply Traffic Considerations</i>	5-32
<i>Improvements to the local road system</i>	5-33
<i>Initiate A Pavement Management Program</i>	5-33
<i>Assess Special Transportation Needs</i>	5-33
<i>Bicycle Transportation</i>	5-34
<i>Assess Rural Transit Needs</i>	5-34
CHAPTER 6 - UTILITIES AND COMMUNITY FACILITIES	6-1
INTRODUCTION	6-1
SUMMARY AND IMPLICATIONS	6-1
UTILITY AND COMMUNITY FACILITY STRATEGY	6-1
<i>Goals: Utilities and Community Facilities</i>	6-1
BOARDS AND COMMITTEES INVENTORY	6-3
<i>Brussels Town Board</i>	6-3
<i>Town Plan Commission</i>	6-3
PUBLIC UTILITIES AND FACILITIES INVENTORY AND ANALYSIS	6-4
<i>Electric Service</i>	6-4
<i>Natural Gas</i>	6-4
<i>Power Generation Plants and Transmission Lines</i>	6-4
<i>Public Water System</i>	6-4
<i>Private Onsite Wastewater Treatment Systems</i>	6-4
<i>Sanitary Sewer Service</i>	6-4
<i>Storm Water Management Systems</i>	6-5
<i>Refuse Disposal & Recycling Facilities</i>	6-5
<i>Telecommunications Facilities</i>	6-5
COMMUNITY FACILITIES INVENTORY AND ASSESSMENT LOCATION, USE AND CAPACITY	6-5
<i>Municipal Buildings</i>	6-5
<i>Road and Other Maintenance</i>	6-6
<i>Postal Services</i>	6-6
<i>Cemeteries</i>	6-6
<i>Police Services</i>	6-6
<i>Fire Services</i>	6-6
<i>Emergency Services</i>	6-7
<i>Library</i>	6-7
<i>Public Schools</i>	6-7
<i>Child Care Facilities</i>	6-8
<i>Health Care Facilities</i>	6-8
OUTDOOR RECREATION INVENTORY	6-8
<i>Community Owned Sites</i>	6-8
<i>National, State and County Facilities</i>	6-8
<i>NRPA Standards</i>	6-9
PUBLIC/COMMUNITY FACILITY RECOMMENDATIONS	6-9
<i>Town Hall/Community Center</i>	6-9
<i>Park Improvements</i>	6-9

<i>Recreational Trail System</i>	6-9
<i>Fire and Safety Services</i>	6-9
<i>Intergovernmental Cooperation</i>	6-10
<i>Road System</i>	6-10
<i>Natural Resources</i>	6-10
<i>Postal Service</i>	6-10
CHAPTER 7 - INTERGOVERNMENTAL COOPERATION	7-1
INTRODUCTION	7-1
SUMMARY AND IMPLICATIONS	7-1
INTERGOVERNMENTAL COOPERATION STRATEGY	7-1
PROGRAMS:	7-2
EXISTING ACTIVITIES	7-2
<i>Adjacent Governmental Units</i>	7-2
<i>School District</i>	7-3
<i>County</i>	7-3
<i>Region</i>	7-3
<i>State</i>	7-3
INVENTORY OF PLANS AND AGREEMENTS UNDER S. 66.0307, S. 66.0301 OR S. 66.0309	7-3
<i>Extra-territorial subdivision regulation</i>	7-4
<i>Extra-territorial Zoning</i>	7-4
OPPORTUNITIES FOR COOPERATION	7-4
<i>State</i>	7-4
<i>County</i>	7-5
<i>Towns</i>	7-5
<i>State/County and Town</i>	7-5
INVENTORY OF EXISTING OR POTENTIAL CONFLICTS	7-5
PROPOSED CONFLICT RESOLUTION PROCESS	7-6
SUMMARY AND CONCLUSIONS	7-6
CHAPTER 8 - LAND USE AND GENERAL PLAN DESIGN	8-1
INTRODUCTION	8-1
SUMMARY AND IMPLICATIONS	8-1
LAND USE STRATEGY	8-2
<i>General Plan Design Goal</i>	8-2
<i>General Plan Design Objectives:</i>	8-2
<i>Residential Land Use Objective</i>	8-3
<i>Commercial Land Use Objective</i>	8-3
<i>Light Industrial Land Use Objective</i>	8-4
<i>Natural and Cultural Resources Land Use Objective</i>	8-4
<i>Transportation Land Use Objective</i>	8-5
<i>Community Services Land Use Objective:</i>	8-5
INVENTORY OF EXISTING LAND USE CONTROLS	8-6
<i>Planning Documents</i>	8-6
<i>Priority Watershed Plan</i>	8-7
<i>Sanitary Sewer Service Area Plan</i>	8-7
LAND USE REGULATIONS	8-7
<i>Zoning Ordinances</i>	8-7
<i>Purpose and intent of zoning districts</i>	8-7
<i>Subdivision Ordinance</i>	8-11
<i>Official Map</i>	8-11
<i>Erosion Control Plan</i>	8-11
<i>Shoreland and Floodplain Ordinances</i>	8-12
<i>Private Onsite Wastewater Treatment Systems</i>	8-12
CURRENT LAND USE INVENTORY	8-13

<i>Planning Area</i>	8-13
<i>Residential Land</i>	8-15
<i>Commercial Land</i>	8-15
<i>Industrial Land</i>	8-15
<i>Transportation</i>	8-15
<i>Communication/Utilities</i>	8-15
<i>Institutional/Governmental</i>	8-15
<i>Parks and Recreational Lands</i>	8-16
<i>Agricultural Structures</i>	8-16
<i>Croplands/Pasture</i>	8-16
<i>Undeveloped Open Space</i>	8-16
<i>Natural Areas</i>	8-16
<i>Woodlands</i>	8-16
<i>Water Features</i>	8-16
LAND SUPPLY	8-17
<i>Amount</i>	8-17
<i>Demand</i>	8-17
GENERAL PLAN DESIGN.....	8-17
<i>Land Use Issues and Conflicts</i>	8-17
ANTICIPATED LAND USE TRENDS.....	8-17
DEVELOPMENT STANDARDS.....	8-18
<i>Environmental and Public Utility Considerations</i>	8-18
<i>Planning Criteria</i>	8-19
<i>General Plan Design Classifications</i>	8-19
DESIGN YEAR LAND USE PROJECTIONS	8-22
<i>Five Year Incremental Land Use Projections</i>	8-22
DEVELOPMENT STANDARDS.....	8-24
<i>General Plan Design Classifications</i>	8-24
DEVELOPMENT STRATEGY	8-27
<i>Residential Development Strategy</i>	8-27
<i>Agricultural Strategy</i>	8-27
<i>Commercial Strategy</i>	8-28
<i>Industrial Strategy</i>	8-29
<i>Governmental/Institutional Strategy</i>	8-29
<i>Communication/Utilities</i>	8-29
<i>Woodland/Open Space</i>	8-30
<i>Park and Recreation</i>	8-30
<i>Environmental Corridors</i>	8-30
<i>Transportation</i>	8-30
<i>Dark Sky Ordinance</i>	8-31
IDENTIFIED “SMART GROWTH” AREAS	8-32
SUMMARY	8-34
CHAPTER 9 - IMPLEMENTATION.....	9-1
INTRODUCTION	9-1
<i>Role of the plan</i>	9-1
<i>Role of the Elected Officials</i>	9-1
LAND USE PLANNING CONTROLS RECOMMENDATIONS	9-1
<i>Zoning</i>	9-1
<i>Official Maps</i>	9-2
<i>Sign Regulations</i>	9-2
<i>Erosion and Storm Water Control Ordinances</i>	9-2
<i>Design Review Ordinances</i>	9-2
<i>Economic Development Committee</i>	9-3
<i>Building/Housing Codes</i>	9-3

<i>Floodplain Ordinance</i>	9-3
<i>Sanitary Codes</i>	9-3
COMPREHENSIVE PLAN INTERNAL CONSISTENCY	9-4
IMPLEMENTATION STEPS	9-4
PROCESS FOR UPDATING PLAN.....	9-4
ACTION PLAN	9-4
<i>Town of Brussels Action Plan</i>	9-4

LIST OF APPENDICES

APPENDIX A: TOWN OF BRUSSELS -1998 LAND USE SURVEY	A-1
APPENDIX B: ADOPTED PUBLIC PARTICIPATION POLICY AND PROCEDURES PUBLIC NOTICES AND LIST OF ATTENDEES	B-1
APPENDIX C: LIST OF RARE, THREATENED AND ENDANGERED SPECIES - DOOR COUNTY	C-1
APPENDIX D: STATUTORY TOWN ROAD CONSTRUCTION STANDARDS AND TYPICAL CROSS SECTIONS	D-1
APPENDIX E: INTERGOVERNMENTAL COOPERATION MEETING NOTICE AND LIST OF ATTENDEES	E-1
APPENDIX F: 2001 LAND USE CALCULATIONS	F-1
APPENDIX G: LAND USE ALLOCATIONS.....	G-1

LIST OF TABLES

Table 3.1: Historic Population Levels, 1900-2000, Town of Brussels & Selected Areas.....	3-5
Table 3.2: Population Trends, 1970-2015, Town of Brussels and Selected Areas	3-6
Table 3.3: Estimated Seasonal Population, 2000, Town of Brussels & Selected Areas	3-7
Table 3.4: Male and Female Distribution by Age and Sex, Town of Brussels, 1980-2000	3-9
Table 3.5: Population by Age Groups and Sex, 2000, Town of Brussels & Selected Areas.....	3-11
Table 3.6: Household Relationship, 2000, Town of Brussels & Selected Areas	3-11
Table 3.7: Median Age, 1970-2000, Town of Brussels & Selected Areas.....	3-12
Table 3.8: Total Housing Units, 1970-2000, Town of Brussels & Selected Areas	3-13
Table 3.9: Housing Unit Additions and Deletions, 1990-1999, Town of Brussels & Selected Areas	3-14
Table 3.10: Household Projections by Household Type, 1990-2015, Door County.....	3-14
Table 3.11: Persons Per Household Projections, 1990-2020, Town of Brussels and Door County.....	3-15
Table 3.12: Units in Structure, 2000, Town of Brussels & Selected Area.....	3-16
Table 3.13: Housing Occupancy and Tenure, 2000, Town of Brussels & Selected Areas	3-17
Table 3.14: Housing Units by Year Structure Built, 2000, Town of Brussels & Selected Areas.....	3-17
Table 3.15: Value of Owner-Occupied Housing Units, 2000, Town of Brussels & Selected Areas.....	3-18
Table 4.1: Place of Work, 1990, Town of Brussels & Selected Areas.....	4-6
Table 4.2: Employed Persons by Occupation, 2000, Town of Brussels & Selected Areas.....	4-7
Table 4.3: Employed Persons by Industry Group, 2000, Town of Brussels & Selected Areas.....	4-7
Table 4.4: Average Civilian Labor Force Estimates, 1990-2000, Door County	4-9
Table 4.5: Household Income, 1999, Town of Brussels & Selected Areas.....	4-11
Table 4.6: Municipal Per Return Income, 1997-2000, Town of Brussels & Selected Areas	4-11
Table 4.7: Employment by Industry Group, 1990-1998, Door County and United States, Location Quotient Analysis.....	4-12
Table 4.8: Comparative Tax Appropriations, 1990-2000, Town of Brussels	4-17
Table 4.9: Public Indebtedness, 1998-2000, Town of Brussels	4-18
Table 5.1: Functional Classification Criteria for Rural Roads and Highways.....	5-16
Table 5.2: Road Function, Total Mileage and Percent of Total Road Mileage, Town	5-22
Table 5.3: Annual Average Daily Traffic Counts - Town of Brussels, 1992, 1995, 1998.....	5-23
Table 5.4: Uninterrupted Traffic Flow Capacities Under Ideal Conditions	5-23
Table 5.5: Vehicle Crash Severity - Town of Brussels, 1998, 1999, and 2001.....	5-25
Table 5.6: Intersection/Non-Intersection Crashes by Highway Jurisdiction, 1998 - 2001	5-26
Table 5.7: Level of Service Criteria.....	5-27
Table 5.8: Wisconsin State Statutes 86.26 - Town Road Standards.	5-32
Table 8.1: Town of Brussels 2001 Land Use Summary.....	8-13
Table 8.2: General Plan Design Classifications and Acreage Within Each Classification.....	8-27

LIST OF FIGURES

Figure 2.1: Common Karst Features Which Effect Groundwater	2-9
Figure 4.1: Percent Employment by Major Industry Group, 2000, Town of Brussels.....	4-8
Figure 4.2: Civilian Labor Force, 2001, Door County	4-9

LIST OF MAPS

Map 2.1: Location Map	2-2
Map 2.2: Community Planning Area.....	2-3
Map 2.3: Pleistocene Geology	2-10
Map 2.4: Bedrock Geology.....	2-11
Map 2.5: General Soil Associations.....	2-13
Map 2.6: Soil Limitation for Dwellings with Septic Systems	2-15
Map 2.7: Soil Limitations for Dwellings with Basements.....	2-17
Map 2.8: Prime Farmland	2-19
Map 2.9: Steep Slope	2-20
Map 2.10: Watersheds	2-21
Map 2.11: Surface Water Features.....	2-22
Map 2.12: Floodplain.....	2-24
Map 2.13: Wetlands.....	2-26
Map 2.14: Woodlands.....	2-27
Map 2.15: Environmental Corridors	2-32
Map 2.16: Brussels Hill	2-33
Map 2.17: Historical Sites.....	2-35
Map 2.18: Non-Metallic Mine Sites.....	2-37
Map 5.1: Functional Classification	5-15
Map 5.2: Proposed STH 57 Alignment.....	5-20
Map 5.3: Annual Average Daily Traffic	5-24
Map 5.4: Transportation Recommendations	5-36
Map 8.1: Zoning Map	8-10
Map 8.2: 1997 Land Use.....	8-14
Map 8.3: General Plan Design	8-33

Chapter 1 - ISSUES AND OPPORTUNITIES ELEMENT

INTRODUCTION

This comprehensive plan is the initial plan for the town of Brussels, which is located in Door County, Wisconsin. 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 guidance for the conservation of natural resources and delineates areas where future growth and development should occur within the community. The plan should be consulted when the town makes decisions concerning land use and other issues impacting the development of the town including:

- Municipal incorporation procedures under s. 66.0215, 66.0201 or 66.0203.
- Cooperative boundary agreements entered into under s. 66.0307.
- Consolidation of territory under s. 66.0229.
- Detachment of territory under s. 66.0227.
- Municipal boundary agreements fixed by judgment under s. 66.0225.
- Official mapping established or amended under s. 62.23 (6).
- Local subdivision regulation under s. 236.45 or 236.46.
- County zoning ordinances enacted or amended under s. 59.69.
- 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. 66.0617.
- 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 Brussels Town Board entered into a contract (#56073) with the Bay-Lake Regional Planning Commission (BLRPC) to prepare a comprehensive plan in accordance with Wisconsin's Smart Growth law in August of 2001. The plan was prepared and approved by the Town of Brussels Plan Commission, the Town Board, and citizens of the Town of Brussels.

DESCRIPTION OF PLANNING AREA

The town of Brussels consists of approximately 23,040 acres (approximately 36 square miles) and is located in the southern portion of Door County (Map 2.1). Communities that surround Brussels include the towns of Union, Gardner, Nasewaupée, Forestville (Door County) and the towns of Red River and Lincoln (Kewaunee County).

COMMUNITY COMPREHENSIVE PLANNING PROCESS

The planning process was completed in four stages. *Initially*, the Plan Commission, with the assistance of the Bay-Lake Regional Planning Commission identified issues and concerns relative to land use and development within the town. Identification of issues and concerns was also facilitated by utilization of a town survey conducted in 1998 by the Door County Planning Department and the Door County UW-Extension Office.

The *second stage*, the 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 Town of Brussels Plan Commission developed an overall vision statement as well as the goals, objectives, policies and programs for each of the nine elements required in the comprehensive plan by the “Smart Growth” legislation.

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 growth and development within the town over the next twenty years. The preliminary General Plan Design was presented to the citizens of the community as well as nearby municipalities and government organizations 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. An action plan and recommended regulatory techniques that include zoning controls, were identified and established to ensure that the community’s vision as expressed in its *Vision Statement* will be achieved.

PLAN CONTENTS

This plan contains nine chapters that correspond to the nine planning elements, that are required inclusions into a comprehensive plan, by Section 66.1001 of the Wisconsin Statutes: **Chapter 1:** Issues and Opportunities Element, contains a vision statement, and the overall plan goals, objectives, policies, and programs of the plan; **Chapter 2:** Agricultural, Natural and Cultural Resources Element, provides goals, objectives, policies, and programs and description of the physical setting and cultural resources of the planning area; **Chapter 3:** Housing and Population Element, presents goals, objectives, policies, and programs as well as information on the demographics of the town and on future population, housing and economic growth; **Chapter 4:** Economic Development, contains goals, objectives, policies, and programs and a development strategy regarding future and existing economic conditions within the town, including an inventory of the labor force and an analysis of the town’s economic base; **Chapter 5:** Transportation, presents goals, objectives, policies, and programs and an inventory of the existing transportation system and an overview of transportation needs; **Chapter 6:** Utility and

Community Facilities, contains goals, objectives, policies, and programs and an inventory of the town's community facilities, including schools, recreational opportunities and town utilities; **Chapter 7:** Intergovernmental Cooperation, contains goals, objectives, policies, and programs for joint planning and decision making with other jurisdictions, including school districts and adjacent local governmental units; **Chapter 8:** Land Use, contains goals, objectives, policies, and programs and a land use inventory for the town, a projection of future land use demands, and the General Plan Design for the town; **Chapter 9:** Implementation Element, contains a strategy and short-term action plan to assist implementation efforts.

Community Survey Results

A community land use survey conducted by the Door County University of Wisconsin – Extension and the Door County Planning Department in fall of 1998 was utilized to identify important issues and to determine the goals and objectives of town residents relative to land use planning.

In all, 562 surveys were mailed to persons who owned land or were registered to vote in the town of Brussels; with 173 surveys being filled out and returned. The survey response rate was 30.1 percent. According to the Survey Research Handbook, authored by Alreck and Settle, response rates for mail surveys normally average 20 percent or less and response rates greater than 30 percent are rare. Thus, the Town of Brussels's Land Use Survey can be considered successful in terms of participation.

In the survey, nearly 67 percent of the respondents agreed or strongly agreed that *“Agricultural uses define the essential character of Brussels”*; more than 75 percent of the respondents agreed or strongly agreed that *“Land use policies should consider land as a family's heritage, savings, investment, and retirement income.”* In addition, more than 64 percent of the respondents agreed or strongly agreed that *“Our town should recognize, understand, and preserve all cultures in Brussels”*; and more than 54 percent agreed or strongly agreed that *“Brussels should have a unique identity as a town rather than a general “Southern Door” identity”*.

The responses to the 1998 survey form the basis and direction for this plan and are reflected in the goals and objectives for each of the elements addressed within the plan. Results to each of the 1998 survey questions are located within **Appendix A.**

PUBLIC PARTICIPATION

A major element of the comprehensive planning process is public participation. In accordance with Wisconsin State Statute 66.1001(4), which defines “Procedures For Adopting Comprehensive Plans”, the town adopted written procedures that were followed in order to involve the public in the comprehensive planning process to the greatest extent practicable.

A formal public participation process was adopted by the Town. Two open houses were held in order to present background information regarding the comprehensive plan and to review the plan's recommendations. The first “open house” was held at the “midway” point of the planning process to present the background data and the second “open house” was conducted at the conclusion of the planning process in order to present and obtain comment on the plan's preliminary recommendations prior to a public hearing. The open houses were noticed and posted in three locations by the Town Clerk. In addition, the final open house at which the findings and

the recommended plan of actions was noticed in the local newspaper. The open houses provided the public with an opportunity to review and comment on work that was accomplished by the Bay-Lake Regional Planning Commission and the Plan Commission. The public participation process adopted by the Town of Brussels Plan Commission, notice to the public, attendees list and comments received in writing or recorded is presented in **Appendix B.**

COMMUNITY VISION STATEMENT

In essence, the town's "vision statement" articulates what the community will look like and be like in the future. The vision statement helped to establish the direction of the plan and to identify an ultimate conceptual description of the town relative to its desired future size, its appearance as well as its essential physical qualities.

Town of Brussels Vision Statement

The town of Brussels is a culturally diverse and dynamic rural community that through the conscientious implementation of its comprehensive plan; has been able to balance the protection of its natural and cultural resources with the inevitable economic and residential growth and change that occurs over time.

The town's charm and character, and ultimately its appeal to the families that have lived and farmed here for generations, as well as those who are newcomers to the community, is intrinsically linked to its abundant open spaces, its rich cultural heritage, its family-owned farms, and small town friendliness.

Over the past 20 years suitably scaled and appropriate commercial and industrial development has been directed to the unincorporated village of Brussels to ensure that essential services are provided to residents, while the town's rural character is preserved.

By conscientiously adhering to this plan, the town of Brussels has maintained its small town rural character, protected its valuable natural resources, supported its family-owned agricultural base, and has preserved its history and heritage for future generations.

GOALS, OBJECTIVES, POLICIES, & PROGRAMS

The following statements describe the town's intentions relative to the management of its (the town's) growth and development over the next 20 years. The town's intentions relative to future growth and development are articulated through goal, objective, policy and program statements. 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.

Goals, objectives, policies and programs specific to each of the elements developed within the plan are stated at the forefront of each respective chapter. The following statements describe the town's goals and objectives, policies and programs relative to planning and the implementation of their comprehensive plan.

Planning Goal:

The town's planning goal is to protect the varied interests of all of its residents as well as to develop the town in an orderly, cost efficient method.

The town's planning goal is consistent with that described in s.66.1001 of the Wisconsin State Statutes.

Planning Objectives:

1. Adopt and maintain a 20-year Comprehensive Plan under s 66.1001, that reflects the needs of all current and future citizens of the town of Brussels.
2. Update the plan periodically in order to provide for the greatest possible benefits regarding the future development of residential, agricultural, commercial, industrial, and parkland expansion and development.

Planning Policies:

1. This plan should be consulted by the Plan Commission, Town Board, Board of Appeals and other units of government before making any decision regarding land use and land use policies.
2. Direct the town of Brussels Plan Commission to regularly refer to the plan and use the plan as a primary guide for recommendations to the Town Board regarding land uses.
3. Review and update existing town ordinances as they relate to the implementation of this plan.
4. Utilize the Official Map ordinance to designate future road right-of-ways and parklands that the town intends to develop.
5. Present the adopted plan to neighboring municipalities and Door County as described within the Implementation section of the plan.
6. Encourage cooperation and communication between the town, neighboring municipalities, and county government in implementing this plan.

Planning Programs:

1. Hold Plan Commission meetings/working sessions 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 ongoing planning projects and plan implementation projects listed/identified within the comprehensive plan to gain new insight, provide for new ideas, promote support, and to educate the public.

BACKGROUND INFORMATION

The following descriptions provide summary information regarding the town's natural and cultural resource base, its population, housing and economic trends, the town's transportation facilities, public facilities, and its land-use characteristics. Each of these elements are examined and analyzed in greater detail in the following chapters of the plan.

General Physical Setting - Agricultural, Natural And Cultural Resources

The Brussels planning area contains a variety of agricultural, natural and cultural 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 include topography, geology, soils, and natural areas, including woodlands, wetlands, and water resources. The most prominent natural features in the town of Brussels are the Brussels Hill, the Niagara Escarpment and the Black Ash Swamp. 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.

Geology

Glacial lake deposits have played a dominant role in shaping the physical setting of the Brussels area. The glacial lake deposits are evidenced by the flat to rolling topographic features of the town. The most notable and influential bedrock unit in the planning area is the Niagara Escarpment. It is a gently sloping plain that is terminated on one side by a steep slope. The gentle slope of the Niagara Escarpment dips to the southeast throughout much of the planning area and is somewhat difficult to observe due to glacial deposits.

Soils

The general character of the soils of the planning area is largely the result of various types of glacial deposits overlying the existing bedrock. Within the town, there are four general soils associations, the characteristics of which place moderate to severe limitations relative to on-site waste disposal systems and construction of basements. The soils found in the town generally have insufficient depths to bedrock or groundwater, percolate slowly, and are subject to flooding. Soils with moderate limitations are generally scattered throughout the planning area, while soils with severe limitations are encountered extensively within 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.

Topography

The predominate topographic features in the town are characterized by a flat to gently rolling land surface occasionally marked by small depressions. Areas of steep slope are defined as soils containing a greater than 12 percent slope according to the US Department of Agriculture, Soil Conservation Service soil surveys. The town of Brussels is characterized by generally flat to rolling topography with only 270 acres in the town having slopes of 12 percent or more. The Brussels Hill, located in the north-central portion of the town, is the most significant topographic feature in the planning area. The heavily wooded hill is the highest named point in Door County and encompasses an area of approximately 2.5 square miles in both the town of Brussels and the town of Gardner.

Surface Water Features and Drainage

Several small rivers and streams provide drainage in the town. Direction of precipitation runoff is primarily southeasterly towards Lake Michigan and westerly to Green Bay. The named surface water features in the town are the Ahnapee River and Silver Creek.

Wetlands

There are approximately 2,800 acres of wetlands located within the town of Brussels, the largest of which is the Black Ash Swamp, located in the southeastern portion of the town. 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.

Environmental Corridors

There are 3,660 acres of environmental corridors identified within the town. Environmental corridors provide an aggregate description and location of key environmental features including; 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 identified within the environmental corridors 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

Cultural Resources

The town's cultural resources include numerous buildings of historical importance. Most of these buildings are old farmhouses and barns. Others are old commercial buildings and churches. A large portion of these sites are located in the area of the unincorporated village of Brussels and in the Namur Historic District, in the neighboring town of Union.

There are also numerous archeological sites scattered throughout the town. Care should be taken when excavation is done within the town of Brussels, since there is the possibility of disturbing a 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 36.

Population and Housing

Population

In 1900, the town of Brussels had a population of 1,287 persons compared to a 2000 population of 1,112 persons. The town's population reached its lowest point of 1,050 persons in 1970, but has been increasing at a slow but steady pace since then.

Median Age

The town of Brussels has experienced somewhat steady increases in median age over the past decades, from a median age of 32.9 in 1990 to 36.3 in 2000. The median age of the population in the town of Brussels is much lower than the median age of the county population, which in 2000

was 47.0 years. The trend toward an older and aging population has been taken into consideration when planning for future needs for the area. The median age of the community's population may significantly affect housing stock needs, housing size, the available labor force, transportation needs, health care, as well as many other areas.

Educational Levels

In 2000, 25.4 percent of the town's population was enrolled in school, including nursery, pre-school, kindergarten through 12th grade, and colleges; compared to 29.3 percent for the County. Nearly 86 percent of the town population had attained a high school diploma or equivalent and 12.4 percent had achieved a bachelor degree or higher compared to 87.5 percent and 21.4 percent for the county, respectively.

Income Levels

According to the 1990 Census, in 1989 the median income for town residents was \$22,500. Data derived from income tax returns and provided by the Wisconsin Department of Revenue indicated that personal income increased by 19.3 percent from 1997 to 1999, from \$31,313 to \$37,342.

Housing

The town of Brussels has experienced a steady increase in the total number of housing units from 1970 to 2000. Overall, the town has experienced a 36.7 percent increase in housing units since 1970, but has had only a slight housing unit increase of 7.5 percent between 1990 and 2000.

Economics

Employment Characteristics

The 1990 Census indicated that more than 80 percent of employed town residents worked within Door County. The 1990 Census also indicated that 22.6 percent of the town's working population were employed in farming and farm related industries, while 24.6 percent were employed in manufacturing.

Transportation

The major transportation issue addressed within *the Town of Brussels 2020 Comprehensive Plan* is the expansion of STH 57 from two to four lanes (on a new alignment) within the town. The STH 57 expansion will play a major role in the future development of the town.

The STH 57 project will include the bypass of the unincorporated village of Brussels, beginning in 2004. This segment will be completed by 2008. The bypass will begin near the CTH Y intersection and traverse east, north of and parallel to CTH D. At CTH C, the bypass will proceed in a northeasterly direction, rejoining the existing highway at CTH H.

Within the town of Brussels, the reconstruction, lane-additions, and realignment design of STH 57 currently includes full at-grade intersections of STH 57 and CTH C, School Road (with a minor realignment of School Road and Misere Road), CTH H, and Stevenson Road. Several existing intersections with STH 57 will be eliminated when the new-realigned highway is constructed including existing intersections at Brussels Road, Roosevelt Road, Misere Road, Swamp Court, Dump Road, Stub Road, and CTH XC.

Public Facilities

The town's public facilities are limited to fire and safety equipment owned and operated jointly by the Brussels/Union/Gardner Fire Department and housed with the BUG Fire Station located in the unincorporated village of Brussels, and the 13 acre town park, located within the unincorporated village. The town does not have its own hall or community center. Town government is administered from the BUG Fire Station under a rental agreement, and records are kept and maintained in the private residences of the local officials.

Land Use

A detailed field inventory of land uses in the Town of Brussels was conducted in the summer of 2000 by the Bay-Lake Regional Planning Commission. This land use information was then compiled into generalized land use categories and is presented in detail in Chapter 8. The land-use inventory indicated that a total of 1,498 acres, or 6.5 percent of the total land area of 23,080 acres, have been developed for various residential, commercial, industrial, transportation and institutional purposes.

TRENDS AND FORECASTS

Tables, figures and additional text is provided in the following, respective chapters to aid in the explanation of the forecasting methods and summaries that follow.

Population Trends and Forecasts

The towns of Brussels experienced slight populations declines between 1980 and 1990, but have been increasing in population since 1990. Between 1990 and 2000, the town of Brussels had a population increase that was slightly below that of the county, the region and the state. For the period 1990 to 2000, Brussels experienced a growth of 6.7 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 town of Brussels has already surpassed its projected year 2015 population.

Demographic Trends

The 2000 Census indicated that 50.4 percent of the town population was male with 47.6 percent of the male population between the ages of 25 and 54 years old compared a male population of 51.1 percent in 1990 and 51.9 percent in 1980. In 2000 , 44 percent of the female population were between the ages of 25 and 54 years old. Working and voting age population in the town (16 years and older) comprised 72.7 percent of the total population compared to 76.6 percent for the county and 76.3 percent for the state. The towns median age in 2000 was 36.3 years compared to 42.9 years old for the county and 36 years old for the state.

Housing

Estimates of future housing needs were developed by the Bay-Lake Regional Planning Commission for the town. Three methods were used to develop the projections providing a range of possible housing unit needs. The projections estimate a low of 55 housing units and a high of 99 housing units needed by 2020.

Employment

Regionally based projections developed by the Wisconsin Department of Workforce Development indicate that overall employment is expected to increase by more than 20 percent in the region through 2005 and while unemployment rates remain low, the region will experience labor shortages in some occupations.

Land Use

The Town of Brussels encompasses approximately 23,081 total acres of land. Of this, 1,499 acres, or 6.49 percent of the town, are developed, leaving 21,582 acres (93.51 percent) of undeveloped land. Of these undeveloped lands, the vast majority of the acreage is in croplands and pasture.

SUMMARY

Based on the detailed inventories that follow it is evident that the town has a relatively youthful population that is growing a slow but steady pace; farming continues to play an important role in the economic base of the town; the town has abundant open space and natural resources; numerous cultural and historically significant resources; adequate housing resources; a concentrated core of development at the unincorporated village of Brussels; a well ordered and maintained transportation system that provides connectivity within the town and throughout the region; adequate fire and safety protection and publicly owned space (the town park); and, an adequate supply of land that is available for future development.

Chapter 2 - NATURAL, AGRICULTURAL AND CULTURAL RESOURCES

INTRODUCTION

The town of Brussels is located in the southwestern portion of Door County. Brussels is bordered by the town of Union to the east, the town of Gardner to the north, the town of Nasewaupée to the northeast, and the town of Forestville to the east. The towns of Red River and Lincoln in Kewaunee County border the town of Brussels to the south. State Highway 57 provides the primary access to the town of Brussels from the city of Sturgeon Bay which is located approximately eight miles northeast of the town; and from the city of Green Bay which is located approximately twenty one miles south of the town. The location of the town of Brussels relative to the region is shown on Map 2.1.

Historically, the town has derived much of its revenue from farming. The unincorporated village of Brussels, centered adjacent to the intersection of STH 57 and CTH C, continues to provide limited but essential services to the town that includes gas station/convenience stores, a grocery store, restaurant, school, church, and an agricultural cooperative.

The Brussels 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.

The town's agricultural resources are identified by the description of the location of prime agricultural soils, that include "most productive" and "productive" soil classes.

The cultural resources of the town, identified herein, include historic and archaeological sites, non-metallic mining sites, and other key identifying landmarks, districts, pathways, and nodes of development.

STATEMENT OF PURPOSE

This section is intended to provide an inventory of the natural, agricultural, and cultural resource features which may affect (and be affected by) land-use development within the town of Brussels. The identification and an understanding of the town's significant natural, agricultural and cultural features is essential to forming decisions relative to the preferred location and density of future development.

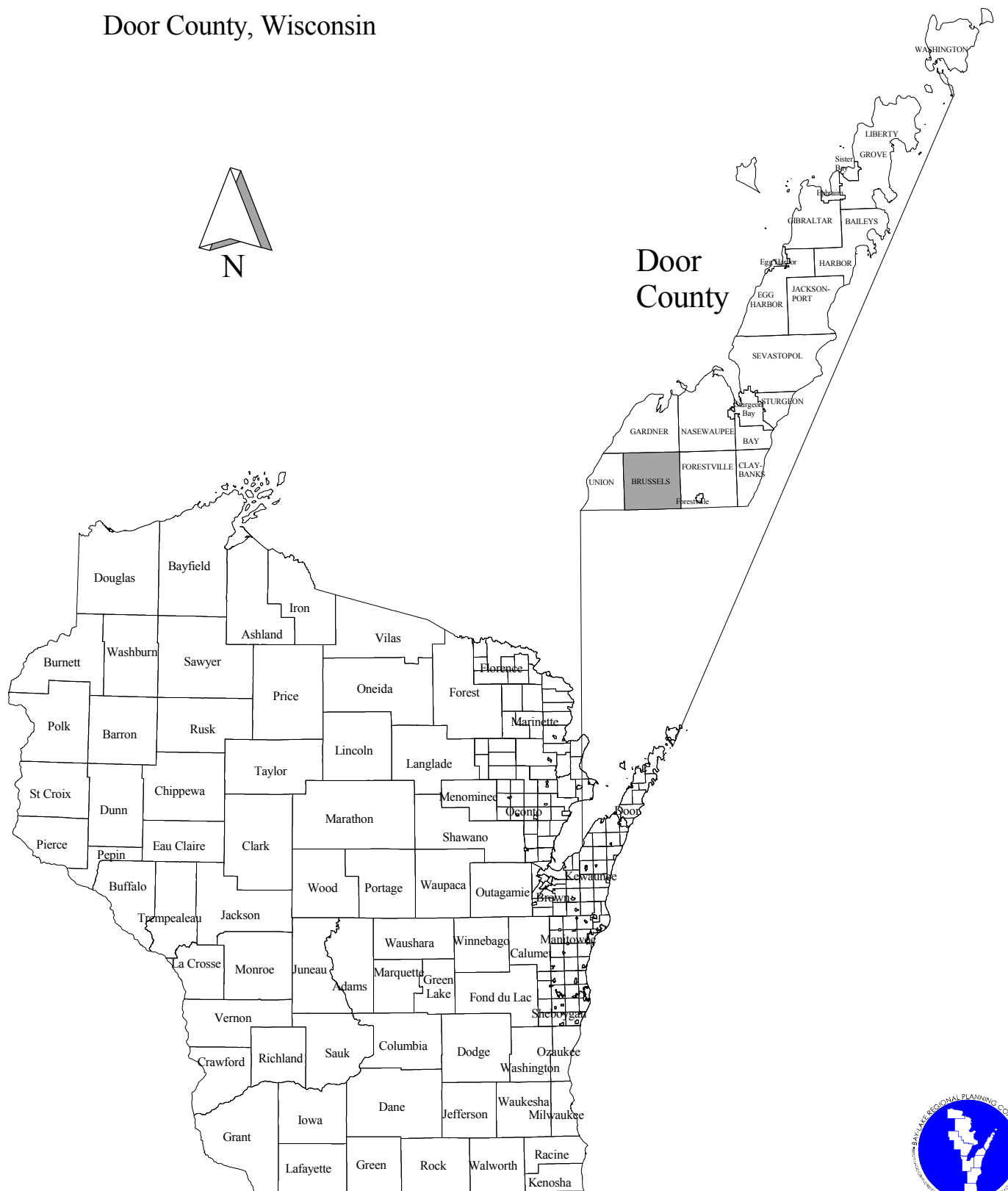
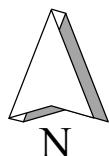
SUMMARY AND IMPLICATIONS

Relative to its physical setting, the town of Brussels is predominantly an agricultural community that contains a variety of natural amenities and the unincorporated village of Brussels. The town's landscape consists of open agricultural lands, tree lined fence lines, small woodlots, with several areas of steep slope. Numerous sites that have historic and/or archeological importance also exist within the town.

Location Map

Town of Brussels

Door County, Wisconsin



WISCONSIN



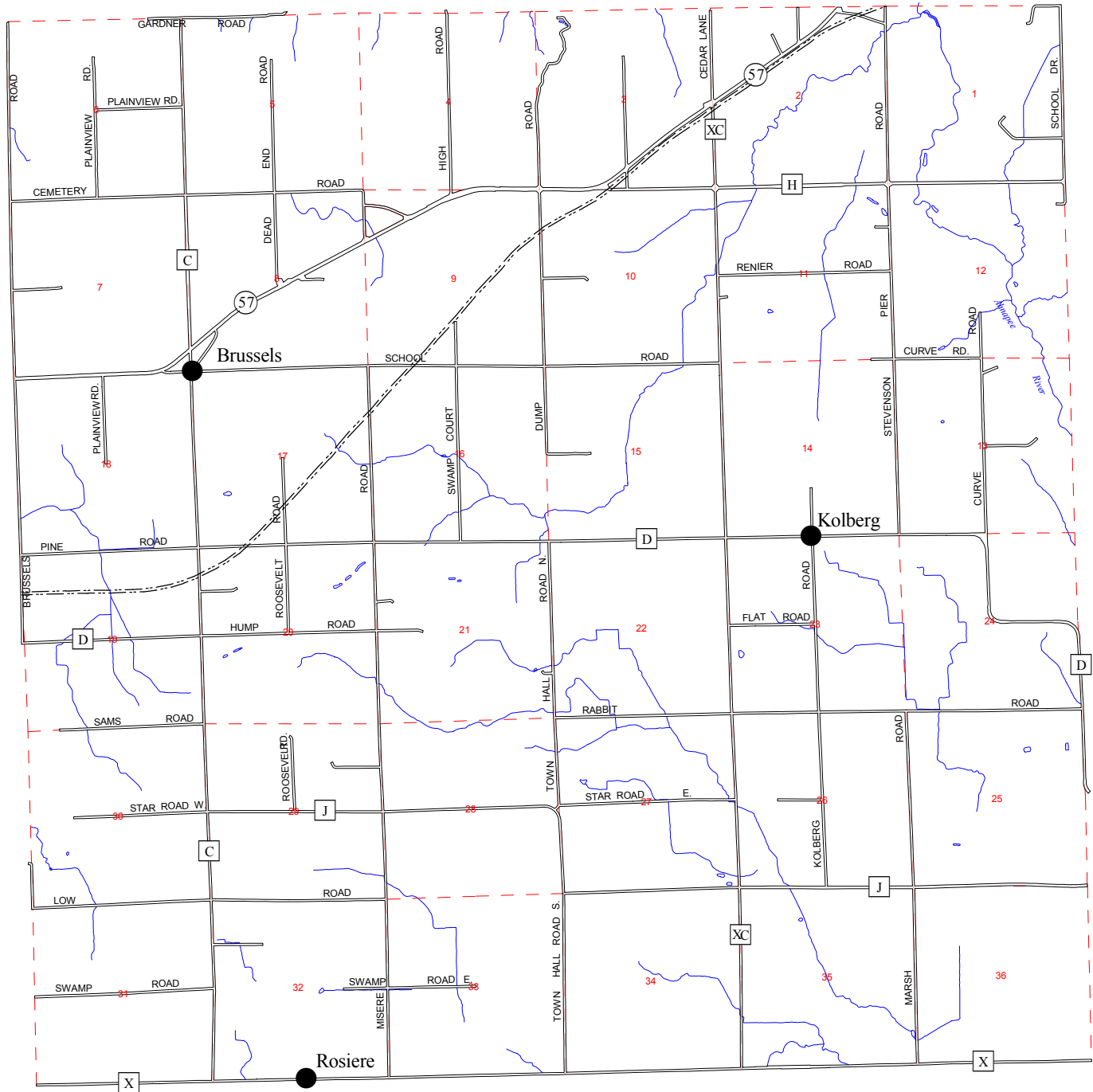
Source: Bay-Lake Regional Planning Commission, 2002.

Community Planning Area

Town of Brussels

Door County, Wisconsin

Map 2.2



0.5 0 0.5
Miles



Proposed STH 57
Alignment

Source: Bay-Lake Regional
Planning Commission, 2002.

The town relies on groundwater to provide its residents with safe drinkable water. The *Door County Land & Water Resource Management Plan* (1999) identified “groundwater pollution” as the county’s greatest natural resource concern. Due to the presence of shallow soils and fractured bedrock at or near the surface, surface water may flow directly to groundwater and threaten the ground water supply. Areas of wetlands and floodplains in the town exist along the two major waterways. Currently there are no ambient air quality concerns for the town. Both threatened and endangered species exist within Door County and are therefore likely present within the town. The town has identified the Brussels Hill as the most prominent geographic feature in the town. The Brussels Hill is located in the north central portion of the town, with portions extending northward into the town of Gardner.

The natural resources of the town should be protected in order to preserve them for future generations. As growth occurs, the town should consider the impacts of the development on these important resources. Furthermore, the community’s “character” or cultural resources are of importance as well. Preserving and promoting a sense of place is a key element of this plan. Protecting entryways into the town as well as considering the visual impacts along transportation corridors will greatly assist the town in reaching its vision.

NATURAL RESOURCES STRATEGY

The following Goals, Objectives, Policies, and Programs will help guide the town in protecting and utilizing its natural, agricultural and cultural resources. The following statements are a compilation of both broad and specific statements reflecting the popular attitudes and beliefs of town residents as expressed in past surveys and input obtained during the development of the comprehensive plan. The following statements are consistent with previously approved and adopted plans, including the Door County Development Plan.

Goal: Natural Resources

Provide a safe, clean and orderly natural environment for the residents of the town of Brussels, that preserves and protects key natural resources and features, specifically the Brussels Hill, the Niagara Escarpment, and the Black Ash Swamp.

Objectives:

1. Require strict enforcement of existing regulations (federal, state, county, town) particularly in environmentally sensitive areas.
2. Conserve and enhance the town’s distinctive natural amenities.
3. Development that occurs adjacent to steep slopes, rivers, streams, and wetlands should not negatively impact these areas.

Policies:

1. Identify the key natural resources within the town.
2. Provide information to residents regarding regulations governing their property and natural resources.
3. Discourage development within the identified environmental corridors.

4. Identify and protect key open spaces and wildlife habitats from development to preserve the town's scenic value.
5. Protect the Brussels Hill, Niagara Escarpment, and Black Ash Swamp.
6. Work cooperatively with the county to provide wellhead and groundwater protection.

Programs:

1. Work with Door County on informational programs and brochures regarding natural resources to educate and inform the public.
2. Establish a sub-committee that would work with the town to further explore ways to best utilize or preserve natural features within the town.
3. Coordinate the town's efforts with adjoining municipalities, Door County, and state agencies.
4. Maintain through the adopted zoning ordinance a 50 foot buffer area (a zone of no buildings) around delineated wetlands.
5. Work with the county to ensure enforcement of floodplain zoning, conservancy zoning and shoreland zoning ordinances to protect water quality.
6. Create and adopt a natural features overlay zoning district to protect the Brussels Hill and other key natural features.

Goal: Agricultural Preservation

Protecting farmland, while providing for the orderly development of land that is currently or was historically in productive farm use for non-farm development.

Objectives:

1. Retain large contiguous areas of prime agricultural lands for future farming operations.
2. Direct development to the smaller less productive farmlands before developing areas that are larger and more productive.
3. Identify future development areas on the General Plan Design.

Policies:

1. Discourage development on soils that have been identified as being prime agricultural areas thus encouraging the use of these lands for farming purposes only.
2. A "Cost to Benefit" comparison on all future agricultural land conversions should be conducted to ensure the town is not negatively impacted by the proposed change in use.
3. Consider development in areas of prime agricultural soils only in those areas that are (1) located on fragmented smaller parcels and/or (2) areas that are adjacent to the unincorporated village of Brussels.

4. Encourage a planned unit development (PUD) approach if a large tract of farmland is to be developed as opposed to a piece by piece method over a long time period. This will help alleviate fragmentation within the town and help lower development pressures.
5. Explore the option of establishing a mandatory buffer strip and/or setback between farm operations and adjacent residential developments to minimize conflicts of farming operations on residential living.

Programs:

1. Establish a sub-committee that will work with the county and state to develop informational material regarding farmer's rights and what they need to do in order to farm.
2. Investigate the future use of Transfer of Development Rights (TDR) and Purchase of Development Rights (PDR) within the town and work with the county and state to get this program operational within the county.
3. Work with the county to establish specific criteria for determining whether or not to allow conversion of use (re-zoning).

Goal: Metallic and Non- Metallic Resources

Existing and future mining sites should not negatively impact the town or its residents.

Objectives:

1. Existing mining sites should be identified and mapped.
2. Incompatible uses with mining should not develop adjacent to one another.
3. Scenic views, the natural environment and rural characteristics should not be harmed by mining operations.
4. Maintenance and repair costs of local roads utilized for access to and from the mining site should not be increased by the operation.

Policies:

1. The town should steer incompatible uses away from identified mining sites.
2. The town should ensure all future mining operations will someday be reclaimed to a natural setting.
3. Reclamation of mines that have ceased operation should be conducted in accordance with the county ordinance, *Ordinance 02-01 Nonmetallic Mining Reclamation Ordinance*; and Section NR 135.32, Wisconsin Administrative Code and Section 59.51, Wisconsin Statutes.

Programs:

1. The town should inform residents of any proposed future mining sites.

2. The town should 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 foster conflict.
3. The town should establish minimum requirements for any increased maintenance and repair of local roads caused by mining operations.

Goal: Historic, Archeological and Cultural Sites

The towns historic, archeological and cultural locations and structures should remain preserved for the town residents.

Objectives:

1. The town should preserve buildings (churches, historic homes and buildings), structures (out buildings, bridges, etc.) and other landscape features (cemeteries, fence lines, etc.) that are the town's cultural history.
2. These resources should be identified (to the best of the town's ability) to the town residents for their information and possible use.

Policies:

1. When deemed appropriate, the town supports the preservation of these locations.
2. The town should discourage the destruction of these sites and should not allow incompatible uses around them that would have negative impacts on the resource.

Programs:

1. The town should work with federal, state and county agencies to ensure all sites are identified and properly protected.
2. Consider a sub-committee that would explore the future integration of these sites into possible recreation sites, in conjunction with the county.

NATURAL RESOURCE INVENTORY

CLIMATE

The climate of Brussels is modified somewhat by the waters of 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 Brussels 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.

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

The geological characteristics of the town are described within the context of two separate and distinct categories, 1) glacial, surface or Pleistocene geology; and, 2) bedrock geology. Glacial geology plainly stated is the reminiscence of the materials that the glaciers transported to and left behind in the area. Bedrock geology is the material beneath the glacial geology.

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.

Two major types of glacial features are identifiable within the planning area. These include glaciolacustrine lake deposits, and ground moraines. (Map 2.3).

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. All but a small area in the north-central portion of the town is located upon glaciolacustrine deposits, indicating these areas were inundated by water several thousand years ago.

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 located in the far north-central portion of the planning area.

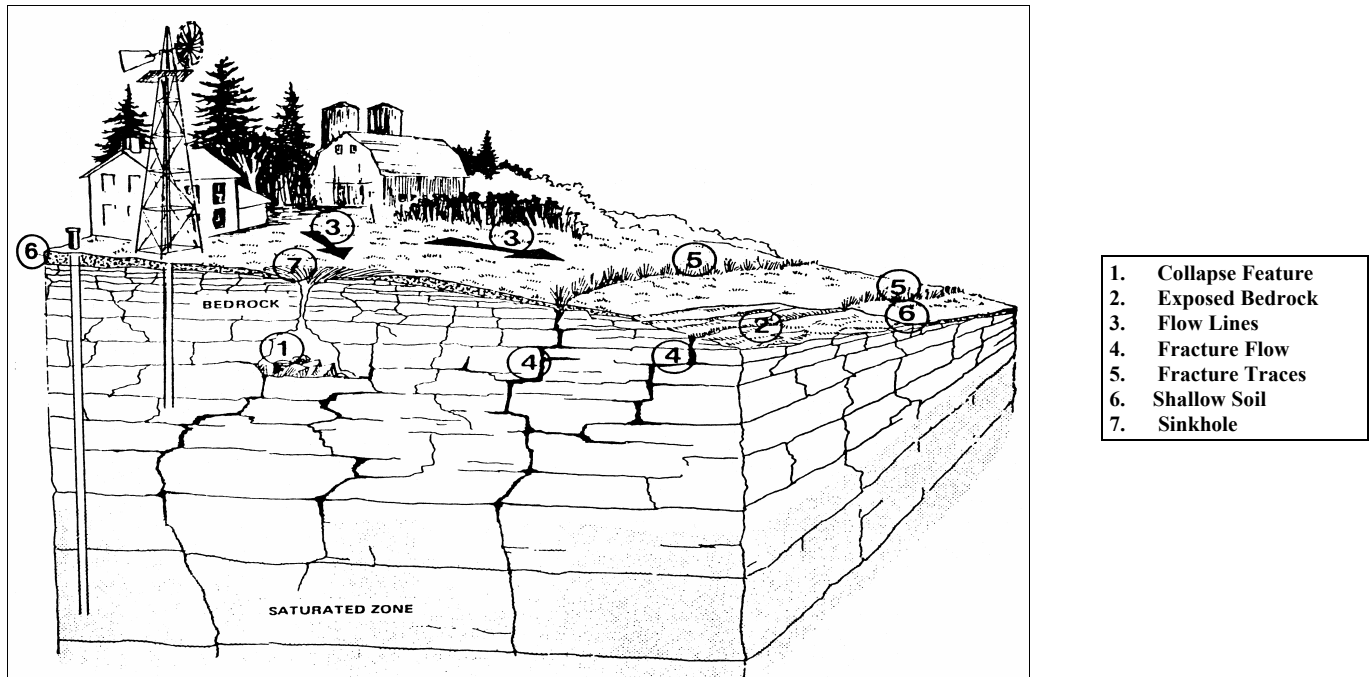
The dominant role glacial lake deposits played in shaping the physical setting of the Brussels area, both in terms of deposition, is evidenced by the flat to rolling topographic features of the area.

Bedrock Geology

The bedrock units which underlie the Brussels 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.

The Silurian or "Niagara" dolomite is perhaps the most notable and influential bedrock unit within the planning area (Map 2.4). 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. 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.

Figure 2.1: Common Karst Features Which Effect Groundwater



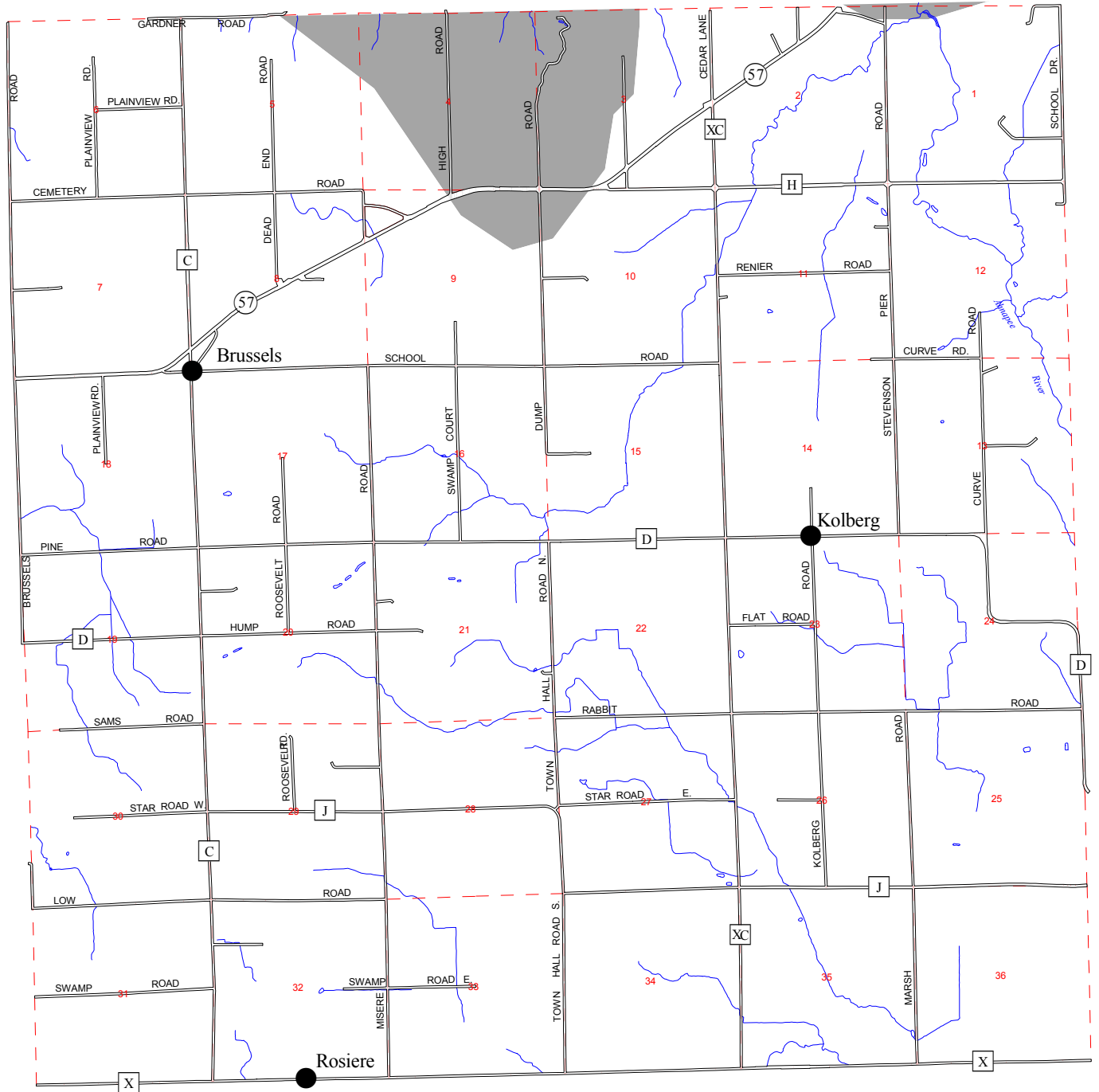
Source: University of Wisconsin Green Bay, 1999.

Pleistocene Geology

Town of Brussels

Door County, Wisconsin

Map 2.3



0.5 0 0.5
Miles



Ground Moraine
Lake Deposits

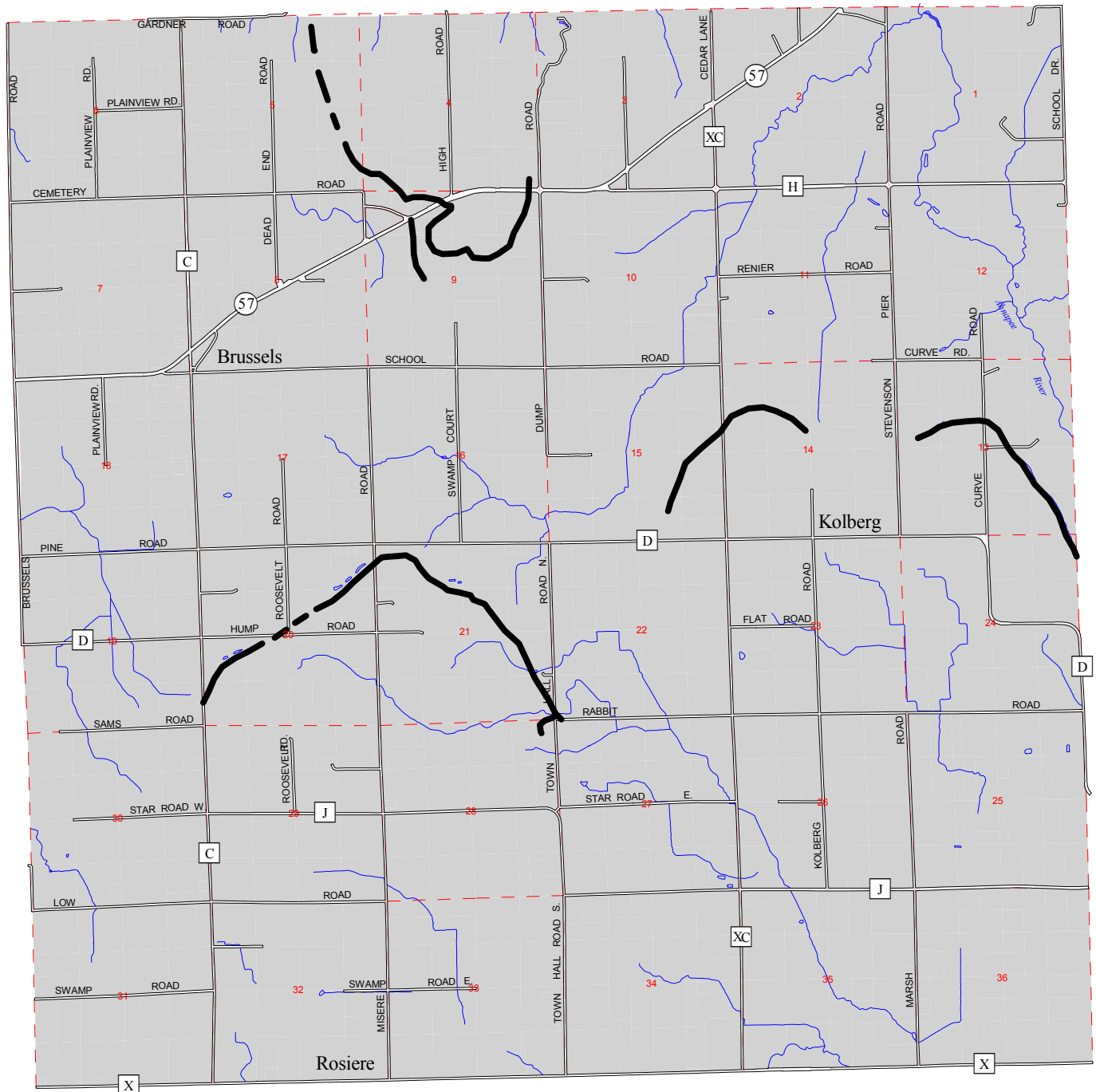
Source: NRCS, 1973;
Bay-Lake Regional
Planning Commission, 2002.

Bedrock Geology

Town of Brussels

Door County, Wisconsin

Map 2.4



0.5 0 0.5
Miles



Niagara Escarpment
Ground Moraine

Source: NRCS, 1973;
Bay-Lake Regional
Planning Commission, 2002.

SOIL

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 town, there are four general soils associations (Map 2.5):

Kewaunee-Kolberg Manawa

Kewaunee series soils consists of deep, well drained and moderately well drained soils on glacial till plains and ridges. These soils formed in a thin mantle of silty or loamy material and in the underlying clayey glacial till. Slopes range from 2 to 30 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. Manawa series soils consists of somewhat poorly drained, nearly level and gently sloping soils in waterways and shallow depressions on glacial till plains. Permeability of Manawa type soils is slow and slopes range from 0 to 3 percent. The Kewaunee-Kolberg Manawa soils associations are predominant throughout the western portion of the town , as well in the north-central and east-central portions of the town.

Emmet-Solona-Angelica

Emmet series soils consists of well drained and moderately well drained, nearly level to very steep soils on glacial till plains and ridges. Permeability is moderate and slopes range from 2 to 6 percent. Solona series soils consists of somewhat poorly drained, nearly level soils in depressions and drainageways on glacial till plains. Solona soils are moderately permeable with slopes ranging from 0 to 3 percent. Angelica series soils are poorly drained and nearly level occurring in broad drainageways and depressions. Permeability of Angelica series soils is moderate to moderately slow and slopes range from 3 to 6 percent. The Emmet-Solona-Angelica soils series is abundant along the eastern and central portions of the town.

Carbondale-Cathro

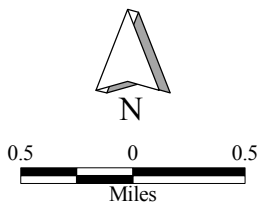
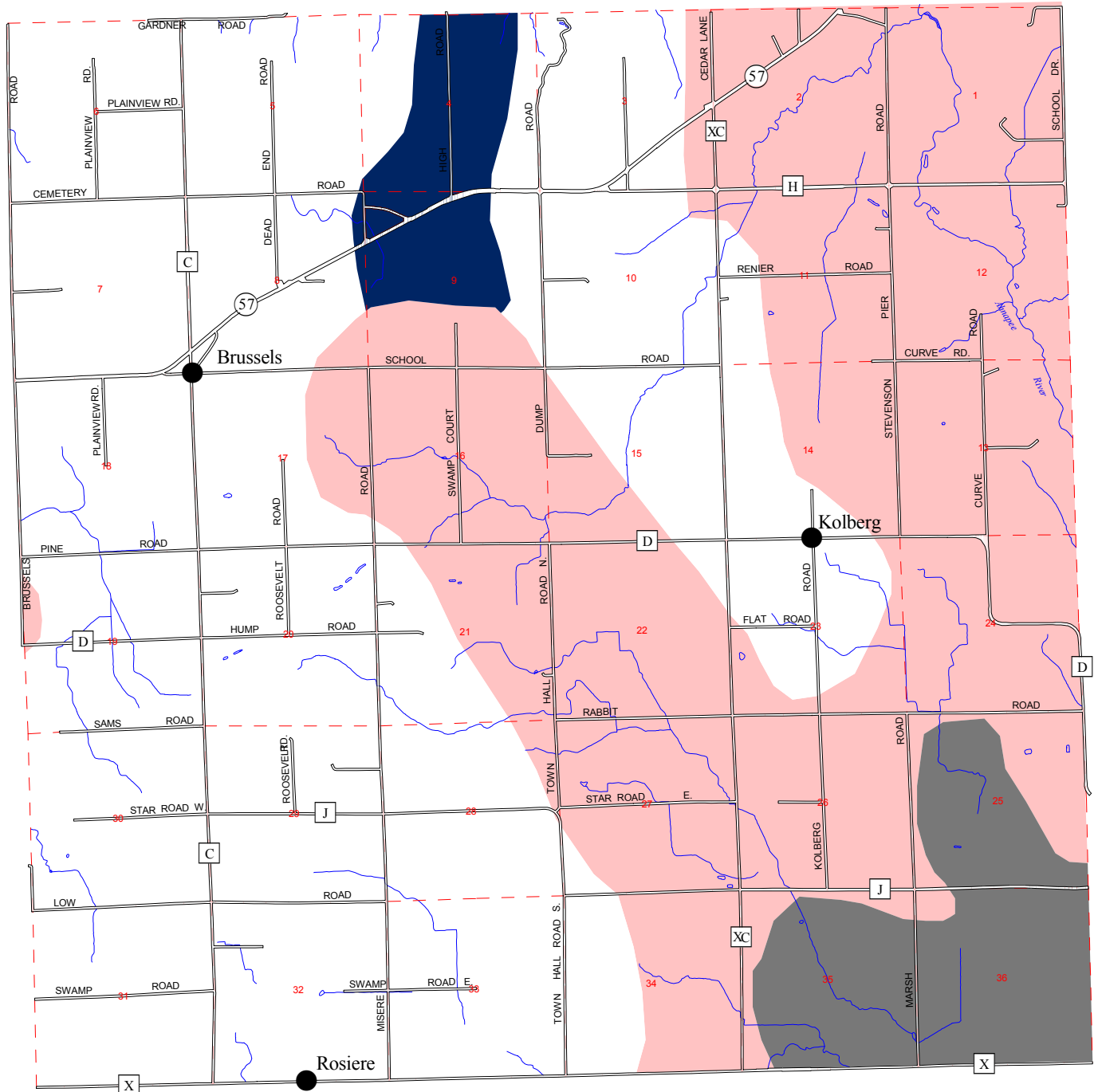
The Carbondale Series consists of deep, very poorly drained soils in shallow glacial lake basins and depressions in stream valleys. Carbondale soils formed in organic material derived from decayed water tolerant grasses, shrubs, and reeds. The Carbondale series consists of very deep, very poorly drained 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 and poor fertility. Slopes range from 0 to 2 percent. Cathro series also consist of very poorly drained organic soils that are moderately deep to loamy. These soils formed in shallow glacial lake basins and depressions. Like Carbondale soils, Cathro series soils also have moderately rapid permeability, and 0 to 2 percent slopes. The Cabondale-Cathro series soils in the town of Brussels are abundant in the southeastern portion of the town.

General Soil Associations

Town of Brussels

Door County, Wisconsin

Map 2.5



- Carbondale-Cathro
- Emmet-Solona-Angelica
- Kewaunee-Kolberg-Manawa
- Summerville-Longrie-Omena

Source: NRCS, 1978;
Bay-Lake Regional
Planning Commission, 2002.

Summerville-Longrie-Omena

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 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 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 Omena series consists of well drained, gently sloping to moderately steep soil on glacial till plains and moraine ridges. Permeability of Omena series soils is moderate and slopes range between 6 and 12 percent. The Summerville-Longrie-Omena soils associations occur in a narrow band adjacent to either side of High Road from the northern portion of the town to an area just south of existing STH 57.

Soils and On-Site Sewage Disposal Systems

On-site sewage disposal systems consist of 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. 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 scattered throughout the planning area, while soils with severe limitations are encountered extensively within the planning area (Map 2.6).

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.

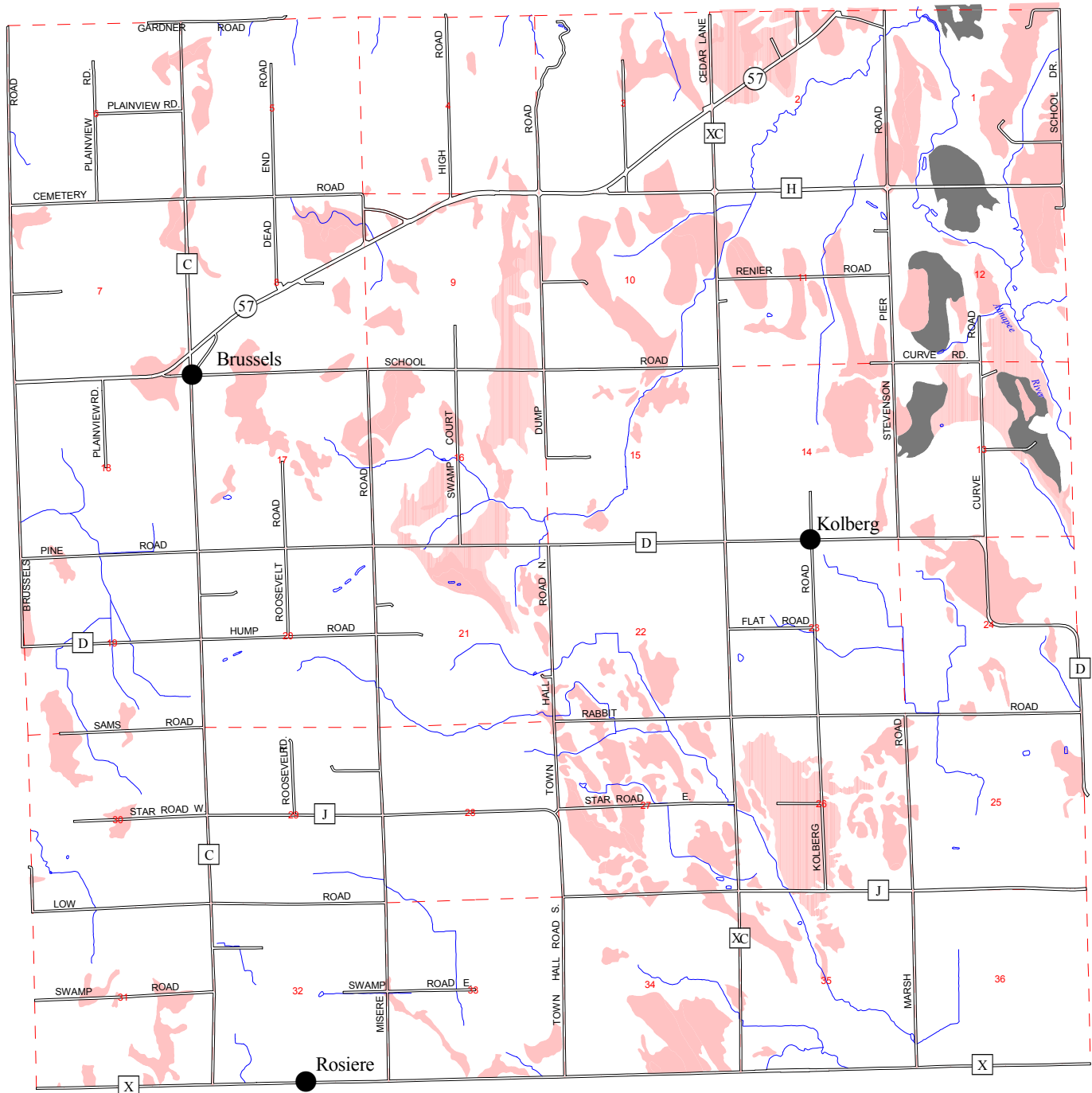
Bedrock - Large stones or bedrock near the soil surface may hinder excavation and considerably increase the cost of construction. In addition, conventional on-site septic systems cannot function properly, which may result in wastewater passing through the cracked bedrock and contaminating the groundwater.

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.

Soil Limitation for Dwellings with Septic Systems

Map 2.6

Town of Brussels Door County, Wisconsin



0.5 0 0.5
Miles

Severe
Moderate
Slight

Source: NRCS, 1978;
Bay-Lake Regional
Planning Commission, 2002.

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 become 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.

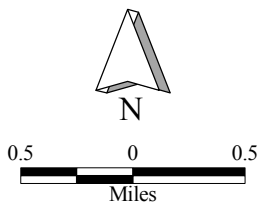
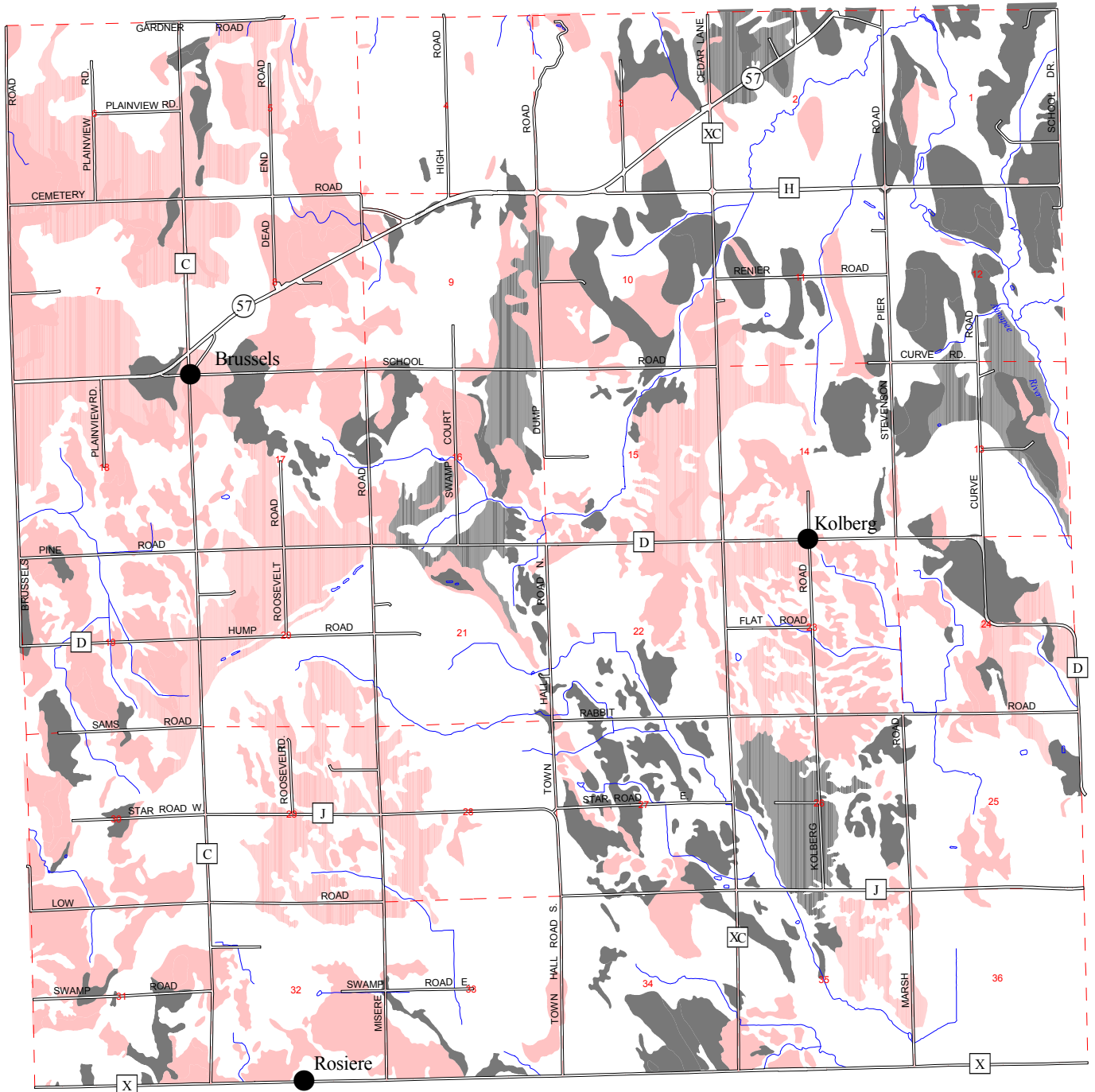
Basements

Fifty-eight percent of the town has 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 town, the main limitation for dwellings with basements is depth to bedrock or wetness. Map 2.7 shows areas where soils limitations for the construction of dwellings with basement are considered severe.

Soil Limitations for Dwellings with Basements

Map 2.7

Town of Brussels Door County, Wisconsin



Severe
Moderate
Slight

Source: NRCS, 1978;
Bay-Lake Regional
Planning Commission, 2002.

Prime Agricultural Lands

More than 77 percent of the town's land is classified as prime agriculture land with minimal modifications. Two classes of prime farmland are identified; those areas where all land is prime farmland (58.7 percent) and those areas that are considered prime farmland only where drained (18.7 percent). The rest of the town, is classified as not prime farmland. Map 2.8 shows these areas of prime farmland.

TOPOGRAPHY

The predominate topographic feature in the town is characterized flat to gently rolling land surface occasionally marked by small depressions.

Areas of steep slope are defined as soils containing a slope greater than 12 percent according to the US Department of Agriculture, Soil Conservation Service soil surveys. As illustrated on Map 2.9, the town of Brussels is characterized by generally flat to rolling topography with only 270 acres in the town having slopes of 12 percent or more. The areas in the town that are severe are scattered throughout the town. The rest of the town is rated either moderate (27.7 percent) or slight (14.2 percent). These areas are mostly located in the west and east-central part of the town.

WATER RESOURCES

Watersheds and Sub-Watersheds

The town of Brussels lies within two predominate watersheds. The Ahnapee Watershed covers the eastern two-thirds of the town. The Red River and Little Sturgeon Bay watershed covers the western one-third of the town. A small area in the southwest corner of the town drains southward through the Kewaunee River watershed. Map 2.10 shows the watersheds in the town.

Surface Waters

Lakes

There are no natural - named lakes located within the town of Brussels.

Rivers and Streams

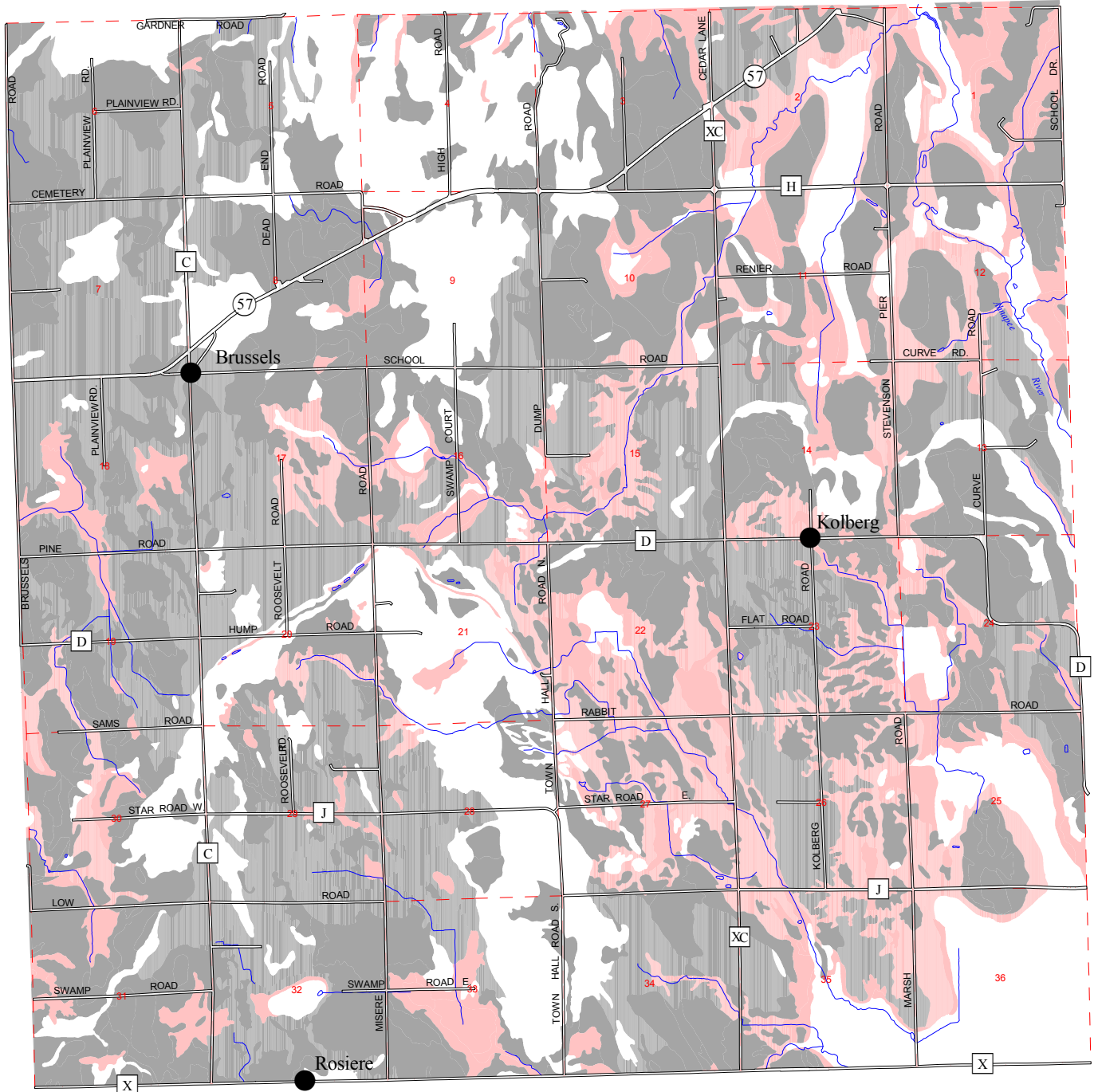
Several small rivers and streams provide drainage in the town. The direction of precipitation runoff is primarily southeasterly towards Lake Michigan and westerly to Green Bay. The named surface water features in the town of Brussels are the Ahnapee River and Silver Creek. (Map 2.11)

Prime Farmland

Town of Brussels

Door County, Wisconsin

Map 2.8



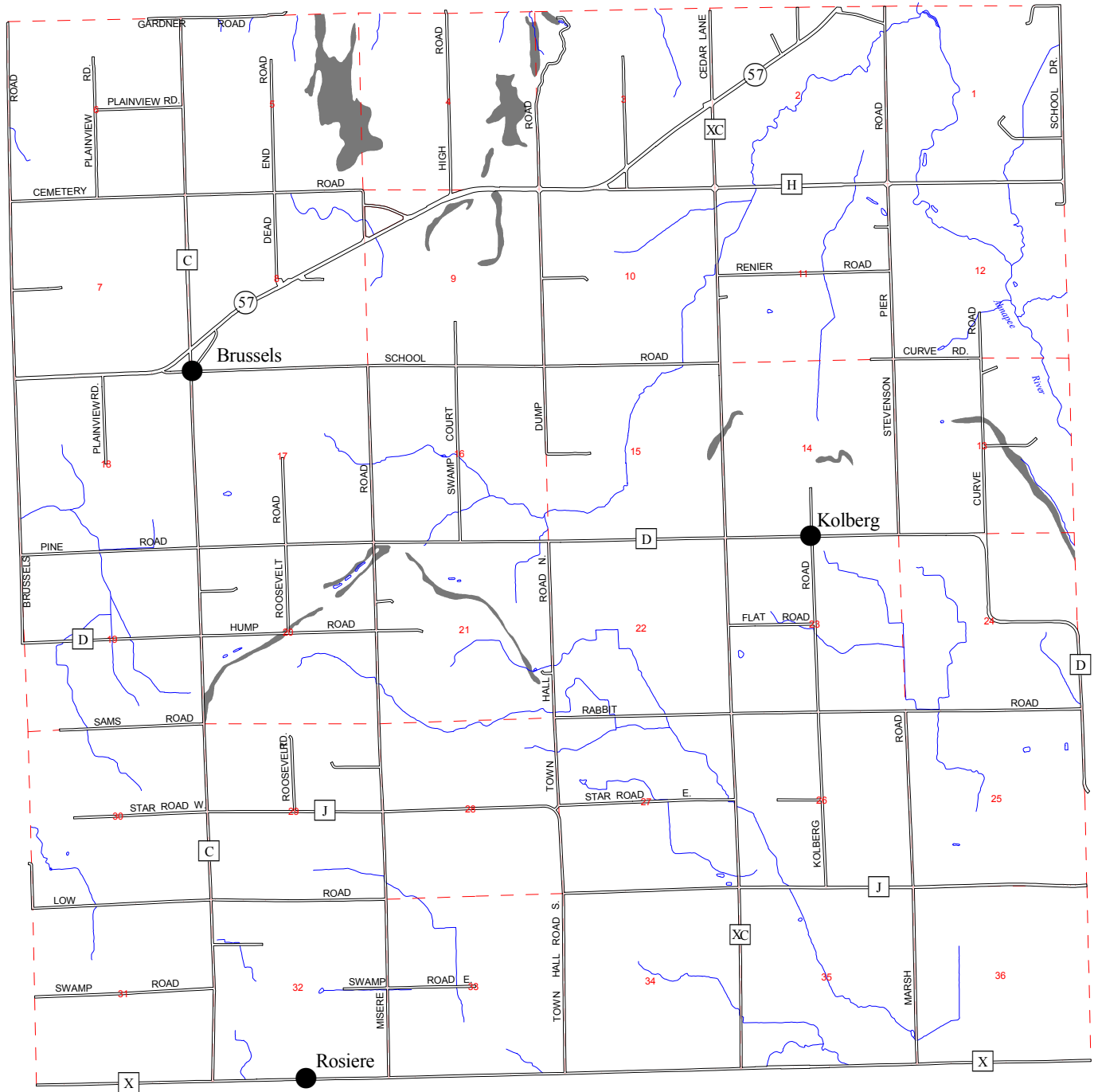
0.5 0 0.5
Miles

All Areas Prime Farmlands
 Prime Farmland Where Drained
 Not Prime Farmland


Source: NRCS, 1978;
Bay-Lake Regional
Planning Commission, 2002.

Steep Slope Town of Brussels Door County, Wisconsin

Map 2.9



0.5 0 0.5
Miles

 Slope Greater than
12 Percent

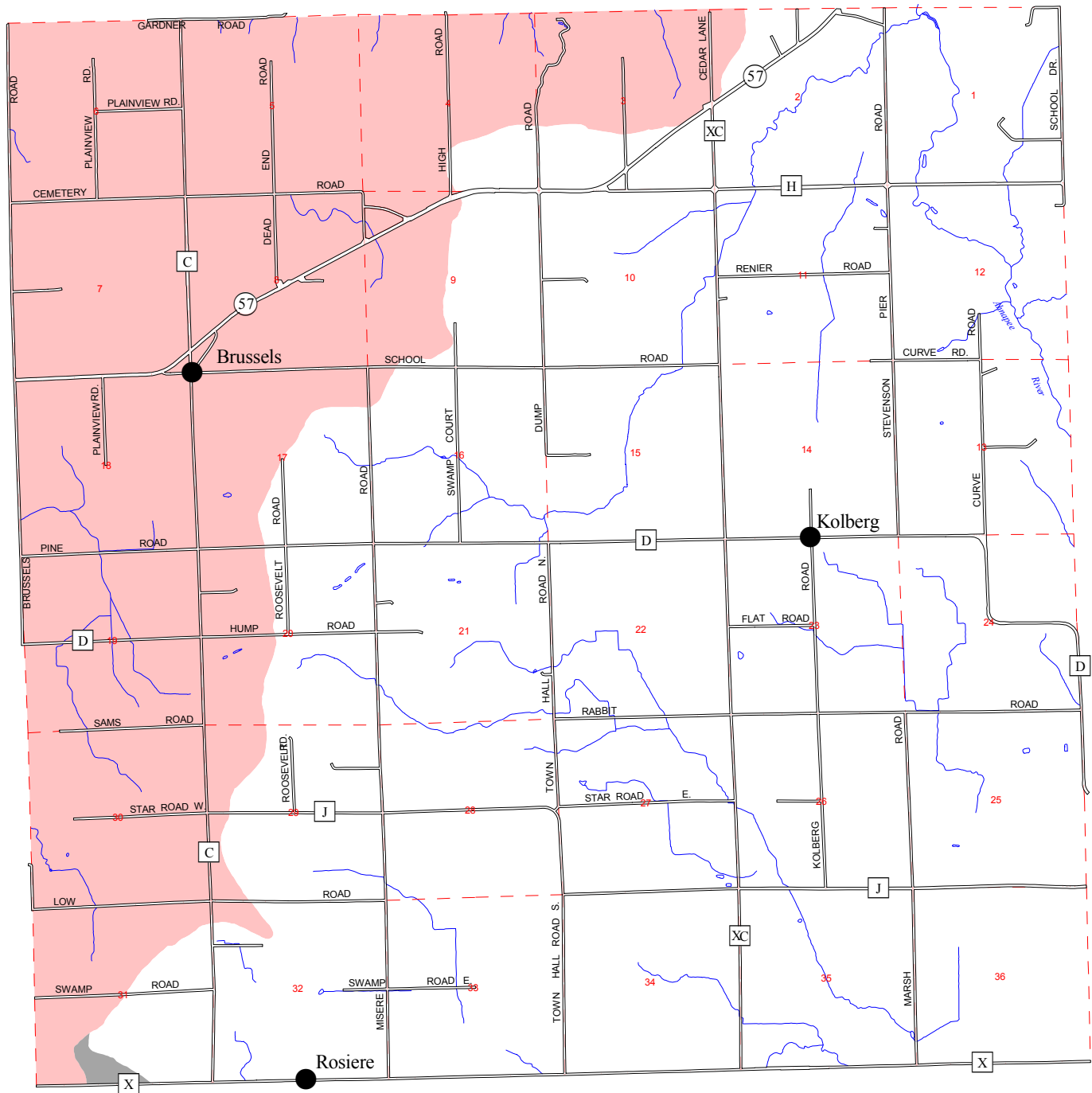
Source: NRCS, 1978;
Bay-Lake Regional
Planning Commission, 2002.

Watersheds

Town of Brussels

Door County, Wisconsin

Map 2.10



0.5 0 0.5
Miles

Ahnapee River
 Red River and Little Sturgeon Bay
 Kewaunee River

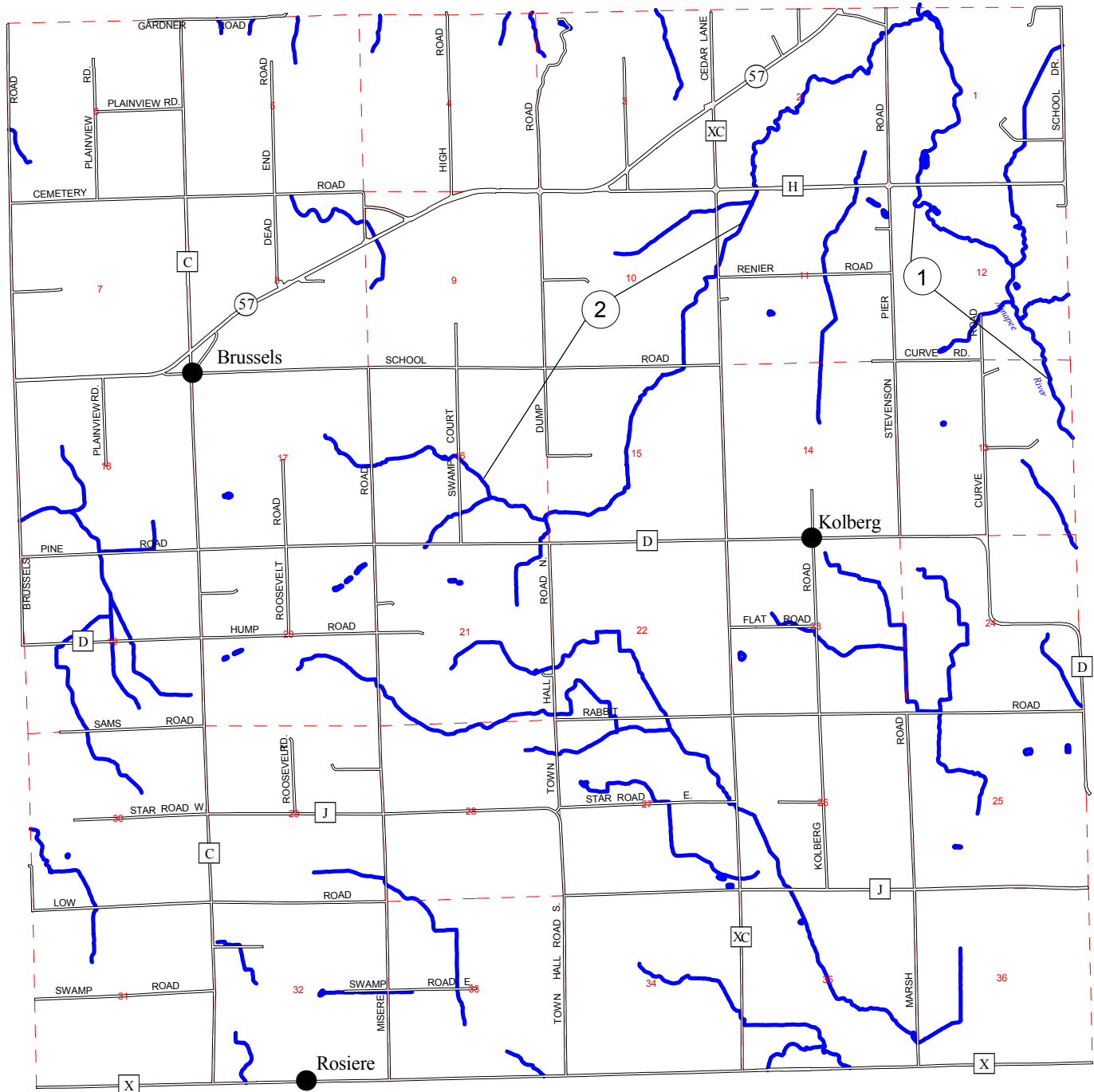
Source: WDNR, 1999;
Bay-Lake Regional
Planning Commission, 2002.

Surface Water Features

Town of Brussels

Door County, Wisconsin

Map 2.11



1 - Ahnapee River
2 - Silver Creek

Source: WDNR, 1965;
Bay-Lake Regional
Planning Commission, 2002.

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 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.

Floodplains

Floodplains are often viewed as valuable recreational and environmental resources. These areas provide for storm water retention, groundwater recharge, and habitat for various kinds of wildlife unique to the water.

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.

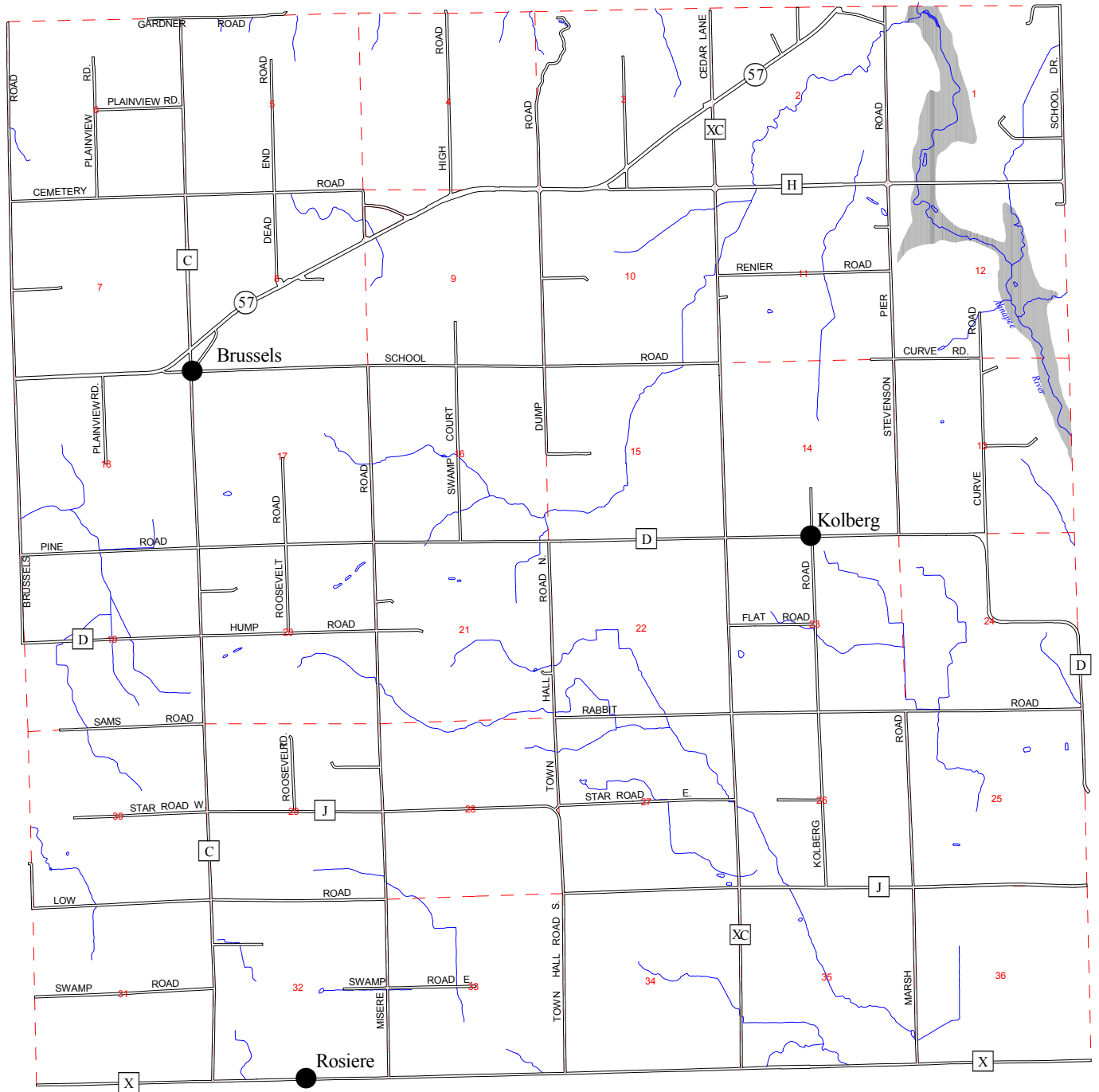
Within the town of Brussels the only area of 100-Year Floodplain (consisting of 310 acres) is associated with the Ahnapee River in the far northeastern portion of the town. (Map 2.12).

Floodplain

Town of Brussels

Door County, Wisconsin

Map 2.12



0.5 0 0.5
Miles

 100 - Year Floodplain

Source: FEMA FIRM, 1978;
Bay-Lake Regional
Planning Commission, 2002.

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.

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 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 town of Brussels. Wetlands not in the shoreland zone are protected from development by the federal government (U.S. Army Corps of Engineers) and the WDNR through Section 404 of the Clean Water Act and NR 103, respectively.

Wetlands within the planning boundaries include an extensive area along the southeastern boundary, which is the northwestern extent of the Black Ash Swamp. The major wetland area within the planning area includes an extensive wetland which extends along the Ahnapee River and its tributaries in the northeastern portion of the town.

Within the town, there are approximately 2,800 acres of wetlands. Map 2.13 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 and/or federal definition.

WOODLANDS

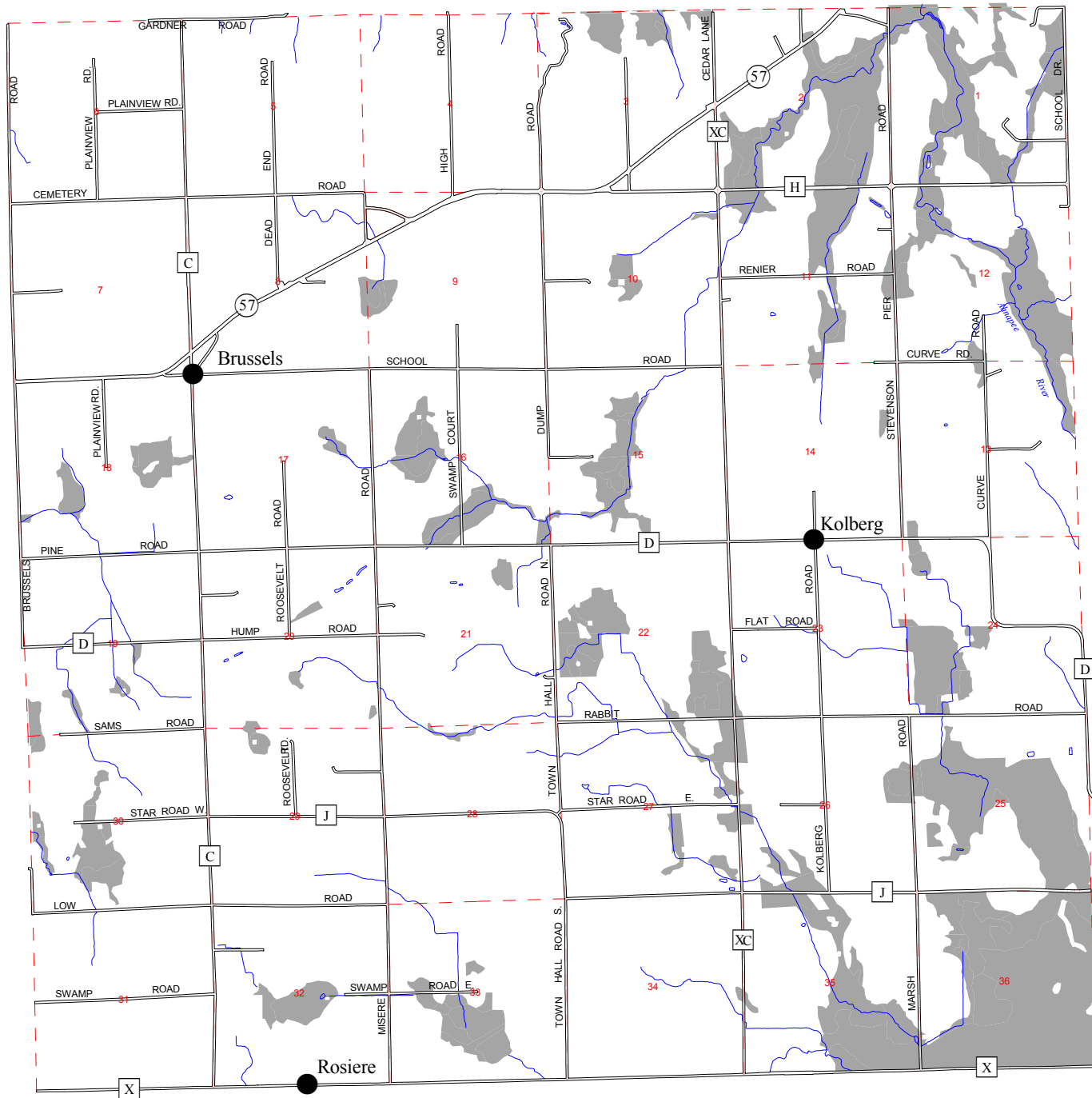
Woodlands in the town are comprised primarily of small isolated stands of sugar maple, yellow birch, and American beech. These woodlands provide an aesthetic and natural purpose, providing habitat to many animals. Woodlands are classified as either upland or lowland woodlands. The difference between the two is that lowland woodlands are located within wetlands. Brussels has approximately 2,162 acres of lowland woodlands and 2,189 acres of upland woodlands for a total of 4,351 acres of woodlands (Map 2.14). The larger stands of woodlands in the town are located on or adjacent to the Brussels Hill and adjacent to the Gardner Swamp.

Wetlands

Town of Brussels

Door County, Wisconsin

Map 2.13



0.5 0 0.5
Miles



WDNR Wetlands

Source: WDNR, 1991;
Bay-Lake Regional
Planning Commission, 2002.

Map 2.14



 Upland Woodlands
 Lowland Woodlands

Source: WDNR, 1991;
Bay-Lake Regional
Planning Commission, 2002.

AIR QUALITY

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. In Door County, 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 town may be subject to additional requirements because Door County is designated as a non-attainment area.

WILDLIFE HABITAT

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:

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. 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 remaining woodlands, fencelines, wetlands, pasture lands and grassy fields are each important to certain species.

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 considered before development occurs to not disturb potential habitats for these flora and fauna. **Appendix C** 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 town of Brussels, Door County has been generated as the community experiences increasing needs for improvements to their recreation areas. The town of Brussels 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. A detailed description of the parks and open spaces in Brussels can be found in Chapter 6 of this plan.

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. There are no designated scientific or natural areas within the town of Brussels.

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 is less than the 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.

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 town there are 3,660 acres of environmental corridors. (Map 2.15).

OTHER LOCAL KEY NATURAL FEATURES

Brussels Hill

The Brussels Hill is the highest named point in Door County with an elevation of 851 feet at its summit (Map 2.15). This hill is located in the north central part of the town of Brussels (north of STH 57, in the High Road area). This geological feature consists of layers that are tilted which seem to be due to karst collapse rather than a tectonic disturbance. The Brussels Hill encompasses an area of approximately 2.5 square miles. There is an elevation difference of more than 100 feet from the hills summit to the base.

Red Hill Woods - Brussels Grassland

A mosaic of hay and small grain farm fields interspersed with open grasslands. This combination of agricultural fields and grasslands supports many grassland birds including upland sandpipers. North of this large open area lies Red Hill, which contains the largest remaining maple-beech forest in this ecological landscape. Together, this area forms a valuable corridor between Gardner and Black Ash Swamp.

Dark Skies

A natural resource that is often overlooked at the planning and policy level is the view of the night sky. The night sky historically has been a source of beauty and value to people and cultures throughout the world. Aside from the aesthetic considerations, cycles of daylight and darkness have ecological consequences. Bright lights on tall buildings and communication towers confuse migratory birds, and deciduous trees near street lights may retain their leaves too late in the year.

Light Pollution

Sky-glow is lighting (yard lights, street lights, etc.) that shine upward or horizontally reflecting off of dust, water and air particles thereby significantly reducing and obstructing the visibility of the night sky.

Obtrusive lighting, often referred to as light pollution, obscures our view of the sky and primarily comes from inefficient and misdirected lighting sources. It is estimated that inefficient and misdirected lighting cost this country alone more than \$1 billion each year. Scientists refer to it as urban sky glow; motorists know it as glare; consumer advocates lobby against it as energy waste; neighbors call it light trespass and, often, a nuisance. Simply defined, it is too much light shining in the wrong direction. It not only fails to accomplish its purpose, it often creates problems where there were none.

Sky glow results from unshielded light shining upward, creating a glow which obscures the night sky and can even disrupt ecological patterns in plants and animals. Under ideal conditions, 2,500 stars and the Milky Way galaxy are visible from horizon to horizon; in a moderately illuminated suburb, because of sky glow only 200 to 300 stars can be seen.

Glare occurs when one can see light directly from the fixture or bulb, dazzling the eye and reducing the effectiveness of the emitted light. In response to glare, the human eye undergoes a process known as transient adaptation: the pupil must rapidly adjust in size to go from extreme light back to darkness. Not only is this transition taxing to the eye, but at times it cannot be accomplished quickly enough to avoid accidents. With our eyes struggling to adapt from high to low light, we are blind to things we would normally see. Glare degrades the quality of the built environment, as increasingly elevated levels of illumination are needed to overcome its impacts.

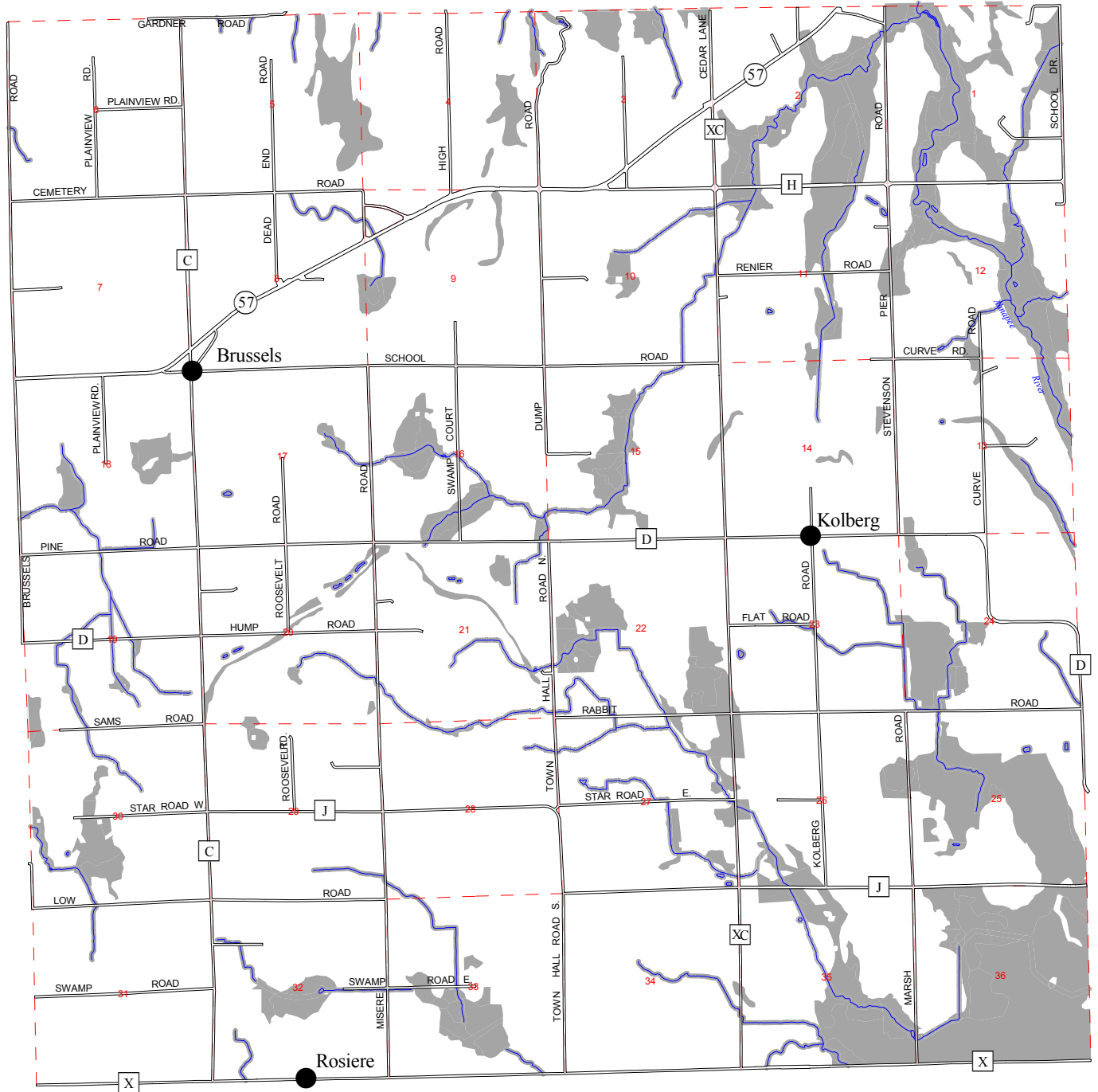
Quality lighting is well shielded, uses the right amount of light, directs the light where it is needed, and uses energy efficient lighting sources. In addition to the direct cost savings, installation of quality lighting would ultimately result in less coal burned (the source of most electrical power in the United States), thereby reducing air pollution and acid rain. The economic benefit of efficient energy use thus complements protection of the dark sky resource. Light trespass occurs when lighting is not confined to the originating property. Spill light glaring across property lines can illuminate adjacent grounds and buildings in an objectionable manner, interfering with the owner's enjoyment of his property, privacy and view of the night sky. The nuisance resulting from light trespass often forces government to be the arbitrator of disputes. "Good neighbor development" includes careful attention to quality lighting, both in rural and urban neighborhoods.

Light pollution is not the inevitable price of progress. There are many remedies, and in fact this kind of pollution is not difficult to reduce. It does require education and commitment: education, because even some lighting professionals are not aware of the problem; and commitment, because there are many lights throughout this community and others which are inefficient and poorly installed.

Environmental Corridors

Map 2.15

Town of Brussels Door County, Wisconsin



0.5 0 0.5
Miles



Environmental Corridors

WDNR Wetlands

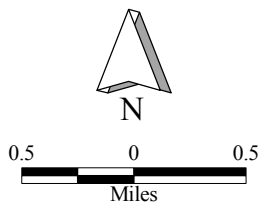
100 - Year Floodplain

Slope 12 Percent or Greater

75 - Foot Water Setback

Source: WDNR, NRCS,
FEMA FIRM; Bay-Lake
Regional Planning
Commission, 2002.

Map 2.16



Source: Bay-Lake Regional Planning Commission, 2002.

HISTORIC AND ARCHEOLOGICAL SITES

There are many buildings of historical importance within the town of Brussels. Most of these buildings are old farmhouses and barns. Others are old commercial buildings and churches. A large portion of these sites are located in the Namur and Brussels area.

There are also numerous archeological sites within the town. These sites are scattered throughout the town. Care should be taken when excavation is done within the town of Brussels, since there is the possibility of disturbing a 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 and archeological sites. These sites were taken from the Wisconsin State Historical Society. The following is a list of sites of historic significance. The Architecture and History Inventory (AHI) is a collection of information on historic buildings, structures, sites, objects, and historic districts throughout the Wisconsin. This Inventory is housed at the State Historical Society of Wisconsin in Madison and is maintained by the Society's Division of Historic Preservation. The AHI is comprised of written text and photographs of each property, which document the property's architecture and history. Most properties become part of the Inventory as a result of a systematic architectural and historical survey. From its beginning in the mid-1970s until 1980, reconnaissance surveys were conducted by summer students. Starting in 1980, intensive surveys were funded by subgrants and conducted by professional historic preservation consultants.

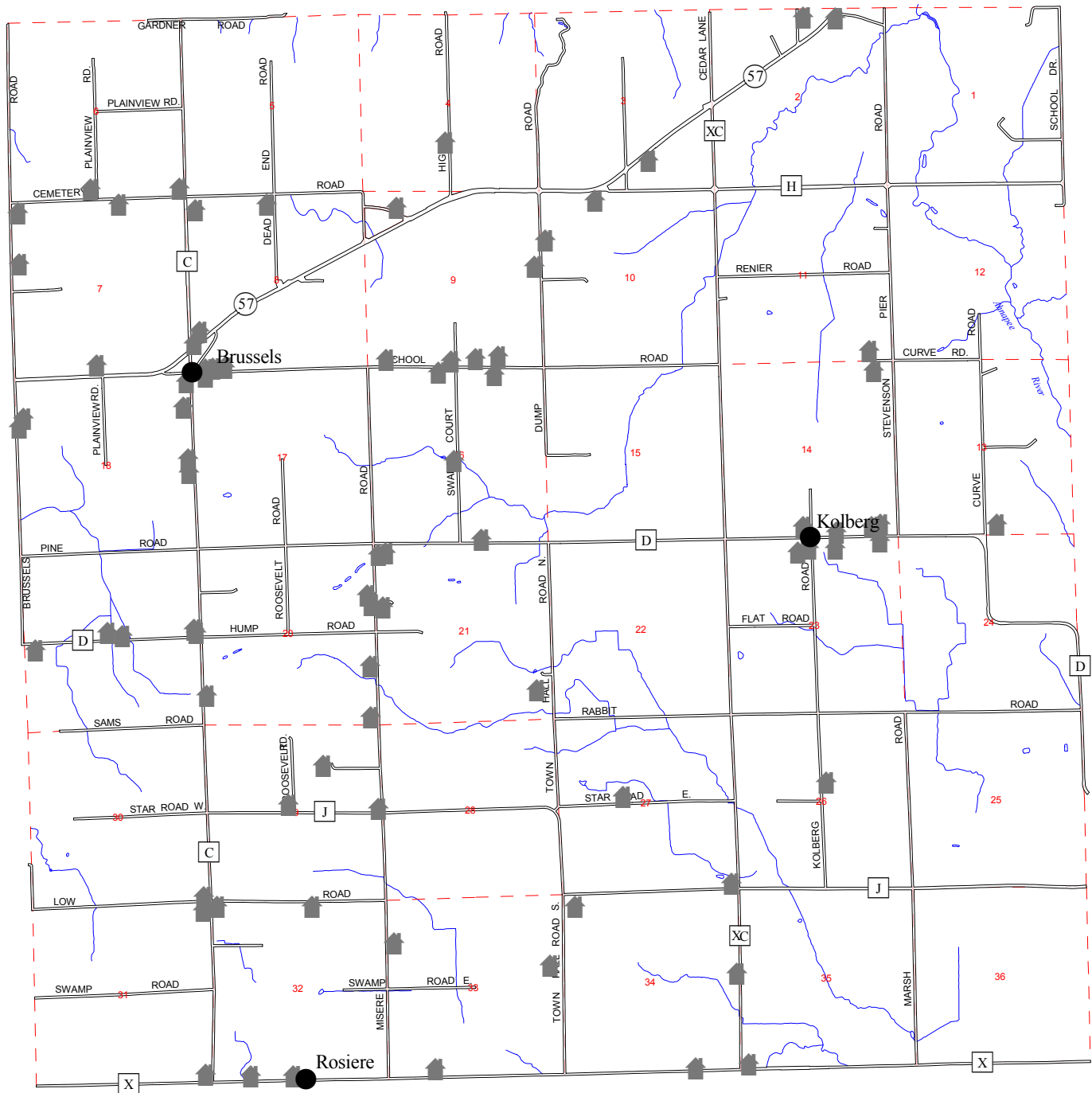
1. Tornado School, 8571 STH 57
2. St. Francis Catholic Church, CTH C and Cemetery Rd.
3. Eloï Munier House, 9910 STH 57
4. Brussels General Merchandise, 9690 School Rd.
5. J Monfils House, 1463 Dump Rd.
6. Henry Meister House, Stevenson Pier Rd. North of Elm Ln.
7. Emanuels Evangelical Kirche, 8612 CTH D
8. J B Stroobants House, 1137 Swamp Court Rd.
9. J B Bouche House, 9670 School Rd.
10. P Mallien House, 1226 Brussels Rd.
11. General Store, 1141 CTH C
12. L Vangindertahlen House, Pine Rd. ¼ mile south of CTH C
13. Joachine J. Flaque House, 1059 CTH C
14. Sugar Mt. Farm Market, 9900 STH 57
15. Craig Umberham House, 8531 CTH D
16. Guth Store, 8652 CTH D
17. E Legrave Farmstead, CTH C and CTH X
18. I Tremble House, Low Rd. and CTH C
19. J B Massart House, 230 Misere Rd.
20. Massarts Farmstead, Summer Kitchen, 230 Misere Rd.
21. Benjamin Baptist Barn, 1640 STH 57
22. Mike Conard, 9760 STH 57
23. T and T Auto Body, 9698 STH 57
24. Brussels High School, 9682 School Rd.
25. Frank Englebert House, 9390 Cemetery Rd.
26. Louis Vangindertahlen House, 1514 Dump Rd.
27. Brussels Meat Market, 1283 CTH C
28. Warehouse, 1141 CTH C

Historical Sites

Town of Brussels

Door County, Wisconsin

Map 2.17



0.5 0 0.5
Miles

 Historical Sites

Note: Historic Site Locations are Approximations

Source: WSHS, 1975;
Bay-Lake Regional
Planning Commission, 2002.

CULTURAL RESOURCES

Metallic and Non Metallic Mining Resources

Metallic mining in Wisconsin has occurred since the time that the state was first settled. Metals mined in the state include copper, lead, iron, and zinc. There are no metallic mining operations located within the town of Brussels.

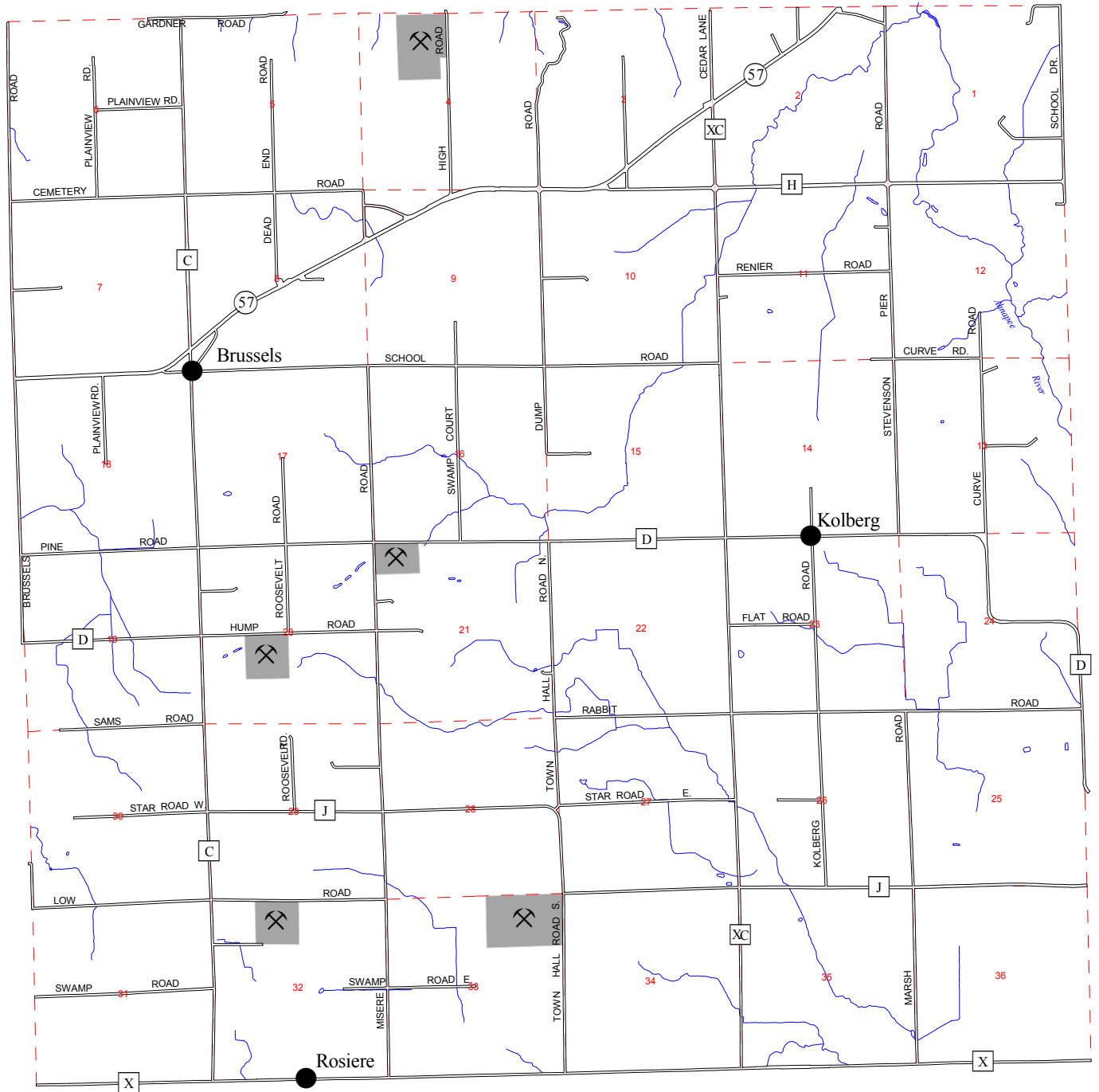
Non-metallic materials extracted include sands, gravel, and limestone which is crushed for gravel. Mining has economic value to multi-regional areas, but also has the ability to potentially harm natural resources. Any new mines need to have a permit granted by the WDNR, which includes a reclamation plan. 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 are currently four active non-metallic mining operations in the town and are shown on Map 2.18.

Non-Metallic Mine Sites

Town of Brussels

Door County, Wisconsin

Map 2.18



0.5 0 0.5
Miles



Non-Metallic Mine Sites

Source: Bay-Lake Regional
Planning Commission, 2002.

Community Design

Community design (Character) 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 town of Brussels have been inventoried. These resources represent the building blocks and language of community design:

Signage

There is a single sign marking the ‘unincorporated Brussels’ community located adjacent to the existing STH 57 south of CTH C. In addition, a single “Door County” sign marks the Door and Kewaunee County line and another marks and identifies the historic district of Namur. Both signs are adjacent to existing STH 57 and are located in the town of Union.

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.

- Brussels Hill

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:

- State Highway 57
- County Highways C, D, H, X, XC and J

Secondary:

- All town roads

Edges

Like pathways, edges are linear. Edges are important organizing elements that represent boundaries that can be either soft or hard, real or perceived.

- Door/Kewaunee County Boundary
- Town borders

District

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.

- Unincorporated Village of Brussels

- Crossroads communities at Kolberg and Rosiere

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.

- BUG Fire Station
- Community Park

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. How people perceive an entrance to a business area or doorway to a town may determine whether they stop or proceed on through the community. These points of interest 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 Brussels should be protected and enhanced. These areas may contain high quality public entry signs and/or public art which is used to formally announce entry to the town. Around the town’s periphery, primary entrances include **STH 57** and **CTH C** entering the town. In order to preserve a sense of place and to help define community character, the town of Brussels may install unique signage on the highways entering the town. It is recommended that the town (at a minimum) maintain any existing entry signs.

The ***Secondary*** entryways into Brussels are more subtle portals enjoyed by town property owners. 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 look of the area.

Chapter 3 - POPULATION AND HOUSING

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 town'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 town's population growth and characteristics. This chapter will identify population and housing trends which may affect the future of Brussels. It should be noted that the following population and housing data is derived both from current available 2000 census count data and previous decade census population and housing counts. As additional 2000 census data is released in the coming years the town should update the data contained herein.

SUMMARY AND IMPLICATIONS

1. The town of Brussels had a population of 1,112 persons in 2000, representing a 6.7 percent increase from 1990.
2. According to Wisconsin Department of Administration (WDOA, 1993), the town's population was projected to increase slightly to 1,119 persons by 2015, which represents an 1.3 percent increase from the actual 2000 census count and also indicates that the WDOA population projections were conservatively low.
3. The largest age grouping in 2000 was between 35 and 44 year olds, which totaled 202 persons and comprised 18.2 percent of the total population, followed by the 45-54 year old group which totaled 171 persons and comprised 15.4 percent of the total population, and then by the 25-34 year old age group which totaled 141 persons or 12.7 percent of the total population. These three age groups traditionally have the highest earning power.
4. The town's median age in 2000 was 36.3 years which indicates a slightly younger population than that of the surrounding towns, the county and the region. The town's median age is just slightly higher than that of the state's which was 36.0 years. The median age of the town's population has increased significantly from 1970 when it was 29.7 years to 2000 when it was recorded as 36.3 years. An implication of a population that is aging is that the community may need to provide additional specialized services to accommodate these age groups in the future.

The town's population has decreased slightly over the course of the last four decades. Projections developed after the 1990 Census indicate that the town's population was likely to increase through 2015 though at a slower rate than has been seen from the 2000 Census. The town has experienced (over the past three decades) an age structure shift towards the older age groups. This may lead the town 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 rural town like Brussels. 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 town.

5. The town of Brussels and the surrounding communities in Door County have seen a steady increase in the total number of housing units from 1970 to 2000. The town of Brussels has had a 36.7 percent increase in housing units since 1970, but has had only a slight housing unit increase of 7.5 percent since 1990.
6. The household size for the town is expected to decline slightly over the next 20 years from 2.43 in 2000 to 2.24 persons per household in 2020.
7. Based on projections utilizing increases in population and a decrease in household size the town can expect an increase in housing units that will range between 55 and 99 units by 2020.

Throughout the planning period there will be a demand for additional housing units within the town. An increased population, a demand for larger lot sizes and a trend of smaller household sizes will increase the demand for residential developments. The town will need to adequately identify areas to accommodate this change in land use while ensuring adequate services are provided. Although additional housing development will increase the town's tax base, 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. The town will need to monitor costs of future housing on the towns' budget to control future property taxes.

8. In 2000, 353 structures or 81.6 percent of the total housing units in the town were single family units, while 12 structures or 2.8 percent were two family units and 61 structures or 14.1 percent were classified as manufactured homes.
9. In 2000, 43 percent (186 structures) of the total 433 housing units in the town were more than 60 years old having been constructed prior to 1940.
10. In 2000, 20 percent of renters were living in "non-affordable" housing, due to their paying 30 percent or more of their incomes towards rent.
11. In 2000, nearly 14 percent of home owners were paying 30 percent or more of their incomes towards housing payments and thus were considered to be living in non-affordable housing
12. According to the U.S. Bureau of Census (2000Census) the median income for the town in 1999 was \$42,212.

Approximately 82 percent of the housing within the town of Brussels is classified as residential - single family, and 43 percent of those structures are more than 60 years old. In 2000, 13.5 percent of the home owners and 20 percent of renters were paying more than 30 percent of their incomes for housing and were thus 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 town will need to support assistance efforts as well as look into actions that promote a mix of housing choices.

This plan's future land use is projecting a range in the number of new housing units to be between 55 and 99 new units over the twenty year planning period. Enough vacant land does

exist (allowing for a mix in densities and services provided) within the town to accommodate these growth forecasts.

The town 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 plan's housing element shall be integrated into and made consistent with the other nine elements of the comprehensive plan. For example, the implementation of the housing goals and policies shall be consistent with implementation activities identified in the other plan elements such as land use, economic development, transportation, and community facilities.

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

Goal:

To provide for a variety of quality housing opportunities for all segments of the town's current and future population as well as minimizing potential conflicts and incompatible land uses.

Objective 1:

To develop and enforce policies and programs that provide a range of housing choices to meet the needs of all income levels and all age groups, and persons with special needs.

Policies:

1. Support mixed use development within the town which can provide additional housing choices.
2. Ensure that the zoning ordinance and subdivision ordinance continue to allow for a range in densities and lot sizes.
3. Encourage the infilling of existing residential developments.
4. Seek the donation of lands for affordable housing opportunities.
5. Support housing developments for all persons including low and moderate income, elderly, and residents with special needs.
6. Support adaptive reuse of existing developments such as business to residential.
7. Encourage rehabilitation and preservation of the existing housing stock in the town.

Programs:

1. Work with the state, county and BLRPC to monitor the town's population characteristics to stay informed of changing demographics/characteristics within the town.
2. Work with federal, state, and county agencies to assist town residents in achieving home loans.

3. Regulate the construction of new homes with adequate building codes and ordinances.
4. When qualified, the town should apply for grants and become involved in programs to address the town's housing needs.
5. Assist residents by providing educational materials and information on financial programs and on home repairs.
6. Provide affordable housing information and assistance for first-time home buyers.

Objective 2:

Encourage new housing development in areas that will preserve the town's rural nature and can be done in a cost effective way.

Policies:

1. Encourage single family development throughout the town, with higher densities adjacent to the unincorporated village of Brussels to minimize conflicts.
2. The construction of new homes should be regulated by adequate building codes and ordinances.
3. Identify areas in which new development should be restricted or maintained as open space.
4. Consider new development ideas that encourage a responsible use of land and the retention of natural or unique areas.
5. Support conservation by design developments as well as cluster type developments as an alternative to conventional zoning methods.

Programs:

1. Encourage new development techniques to be permitted (i.e. conservation subdivision designs within the town) and evaluate their effectiveness at least once every year to help residents in meeting their housing needs.
2. Assist in reviewing existing zoning and subdivision ordinances to identify antiquated standards that limit certain housing choices and to measure impacts that current ordinances have on the town's housing stock and future choices. The town should also work on any future controls affording more flexibility in regulations allowing for a greater variety of housing choices to include considering Conservation Subdivisions and clustering.

POPULATION CHARACTERISTICS

Historical Population Levels

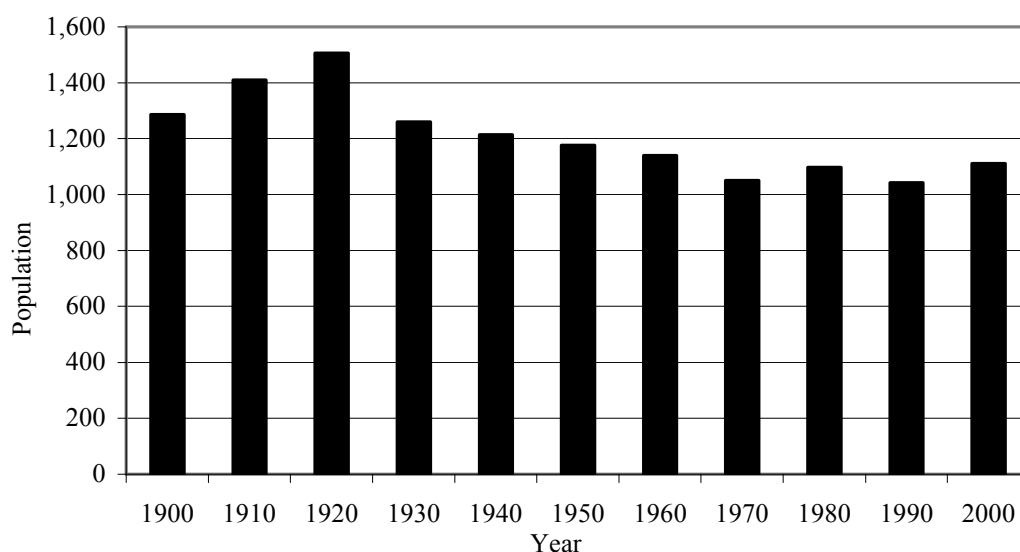
Table 3.1 displays the historic population trends for the towns of Brussels, Union and Forestville, and Door County. At the beginning of the century (1900) the town of Brussels had a population of 1,287 persons, in 2000 the population was 1,112. In 1990, the population reached its lowest point of 1,042 persons, but has risen slightly since then. Figure 3.1 displays the increases and decreases that the town's of Brussels, Forestville and Union, and Door County population has experienced since 1900.

Table 3.1: Historic Population Levels, 1900-2000, Town of Brussels & Selected Areas

Year	Town of Brussels		Town of Forestville		Town of Union		Door County	
	No.	Percent Change	No.	Percent Change	No.	Percent Change	No.	Percent Change
1900	1,287		1,364		639		17,583	
1910	1,410	9.6%	1,423	4.3%	641	NA	18,711	6.4%
1920	1,505	6.7%	1,501	5.5%	691	NA	19,073	1.9%
1930	1,260	-16.3%	1,327	-11.6%	698	1.0%	18,182	-4.7%
1940	1,215	-3.6%	1,308	-1.4%	695	-0.4%	19,095	5.0%
1950	1,177	-3.1%	1,301	-0.5%	598	-14.0%	20,870	9.3%
1960	1,139	-3.2%	1,256	-3.5%	586	-2.0%	20,685	-0.9%
1970	1,050	-7.8%	902	-28.2%	620	5.8%	20,106	-2.8%
1980	1,097	4.5%	1,035	14.7%	755	21.8%	25,029	24.5%
1990	1,042	-5.0%	999	-3.5%	721	-4.5%	25,690	2.6%
2000	1,112	6.7%	1,086	8.7%	880	22.1%	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, 2002.

Figure 3.1: Historic Population Levels, 1900-2000, Town of Brussels



Source: General Population Characteristics 1840-1970, Bay-Lake Regional Planning, December 1975; 1980 and 1990 U.S. Census; and Bay-Lake Regional Planning Commission, 2002.

Population Trends and Forecasts

The towns of Brussels, Forestville and Union experienced slight populations declines between 1980 and 1990, (Table 3.2) but have been increasing in population since 1990. Between 1990 and 2000, the town of Brussels had a population increase that was slightly below that of the county, the region and the state. Conversely the town of Union experienced a population increase that was more than twice that of the county. For the period 1990 to 2000, Brussels experienced a growth of 6.7 percent, Forestville's population increased by 8.7 percent, and the town of Union grew by 22.1 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 town of Brussels is slightly under its projected year 2015 population.

Table 3.2: Population Trends, 1970-2015, Town of Brussels and Selected Areas

Year	Geographic Location					
	Town of Brussels	Town of Forestville	Town of Union	Door County	Bay-Lake Region	State of Wisconsin
Actual Population						
1970	1,050	902	620	20,106	440,926	4,417,731
1980	1,097	1,035	755	25,029	476,134	4,705,767
1990	1,042	999	721	25,690	498,824	4,891,769
2000	1,112	1,086	880	27,961	554,565	5,363,675
Population Projections						
2005	1,119	1,033	709	26,967	539,948	5,409,536
2010	1,127	1,033	702	27,101	546,261	5,512,313
2015	1,127	1,025	689	27,070	550,833	5,603,528
Number Change						
1970-1980	47	133	135	4,923	35,208	288,036
1980-1990	-55	-36	-34	661	22,690	186,002
1990-2000	70	87	159	2,271	55,741	471,906
2000-2015	15	-61	-191	-891	-3,732	239,853
Percent Change						
1970-1980	4.5	14.7	21.8	24.5	8.0	6.5
1980-1990	-5.0	-3.5	-4.5	2.6	4.8	4.0
1990-2000	6.7	8.7	22.1	8.8	11.2	9.6
2000-2015	1.3	-5.6	-21.7	-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, 2002.

Year-Round Population

The population of the town of Brussels consists almost entirely of permanent year-round residents, differentiating it from the other towns and communities in Door County which have significant numbers of seasonal residents. In 2000, approximately 98.5 percent or 1,095 of the town's total population of 1,112 are considered to be permanent and year-round residents.

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 town of Brussels had 6 seasonal housing units. Thus creating an estimated seasonal population of 17 persons for Brussels.

Table 3.3: Estimated Seasonal Population, 2000, Town of Brussels & Selected Areas

	Geographic Location			
	Town of Brussels	Town of Forestville	Town of Union	Door County
Population	1,112	1,086	880	27,961
Persons Per Household	2.76	2.81	2.63	2.33
Total Housing Units	428	432	512	19,587
Total Seasonal Housing Units*	6	21	159	6,970
Percent of Housing Units Seasonal	1.4	4.9	31.1	35.6
Estimated Seasonal Population**	17	59	418	16,240
Percent Population Seasonal	1.5	5.4	47.5	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, 2002.

Revised Population Projections

An area's future population provides an important basis for planning and public policy making. Reasonably accurate population projections are essential toward an assessment of 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 20-Year planning period, the Commission has prepared alternative population projections to determine an approximate growth rate for the town of Brussels.

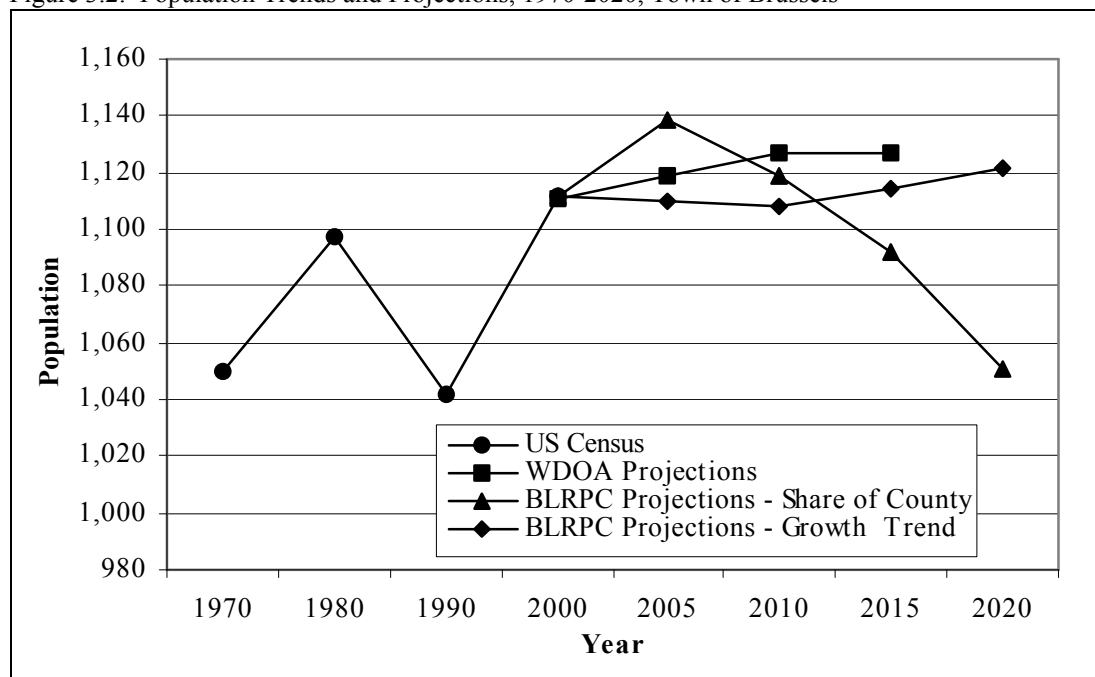
Projections were found by using a ratio methodology, termed share-of-the-county, to distribute county projections to the town level. The limitations of population projections should be recognized. Population projections are not predictions, rather they extend past growth trends into the future and their 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 the town of Brussels will be 1,139 persons. The projected 2010 population is 1,119 persons, the projected year 2015 population is 1,092, and the 2020 projected population is 1,051 persons. The projected 2020 population is a 5.5 percent decrease from the actual 2000 population. It should be noted that these projections are based on past trends in which the population was declining. 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 1,110 persons, a projected year 2010 population of 1,108 persons, a estimated 2015 population of 1,114, and a projected year 2020 population of 1,121. According to this "High Growth" projection, the town of Brussels' 2000 population will increase by 0.8 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.

Figure 3.2: Population Trends and Projections, 1970-2020, Town of Brussels



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 town of Brussels (see Table 3.4). The trends indicated by the age and sex distribution for 1980, 1990, and 2000 reflect the aging of the population previously discussed. In 1980 10 percent of the population (total of male and female) were in the 35-44 year age bracket, in 1990 15.1 percent were in the 35-44 year age bracket and in 2000, 18.2 percent of the population was between the ages of 35 and 44 years old. The difference between the distribution of males and females in the population has not been as significant for the three decades cited. In 1980, 51.9 percent of the population was male and 48.1 percent were female. In 2000, the total male population had declined slightly to 50.4 percent, while the total female population had increased to 49.6 percent.

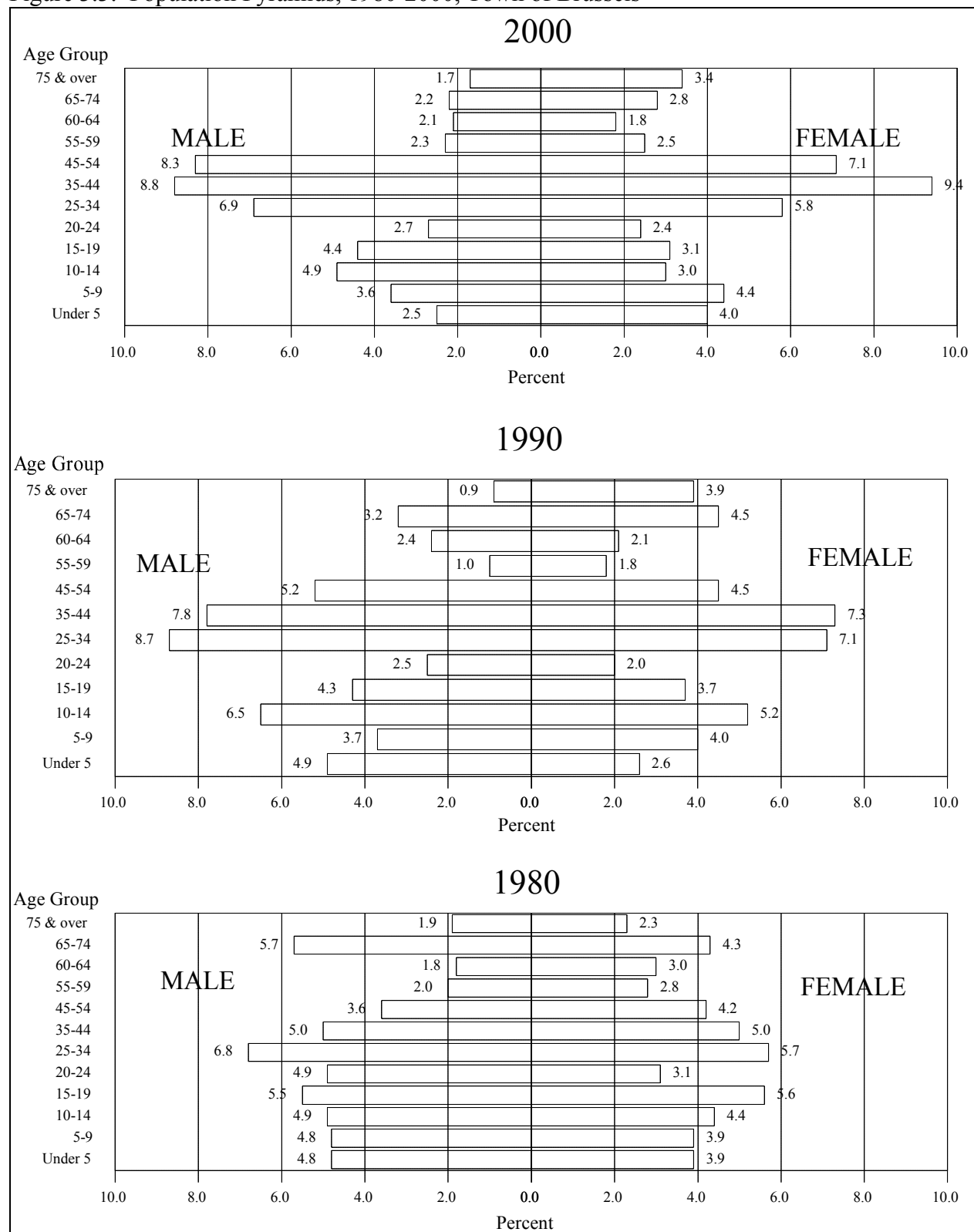
Decade Population Pyramids

Figure 3.3 represents the distribution of the age and sex of the population of Brussels for 1980, 1990 and 2000.. The pyramids show how the population was fairly evenly distributed among the age groups for 1980 but by 1990 and 2000 the middle age groups, approximately age 25 to age 54, had become the majority. *The trend illustrated by Figure 3.3 indicates an aging population group resulting in an increasingly older age-group majority.*

Table 3.4: Male and Female Distribution by Age and Sex, Town of Brussels, 1980-2000

1980								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	21	3.7	1.9	25	4.7	2.3	46	4.2
65-74	62	10.9	5.7	47	8.9	4.3	109	9.9
60-64	20	3.5	1.8	33	6.3	3.0	53	4.8
55-59	22	3.9	2.0	31	5.9	2.8	53	4.8
45-54	40	7.0	3.6	46	8.7	4.2	86	7.8
35-44	55	9.7	5.0	55	10.4	5.0	110	10.0
25-34	75	13.2	6.8	62	11.7	5.7	137	12.5
20-24	54	9.5	4.9	34	6.4	3.1	88	8.0
15-19	60	10.5	5.5	61	11.6	5.6	121	11.0
10-14	54	9.5	4.9	48	9.1	4.4	102	9.3
5-9	53	9.3	4.8	43	8.1	3.9	96	8.8
under 5	53	9.3	4.8	43	8.1	3.9	96	8.8
TOTAL	569	100.0	51.9	528	100.0	48.1	1,097	100.0
1990								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	9	1.7	0.9	41	8.1	3.9	50	4.8
65-74	33	6.2	3.2	47	9.2	4.5	80	7.7
60-64	25	4.7	2.4	22	4.3	2.1	47	4.5
55-59	10	1.9	1.0	19	3.7	1.8	29	2.8
45-54	54	10.2	5.2	47	9.2	4.5	101	9.7
35-44	81	15.2	7.8	76	14.9	7.3	157	15.1
25-34	91	17.1	8.7	74	14.5	7.1	165	15.9
20-24	26	4.9	2.5	21	4.1	2.0	47	4.5
15-19	45	8.5	4.3	39	7.7	3.7	84	8.1
10-14	68	12.8	6.5	54	10.6	5.2	122	11.7
5-9	39	7.3	3.7	42	8.3	4.0	81	7.8
under 5	51	9.6	4.9	27	5.3	2.6	78	7.5
TOTAL	532	100.0	51.1	509	100.0	48.9	1,041	100.0
2000								
Age	Male			Female			Total	
	Count	Percent		Count	Percent		Count	Percent
		Male	Total		Female	Total		
75 & over	19	3.4	1.7	38	6.8	3.4	57	5.1
65-74	25	4.5	2.2	31	5.5	2.8	56	5.0
60-64	23	4.1	2.1	20	3.6	1.8	43	3.9
55-59	26	4.6	2.3	28	5.0	2.5	54	4.9
45-54	92	16.4	8.3	79	14.1	7.1	171	15.4
35-44	98	17.5	8.8	104	18.5	9.4	202	18.2
25-34	77	13.7	6.9	64	11.4	5.8	141	12.7
20-24	30	5.3	2.7	27	4.8	2.4	57	5.1
15-19	49	8.7	4.4	34	6.1	3.1	83	7.5
10-14	54	9.6	4.9	33	5.9	3.0	87	7.8
5-9	40	7.1	3.6	49	8.7	4.4	89	8.0
under 5	28	5.0	2.5	44	7.8	4.0	72	6.5
TOTAL	561	100.0	50.4	551	98.2	49.6	1,112	100.00

Figure 3.3: Population Pyramids, 1980-2000, Town of Brussels



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, SF-1; 1990 Census of Population and Housing, STF 1A, Table P012 and General Profile; 1980 Census of Population and Housing, STF 3A, Table 15; 1970 Census of Population and Housing, Series 100, Table 118; and Bay-Lake Regional Planning Commission, 2002.

School Age, Working Age, and Retirement Groups

Table 3.5 shows the number and percentage of town population by sex and within broad age brackets. In 2000, nearly 73 percent of the town's population were in what is considered the "working and voting age bracket" or 16 years of age or older. More than 14 percent of the town's population were in the "retired" age bracket, 65 years old or older; while more than 25 percent of the population were in the "school age group" or 5 to 17 years old. Some notable features to Brussels's population include lower percentages of retirement age persons and a higher percentage of 12-14 and 15-17 school age persons when compared to the county and the state.

Table 3.5: Population by Age Groups and Sex, 2000, Town of Brussels & Selected Areas

Age Groups	Total	Town of Brussels		Percent	Door County Percent	Wisconsin Percent
		Male	Female			
School Age						
5-11	129	67	62	11.6	8.9	10.1
12-14	47	27	20	4.2	4.2	4.5
15-17	57	32	25	5.1	4.4	4.5
Working and Voting Age						
16+	844	427	417	75.9	80.8	77.5
16-64	731	383	348	65.7	62.1	64.4
18+	807	407	400	72.6	77.9	74.5
18-64	694	363	331	62.4	59.2	61.4
Retirement Age						
65+	113	44	69	10.2	18.7	13.1
Total Population	1,112	561	551			

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, 100 percent of persons in Brussels lived in a household (see Table 3.5). The trend in Brussels showed less than half of householders being present in the home; all the other areas compared revealed the same. Neither Brussels, Forestville or Union has any part of their population residing in group quarters.

Table 3.6: Household Relationship, 2000, Town of Brussels & Selected Areas

Units	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Persons	1,112	100.0	1,086	100.0	880	100.0	27,961	100.0
In Households	1,112	100.0	1,086	100.0	880	100.0	27,580	98.6
Householder	403	36.2	387	58.5	335	25.7	11,828	53.7
Spouse	266	23.9	264	39.9	231	17.8	6,867	31.1
Child	374	33.6	373	56.4	278	21.4	7,329	33.2
Other Relative	24	2.2	34	5.1	12	0.9	545	2.5
Non Relative	45	4.0	28	4.2	24	1.8	1,011	4.6
In Group Quarters	--	--	--	--	--	--	381	1.4
Institutionalized	--	--	--	--	--	--	323	84.8
Other	--	--	--	--	--	--	58	15.2

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

Median Age

For the period 1980 to 2000, the median age for the areas shown has been steadily increasing. However, from 1970 to 1980, the median age dropped slightly for all areas compared, except the town of Union. The town of Union shares this increase in median age since 1970 with the State of Wisconsin. In general, the population of the entire U.S. is expected to continue to shift to an increasing older population. The town of Brussels has experienced somewhat steady increases in median age over the past decades, from 29.7 in 1970 to 36.3 in 2000. However the median age of the population in the town of Brussels is lower than that of the town of Forestville and the town of Union, 37.3 years and 38.2 years respectively, and much lower than the median age of the county population, which in 2000 was 42.9 years. (Table 3.7). The trend toward an older and aging population should be taken into consideration when planning for future needs for the area. The median age of the community's population may significantly affect housing stock needs, housing size, the available labor force, transportation needs, health care, as well as many other areas.

Table 3.7: Median Age, 1970-2000, Town of Brussels & Selected Areas

Geographic Area	1970	1980	1990	2000
Town of Brussels	29.7	28.7	32.9	36.3
Town of Forestville	28.3	27.1	32.6	37.3
Town of Union	27.3	28.1	32.8	38.2
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, 2002.

HOUSING INVENTORY

Total Housing Unit Levels by Decade

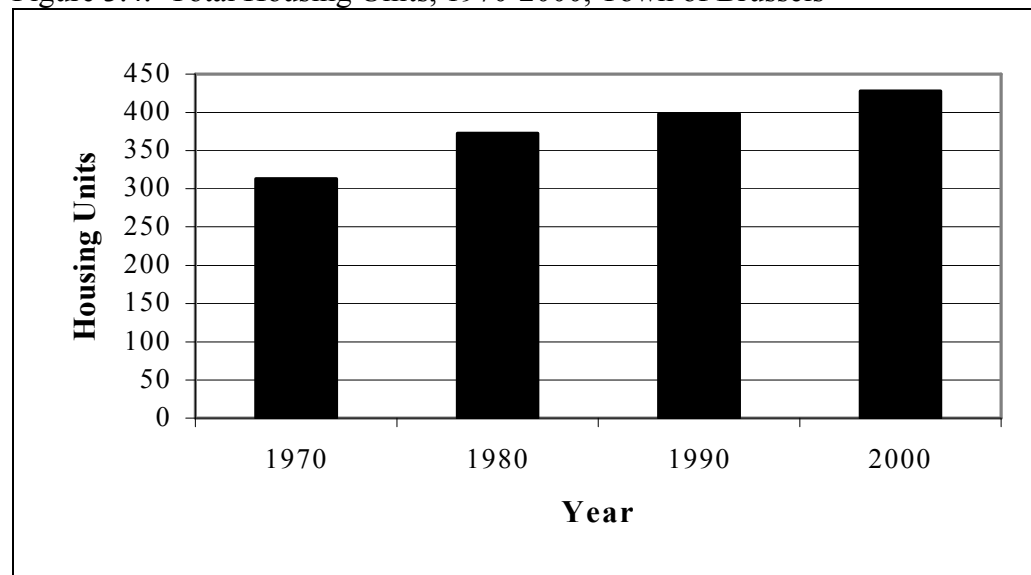
The total number of housing units within the town of Brussels has steadily been increasing since 1970 (Table 3.8 and Figure 3.4) although at a slower rate than that of the county, the region and the state. Between 1970 and 1980, the rate of housing unit growth ranged from 52.5 percent for the town of Union to 19.2 percent for the town of Brussels. For the period 1980 to 1990, housing units in the town of Brussels increased by 6.7 percent and by 7.5 percent between 1990 and 2000. The total number of housing units in the town of Brussels increased by 36.7 percent for the period 1970 to 2000.

Table 3.8: Total Housing Units, 1970-2000, Town of Brussels & Selected Areas

Area	Year				Percent Change			
	1970	1980	1990	2000	1970-80	1980-90	1990-00	1970-00
Town of Brussels	313	373	398	428	19.2	6.7	7.5	36.7
Town of Forestville	279	354	363	432	26.9	2.5	19.0	54.8
Town of Union	377	575	593	512	52.5	3.1	-13.7	35.8
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, STF 1A, Census 2000; and Bay-Lake Regional Planning Commission, 2002.

Figure 3.4: Total Housing Units, 1970-2000, Town of Brussels



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, STF 1A; 2000 Census of Population and Housing; and Bay-Lake Regional Planning Commission, 2002.

Housing Permits Current Decade

The town of Brussels has had a total of 52 housing unit additions and four deletions for the period 1990 to 1999 (Table 3.9). For the same period, the town of Forestville had 71 housing unit additions, and 14 housing unit deletions. The town of Union had 90 additions and 23 deletions from their housing units stock. The number of housing unit additions which occur in Brussels fluctuate from year to year. In 1998, the town reached a high of twelve, with one deletions, for a net gain of eleven.

Table 3.9: Housing Unit Additions and Deletions, 1990-1999, Town of Brussels & Selected Areas

Year	Town of Brussels	Town of Forestville	Town of Union	Door County
1990	4	3	4	257
1991	5	0	8	201
1992	3	10	12	252
1993	0	4	5	253
1994	3	7	14	301
1995	5	4	12	301
1996	6	6	12	360
1997	6	12	4	329
1998	12	10	10	360
1999	8	15	9	486
Total Additions	52	71	90	3,100
Total Deletions, 1990-1999	4	14	23	185
Net Change, 1990-1999	48	57	67	2,915

Source: State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys, July 18, 2000; and Bay-Lake Regional Planning Commission, 2002.

Historic and Projected Household Size

According to the Wisconsin Department of Administration household size projections for Door County, the household size within the county is projected to decrease between 2000 and 2015 from 2.50 to 2.24 (Table 3.10). Household size projections for the town of Brussels that were developed utilizing the county data, (Table 3.11) indicate that the number of persons per household will consistently decrease during the planning period from 2.4 in 2000 to 2.2 in 2020.

Table 3.10: 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.

Table 3.11: Persons Per Household Projections, 1990-2020, Town of Brussels and Door County

Geographic Area	Planning Year					
	1990	2000	2005	2010	2015	2020
Town of Brussels	2.9	2.8	2.7	2.6	2.5	2.4
Door County	2.5	2.4	2.4	2.3	2.2	2.2

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

Projected Housing Units

Three methods, detailed below, were used to formulate estimates for the number of new housing units needed to meet the future residential needs of the community through 2020. All three methods utilized the year 2000 “occupied housing” count of 403 units as a base figure, as was the 2000 count for “total housing” units of 428.

Method One:

Using the census “occupied” housing counts from 1970 to 2000, a “*growth trend*” was created to the year 2020. This created a housing unit need projection which indicated that by 2020 the town of Brussels would have 502 occupied housing units, or an increase of **99** occupied units from the 2000 Census (Figure 3.5).

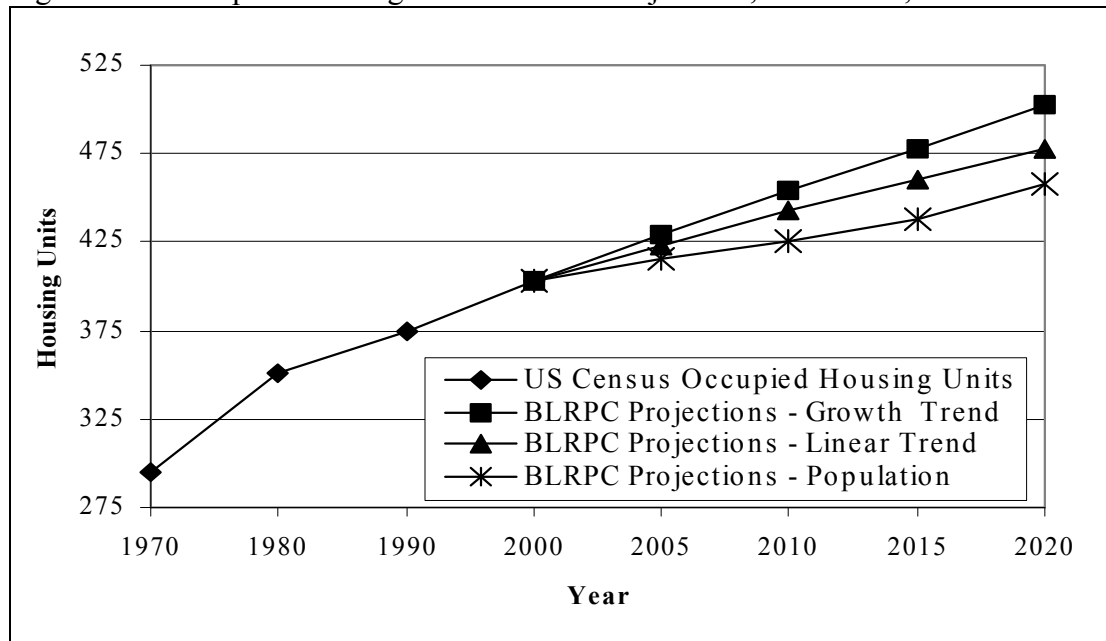
Method Two:

A “*linear trend*” to the year 2020 was also created utilizing the census “occupied” housing counts from 1970 to 2000. This created a housing unit need projection which indicated that by 2020 the town of Brussels would have 478 total occupied housing units, or an increase of **75** occupied housing units.

Method Three:

By using the “High” population projection to 2020, and the projected Persons Per Household number to 2020, one can predict another range in the number of housing units needed by 2020. The High population projection, which shows a gain of 9 persons from 2000 to 2020, would equal an increase in housing demand of **55** (or 458 total) occupied housing units.

Figure 3.5: Occupied Housing Unit Trends & Projections, 1970-2020, Town of Brussels



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, STF 1A; State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys, July 18, 2000; and Bay-Lake Regional Planning Commission, 2001.

Housing Types - Units in Structure

The majority of housing types in the town of Brussels and all other areas were one unit, detached structures which accounted for 348 or 80.4 percent of the total of 433 structures in the town (Table 3.11). The second greatest housing type for all areas were mobile homes at 14.1 percent within the town of Brussels.

Table 3.12: Units in Structure, 2000, Town of Brussels & Selected Area

Units	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1 unit, detached	348	80.4	357	81.9	460	88.0	15,188	77.5
1 unit, attached	5	1.2	7	1.6	3	0.6	737	3.8
2 units	12	2.8	12	2.8	8	1.5	529	2.7
3 or 4 units	5	1.2	2	0.5	2	0.4	619	3.2
5 to 9 units	0	0.0	0	0.0	10	1.9	601	3.1
10 to 19 units	0	0.0	0	0.0	0	0.0	269	1.4
20 or more units	2	0.5	0	0.0	0	0.0	307	1.6
Mobile home	61	14.1	56	12.8	40	7.6	1,320	6.7
Boat, RV, van, etc.	0	0.0	2	0.5	0	0.0	17	0.1
Total	433	100.0	436	100.0	523	100.0	19,587	100.0

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

Housing Occupancy and Tenure

In 2000, there were 25 vacant housing units in the town of Brussels. Of those vacant units, less than a quarter of them were for seasonal, recreational, or occasional use (Table 3.13). There were 403 occupied housing units in Brussels (94.2 percent), of which 347 were owner occupied (81.1 percent). The towns of Forestville and Union had similar trends to Brussels, however they both had a higher percentage of their vacant units as seasonal, recreational, or occasional use. The county as a whole had approximately 39.6 percent of all housing units as being vacant with 35.6 percent for seasonal, recreational, or occasional use; and 60.4 percent as owner occupied.

Table 3.13: Housing Occupancy and Tenure, 2000, Town of Brussels & Selected Areas

Units	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied	403	94.2	387	89.6	335	65.4	11,828	60.4
Owner	347	81.1	341	78.9	290	56.6	9,394	48.0
Renter	56	13.1	46	10.6	45	8.8	2,434	12.4
Vacant	25	5.8	45	10.4	177	34.6	7,759	39.6
Seasonal, Recreational, Occasional Use	6	1.4	21	4.9	159	31.1	6,970	35.6
Other	19	4.4	24	5.6	18	3.5	789	4.0
Total Units	428	100.0	432	100.0	512	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 town of Brussels and the town of Forestville had the greatest number of housing units built prior to 1939 (Table 3.13) at 186 and 207 structures, respectively. 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 3.14: Housing Units by Year Structure Built, 2000, Town of Brussels & Selected Areas

Year Structure Built	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1999 to March 2000	14	3.2	16	3.7	22	4.2	702	3.6
1995 to 1998	30	6.9	26	6.0	21	4.0	1878	9.6
1990 to 1994	17	3.9	27	6.2	61	11.7	1373	7.0
1980 to 1989	58	13.4	37	8.5	48	9.2	3033	15.5
1970 to 1979	51	11.8	85	19.5	56	10.7	3246	16.6
1960 to 1969	21	4.8	8	1.8	39	7.5	1510	7.7
1940 to 1959	56	12.9	30	6.9	128	24.5	3316	16.9
1939 or earlier	186	43.0	207	47.5	148	28.3	4529	23.1
Total	433	100.0	436	100.0	523	100.0	19,587	100.0

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

Substandard Housing

Determining the number of substandard housing units in Brussels 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 186 housing units built prior to 1939, many of which are not substandard. However, in 2000 there were six housing units in Brussels which lacked complete kitchen facilities and complete plumbing facilities. For the purpose of this document these six units should be considered substandard and not be counted as part of the 2000 housing supply.

Housing Values

In 2000, more than half of the housing units in Brussels were valued between \$50,000 and \$99,999. In the town of Forestville and the town of Union approximately 53 and 30 percent of the homes, respectively, were valued between \$50,000 and \$99,999. In Door County, 34.2 percent of the homes were in this price range. (Table 3.15).

Table 3.15: Value of Owner-Occupied Housing Units, 2000, Town of Brussels & Selected Areas

Value	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$50,000	8	4.9	8	4.5	4	2.6	241	3.8
\$50,000 to \$99,999	85	52.1	95	53.1	45	29.2	2181	34.2
\$100,000 to \$149,999	34	20.9	49	27.4	37	24.0	1613	25.3
\$150,000 to \$199,999	26	16.0	17	9.5	28	18.2	850	13.3
\$200,000 to \$299,999	10	6.1	10	5.6	18	11.7	776	12.2
\$300,000 to \$499,999	0	0.0	0	0.0	16	10.4	447	7.0
\$500,000 to \$999,999	0	0.0	0	0.0	6	3.9	238	3.7
\$1,000,000 or more	0	0.0	0	0.0	0	0.0	28	0.4
Total Units	163	100.0	179	100.0	154	100.0	6374	100.0
Median Value	\$94,800		\$92,500		\$124,100		\$120,800	

Source: U.S. Bureau of the Census, 2000 Census, 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 industry 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 performed by the DCEDC covered all of Door County, many of the trends found in the county apply to Brussels as well. Census information and other data

of the trends found in the county apply to Brussels 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 Brussels 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 \$42,212 in Brussels. Therefore, assuming individuals made the median household income, the monthly amount a household can afford for housing is approximately \$1055.

Rent and Income Comparison

According to the 2000 Census, the median gross rent for renter-occupied housing units was \$496. Approximately 9 out of 45 renter-occupied housing units, 20.0 percent, paid 30 percent or more of their income in rent in Brussels.

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 22 out of 163, or 13.5 percent, of owner-occupied housing units paid 30 percent or more for monthly owner costs. This 13.5 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 \$871 for Brussels. For owner-occupied units without a mortgage the median monthly cost was \$236.

ANALYSIS AND DEVELOPMENT OF COMMUNITY POLICIES AND PROGRAMS

The town of Brussels 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.

Housing Programs

A number of federal and state housing programs are available to help local communities promote the development of housing for individuals with lower incomes and certain special needs. Some communities may also want to explore developing their own programs. Below are agencies established to provide assistance to a wide variety of communities.

Note: Not each program is available to the town, nor is each recommended. The programs are described in order to educate residents on specific agencies with their programs and to be an inclusive information source during planning discussions.

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 the town of Brussels. 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 town will 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.

Fast-tracking - Development projects that are desirable because of type or location can be encouraged by exempting them from certain permit requirements.

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 stock. The existing stock 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 stock.

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

Although the early wheat farms and groves of cedars that were harvested for shingles have given way to modern dairy farms and apple and cherry orchards, the town still, after more than 150 years, relies on its land resources and farming for its economic base and its economic stability, as it has since the first Belgian immigrants arrived in Brussels in the late 1850's.

According to the Wisconsin Town Land-Use Databook, the number of dairy farms in the town declined by more than 40 percent between 1989 and 1997. Although agricultural acreage has declined over the years, still in 1997 more than 74 percent of the town land was taxed as farmland.

The average value of the land that was sold and converted out of farmland was \$581 per acre as compared to \$523 per acre for land that was sold and continued to be used for agriculture.

Throughout the planning process, many factors are identified that 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 town of Brussels.

SUMMARY AND IMPLICATIONS

1. Federal, state, county, and local programs exist to promote opportunities within the town.
2. Major employment opportunities for town residents exist within the cities of Green Bay and Sturgeon Bay, as well as the city of Algoma and the village of Luxemburg in Kewaunee County, all of which are less than a 30 minute drive from the town. The 1990 Census indicated that 80.1 percent of town workers chose to remain in Door County for employment.
3. The greatest number of job types that existed for town residents were the farming, forestry and fishing occupations (22.6 percent). The *Manufacturing* industry group employed the most people with 24.6 percent.
4. For the period 1990-1999, the civilian labor force in Door County increased by 2.4 percent, while the number of unemployed persons decreased by 33.4 percent.
5. The manufacturing group occupation is expected to increase, however the rate of increase will slow down.
6. In 1997 the town had a median household income of \$30,353 resulting in a 34.9 percent increase from 1989.

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

- Access to STH 57 (both the existing route and the bypass route to be constructed in 2004 to 2008).
- a well defined community core located at crossroads of STH 57 and CTH C.
- an abundance of area for future growth,

- efficient and safe access to state and county highways,
- having a rural character and an abundance of natural features.

With limited growth, the town can look to expand its tax revenue, plus capitalize on the future growth of the city of Sturgeon Bay, and other nearby communities, to afford greater job opportunities to its town residents. The town is rather typical of many rural communities within northeast Wisconsin. Commercial and industrial developments have occurred on their own based upon market forces with little to no past guidance by the town.

Knowing where and how much of a type of business the town wants is going to be the key to the town's long range planning regarding its vision. Therefore, the Town Board will need to closely monitor commercial and industrial growth in neighboring communities, its impacts on existing infrastructure and determine the needed regulations to minimize any negative impacts they may have.

The plan will direct development to designated commercial and industrial areas in the future, in order to steer incompatible uses away from the town'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.

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGIES

The following *Goals, Objectives, Policies, and Programs* will help guide the town in developing areas within its borders for economic growth. The following statements are both broad and specific and reflect town residents views for how development should occur within the town.

Goal 1:

Provide for limited development in the town of Brussels by seeking balanced economic growth in business and industry, while providing jobs for residents, increasing personal income and protecting and enhancing the town's environmental assets

Objective:

Specify areas for future business development in the general plan design chapter which will preserve, enhance and promote the rural character of the town of Brussels.

Policies:

1. Encourage the establishments of local businesses in areas specified in the general plan design chapter that can enhance and promote the rural character of the town of Brussels.
2. Consolidate commercial and industrial growth adjacent to the existing community core at STH 57 and CTH C in order to establish specific service areas and to prevent incompatible uses.
3. Locate commercial development dependent on automobile traffic and easy access, such as gas stations, fast-food restaurants, to CTH C (south of the unincorporated village and north of the CTH C intersection with STH 57) in order to provide commercial service to local and through traffic.

4. 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; utilization of modern technology; employment of persons with low to moderate skills; and the upgrading of jobs and training of employees to improve job skills.
5. Obtain financial aid or provide incentives to make economic development projects feasible and competitive through such programs as the Small Business Administration loan program, the Economic Development Administration, and the Community Development Block Grant program.

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 approved types of commercial development wanted by the town.
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 town's desire for well planned growth and rural character setting.

Goal 2:

Protect prime farmlands for future agricultural businesses.

Objective:

Buffer agricultural businesses from incompatible uses in order to promote their operation and to minimize potential conflicts.

Policies:

1. Encourage future development to be concentrated near the unincorporated village of Brussels and not dispersed throughout the town to protect the majority of the prime farmlands and to lessen pressure on farmers located away from the community.
2. Consider the value of the prime agricultural lands and the rural/scenic nature of the town before changing the zoning to non-agricultural uses.
3. Identify prime agricultural lands by utilizing the soil surveys.

Programs:

1. Work with the county and state in identifying the possible use of Transfer of Development Rights (TDR) and Purchase of Development Rights (PDR) within the town.
2. Work with farmers in acquiring loans or grants from state and federal agencies.

PROGRAMS

This section contains a brief explanation of the agencies that could potentially help the town and town's businesses with loans and grants.

Local

Currently the town does not administer any economic development programs.

County

Though the town of Brussels does not have a local economic development programs, Door County provides information and assistance through the Door County Economic Development Corporation.

The Door County Economic Development Corporation promotes industrial and business development in Door County through the administration of a Door County Revolving Loan Fund. The mission of DCEDC is to improve the economic climate and increase employment opportunities and the tax base of Door County, by:

- Promoting industrial and business development in Door County
- Stimulating and leveraging the flow of private investment funds from banks, investment houses, insurers, and other financial institutions to Door County
- Preserving and enhancing the tax base of Door County
- Promoting, attracting, stimulating, rehabilitating, and revitalizing business and industry in Door County
- Establishing and maintaining an economic climate that will encourage and attract new industries
- Providing technical assistance to businesses, entrepreneurs, elected officials, and the general public

Door County also provides assistance through the local University of Wisconsin Extension Office Community Resource Development Agent who offers small business management assistance workshops or one-on-one counseling, as well as information on county revolving loan funds and other sources of financing.

State

The Wisconsin Department of Commerce has several grant programs that would be available to the town of Brussels. 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.

Regional

The Bay-Lake Regional Planning Commission has developed a Comprehensive Economic Development Strategy (CEDS) for the region that includes the town of Brussels. The report, which is updated annually, evaluates local and regional population and economic activity. Economic development trends, opportunities and needs are identified within the CEDS report. All communities which are served by the Commission, including the town of Brussels, 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) Public Works grant program.

Wisconsin Public Service Corporation offers economic development assistance to communities and businesses in a number of ways including the development of business plans, acquisition of loans, and educational forums.

Federal

Some examples of federal programs that could assist the town of Brussels 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, private nonprofit corporations, and federally-recognized Indian Tribal groups to finance and facilitate development of small and emerging private business enterprises located in areas outside the boundary of a city, or unincorporated areas of 50,000 or more and its immediately adjacent urbanized or urbanizing area. 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, 80.9 percent of workers who are age 16 and over in the town of Brussels worked in Door County (Table 4.1), 87.4 percent of workers who are 16 years and older in the town of Forestville worked in the county, and 69.3 percent of those in the town of Union worked in the county. When looking at the whole county, 93.3 percent of county residents worked within the county. These percentages indicate either that there is a sufficient amount 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, would most likely be the greatest source of out of county employment for Door County residents.

Table 4.1: Place of Work, 1990, Town of Brussels & Selected Areas

Place of Work	Town of Brussels	Town of Forestville	Town of Union	Door County	State of Wisconsin
Worked in state of residence	493	508	388	11,580	2,271,607
Worked in county of residence	399	444	269	10,808	1,846,382
Worked outside county of residence	94	64	119	772	425,225
Worked outside state of residence	0	0	4	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 town of Brussels were either classified as working in *management, professional or related* occupations, (32.1 percent) or they were in occupations classified as *production, transportation, and material hauling* (23.3 percent). In addition, 18.9 percent of employed persons older than 16 years were in occupations classified as *sales and service* and 13.5 percent were in occupations classified as *construction, extraction and maintenance*. It should be noted that the individual filling out the census form determines the broad occupation classification within which they and other members of the household are employed. Only seven persons identified themselves or other members of the household as being employed in the *farming, fishing and forestry* occupation classification (table 4.2). The number of persons actually employed in farming is certainly much higher, but the individual filling out

the census report likely reported their occupation in classifications other than farming such as either *production* (milk, beef cattle etc. production) or as *managerial* (farm manager, owner operator).

Table 4.2: Employed Persons by Occupation, 2000, Town of Brussels & Selected Areas

Occupation	Town of Brussels		Town of Forestville		Town of Union		Door County	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Management, professional, and related	200	32.1	147	24.6	138	29.7	3,828	27.5
Service	69	11.1	63	10.6	68	14.7	2,172	15.6
Sales and office	118	18.9	102	17.1	74	15.9	3,285	23.6
Farming, fishing, and forestry	7	1.1	16	2.7	12	2.6	267	1.9
Construction, extraction, and maintenance	84	13.5	91	15.2	62	13.4	1,847	13.3
Production, transportation, and material moving	145	23.3	178	29.8	110	23.7	2,502	18.0
Total	623	100.0	597	100.0	464	100.0	13,901	100.0

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

Industry

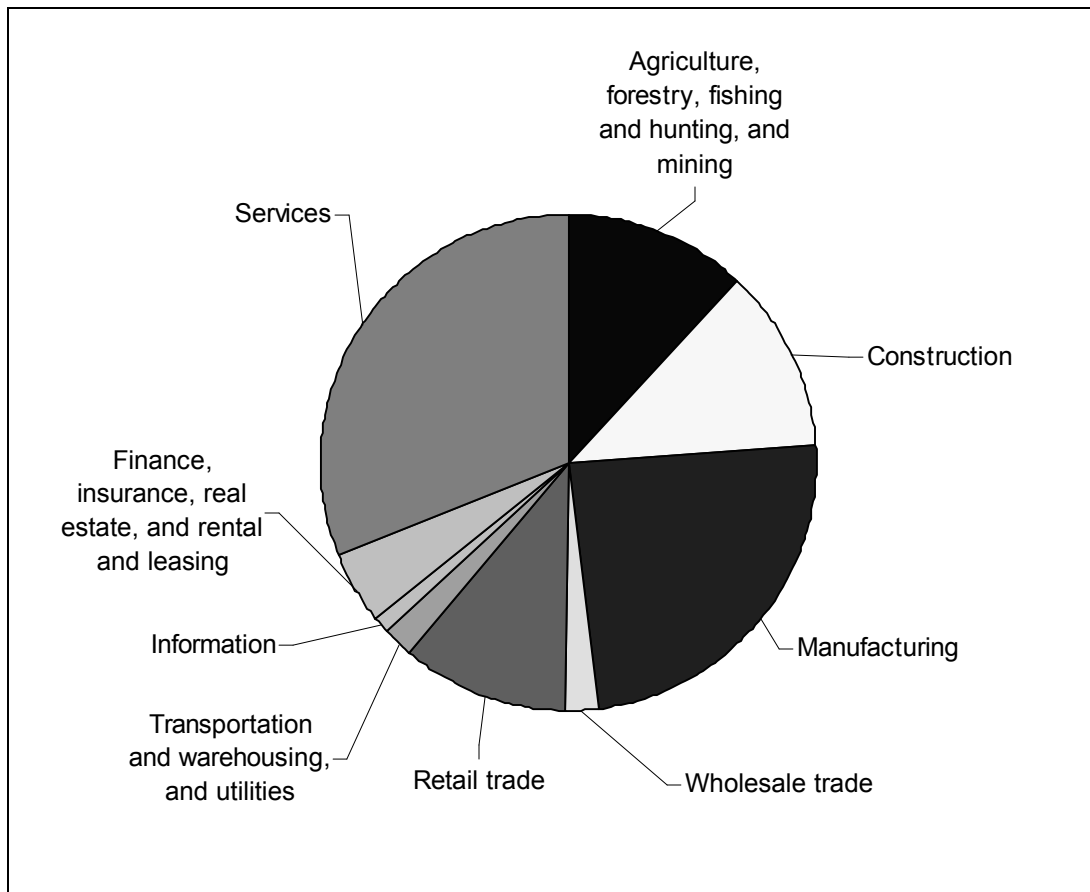
Table 4.3 displays the number and percent of employed persons by industry group in the towns of Brussels, Forestville, and Union, and Door County for 2000. The greatest percentage of employment by industry group for the three towns was in the *manufacturing* industry with 23.9 percent, 32.2 percent, and 22.2 percent, respectively. In addition, the town of Brussels had 16.2 percent of employed persons in occupations classified as *education, health and social services*; 11.9 percent in *agriculture* related occupations; 11.9 percent in *construction* occupations; and, 10.8 percent in *retail trade* occupations. By comparison, Door County had only 4.5 percent of employed persons working in the *agricultural, forestry, fishing and mining* industry group. Figure 4.1 represents the percent employment by major industry group for the town of Brussels in 2000.

Table 4.3: Employed Persons by Industry Group, 2000, Town of Brussels & Selected Areas

Industry	Town of Brussels		Town of Forestville		Town of Union		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	74	11.9	53	8.9	53	11.4	625	4.5
Construction	74	11.9	76	12.7	63	13.6	1,392	10.0
Manufacturing	149	23.9	192	32.2	103	22.2	2,607	18.8
Wholesale trade	15	2.4	16	2.7	6	1.3	200	1.4
Retail trade	67	10.8	52	8.7	43	9.3	1,881	13.5
Transportation and warehousing, and utilities	12	1.9	11	1.8	20	4.3	388	2.8
Information	7	1.1	9	1.5	0	0.0	198	1.4
Finance, insurance, real estate, and rental and leasing	28	4.5	19	3.2	38	8.2	717	5.2
Professional, scientific, mngmnt, admin, and waste mngmnt serv	25	4.0	27	4.5	17	3.7	865	6.2
Educational, health and social services	101	16.2	67	11.2	65	14.0	2,096	15.1
Arts, entertainment, recreation, accommodation and food serv	43	6.9	40	6.7	31	6.7	1,919	13.8
Other services (except public administration)	24	3.9	21	3.5	14	3.0	572	4.1
Public administration	4	0.6	14	2.3	11	2.4	441	3.2
Total	623	100.0	597	100.0	464	100.0	13901	100.0

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

Figure 4.1: Percent Employment by Major Industry Group, 2000, Town of Brussels



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

Unemployment Rate

The civilian labor force for Door County rather significant increases and decreases in unemployment rates since 1990 (Table 4.4). The county unemployment rate during this period was lowest in 1999, with 4.4 percent of the labor force unemployed and highest in 1994 when 9.5 percent of the labor force was unemployed. For the period 1990 to 2001, the civilian labor force (number of persons employed) increased from 13,747 persons employed in 1990 to 15,299 persons employed in 2001.

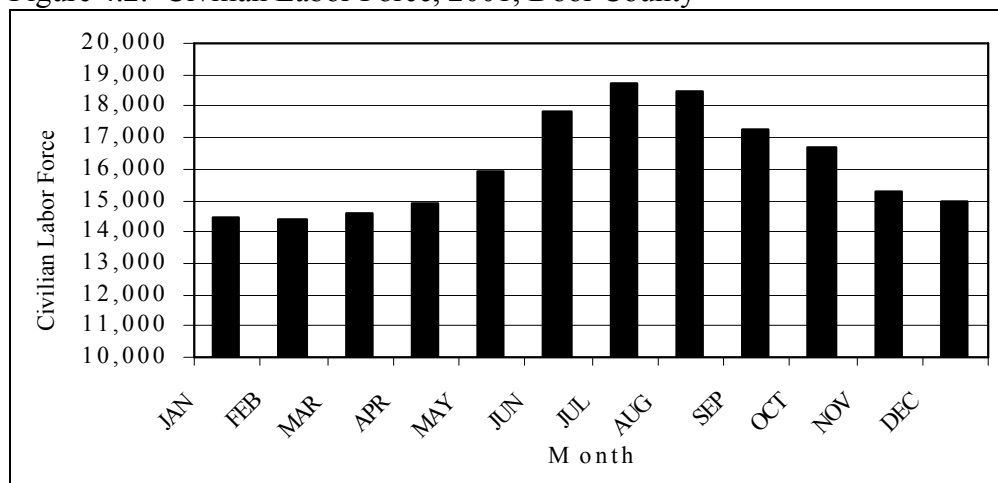
Figure 4.2 presents the civilian labor force by month for 2001 and illustrates the impact of seasonal employment on the county. In 2001, nearly three thousand more persons were employed in August in Door County than in December.

Table 4.4: Average Civilian Labor Force Estimates, 1990-2000, 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	15,483	706	4.6	14,777
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, 2002.

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.

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 new available technology and production processes that are more efficient.

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 town of Brussels which 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 town, not the employment numbers of the businesses in the town.

To determine the economic health of the town, it is important to determine the number of jobs available in the town. Therefore, the following methodology is used to determine an estimated number of people who are employed by businesses in the town of Brussels. In 1990, businesses in the town employed a total of 320 persons. Businesses in Door county employed a total of 8,958 persons in 1990. To determine the town of Brussels's share of total county employment, the 1990 town employment number (320) is divided by the county employment number (8,958). The resulting number is 3.6 percent. Since town 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 town of 401 persons. The resulting figure reveals a 25.3 percent increase in town employment from 1990. It should be noted that in using this forecast, the assumption is made that the town'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 town of Brussels was \$42,212 (Table 4.5). This was significantly less than the towns of Forestville and Union who had median incomes of \$46,818 and \$47,604 respectively, and slightly less than the state of Wisconsin's median household income of \$43,791. The town of Brussels median income was higher than the overall county median income which was \$38,812. The greatest percentage of households in the town of Brussels had incomes ranging between \$35,000 to \$49,999 (21.1 percent) and between \$50,000 and \$74,999 (also 21.1 percent).

Table 4.5: Household Income, 1999, Town of Brussels & Selected Areas

Annual Household Income	Town of Brussels		Town of Forestville		Town of Union		Door County		Wisconsin	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	22	5.5	25	6.6	27	8.1	824	7.0	148,964	7.1
\$10,000 to \$14,999	29	7.2	13	3.5	12	3.6	847	7.2	121,366	5.8
\$15,000 to \$24,999	54	13.4	37	9.8	41	12.3	1,857	15.7	264,897	12.7
\$25,000 to \$34,999	57	14.1	57	15.2	33	9.9	1,717	14.5	276,033	13.2
\$35,000 to \$49,999	85	21.1	61	16.2	65	19.5	2,208	18.7	377,749	18.1
\$50,000 to \$74,999	85	21.1	119	31.6	95	28.5	2,482	21.0	474,299	22.7
\$75,000 to \$99,999	37	9.2	42	11.2	24	7.2	855	7.2	226,374	10.9
\$100,000 to \$149,999	34	8.4	14	3.7	29	8.7	741	6.3	133,719	6.4
\$150,000 to \$199,999	0	0.0	6	1.6	2	0.6	122	1.0	30,598	1.5
\$200,000 or more	0	0.0	2	0.5	5	1.5	158	1.3	32,305	1.5
Total Households	403	115.1	376	113.9	333	129.6	11,811	117.0	2,086,304	114.4
Median Income	\$42,212		\$46,818		\$47,604		\$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 town of Brussels has increased 19.3 percent from 1997 to 2000 (Table 4.6). This percent increase is less than any other areas compared, except the state of Wisconsin. Per return income is based on income tax returns filed in the year cited to the Wisconsin Department of Revenue.

Table 4.6: Municipal Per Return Income, 1997-2000, Town of Brussels & Selected Areas

Area	(Dollars)				Percent Change 1997-2000
	1997	1998	1999	2000	
Town of Brussels	31,313	30,314	37,342	37,291	19.1
Town of Forestville	25,670	28,457	30,983	32,650	27.2
Town of Union	33,891	37,534	39,612	41,625	22.8
Door County	30,471	31,937	34,816	36,435	19.6
Wisconsin	34,716	36,996	38,930	40,570	16.9

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, 2002.

ECONOMIC BASE

Employment by Economic Division

The future of town of Brussels'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 (Table 4.7). 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 4.7: 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 which 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 which 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 which are very close.

STRENGTHS AND WEAKNESSES ANALYSIS

Introduction

This element of the plan assesses those conditions within the town that when viewed as either strengths, weaknesses, or general statement of facts, may be considered for retaining or attracting businesses. These factors may greatly influence the future economic climate over the next two decades and thus are important for the community to identify as part of this plan in order to understand exactly their community's continued economic viability and future draw for new businesses. This portion of the element gives a perspective from a business point of view and reflects concerns, issues, questions that current and future business owners would ask about a community in formulating a plan, or before expanding their business. Within these categories are assumptions and statements based on information made available from the inventories and data compiled within the comprehensive plan, as well as information derived from the planning commission.

Marketing

The town does not currently employ any marketing strategies or administer programs for marketing the town's economic development strengths and assets.

Infrastructure

Utilities

Strengths:

Electric services are provided by Wisconsin Public Service, from two substations located on School Lane and near Rosiere. Natural gas is also available from Wisconsin Public Service. Areas currently served include the unincorporated village and portions of areas adjacent to STH 57, CTH C, CTH H, School Road and Cemetery Road.

Weaknesses:

The town currently has no public sewer and water system in the unincorporated village of Brussels, nor anywhere else in the town.

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 town and other municipalities within the county.

Transportation

Strengths:

The town has an efficient network of state highway, county trunk highways and local roads. The town and the unincorporated village of Brussels, in particular, has direct access to STH 57 which is a pathway that provides highway exposure to the town. Another pathway that gives the town some added exposure is CTH C which provides access to the tourist and recreational areas of Little Sturgeon Bay. With the expansion of STH 57, from two to four lanes, including a bypass of the unincorporated village, transportation efficiency and safety will be much enhanced between the Green Bay metropolitan area, the town of Brussels, and the city of Sturgeon Bay.

Weaknesses:

The town does not have immediate access to rail or air service although Door County's Cherryland Airport is located just eight miles north of the town near the city of Sturgeon Bay. The nearest rail service is available in the city of Green Bay or the village of Luxemburg.

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 town 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 employment and housing opportunities elsewhere.

Industrial/Commercial Site Availability

Strengths:

The town has ample space for commercial or light industrial development in selected areas adjacent to STH 57 and CTH C. These areas adjacent to the major transportation routes provide ease of access, excellent regional connectivity, and good visibility.

Weaknesses:

Although the town has ample land available to serve existing and new commercial and industrial uses the town should not look to compete with the city of Sturgeon Bay or other communities that offer sewer and water services. In order to maintain its rural nature new commercial and light industrial development should be small neighborhood commercial businesses that relate to the town's character. More intensive business operations should locate in the city of Sturgeon Bay other adjacent communities that have adequate services.

Programmatic Capabilities**Existing Business Base Analysis**

The town has approximately 280 acres dedicated to industrial and commercial uses, or approximately 18 percent of its developed lands. Business within the town include a grocery store, bank, agricultural cooperative, restaurant and other retail, service, wholesaling, manufacturing, excavating businesses. There are four excavation (sand and gravel) operations located within the town which comprise the largest use of land for commercial and industrial purposes.

Available Government Services

The town has adopted a comprehensive plan and a zoning ordinance, and is further regulated by a county farmland preservation plan, subdivision ordinance, a shoreland and floodplain ordinance, erosion control plan, extractive mining reclamation plan, and an onsite sewage waste disposal ordinance.

Police services are provided by Door County, fire and ambulance services are provided by a joint town of Brussels/Union/Gardner Fire Department. Postal services are provided by a branch office located in the unincorporated village of Brussels. Government assistance comes from a Town Board, Plan Commission, Town Clerk, and various county, regional, and state agencies and commissions who assist the town on writing grant applications and monitoring these grants (park acquisitions/improvements, community developments, housing improvements, etc).

Specific Inhibitors To Economic Development

Other than transportation facilities, infrastructure (sewer and water) does not exist in planned areas for commercial and industrial growth. Rail and air services do not exist within the town.

Training Programs***Strengths:***

There are numerous technical training and educational programs and opportunities offered by the state university system (the University of Wisconsin - Green Bay is located just 18 miles south of the town) by the Northeast Wisconsin Technical College (NWTC) branch in the city of Sturgeon Bay, and by the UW-Extension System.

Weakness:

Travel distance is not a major impediment to access to the programs offered by the University, the technical college or the Extension office, with most of the programs and

services provided at locations that are within a twenty to thirty minute drive from the town.

Financial Capabilities

Tax Base Comparisons

The town has a 1999 Full Value equal to \$40,062,300, with \$0 debt and a debt margin of \$2,003,115.

Banking Capability and Capacity

The town and its residents have access to numerous lending institutions throughout the county, the state and the nation, including the Bank of located in the unincorporated village.

Quality of Life

Housing Prices

Approximately 14 percent of the town residents paid more than 30 percent of their incomes towards housing costs in 2000. In 1998 the median household income was \$37,868. Based on the household income median, a median housing payment would be \$946 or approximately a home valued around \$135,000 at 7.5 percent interest.

According to the 1990 Census, nearly 50 percent of the housing stock in the town was valued at less than \$50,000, approximately 47 percent of the housing was valued between \$50,000 and \$100,000, while just three percent was valued at \$100,000 or more.

Aesthetics

The town consists of a rural countryside with rolling hills and abundant open space in the form of fields, meadows, pastures, and woodlands. The abundance of open fields, woodlands and sloping terrain, most notably located at the Brussels Hill, make up much of the town's prominent views. It is scenic views, rolling hills and general openness of the countryside that attract rural residential development.

Environment

Abundant areas of woodlands, farm fields, wetlands, and rolling topography exist within the town. It is the natural and rural qualities exemplified by the abundant natural features in the town that both attract development and require that the town to protect and enhance these natural qualities.

Education And Health Care

The town is within the Southern Door School District, with the Southern Door School (K through 12) located just a mile and a half north of the town, adjacent to STH 57 in the town of Gardner.

Limited health care services, including dental care, provided by a hospital, and several clinics is available in the city of Sturgeon Bay. Major health care facilities and services are located in the Green Bay metropolitan area, just 30 miles south of the town.

SITES FOR BUSINESS AND INDUSTRIAL DEVELOPMENT

Existing Site Inventory and Analysis

The town does not currently have an established business or industrial park. This plan has sought to establish and identify areas that are suitable for commercial and industrial uses. Appropriate areas for future development have been identified based on the land access to a major transportation route, absence of environmental constraints, proximity to the unincorporated village of Brussels and minimal impact on surrounding and dissimilar land uses. The areas identified within this plan are presented on Map 8.4: General Plan Design.

Evaluation of Environmentally Contaminated Sites For:

Recently the DNR and EPA have been urging the clean up of contaminated commercial or industrial sites so they may be used for more productive uses. According to the WDNR list of Leaking Underground Storage Tanks (LUST) sites, the town of Brussels currently *has one of these sites. The town also has five sites which 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.*

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. Tables 6.8 and 6.9 provide a history of the taxes levied in the town of Brussels. The full value has increased 56.9 percent for the period 1990 to 1999. The total property tax has increased 3.4 percent for the same period. The taxing jurisdiction share which has increased the most for the period was the “other” category which has increased by 56.9 percent.

Table 4.8: Comparative Tax Appropriations, 1990-2000, Town of Brussels

Year Levied	Full Value	Percent Assm't Level	Total Property Tax	State Tax Credit	Full Value Rate		Taxing Jurisdiction Share				
					Gross	Effective	School	Vocational	County	Local	Other
1990	25,525,500	102.05	572,546	45,911	0.02243	0.02063	397,532	36,738	92,780	40,390	5,105
1991	25,330,500	102.84	628,978	56,483	0.02483	0.0226	444,875	36,675	102,361	40,000	5,066
1992	26,536,100	99.4	686,931	55,163	0.02588	0.0238	490,118	39,830	111,675	40,000	5,307
1993	27,408,500	98.06	674,496	54,620	0.0246	0.02261	472,680	40,933	114,986	40,416	5,482
1994	28,337,400	95.32	665,124	53,353	0.02347	0.02158	457,555	40,939	118,302	42,661	5,667
1995	29,698,100	92.23	633,550	51,231	0.02133	0.0196	424,924	40,883	121,793	40,009	5,940
1996	31,676,600	88.71	31,676,600	70,416	0.01646	0.01424	311,461	40,886	122,415	40,395	6,335
1997	33,699,200	103.89	508,488	65,374	0.01508	0.01314	296,308	42,283	123,157	40,000	6,740
1998	36,861,000	96.64	545,843	59,339	0.01480	0.01319	319,502	47,909	131,060	40,000	7,372
1999	40,062,300	91.08	592,236	55,212	0.01478	0.0134	352,255	53,896	138,072	40,000	8,012
2000	44,428,900	83.97	672,212	55,738	0.01513	0.01387	369,616	61,798	152,033	79,880	8,886

Source: Wisconsin Department of Revenue, *Town, Village and City Taxes*, for years cited; and Bay-Lake Regional Planning Commission, 2002.

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 town's existing debt as of December 31, 1999, was \$0, with a debt margin of \$2,003,115.

Table 4.9: Public Indebtedness, 1998-2000, Town of Brussels

Year	Full Value	Debt Limit*	Existing Debt	Debt Margin
1998	36,861,000	1,843,050	0	1,843,050
1999	40,062,300	2,003,115	0	2,003,115
2000	44,428,900	2,221,445	0	2,221,445

*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, 2002.

Chapter 5 - TRANSPORTATION

INTRODUCTION

This element of the town's comprehensive plan focuses on the various transportation components that comprise the town's transportation system. Chapter 5 presents the town's transportation goals, objectives, and policies and also includes identification of various programs that provide funding assistance for the town's transportation facilities and services. This chapter also presents an inventory of the existing transportation facilities that serve the town of Brussels 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 town'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 town's highway and road system. The detailed description of the highway and road system includes the functional classification of roads within the town, 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: a state airport plans, state railroad plan, state bicycle plan, as well as any other special transportation plans that are applicable to the town. 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 town of Brussels seeks to establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the town's adopted Year 2020 Master Plan.

The transportation facility inventory conducted for the town of Brussels has established that the town currently has jurisdiction over and responsibility for approximately 52-miles of local roads. The town's jurisdictional responsibility relative to its local roads includes maintenance, repair and reconstruction of the roads as needed. The primary funding source for maintaining, rehabilitating and reconstructing the local road system in the town of Brussels is the state's disbursement of general transportation aids. The state provides a payment to the town 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 57, and the county trunk highway system, which provide access to the major urban areas located within Door County, the region and the state.

The town currently, does not have any specific facilities (bicycle paths, paved shoulders, and or sidewalks) to serve bicyclist and pedestrians. However, provided that traffic levels remain moderate to low, the town's existing local road system can and does safely and efficiently serve the needs of bicyclist and pedestrians.

The expansion of STH 57 from two to four lanes on a new alignment bypassing the unincorporated village of Brussels, , scheduled to be completed by 2008, will significantly

impact access from the state highway to the county and local road system and affect the current alignment of CTH C and CTH H as well as several local town roads.

The transportation facility inventory conducted for this plan also determined that the town has readily available and efficient access to multi-modal transportation services and facilities including; transportation services for the town's elderly and disabled residents (provided by Door County Commission on Aging); private intercity bus service (Greyhound connections in the city of Green Bay); local air service (Door County's Cherryland Airport); and, regional passenger-air service (Austin Straubel Airport at Green Bay).

TRANSPORTATION STRATEGY

Transportation System Development Goals, Objectives, Policies and Programs

Transportation in its many forms is the link that connects the town's land uses into a cohesive pattern. The following goal, objectives, policies, and programs have been adopted to represent and define the importance of transportation in achieving the goals of the *Town of Brussels 2020 Comprehensive Plan*.

Transportation Goal

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

Transportation Principle

An integrated area transportation system serves to freely interconnect the various land use activities located within the town, county and region, thereby providing the accessibility needed to support these activities.

Transportation Objectives

1. To develop a transportation system that provides for all transportation modes.
2. To develop transportation system that is harmonious with surrounding land uses.
3. To provide for convenient and efficient vehicular movement near all commercial, industrial, and public facility locations.
4. Provide for adequate traffic controls (i.e. turning lanes, frontage roads) near businesses located along CTH C and within the existing STH 57 corridor.
5. To provide and maintain aesthetically pleasing transportation corridors.
6. Identify and provide a safe system of bicycle paths and designated bicycle routes throughout the town.
7. To provide safe and convenient pedestrian traffic movement.
8. To plan for and designate future road rights-of-way within the town.
9. Develop an integrated multi-modal transportation system which, through its location, capacity, and design, will effectively serve the existing town land use development pattern and promote implementation of the town land use and transportation plan, meeting the anticipated transportation demand generated by existing and planned land uses.

10. 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.
11. Develop a transportation system which reduces accident exposure and provides for increased travel safety.
12. Develop a transportation system which is economical and efficient, satisfying other objectives at the lowest possible environmental, social and financial public cost.
13. Develop a transportation system which minimizes adverse effects upon the property tax base and the natural and cultural resource base.
14. Develop a transportation system which preserves a high aesthetic quality and possesses a positive visual relation to the land.
15. Develop a transportation system that facilitates energy conservation while minimizing associated pollution effects.
16. Develop a transportation system that identifies and preserves multi-use utility and transportation corridors.
17. Provide continued support for future infrastructure, communications, and navigation improvements to Door County Cherryland Airport.

Transportation Policies

1. The proper use of land for, and adjacent to, transportation facilities should be pursued in accordance with the town'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. A minimum Level of Service (LOS) of 'C' should be maintained on all highways and roads.
4. 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.
5. 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.
6. 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.
7. Transportation facilities should be located to minimize impacts on visually pleasing buildings, structures, and natural features; and to enhance vistas to such features.

8. The location of transportation facilities in or through environmental corridors and natural areas should be avoided.
9. The loss of wetlands and environmental corridor land to transportation facility construction should be avoided.
10. Adverse impacts on significant natural habitat, with special attention to endangered species should be avoided.
11. Use of the natural resource base in the development of transportation facilities should be minimized.
12. Abandoned rail and/or utility right-of-way corridors should be preserved for future transportation facilities such as bicycle, pedestrian, transit, and/or arterial streets where such need is shown in the town's land use plan.
13. 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.
14. The amount of transportation system operating and capital investment costs should be minimized.
15. The direct benefits derived from transportation system improvements should exceed the direct costs of such improvements using life-cycle costing methods.
16. 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 town and county.
17. 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.
18. Bicycle lanes or wide curb lanes should be constructed on arterial and higher volume collector highways and local roads.
19. Bicycle paths should be constructed to serve corridors that are not or cannot be served by highways and roads. The most common uses are along rivers, lake shores, canals, utility rights-of-way, and within college campuses.
20. Bicycle routing should direct bicyclists to suitable highways and streets without significantly compromising directness. Established bicycle suitability models should be used.

Transportation 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 road pavement maintenance and improvement program for town roads.
2. Work with the Door County Highway Safety Commission to provide an ongoing assessment of town 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 57 and major collector roads (CTH C, CTH D and CTH H).

4. The Town Board or a designated committee should conduct an annual assessment of town road pavement conditions, road drainage and ditch 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.
5. Adopt an Official Map delineating future roads and recreation sites.

FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

The following section identifies the agencies as well as programs established and administered by those agencies to provide financial and technical support for the operation, maintenance and planning of the town's transportation system.

Wisconsin Department of Transportation

General Transportation Aid (GTA)

Town 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. The statutory "rate per mile" is \$1,755 for 2002. 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 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. Local road certification also includes the requirement to report major road rehabilitation and improvements, new construction and reconstruction of existing roads. Asphalt overlays of 1-inch or more are considered major improvements to the road. The town does not have to report crack filling or sealcoating projects.

Local Roads Improvement Program (LRIP)

This program provides funding to local units of government for the costs associated with improving seriously deteriorating county highways, town 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; CHIP-D County Highway Discretionary Improvement Program; 2) Trip-D Town road Discretionary Improvement Program; and 3) MISP-D Municipal Street Discretionary Improvement Program 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.

Local Bridge Program

This program includes two separate programs 1) a statewide local bridge entitlement program and 2) a high cost local bridge program (High cost bridges are those that cost more than \$5 million and exceed 475 feet in length.)

This program funds 80 percent of project costs to replace and rehabilitate structures on the Federal Bridge Register, in excess of 20 feet. Bridges with sufficiency ratings less than 50 are eligible for replacement and those with sufficiency ratings less than 80 are eligible for rehabilitation.

Counties set priorities for funding within their area, with projects funded on a statewide basis.

Local bridge projects are solicited by local WisDOT transportation Office (District 3) staff in winter of the odd numbered years, with program approval in summer of the odd numbered years. The program has a three-year cycle.

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 of 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).

TDM Grant Program

The TDM Grant program 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.

Wisconsin Employment Transportation Assistance Program (WETAP)

As 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 brownfields 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.

Comparison of Transportation Strategy to State and Regional Transportation Plans

The town of Brussels transportation strategy as represented in its transportation goals objectives, policies and programs are consistent with state, regional and county plans and programs. State, regional and county plans and programs are inventoried and outlined at the conclusion of this chapter.

INVENTORY OF TRANSPORTATION PROGRAMS AND FACILITIES

Highways

STH 57 is the primary highway traveling to and through the town of Brussels. County trunk highways include CTH D, CTH C, CTH XC, CTH J, CTH X, and CTH H. A detailed inventory and analysis of the highway system for the town of Brussels is contained within the following section (Inventory and Analysis of Road System) of this chapter.

Waterborne

The town of Brussels is located entirely inland and therefore there are no port, harbor, or marina facilities located within the town. However, due to its location within the Door County relative to Lake Michigan and the bay of Green Bay there are numerous marina and harbor facilities located within a short driving distance from the town including several marinas and harbors located at the city of Sturgeon Bay, the city of Algoma in Kewaunee County, and the city of Green Bay in Brown County.

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 Town of Brussels is provided by Austin Straubel International Airport, owned and maintained by Brown County and located near the city of Green Bay. The facility is classified as a Air Carrier/Air Cargo (AC/AC) indicating that the airport can accommodate virtually all sizes

and types of aircraft. Austin Straubel International Airport is a full service regional connector that is currently providing direct service flights to four major cities, including Milwaukee, Wisconsin; Chicago, Illinois; Detroit, Michigan; and Minneapolis, Minnesota. Flights are provided on six airlines with approximately 32 arrivals and departures daily

Door County Cherryland Airport located in Sturgeon Bay provides a seasonal passenger service as well as corporate service for Door County. Cherryland Airport is classified as a Transport/Corporate (T/C) facility indicating that the facility can serve and accommodate corporate jets, small passenger and cargo jet aircraft used in regional service and small airplanes (piston or turboprop) used in commuter air service. Currently the facility has two asphalt paved runways 4,600 feet and 3,200 feet in length.

Private airport facilities are required to obtain a certificate of approval or permit from the Wisconsin Department of Transportation's Bureau of Aeronautics. The permit is issued if the Department determines that the location of the proposed airport is compatible with existing and planned transportation facilities in the area. Generally, permits are granted provided that the proposed air-strip is located that approaching and departing aircraft clear all public roads, highways, railroads, waterways or other traverse ways by a height which complies with applicable federal standards. The permit is issued upon the applications review by WisDOT, the county and the town in which the facility is located and by the appropriate regional planning commission.

Rail Transportation

There are no operating rail facilities located within the Town of Brussels or for that matter in Door County. The nearest rail service via the Canadian National (CN) and Escanaba and Lake Superior (E&LS) is located in the city of Green Bay in Brown County or via the Canadian National at the village of Luxemburg in (Kewaunee County).

Transit

There are no transit services available to the town of Brussels or for that matter, Door County. The nearest transit service is available in the Green Bay metropolitan area, with services provided by bus throughout the urban area.

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. Intercity bus service via a private carrier is available from the city of Green Bay with service provided to Milwaukee and Chicago, Madison, Minneapolis/St. Paul, and to Escanaba, Michigan.

Trucking

There are no major trucking terminals located within the town of Brussels. Major heavy truck transportation activity within the town is currently limited to truck traffic generated by the town's four existing extractive mining industries (sand and gravel pits). The four industries are located : 1) west side of Town Hall Road just south of its intersection with CTH J; 2) the south side of Low Road just east of its intersection with CTH C; 3) the south side of Hump Road just west of its intersection with Roosevelt Road; and, 4) the west side of High Road bordering the town of Gardner.

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 Town of Brussels 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 town. 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, and in the summer of 1997, elderly residents of southern Door County will be provided service on Thursdays. 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.

Recreational and Bicycle Trail System

At this time, there are no county or town facilities (bicycle paths or lanes) dedicated solely to the use of bicyclists located within the town. However, the *Wisconsin Bicycle Transportation Plan 2020* does identify general bicycling conditions on state and county highways within the town of Brussels 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 57 (existing) is *not recommended for bicycling*; CTH D and CTH C are designated as “*best conditions 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 town roads are suitable for bicycling, basing that assumption on the low traffic volumes present on average town roads.

In addition, the *Bicycle Transportation Facility Plan for the Bay-Lake Region* has 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 town of Brussels. The important origin and destination points identified within the regional plan include

the city of Sturgeon Bay, the Ahnapee Trail, the unincorporated village of Brussels, the Namur Historic District and the village of Forestville. The regional plan recommends bicycle facility improvement (the addition of five-foot paved shoulders) to CTH X, CTH C and existing STH 57 (when jurisdiction is transferred from the state to the county). The regional plan does not include recommendations for bicycle route or facility improvements to the local road system.

The Ahnapee State Recreation Trail, a multi-use facility, is located just one to two-miles east of Brussels in the town of Forestville. The state trail, which originates in the city of Sturgeon Bay, travels to the city of Algoma in Kewaunee County, and access to it is accommodated by CTH H, CTH J and CTH X, as well as several local roads. The Ahnapee trail currently terminates south of Algoma at Casco Junction. The state is now in the process of negotiating purchase of the remainder of the abandoned rail corridor from Casco Junction south and east to the city of Kewaunee and west to the village of Luxemburg.

Pedestrian

There are currently no pedestrian facilities (either trails, paths or sidewalks) located in the town of Brussels or in the unincorporated village of Brussels.

INVENTORY AND ANALYSIS OF ROAD SYSTEM

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 town, 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 road system for the town of Brussels shown in Map 5.1 has been functionally classified based on criteria identified in Table 5.1

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. STH 57 which is classified as a principal arterial is located within the town.

STH 57

STH 57 measures 191.73 miles from its southern terminus at STH-59/National Avenue in Milwaukee west of the city's downtown to its northern terminus at STH 42/Shore Drive in Sister Bay, in northern Door County. STH 57 is the primary connector between Green Bay and Sturgeon Bay. From its junction north of the city of Sturgeon Bay.

State Highway 57, from Church Road located one-mile north of STH 54 in Brown County to STH 42 in Door County, is currently a two-lane, primary arterial highway connecting the industrial, commercial, residential and tourist areas of Door County to Green Bay and the Fox River Valley. It is the primary route for the state and interstate transportation of goods and services to the city of Sturgeon Bay and the northern Door Peninsula. It is also the primary route for *thousands* of tourist and vacationers and summer residents that visit northeastern Wisconsin and Door County every year. STH 57 is also becoming increasingly important as a route for the hundreds of commuters that live in the rural towns and small communities of Brown, Kewaunee and Door County, including the town of Brussels, who travel to employment centers in Green Bay and Sturgeon Bay on a daily basis.

In 1989, the Wisconsin Department of Transportation adopted a statewide highway transportation plan (Corridors 2020) that identified a network of quality connecting highway routes throughout the state. The plan identified a statewide system of connecting highways that would foster economic development and would meet intercity mobility needs into the 21st Century. In that plan, STH 57 was identified as a “backbone connector” between the city of Green Bay and the city of Sturgeon Bay, due to its importance for tourism and recreation.

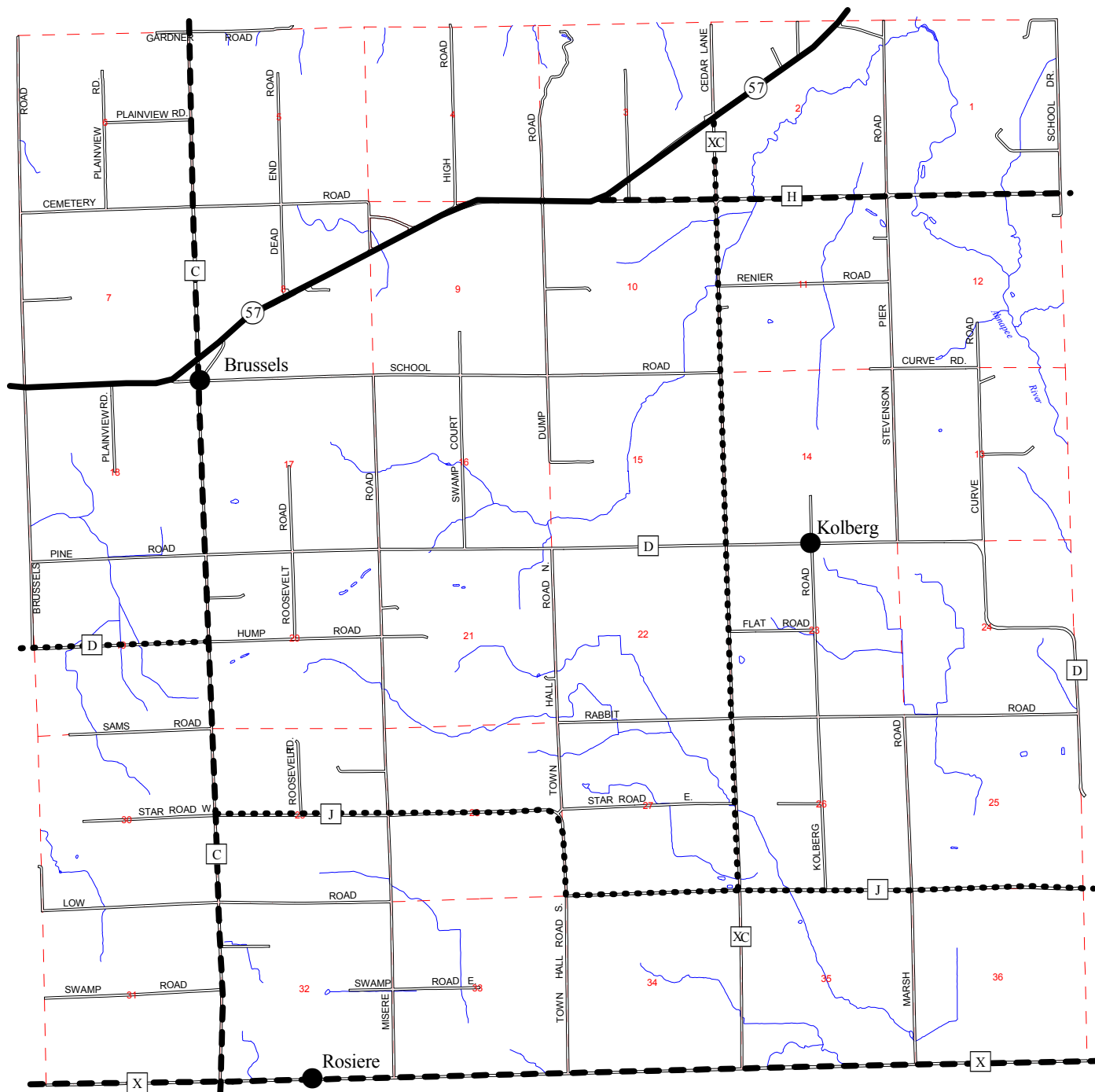
In the late eighties, state transportation planners began to address capacity deficiencies on STH 57. In 1990, WisDOT submitted a proposal to the state's Transportation Projects Commission (TPC) to expand STH 57 from two to four lanes for the segment of highway between STH 54 in Brown County and CTH A, just north of Dyckesville. In 1991 the state legislature enumerated (placed the project on a list of funded major highway projects) the reconstruction and addition of two lanes to STH 57. The state legislature enumerated the remaining segment of STH 57 between CTH A and STH 42, in 1997

The purpose of the highway expansion project is to provide additional roadway capacity to serve existing and projected volumes and to improve operational efficiency and safety for both local and through traffic. The project will also enhance regional economic development in accordance with area-wide plans and land use policies and the Wisconsin Department of Transportation's (WisDOT) Corridor 2020 Report.

Functional Classifications

Map 5.1

Town of Brussels Door County, Wisconsin



0.5 0 0.5
Miles

Principal Arterial
Major Collector
Minor Collector

Source: WisDOT; 1992;
Bay-Lake Regional
Planning Commission, 2002.

Table 5.1: Functional Classification Criteria for Rural Roads and Highways

Rural Principal Arterials						
County Population Density (Rural)	Basic Criteria				Supplemental Criteria	Mileage
	Must meet any 2 of these				OR	Percent
	Population Service	Land Use Service	Spacing	Traffic Volume	must meet both of these plus 90% of Traffic Volume	of System Range
>43	Connect places 50,000 with other places of 50,000.	Provide access to major recreation Areas of the state.	Maximum 30 miles	>6,000		2.0-4.0% statewide
<43	Connect places 5,000 with places of 50,000.			>2,000		
Rural Minor Arterials						
>43	Connect places 5,000 with other places 5,000.	Serve all traffic generating activities with an annual visitation of 300,000 if not served by a principal arterial.	Maximum 30 miles	>2,000	1. Alternate population connection 2. Major river crossing/ restrictive topography	4.0-8.0% statewide
<43	Connect places 1,150 with places 5,000 or with principal arterials			>1,000		

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

Rural Major Collector						
County Population Density (Rural)	Basic Criteria				Supplemental Criteria	Mileage Percent of System Range
	Must meet any 2 of these OR the Parenthetical Traffic Volume Alone				OR	
	Population Service	Land Use Service	Spacing	Traffic Volume	Must meet 2 of these plus 90% of Traffic Volume	
>43	Connect places 1,150 with other places 1,150. Connect places 575 with places 1,150 or higher function route.	Land Use Service Index > or = 16.	Maximum 10 miles	>1,000 (>4,000)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchanges with a freeway 5. Parallel to a principal arterial.	5.0-18.0% countywide
<43	Connect places 575 with with other places 1,150 or higher function route. Connect places 115 with with places 575 or higher function route.	Land Use Service Index > or = 12.		>400 (>1600)		Most counties should be at 7.0 - 14.0%

* 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.

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.

Source: Wisconsin Department of Transportation, 2002; and, Bay-lake Regional Planning Commission, 2002

The current timetable for project completion anticipates the expansion project in three phases. Phase One entailed construction of an interchange at the intersection of STH 57 and STH 54 and increasing capacity of STH 57 from STH 54 to Church Road (construction began in March of 1999 and was open to traffic in June of 2000). Phase Two of the project entails construction on the segment of STH 57 between Church Road and CTH D in Door County, and includes the bypass of Dyckesville by 2004. Phase 3 of the project entails construction between CTH D and STH 42, and includes the bypass of the unincorporated communities of Namur and Brussels, beginning in 2004. This segment will be completed by 2008.

WisDOT studied numerous alternative alignments for the four-lane project that included several new location alternatives. Following extensive evaluation and consideration of the possible alternatives a process that included significant opportunities for public input and comment a recommended corridor for the project was selected. The STH 57 expansion project will include realignment of the highway at three locations along the corridor. Four new lanes on realignment, east of the existing highway, will be constructed from a point just south of the Chalet Supper Club and reconnecting to existing STH 57 at a point just south of the entrance to Bay Shore County Park. An easterly bypass of Dyckesville will be constructed. The bypass will begin at a point just west of CTH P, will traverse the east portion of Dyckesville, and will connect back to the existing highway at a point just north of CTH A. North of Dyckesville, four lanes will be constructed immediately adjacent to the existing highway and the four lanes will follow the existing route to a point just south of CTH Y in the town of Brussels. From that point north, an easterly bypass of the unincorporated communities of Namur and Brussels will be constructed. The bypass will begin near the CTH Y intersection and traverse east, north of and parallel to CTH D. At CTH C, the bypass will proceed in a northeasterly direction, rejoining the existing highway at CTH H (See Map 5.3)

Within the town of Brussels the reconstruction, lane-additions, and realignment design of STH 57 currently includes full at-grade intersections of STH 57 and CTH C, School Road (with a minor realignment of School Road and Misere Road), CTH H, and Stevenson Road. Several existing intersections with STH 57 will be eliminated when the new-realigned highway is constructed including existing intersections at Brussels Road, Roosevelt Road, Misere Road, Swamp Court, Dump Road, Stub Road, and CTH XC.

Several sections of existing roads will be realigned to provide access to STH 57 including:

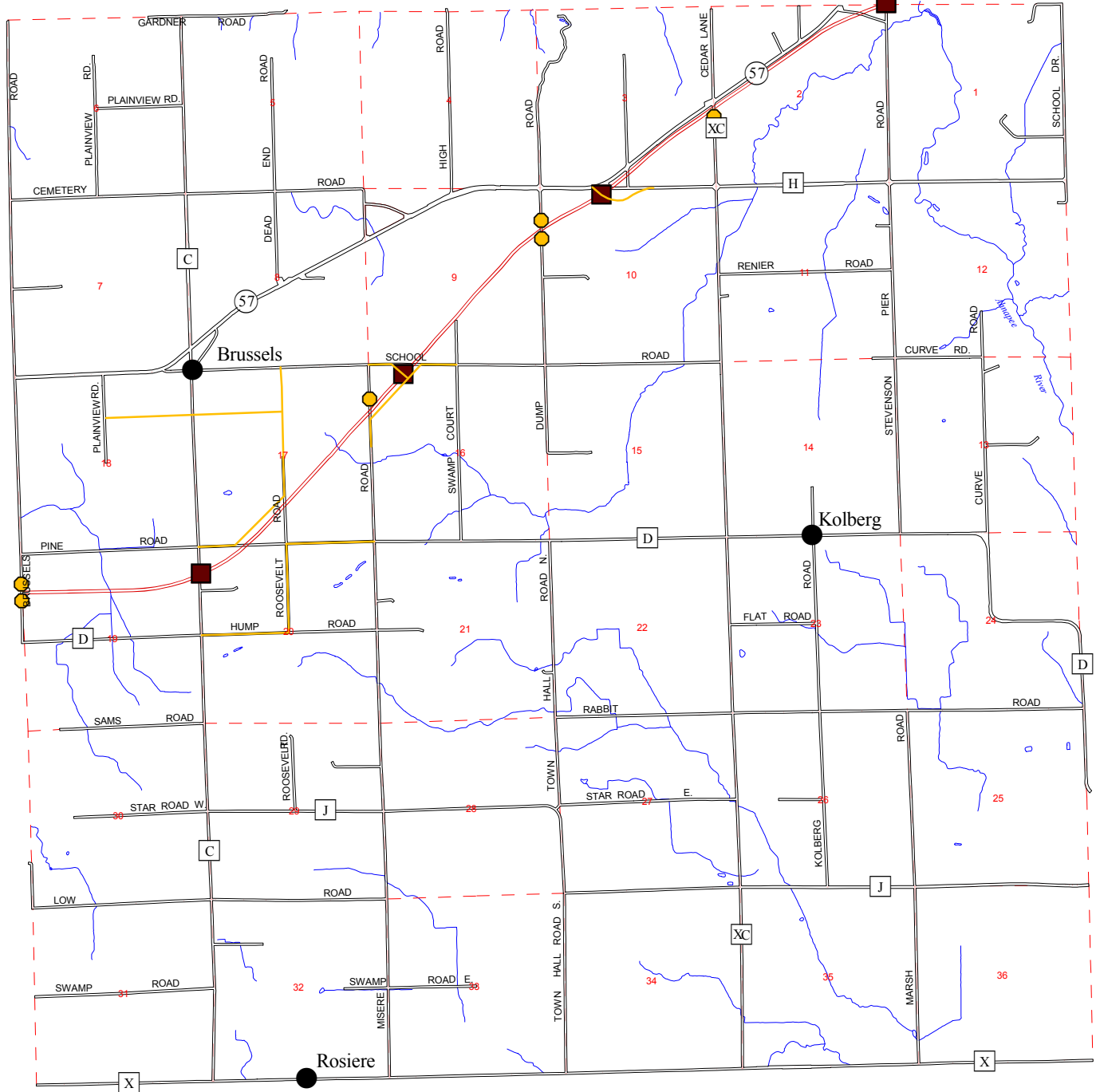
1. A new connecting road segment will be constructed between Pine Road and the segment of Roosevelt Road that lies north of the new highway with access provided to STH 57 via CTH C.
2. CTH D will continue east of CTH C (on a segment of Hump Road that will be transferred to the county) and then proceed north on a short segment Roosevelt Road before turning in an easterly direction along its current alignment.



Proposed STH 57 Alignment



Town of Brussels
Door County, Wisconsin

Map 5.2

Date: 9/30/2002



Alignments
 New Alignment
 New or Redirected Road

Intersections
 Cul-de-sac
 At Grade - Full Intersection

Source: WisDOT, 2000;
Bay-Lake Regional
Planning Commission, 2002.

3. School Road, Misere Road, Swamp Court and Dump Road will be connected with a frontage road paralleling the south side of the new highway with a single access to STH 57 located somewhat south of the current School Road/STH 57 intersection.
4. On the north side of the newly constructed STH 57, School Road will be redirected south with a single access to STH 57 provided for Misere Road, Swamp Court, Dump Road and School Road.
5. The jurisdiction of existing STH 57, along its entire length from the south county line to a point just north of Southern Door High School, will be transferred to Door County.

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 Town of Brussels, CTH C, CTH X and CTH H are classified as *major collectors* and CTH D, CTH J, and CTH XC are classified as a *minor collector* roads. There are nearly 30-miles of county trunk highways (collectors) located within the town of Brussels.

When the construction and realignment of STH 57 is completed, the jurisdiction of the existing highway will transferred to Door County and will, in all likelihood, function as major collector within the southern portion of the county.

Local Roads

The primary and most important function of local roads is to provide direct access to land adjacent to the road. Local roads 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 roads that are not classified as arterial or collector facilities within the town are classified as local roads.

Local roads should be designed to move traffic from an individual lot (more often than not, a person's home, cottage or farm) to collector roads that in turn serve areas of business, commerce and employment. Local roads 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 51-miles of local roads under the jurisdiction of the town.

Table 5.2: Road Function, Total Mileage and Percent of Total Road Mileage, Town of Brussels, 2001

Road and Function	Mileage	Percent of Road System
STH 57 - Major Arterial (existing)	5.45	6.19
STH 57 - Major Arterial (new 4-lane)	6.20	7.04
CTH C - Major Collector	6.13	6.96
CTH X - Major Collector	6.03	6.84
CTH H - Major Collector	2.64	2.99
CTH J - Minor Collector	5.45	6.19
CTH XC - Minor Collector	5.51	6.25
CTH D - Minor Collector	5.02	5.70
Town Roads -Local	51.8	58.84
Total	88.03	100.0

Source: Wisconsin Department of Transportation, *Town Plat Record*, 2000; 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. These counts are generally used by the Department to form a “benchmark:” database for long range transportation facility planning. For the Town of Brussels, traffic volumes were last counted in 2001. Counts were also taken in 1998 and 1995. The annual average daily traffic volume on principal and minor arterial roadways within the town for those years are listed in Table 5.3, and are shown on Map 5.3. 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.

As might be expected, STH 57 carries the highest volume of traffic through the town, with average daily traffic counts in 2001 ranging between 6,400 vehicles and 7, 700 vehicles. As noted, the WisDOT traffic counts represent annual averages and do not depict the peak traffic volumes that occur at the height of the summer tourist season. According to WisDOT, peak seasonal traffic volumes on STH 57 may range between 15,000 and 20,000 vehicles per day.

CTH C carries the next highest volume of traffic ranging between 630 vehicles and 1,100 vehicles in 2001. Traffic volumes on CTH C remained relatively consistent with the number of vehicles that were counted in 1998. CTH X carries the next highest volume of traffic in the town of Brussels, ranging between 570 and 590 vehicles per day in 2001.

According to the 2001 traffic volume counts, the remaining collector roads (CTH D, CTH XC, CTH J, and CTH H) carry somewhat low volumes of traffic, with annual daily traffic volumes ranging between 190 vehicles per day on CTH XC and an 530 vehicles per day on CTH H.

Table 5.3: Annual Average Daily Traffic Counts - Town of Brussels, 1992, 1995, 1998.

Road	Vehicle Counter Location Direction to Nearest Intersecting Highway	1992	1995	1998	2001	1998-2001	1998-2001
						Number Change	Percent Change
STH 57	East of CTH N	4,860	6,900	7,200	6,400	(800)	-11.1%
STH 57	Northeast of CTH C	4,730	6,600	7,200	6,700	(500)	-6.9%
STH 57	Northeast of CTH H	5,300	7,100	8,300	7,700	(600)	-7.2%
CTH D	East of CTH Y	160	250	260	250	(10)	-3.8%
CTH C	North of CTH X	490	700	630	630	-	0.0%
CTH C	South of CTH D	760	870	770	790	20	2.6%
CTH C	South of STH 57	750	1,200	920	1,000	80	8.7%
CTH C	North of STH 57	860	1,200	930	970	40	4.3%
CTH C	North of CTH K	660	900	790	1,100	310	39.2%
CTH XC	North of CTH J	230	190	230	190	(40)	-17.4%
CTH XC	South of CTH H	270	260	370	330	(40)	-10.8%
CTH XC	North of CTH H	220	240	300	260	(40)	-13.3%
CTH H	East of CTH XC	330	380	420	530	110	26.2%
CTH X	East of CTH C	430	610	740	570	(170)	-23.0%
CTH X	West of CTH C	400	860	610	590	(20)	-3.3%
CTH J	East of CTH C	150	190	290	200	(90)	-31.0%

Source: Wisconsin Department of Transportation, *Wisconsin Highway Traffic Volume Data*, 1992, 1995, 1998 and 2001; Bay-Lake Regional Planning Commission, 2001.

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 57 or CTH C, CTH D, CTH J, CTH XC, CTH H and CTH X) under ideal conditions is 2,000 vehicles per hour per lane, as determined by the Peak Hourly Traffic (PHT), regardless of traffic distribution by direction. The maximum capacity values given in Table 5.4 should be considered as the average maximum volume on various types of roads under ideal conditions. 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 town that have approached or appear to be approaching the roads design capacity.

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

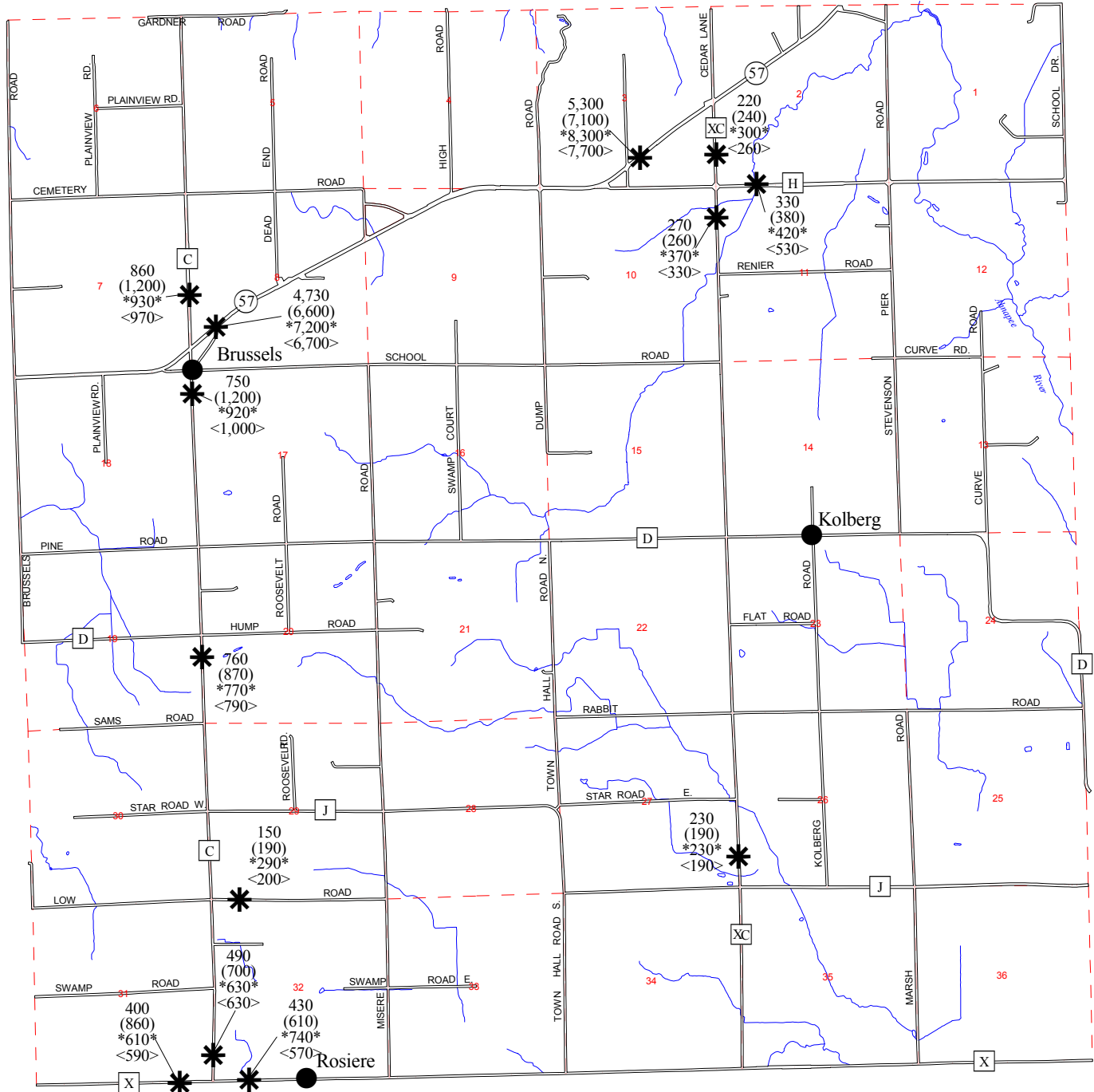
Source: *Highway Capacity Manual*, Highway Research Board of the Division of Engineering and Industrial Research, 1985; Bay-Lake Regional Planning Commission, 2001.

Annual Average Daily Traffic

Town of Brussels

Door County, Wisconsin

Map 5.3



0.5 0 0.5
Miles

Count	Year
000	1992
(000)	1995
000	1998
<000>	2001

Source: WisDOT, 1992, 1995, 1998, 2001; Bay-Lake Regional Planning Commission, 2002.

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, 1998 and December 31, 2001, there were a total of 167 crashes reported in the town of Brussels. There were no fatalities and a total of 44 persons injured in 28 of the 123 reported crashes. A total of 139 crashes resulted in property damage only, with no injuries reported. More than 52 percent or 87 of the crashes reported were the result of deer/vehicle crashes and more than 26 percent or 44 crashes reported were multi-vehicle incidents. The remaining 36 reported crashes were listed as vehicles striking fixed objects such as trees, parked vehicles, culverts, sign post and guard rails, vehicles overturning or entering the roadside ditch (15 crashes); vehicles striking an animal other than a deer (1); and three crashes the causes of which were unknown or not listed.

Table 5.5: Vehicle Crash Severity - Town of Brussels, 1998, 1999, and 2001

Town of Brussels	1998	1999	2000	2001	Total
Total Reported Crashes	37	47	39	44	167
Intersection Crashes	5	6	3	5	16
Non-Intersection Crashes	32	41	36	39	148
Vehicle/Deer Crashes	18	27	23	19	87
Fixed Object/Tree Crashes	5	4	6	7	22
Fatalities	0	0	0	0	0
Persons Injured	14	14	1	15	44
Property Damage Only	29	36	38	36	139
Crashes Causing Injury and or Fatality	8	11	1	8	28
Multi-Vehicle Crashes	9	11	11	13	44

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

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, 1998 - 2001

Crash Location	Total Crashes	Intersection Crashes		Non-Intersection Crashes	
		Number	Percent	Number	Percent
State Highway 57	22	6	3.59%	16	9.58
County Highways	64	8	4.79%	57	34.13
Local Town Roads	81	5	2.99%	75	44.91
Total	167	19	11.38%	148	88.62

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

The crash data indicates very few intersection crashes, with a significant majority of the reported crashes (nearly 89 percent) occurring as single vehicle crashes at mid-points on the local road system or at points away from road intersections. The crash data for the years cited does however, indicate that 12 of the crashes, although listed as non-intersection crashes did occur within a short distance (less than 50 feet) of road intersections with STH 57. These crashes include rear-end crashes, angle crashes and sideswipe crashes.

Access Controls

Access management is a means to maintain the safe and efficient movement of traffic along arterial and major collector highways by controlling the number and location of intersecting roads and driveways. State statutes allow counties, cities and villages (through an adopted ordinance) to control access on county highways that have traffic counts in excess of 1,000 vehicles daily.

At this time, Door County does not have nor does it plan to adopt a Controlled Access Ordinance.

Driveway Permits

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

Wisconsin State Statutes allow towns to issue permits for all new driveways which can allow the town 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.

Level of Service

A highway or road's level of service (LOS) is a measure of its capacity to serve the traffic demands placed on it. Traffic and roadway design factors such as Average Daily Traffic (ADT) volumes, peak hour volumes, truck percentages, number of driving lanes, lane widths, vertical grades, passing opportunities, and numbers of access points affect the level of service. Levels of service range from 'LOS A' to 'LOS F' in order of decreasing operational quality.

The LOS for highways and roads are determined by consideration of the following criteria:

Table Chapter 5 .7: Level of Service Criteria

<u>Level of Service 'A'</u>	<u>Level of Service 'D'</u>
· Unrestricted free flow.	· Heavily restricted flow.
· Drivers virtually unaffected by others.	· Driver operation completely-affected by others.
· High level of freedom to select speed and maneuver.	· Severe restriction in speed and maneuvering.
· Excellent level of driver comfort and convenience.	· Poor level of driver comfort and convenience.
<u>Level of Service 'B'</u>	<u>Level of Service 'E'</u>
· Slightly restricted stable flow.	· Unstable flow (approach greater than discharge flow)
· Drivers aware of use by others.	· Slow speeds and traffic backups; some stoppage.
· Slight restriction in speed and maneuvering.	· Total restriction in vehicle maneuvering.
· Good level of driver comfort and convenience.	· High driver frustration.
<u>Level of Service 'C'</u>	<u>Level of Service 'F'</u>
· Moderately restricted stable flow.	· Forced flow (approach greater than discharge flow)
· Driver operation completely affected by others.	· Stop and go movements with long backups and delays.
· Moderate restriction in speed and maneuvering.	· Forced vehicle maneuvers.
· Fair level of comfort and convenience.	· Maximum driver frustration.

Source: Wisconsin Department of Transportation, *Field Design Manual*; and, Bay-Lake Regional Planning Commission, 2002.

Levels of service 'A' and 'B' are most desirable in rural and urban areas, while levels 'D' through 'F' are considered poor and unacceptable. LOS 'A' and LOS 'B' are most often associated with highways designed to freeway standards, where access is completely controlled (no roads or driveways directly access the facility) and appropriately spaced interchanges provide access to the highway. An intermediate level of service 'C' will provide for stable operation, but traffic flow approaches a level at which small increases in traffic and unrestricted access may cause (both temporary and long-term) deterioration in the level of service. Generally, rural two-lane highways and local roads fail to meet level 'C' when traffic volumes exceed 7,000 ADT, where there are 12-foot wide driving lanes, and 9 percent truck volumes. The existing STH 57 currently has an ADT in excess of 7,300 and 11.5 percent truck volumes on its rural segment indicating that it is currently operating below level of service 'C'.

Funding The Town Road System

The cost of constructing, maintaining and operating roads under local jurisdiction (town 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 towns 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 town 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 town. The 2002 funding level has resulted in a share of cost percentage of 20.8 percent for towns. Each town's share of costs is determined by multiplying the six-year average costs by the percentage rate.

The 2002 flat rate has been set at \$1,755 per mile, and \$1,825 per mile in 2003. Transportation Aids for towns, as well as all other local units of government and counties, are derived primarily from motor fuel taxes and vehicle registration fees

Internal Traffic Circulation System

The internal traffic circulation system for the town of Brussels is comprised of a grid network of local roads serving agricultural and scattered rural residential land access needs. The local road system is complimented by a network of well spaced county trunk highways, which although serving limited land access, primarily serve the purpose of providing through county traffic. The primary north/south collectors are CTH C and CTH XC. East and west bound traffic are served by CTH J, CTH D and CTH H.

STH 57, both by its existing configuration and the proposed four-lane facility serves regional and state interest, providing an efficient avenue for traffic movement between Green Bay and the rest of the state to the city of Sturgeon Bay and the recreational/tourism areas of the county.

New Road Alignments

In the unincorporated village of Brussels, local road access and traffic circulation could be improved for planned future commercial, industrial, and mixed use development by extending Lark Road north to School Road and by construction of a new road, south and parallel to School Road, from Lark Road to Plainview Road. The proposed and recommended new road alignments are illustrated on Map 5.4: Recommended Transportation Improvements.

Highway Expansion Impacts

The realignment of STH 57 will remove traffic from the existing facility that now travels through the unincorporated village of Brussels. The new proposed alignment, as previously described and illustrated in Map 5.3, will provide a bypass of the unincorporated village reducing conflicts between local traffic and through traffic. The STH 57 bypass will also travel south and east of the Brussels Hill thereby affording a significant measure of protection to the sensitive physical and cultural attributes of that area of the town.

The Wisconsin Department of Transportation has proposed improvements and alterations to the collector and local road alignment and access to STH 57. Most notably, CTH C will initially be serviced by an at-grade intersection with the state highway, but adequate right-of-way will be purchased to allow construction of an interchange if and when that type of facility is warranted by traffic volumes.

INVENTORY AND ANALYSIS OF APPLICABLE TRANSPORTATION PLANS

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

County Functional and Jurisdictional Studies

There are no existing county functional or jurisdictional transportation plans for the road system located within the town of Brussels.

Transportation Corridor Plans

The *STH 57 Transportation/Land Use Highway Corridor Plan* was completed in 2002 by the Bay-Lake Regional Planning Commission. The plan recommends land use practices and incorporation of highway design that will protect the natural and cultural features of the area, maintain the function of the highways located within the corridor, and lessen the impacts of the typical highway commercial development, that will likely be attracted by the new four-lane highway, on to town. The plan recommends adoption of a highway corridor overlay zoning district by the town to prevent strip development along CTH C, as well as all other highways and roads intersecting with STH 57, and to ensure that the physical appearance of any new development in the highway corridor is consistent and compatible with the existing rural character of the town.

Rural Transportation Plans

There are no rural transportation plans for the road system located within the town of Brussels.

State Highway Plan

The *Wisconsin State Highway Plan 2020* states that, “Wisconsin's State Trunk Highway system, consisting of approximately 11,800 miles of roads, is aging and deteriorating at the same time traffic congestion is increasing.” In response to this critical issue, WisDOT, in partnership with its stakeholders, has developed the *State Highway Plan 2020*, a 21-year strategic plan which considers the highway system's current condition, analyzes future uses, assesses financial constraints and outlines strategies to address Wisconsin's preservation, traffic movement, and safety needs. The plan will be updated every six years to reflect changing transportation technologies, travel demand and economic conditions in Wisconsin.

The *Wisconsin State Highway Plan 2020* addresses three key elements or issues of concern relative to the State Highway System;

1. Preserving the system by improving or replacing aging pavements and bridges;
2. Facilitating movement of people and goods through an efficiently designed system, and with programs that reduce traffic congestion; and
3. Improving highway safety through combined strategies of engineering, education and enforcement.

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.

WisDOT's Six-Year Program indicates that STH 57 will be rebuilt to four-lanes on a new alignment through the town , with construction completed by 2008 (see Map 5.3).

Airport Master Plans

Door County is currently studying options for improving safety and access to the Cherryland Airport by extending runways, realigning and terminating some roads adjacent to airport.. Although, this facility is not located within the town, the airport provides significant economic benefit to the region and the county (and the town of Brussels) estimated at \$8 million annually.

The airport's plan will not directly impact the town of Brussels. Indirectly, the airports expansion will impact road alignments in the vicinity of the expansion project and may ultimately result in positive economic impacts for the county.

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.

Wisconsin State Railroad Plans

An update of the State Rail Plan is in progress. The nearest rail service to the town of Brussels is located either in the city of Green Bay or to the village of Luxemburg in Kewaunee County. Although, the county and town does not have direct access to rail, the trend toward utilization of containers and truck trailers moved by rail reduces the need for manufacturers to have direct links to a rail facilities. Due to the increased utilization of inter-modal shipment of goods, manufacturers can locate virtually anywhere within a short driving distance of a rail facility and still benefit from the reduced costs afforded by rail transportation.

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.

As previously noted; the *Bicycle Transportation Facility Plan for the Bay-Lake Region* identifies 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 town of Brussels. The important origin and destination points identified within the regional plan include the city of Sturgeon Bay, the Ahnapee Trail, the unincorporated village of Brussels, the Namur Historic District and the village of Forestville. The regional plan recommends bicycle facility improvement (the addition of five-foot paved shoulders) to CTH X, CTH C and existing STH 57 (when jurisdiction is transferred from the state to the county). The regional plan does not include recommendations for bicycle route or facility improvements to the local road system.

TRANSPORTATION RECOMMENDATIONS

Employ Adequate Design Standards

Wisconsin State Statute 86.26 addresses the design standards for newly constructed roads; and, Wisconsin Administrative Code Trans 204 addresses improvements (that are designed to last ten years or longer) to existing town roads. Town roads using state and federal funds must adhere to the Field Design Manual which is consistent with the Statutes (Appendix D).

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 town 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.

All town roads should be designed to the standards although State Statute s.86.26 is only applied to new roads, while Administrative Code Trans 204 is applied to improvements (that last 10 years or longer) on existing town roads.

Table 5.8: Wisconsin State Statutes 86.26 - Town Road Standards.

Annual Average 24-hour Traffic (ADT)		Minimum Design Standards	Annual Average 24-hour Traffic (ADT)		Minimum Design Standards
(a)	Local service, intermittent traffic		(e)	401 to 1,000 ADT	
	1. Right-of-way	3 rods		1. Right-of-way	4 rods
	2. Roadway width	20 feet		2. Roadway width	34 feet
	3. Surface width	16 feet		3. Surface width	22 feet
				4. Maximum grades	5%–8%
				5. Curvature	5°–12.5°
(b)	Under 100 ADT		(f)	1,001 to 2,400 ADT	
	1. Right-of-way	3 rods		1. Right-of-way	4 rods
	2. Roadway width	24 feet		2. Roadway width	44 feet
	3. Surface width	18 feet		3. Surface width	24 feet
	4. Maximum grades 9%–11%			4. Maximum grades	5%–7%
				5. Curvature	4.5°–7.5°
(c)	100 to 250 ADT		(e)	(e) Over 2,400	
	1. Right-of-way	4 rods		State Trunk Highway Standards	
	2. Roadway width	26 feet			
	3. Surface width	20 feet.			
	4. Maximum grades	8%–11%			
(d)	251 to 400 ADT				
	1. Right-of-way	4 rods			
	2. Roadway width	32 feet			
	3. Surface width	22 feet			
	4. Maximum grades	6%–8%			
	5. Curvature	6°–12.5°			

Source Wisconsin State Statutes 86.26 (Unofficial Text) ; and, Bay-Lake Regional Planning Commission, 2002

The department may approve deviations from the minimum standards in special cases where the strict application of the standards is impractical and where such deviation is not contrary to the public interest and safety and the intent of this section. This section does not apply to improvements on town roads existing on October 1, 1992.

Apply Traffic Considerations

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

1. Adequate vehicular and pedestrian access should be provided to all parcels of land.
2. Local road systems should be designed to minimize through traffic movement.
3. The road pattern should minimize excessive travel.
4. A simple and comprehensible system of road names and house numbering should be provided.
5. Traffic generators located within new subdivisions (such as schools, churches and parks) should be considered in the local circulation pattern.
6. The planning and construction of local residential roads should clearly indicate their function.
7. The local roads should be designed for a relatively uniform and low volume of traffic.

8. Local roads should be designed to discourage excessive speeds.
9. Minimize intersections.
10. Devote a minimal but adequate amount of space to road uses.
11. Roads are a function of land use, and therefore should not unduly hinder the development of land.
12. Pedestrian and bicycle paths should be separated from vehicle paths where possible.

Improvements to the Local Road System

Develop and adopt an official map that identifies the proposed STH 57 alignment and the recommended alterations to the county and local road system resulting from the STH 57 project. In addition, the official map could identify the expansion of the existing town park as well as future park locations or natural areas on the Brussels Hill.

The official map should show the location of the recommended extension of Lark Road to School Road and the proposed new road between Lark Road and Pleasant View Road (Map 5.4).

Recommend four to five-foot paved shoulders on all major and minor collectors (existing STH 57, CTH C, CTH H, CTH J, CTH XC, and CTH D) to enhance safety, decrease road maintenance and provide a safer travel path for bicyclist and pedestrians. Paved shoulders can extend the service life of the road surface since edge deterioration will be significantly reduced. Paved shoulders also provide a safer break-down area for motor vehicles.

Recommend five-foot paved shoulders on all roads within the unincorporated village to accommodate bicyclist and pedestrians.

Adopt a STH 57 Highway Corridor Overlay zoning district that will enhance safety and protect the function of all roads within the designated corridor by controlling the location and design of access driveways.

Initiate A Pavement Management Program

Town 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 a "pavement management" system be developed and utilized by the town. The system provides a detailed inventory and description of all roads within the town, provides a detailed surface condition survey of those roads, defines the goals and objectives of the town 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 town's roads. The pavement management program provides the town with a detailed, defensible document, which will assist elected and appointed officials in making informed decisions regarding road maintenance and repair.

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 town 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 town.

Bicycle Transportation

Develop and identify a system of bicycle trails, paths and road accommodations to facilitate safe and efficient travel between population centers and nodes of development, and other important destination points such as state parks and natural areas. All local (town) roads are considered suitable or desirable for bicycling based on traffic volumes and roadway width. The existing segment of STH 57 through the town that will be transferred to the county, as well as the higher volume county roads such as CTH C, CTH H and CTH XC, could be significantly improved for bicycling (and pedestrians) by paving the road shoulders to a width of 4 or 5 feet.

Adding or improving paved shoulders often can be the best way to accommodate bicyclists in rural areas and benefit motor vehicle traffic. Where funding is limited, adding or improving shoulders on uphill sections will give slow-moving bicyclists needed maneuvering space and will decrease conflicts with faster moving motor vehicle traffic. Paved shoulders should be at least 4-feet wide to accommodate bicycle travel. However, where 4-foot widths cannot be achieved, any additional shoulder width is better than none at all. The measurement of usable shoulder width should not include the width of a gutter pan, unless the pan width is 4-feet or greater. Shoulder width of 5-feet is recommended from the face of guardrail, curb or other roadside barriers. It is desirable to increase the width of shoulders where higher bicycle usage is expected. Additional shoulder width is also desirable if motor vehicle speeds exceed 50-mph, or the percentage of trucks, buses and recreational vehicles is high, or if static obstructions exist at the right side of the roadway. In general, AASHTO's recommendations for shoulder width (as described in A Policy on Geometric Design of Highways and Streets (Green Book₁)) are the best guide for bicycles as well, since wider shoulders are recommended on heavily traveled and high-speed roads and those carrying large numbers of trucks. However, in order to be usable by bicyclists the shoulder must be paved.

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 major county population center (Sturgeon Bay) to jobs in northern Door County. An economical and efficient transportation system is essential to attracting a sufficient workforce. The town may wish to have the county explore development of a rural transit (bus) system to provide service between the towns, city and villages located within the county.

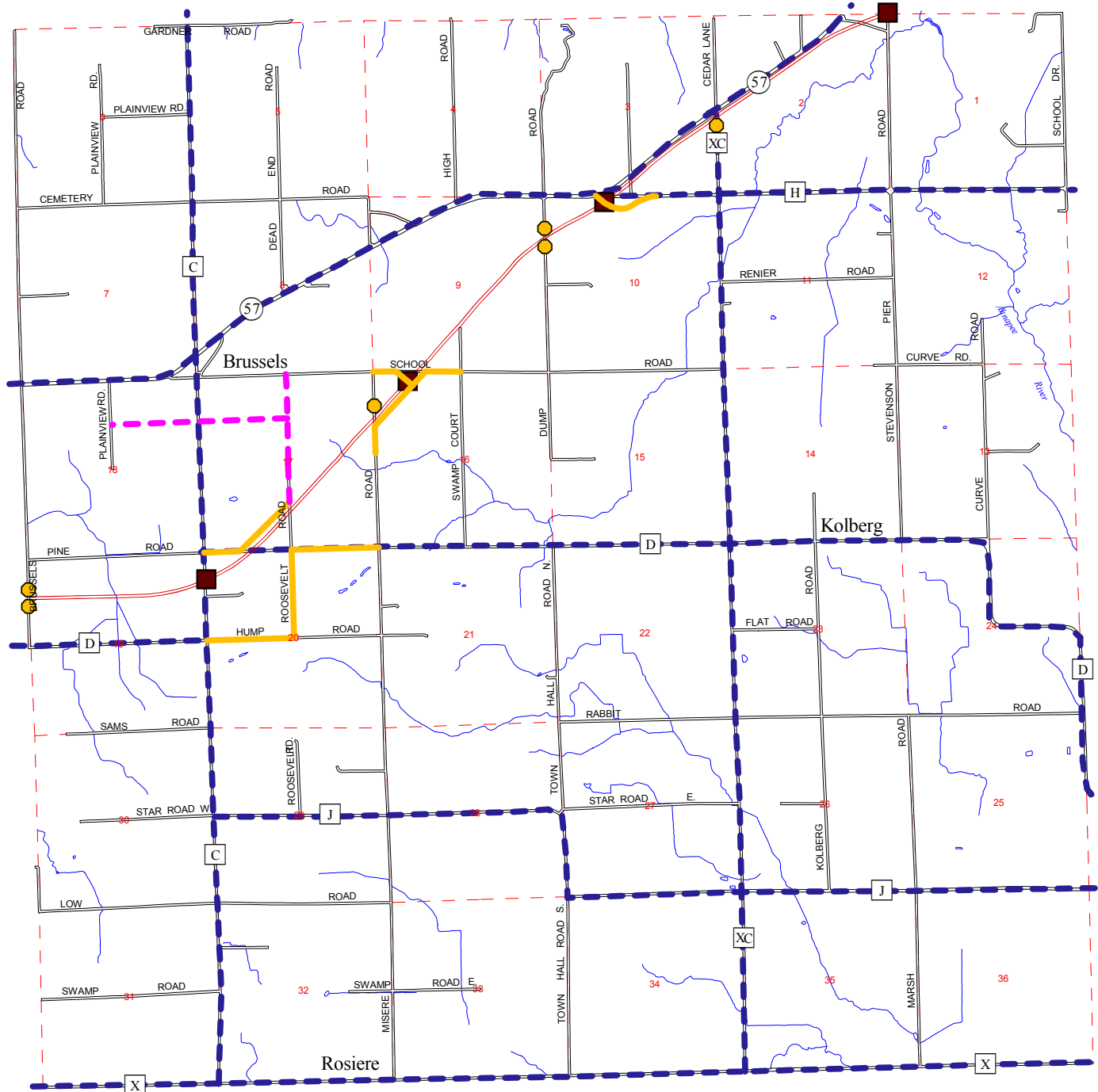
The county should consider the feasibility of development of a county bus transit system to operate in a coordinated fashion with an urban shared-ride taxi system within the city of Sturgeon Bay. Public Transit (s 85.20/Sections 5307 & 5311 USC) funding is available to local public bodies and federally 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.

Recommended Transportation Improvements

Map 5.4

Town of Brussels Door County, Wisconsin



0.5 0 0.5
Miles

Alignments

- STH 57 New Alignment
- New Town Road/Road Extension
- New Road and Realignment Access to STH 57
- Bicycle Accommodations - 4' to 5' Paved Shoulders

Intersections

- Cul-de-sac
- At Grade - Full Intersection

Source: WisDOT, 2000;
Bay-Lake Regional
Planning Commission, 2002.

Chapter 6 - UTILITIES AND COMMUNITY FACILITIES

INTRODUCTION

As part of the comprehensive planning program, the town of Brussels utilities and community facilities were reviewed and broadly 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 Town Clerk, employees of the town, and other representatives throughout the community.

To continue to maintain an adequate level of public services, the town must continuously monitor and upgrade their existing facilities as population increases. The general recommendations contained within 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. The confidence level of referenced materials herein is subject to change and should only be used as an initial guide/reference in establishing this plan's initial land use needs. As time goes on, the town should collect updated information regarding services as it looks to modify them. In some cases greater detail of information on the services should be collected.

SUMMARY AND IMPLICATIONS

As is typical of rural towns, many of the services provided to the residents of the town of Brussels are provided at the county level such as police, and library services; while fire protection and emergency medical services are provided by a volunteer department, jointly served by the towns of Brussels, Union and Gardner. The facility which houses fire and emergency equipment is located in the unincorporated village of Brussels.

The town maintains more than 50 miles of local roads that provide essential land access and connectivity to both state and county highway systems. Electric and natural gas services for the town are provided by the Wisconsin public Service Corporation (WPS). All sewer and water needs are provided by private on-site waste disposal systems and private wells. The town of Brussels is located within the Southern Door school district and the kindergarten through grade 12 school facility is located approximately two miles north of Brussels, on STH 57, in the town in the town of Gardner. The town maintains a town park located in the unincorporated village which consists of approximately 13 acres. The community facility (town hall) currently is currently housed within the Brussels/Union/Gardner Fire Station.

UTILITY AND COMMUNITY FACILITY STRATEGY

Goals: Utilities and Community Facilities

1. To provide appropriate and quality community services to all the residents of the town of Brussels and to provide for orderly development of the town through the planned development of the necessary public and community facilities and services.

Objectives:

1. To develop, maintain and upgrade as needed the town's utilities, community facilities and services for all its residents.
2. To site and locate all new facilities within the unincorporated village of Brussels, as appropriate.

Policies:

1. Improve the conditions and maintenance of the roads in the town of Brussels and maintain at a minimum level of service of C (LOS C).
2. Ensure that the town continues to receive effective and efficient fire and emergency medical services.
3. Ensure adequate law enforcement services within the town.
4. Ensure that adequate and affordable solid waste disposal services are provided.
5. Ensure that private on-site waste disposal systems are adequately maintained in order to protect the town's valuable groundwater sources.
6. Ensure that provision of public facilities to accommodate development will not place an unreasonable burden on the ability of the town to provide them.
7. Developers shall ensure that adequate public facilities exist to accommodate proposed development or will be provided within a reasonable time.

Programs:

1. Continue to work with Door County and adjacent communities to provide affordable and adequate levels of police, fire and rescue services.
2. Designate a sub-committee to explore creation of a sanitary district and development of a feasibility study to provide sewer service to the community of Brussels.
3. Designate a transportation sub-committee that will explore other ways to improve town road conditions and road maintenance.

Goal: Parks and Recreational Lands

Provision of an integrated system of public, general-use, outdoor recreation sites and related open space areas and areas for intensive nonresource-oriented outdoor recreational activities, intensive resource oriented outdoor recreational activities, and land based outdoor recreational activities which will allow the resident population of the town of Brussels adequate opportunity to participate in a wide range of outdoor recreational activities.

Objectives:

1. Continue to maintain and develop appropriately spaced and sized recreational sites within the town for all of the town's residents.
2. Ensure that existing and new outdoor recreation sites are consistent with accepted standards.

Policies:

1. The town will cooperate with Door County in the development and implementation of the County Outdoor Recreation Plan.
2. The town will cooperate with adjacent communities to consider the development of jointly beneficial future recreational lands within the area.
3. The town will promote utilizing as many natural features, as reasonably possible, for enhancing the town's recreational opportunities.
4. The town will use the town's official mapping powers to preserve any areas the town designates for future park and recreational uses.
5. The town will consider access for the disabled, elderly and very young when planning/designing/coordinating and constructing any new recreation projects, including parking, trails, etc.
6. The town will provide a minimum of 2.2 acres of public park sites per 1,000 persons.

Programs:

1. Establish a sub-committee to work with the county and adjacent municipalities in identifying future recreational areas.
2. Work with state agencies and private property owners to ensure that existing trails (i.e. bicycle, pedestrian, snowmobile) are properly maintained and that any disputes are reconciled quickly, so as to provide quality trail networks throughout the town.
3. Explore all available resources to further enhance the quality of the town's recreational systems.
4. Work with private clubs and seek potential public and private donations for funding park system improvements.

BOARDS AND COMMITTEES INVENTORY

Brussels Town Board

The Brussels Town Board members consist of the Town Chairperson and two Supervisors, along with the Clerk and the Treasurer. *The Town Board should work for the benefit of the public, recognizing that public interests must be their prime concern.*

Town Plan Commission

The Town Plan Commission (consisting of five-members) was created by the Town Board of Supervisors and was designated as the town zoning agency pursuant to 62.23, Wis. Stats. The Town Board also gave the Town Plan Commission the responsibility of developing the town's comprehensive plan. The commission has the responsibility of recommending a comprehensive plan to the Town Board for its adoption.

PUBLIC UTILITIES AND FACILITIES INVENTORY AND ANALYSIS

Electric Service

Electric services are provided by the Wisconsin Public Service Corporation (WPS). The two substations servicing the town are located on School Lane and the Rosiere area. The primary source of electricity for the Brussels area is transmitted from the Kewaunee Nuclear Plant, Pulliam of Green Bay, and Sky Gen of DePere. Voltage capacity of the present system is 24.9 KV out of Rosiere, and 12.5 KV out of Brussels. Approximately 1,500 to 1,750 customers in the Brussels area are being served with electricity. Future improvements include Wisconsin Public Service's plan to upgrade all primary power out of the Brusbay substation over the next 10 year period.

Natural Gas

Wisconsin Public Service also provides natural gas service to several areas in the town of Brussels. The areas of the town that are provided natural gas include the unincorporated village of Brussels and portions of the town located adjacent to STH 57, County Highways H, XC and C, School Road, and Cemetery Road. The system currently serves approximately 250 customers but has the potential to serve 600. Future improvements may include expanding the natural gas main to more areas as customer growth occurs. *The remainder of the town's households utilize liquid propane gas with on-site tank storage.*

Power Generation Plants and Transmission Lines

There are currently no power generation plants located within the town of Brussels.

Public Water System

The town of Brussels does not have a public water system. Residents in the town have individual wells that are owned and maintained by the property owner. Currently the town has no plans to develop a public water system.

Private Onsite Wastewater Treatment Systems

All onsite wastewater treatment in the town is provided by privately owned, wastewater septic systems. A septic permit, obtained from the county, is required for the installation, modification, or addition of systems; and the permit must be obtained prior to issuance of a building permit.

Sanitary Sewer Service

The town of Brussels currently does not have a sanitary sewer system. Property owners within the town are responsible for owning and maintaining individual septic systems and holding tanks. However, there have been discussions about the development of a sanitary district in the unincorporated community of Brussels for the purpose of connecting to the city of Sturgeon Bay system or the Green Bay Metropolitan Sewer District System. The procedures for the development of such a district include the following.

Metropolitan Sewerage Districts: Proceedings to create these districts are initiated by resolution of any municipality. Following a public hearing, the State department of natural resources may order the creation of such a district. A board of commissioners governs each district; the county board appoints the commissioners unless the cities, towns, and villages

comprising the district agree to appoint the commissioners or provide for their election. The district may issue bonds (approval of the voters is required for bond issues if petitioned for), levy direct annual taxes that the participating governments collect, levy special benefit assessments, and fix charges for services).

Storm Water Management Systems

Currently, all storm water drainage for the town of Brussels is provided by roadside ditches and culverts, and surface water drainage to natural areas. There are no plans to add a storm sewer system to the town.

Refuse Disposal & Recycling Facilities

Solid waste disposal for the town of Brussels is provided by a contractor which transports the waste to the county landfill and/or other municipal landfills. The town's recycling program does not have curbside pickup, but the community does have a drop-off site. The site is open Tuesday mornings, Thursday afternoons and Saturdays all day. Paper, glass, plastics and metal are all materials that are collected at the recycling center. There are no future improvement plans for these services.

Telecommunications Facilities

CenturyTel provides the town of Brussels with local and long distance telephone service. Additional long distance providers include AT&T, Sprint, MCI and many others. The nearest telephone facility is located on CTH C in the town of Brussels. This facility does not have an open office, it contains a drop box for payments only. The town does not contain any special lines for internet access. Cellular service for the town is provided by Cellcom, US Cellular and Verizon. One telecommunication tower currently exists in the town located on High Road. The tower is being used by Cellcom and other cellular providers. The telephone service in the community is considered adequate at this time. No cable television service is provided within the town .

COMMUNITY FACILITIES INVENTORY AND ASSESSMENT LOCATION, USE AND CAPACITY

Municipal Buildings

The town of Brussels does not have a town hall. Currently the town of Brussels rents the Brussels, Union and Gardner Fire Station (BUG) to use for town meetings. The BUG fire station facility is located at 9683 Highway 57, within the unincorporated village of Brussels. Town officials store and maintain town records within their private residences. The fire station facility consists of a large vehicle equipment storage area with desk, bathroom, and tables and chairs located to one side of the structure. Due to the need for additional and more efficient equipment storage, an office addition will be constructed to the west side of the structure and the area now used for meetings will be used to store equipment. The present facilities are not adequate and the town has held discussions on constructing a Town Hall and/or Community Center within the Town Park in the future.

Road and Other Maintenance

The everyday maintenance of Brussels roadways is provided by the Door County Highway Department located in Sturgeon Bay. Other town facilities such as the town park are maintained by the town and volunteer organizations.

Postal Services

Postal service within the town of Brussels is provided by a facility located at 9771 Highway 57. The post office was built in 1963 and presently contains 100 lock boxes and approximately 966 sq. ft. of space. The facility lacks adequate parking as more space is needed. The present facility is considered inadequate for future use as more building space will likely be needed.

Cemeteries

The cemeteries located in the town of Brussels are all found on church grounds.

Police Services

Police protection for the town of Brussels is provided by the Door County Sheriffs Department. The county sheriff's offices are located at the County Court House in Sturgeon Bay. The police protection is considered adequate at this time.

Fire Services

The town of Brussels has its own fire department located at 9683 Highway 57. The B.U.G was built and established in 1968 and contains 55 volunteers from the towns of Brussels, Union and Gardner. Special services provided by the fire department is the rescue sled for off-road use. Fire services are accessed by calling the 911 system, which in turn pages the volunteers. The Fire Department serves the towns of Brussels, Union and Gardner and has mutual aid agreements with the Southern Door Fire Department, and other fire departments throughout Door and Kewaunee County. The Southern Door Fire Department is automatically paged for structural fires while other Door and Kewaunee County departments are available upon request. For every fire, the department has the following major equipment:

- 1968 Chevrolet pumper
- 1969 Chevrolet tanker
- 1974 Chevrolet tanker
- 1983 Ford pumper
- 1995 Freightliner pumper
- 1995 Freightliner tanker
- 2000 Freightliner pumper
- 2000 Freightliner tanker
- 2000 Dodge brush pick-up truck.

Presently, the B.U.G. Fire Department facilities are seen as being adequate for the community.

Insurance Service Office (ISO) Grading

The adequacy of fire protection within the town is evaluated by the Insurance Service Office (ISO) through the use of the *Grading Schedule for Municipal Fire Protection*. The schedule provides criteria to be used by insurance grading engineers in classifying the fire defenses and physical conditions of municipalities. Grading obtained under the schedule are used throughout

the United States in establishing base rates for fire insurance. While ISO does not presume to dictate the level of fire protection services that should be provided, it generally identifies serious deficiencies found, and over the years has been accepted as a guide by many municipal officials in planning improvements to their fire fighting services.

The grading is obtained by ISO through its Municipal Survey Office based upon their analysis of several components of fire protection including:

- Fire department equipment
- Alarm systems
- Water supply system
- Fire prevention programs
- Building construction
- Distance of potential hazard areas from a fire station

In rating a community, total deficiency points in the areas of evaluation are used to assign a numerical rating of one to ten, with one representing the best protection and ten representing an unprotected community. The town of Brussels ISO fire rating is a nine.

Emergency Services

The town of Brussels does not provide its own ambulance service. This service is provided by Door County Emergency Services located in Sturgeon Bay. The ambulance service is provided to all of Door County and was established in 1971 in Sturgeon Bay and in 1983 in Brussels. The ambulance in Brussels is located at the B.U.G. Fire Station. The vehicles are advanced life support modular ambulances with advanced life support and basic life support equipment. There are 13 full-time paramedics and 15 on-call emergency medical technicians. There are no future improvement plans for the emergency service at this time. The service is considered adequate for the community.

Library

The town of Brussels does not have a library facilities. However citizens of the town can utilize the Door County Library system with the nearest branches located in Forestville and Sturgeon Bay. The Forestville Library is located just two miles east of the town, at 123 STH 42 in Forestville, and the Sturgeon Bay Library is located at 107 South 4th Ave.

Public Schools

The town of Brussels is located within the Southern Door school district. The school facilities, located at 8240 STH 57 in the town of Gardener, educate grades K-12 and has a student enrollment of 1,320. The schools are considered adequate at this time, however there are future improvement plans for the educational facilities. The improvement plans are to build a new high school library, increase science lab area in the old library, new middle school band and chorus rooms, new administrative offices for the middle school, convert old offices to special education areas and develop a new health and nurse area.

Child Care Facilities

The town of Brussels does not contain any public child care facilities, however several private child care facilities are available in the area.

1. Abel's Child Care Plus, 1514 Dump Road
2. Adventures Child Care, Inc., 1645 Tee Off Lane

Abel's Child Care Plus currently has 8 children enrolled, whereas Adventures Child Care, Inc. has an enrollment of 39 children. The present private facilities are not adequate for the community because both providers have waiting lists for new enrollment.

Health Care Facilities

There are no existing hospital facilities within the town of Brussels. The nearest hospital and medical facilities are located 15 miles away in the surrounding communities of Sturgeon Bay and Algoma. The Door County Hospital in Sturgeon Bay is the nearest major hospital facility along with the major hospital facilities in the nearby city of Green Bay (Bellin Medical Center, St. Mary's Hospital, St. Vincent Hospital, Aurora Medical Center).

There are no dental facilities found within the town. The nearest dental facilities can be found in the communities of Sturgeon Bay and Algoma.

OUTDOOR RECREATION INVENTORY

Community Owned Sites

The Brussels Town Park located on Junction Road in Brussels is a 13 acre community owned recreational facility with a ball diamond and shelter. Future improvement plans for the town's recreational facilities includes the expansion of the town park within the next 10 to 20 years.

School-related park or recreation sites at the Southern Door Schools could be utilized by the residents of the town of Brussels. There is also a baseball field including backstop and other amenities located at Kolberg. Also several surrounding communities such as Sturgeon Bay and Algoma have public parks that are available for use by the citizens of the town.

National, State and County Facilities

The town of Brussels does not contain any National, State or County recreational facilities.

NRPA Standards

The National Recreation and Park Association (NRPA) has developed a population guideline to help determine the amount of resources and facilities required to serve a given population. The NRPA standard is 10 acres of parkland should be provided for every 1,000 residents in a community. Based on the NRPA standard, the town of Brussels with a population of 1,112 persons in 2000 should be providing approximately 12 acres of parkland. However, the NRPA standard of 10 acres for every 1000 persons is only a guide and the number of acres for park and recreation land needs to be determined by the individual community.

By their very nature, typical rural communities such as the town of Brussels, have access to significant open and natural areas for outdoor recreation pursuits. Given the dispersed nature of residential development, formal play lots with play equipment, which would require transportation to access, would be underutilized by the community. However, as the population increases within the unincorporated village, town, park and recreation needs will need to be continually monitored. Additionally, providing amenities such as formal play lots and equipment, within the existing town park, may serve to attract more densely spaced residential development in the unincorporated village of Brussels.

PUBLIC/COMMUNITY FACILITY RECOMMENDATIONS

Town Hall/Community Center

The town of Brussels currently rents space from the Brussels/Union/Garner Fire Station for the operation of town government and to conduct meetings. Town officials store papers and resources in their own private residences. The BUG facility, although serviceable, is considered less than ideal, particularly for conducting meetings. The town should continue to assess and explore funding opportunities for development of a community center/town hall facility which could be located adjacent to the town park., within the unincorporated village.

Given that a primary goal of this plan is to concentrate and direct future land for residential, commercial and industrial development in and adjacent to the existing unincorporated village, a community center could serve to focus such development in the unincorporated village.

Park Improvements

The town park is also an amenity that could serve to focus and concentrate development in the unincorporated village. The town should work with private contributors and clubs, the WDNR, and other appropriate agencies to expand the park grounds and to develop and improve access, parking, and the park's facilities (play equipment, community paths, lighting, etc.).

Recreational Trail System

The town should work with the state and the county to plan and develop transportation corridor paths and recreational trail systems within the town to accommodate bicyclists, pedestrians, snowmobiles, etc.

Fire and Safety Services

The town should continue to work closely with the towns of Union and Gardner to provide and improve protective services.

Intergovernmental Cooperation

The town should continue to monitor the towns contractual agreements for services, so as to provide the most cost efficient and effective services to the town residents.

Road System

The town should maintain roads at a minimum level of service C (LOS C) as described in Chapter 5.

Natural Resources

The town should continue to seek methods and means to preserving the valuable natural resources of the town (the Brussels Hill and other less prominent Niagara Escarpment features, wetlands, etc.,) for future generations. It is recommend that the town include natural area protections for the Brussels Hill, that is consistent with that contained in the Door County Zoning Ordinance.

Postal Service

The town should work with U.S. Postal Service to maintain operation of post office facility and services in the unincorporated village of Brussels and to expand existing facility when needed.

Chapter 7 - INTERGOVERNMENTAL COOPERATION

INTRODUCTION

The town of Brussels' relationship with neighboring communities, the county, school districts, the Regional Planning Commission, the state, and the federal government and their agencies, can impact town residents in terms of taxation, planning, the provision of services, and siting of public facilities. This chapter of the town's plan provides an overview of the relationships that exists and identifies common issues and potential conflicts. It is through the formal identification and review of these important shared issues and conflicts that mutually beneficial opportunities may be brought about and potential problem resolutions may be arrived at.

SUMMARY AND IMPLICATIONS

The town has excellent relationships with the state, county and adjoining local units of government. The town has met regularly with the Wisconsin Department of Transportation and the Door County Highway Commission to discuss issues relative to the realignment and expansion of STH 57 and its impact on the county and town road system. The town has also worked closely with the Door County Planning Department in the development and adoption of the town interim zoning ordinance which is modeled after that of Door County's Zoning Ordinance. The southern towns in Door County (Union, Brussels, Gardner, Forestville and Clay Banks) have been meeting periodically with each other and with County planning representatives since 1999 to discuss mutual issues, conflicts, and concerns.

INTERGOVERNMENTAL COOPERATION STRATEGY

Goal:

Develop a cooperative land use decision making process between the town of Brussels, the adjoining towns, the county and all other government agencies.

Objectives:

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

Policies:

1. Work with neighboring communities regarding any issues affecting land uses and land use impacts that lie across township lines.
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.

4. Promote cooperation and coordination between Door County regarding any county plans.
5. Work with the Wisconsin Department of Natural Resources, the U.S. Army Corps of Engineers and the Environmental Protection Agency to insure compliance with water quality regulations.
6. Continue to work with the Bay-Lake Regional Planning Commission or other planning agencies on town planning activities, and county and/or regional planning activities.
7. The Town Plan Commission or Town Board should be aware of any planning activities that may impact the town of Brussels.

PROGRAMS:

1. Continue regularly scheduled meetings between adjoining towns and the county to discuss and review land use issues.
2. Develop a check list that encourages and/or requires an opportunity for formal county and state review of any major land use decisions made by the town.

EXISTING ACTIVITIES

Adjacent Governmental Units

The town of Brussels shares borders with six other municipalities. The municipalities include the towns of Union, Gardner, Nasewaupée and Forestville in Door County, and the town of Lincoln and Red River in Kewaunee County.

Relationship

The town of Brussels has a good working relationship with the surrounding towns. Since towns are not incorporated they cannot annex land. Therefore, the borders between the town of Brussels and adjacent towns are fixed and boundary disputes are nonexistent. There is cooperation with several of the adjacent towns in regards to the provision of public services such as fire protection, road maintenance and emergency services.

Siting Public Facilities

The town of Brussels jointly operates a fire department with the towns of Union and Gardner located at 9683 Highway 57. The B.U.G was built and established in 1968. The department serves the towns of Brussels, Union and Gardner and has mutual aid agreements with the Southern Door Fire Department, and other fire departments throughout Door and Kewaunee County.

Sharing Public Services

Currently the town of Brussels has an intergovernmental agreement with the towns of Union and Gardner regarding fire protection and safety.

School District

The town of Brussels is located within the Southern Door school district. The school facilities, located at 8240 STH 57 in the town of Gardener, educate grades K-12 and has a student enrollment of 1,320.

Relationship

The town of Brussels's relationship with the School Districts is best described as limited. The School District tends to operate rather independently and interaction with the Town tends to be minimal.

Siting School Facilities

The siting of new school facilities and expansion of existing school facilities is mainly conducted by the School District.

Sharing School Facilities

The town has no formal agreement with the School Districts for shared use of the school facilities. However, the schools outdoor recreational facilities may provide opportunities to residents of the Town.

County

The town of Brussels is located in Door County and therefore the county has jurisdiction within the town. In particular, the county has jurisdiction in the town over, shoreland- floodplain zoning, land divisions and on-site sanitary systems, and the county highway system. The Town and County continue to maintain open communication with each other in order to build a good working relationship of both general agreement and respect.

Region

The town of Brussels is located in Door County, which is located in the northeast region of the State of Wisconsin. Door County is not a member of the Bay-Lake Regional Planning Commission (BLRPC). The BLRPC has a number of programs and plans in place covering natural resources, population projections, community plans, transportation plans, bike plans.

State

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

INVENTORY OF PLANS AND AGREEMENTS UNDER S. 66.0307, S. 66.0301 OR S. 66.0309

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. However, in order to promote harmonious development in the area, the town may want to discuss Boundary Agreements with adjacent municipalities in the future. Currently, the town of Brussels has not entered into a boundary agreement with any municipality.

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, cities over 10,000 the area extends to 3 miles. There are no municipalities that currently have extraterritorial powers or jurisdiction in the town of Brussels.

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. There are currently no municipalities that are or can exercise extra-territorial zoning in the town of Brussels.

OPPORTUNITIES FOR COOPERATION

On April 15, 2002, the town of Brussels facilitated an intergovernmental cooperation meeting at the Brussels/Union/Gardner Fire Station and invited all surrounding municipalities, the school district, WDNR, WisDOT, and several county agencies, to identify existing opportunities and/or potential conflicts in and around the area. Participants were asked to articulate issues and to identify conflicts that might be resolved through cooperative efforts. The opportunities and conflicts that were identified included:

State

- Preservation of Brussels Hills
- Preservation of historic and archaeological resources
- Protection and preservation of natural resource base
- Preservation of the scenic and rural character of the STH 57 corridor
- Protection of groundwater and wellhead protection

County

- Preservation of Brussels Hill
- Preservation of historic and archaeological resources
- Protection and preservation of natural resource base
- Preservation of the scenic and rural character of the STH 57 corridor
- Maintaining function of county highways
- Protection of groundwater and wellhead protection

Towns

- Preservation of Brussels Hill
- Preservation of historic and archaeological resources
- Preservation of the scenic and rural character of the STH 57 corridor
- Local road maintenance and alignment

State/County and Town

- Sharing/Duplication of services
- Ground and surface water quality protection
- Lack of communication between local units of government
- Economic development
- County land use decision making vs. local control
- Common goals for conservation areas across political boundaries

The meeting notice and list of attendees from the workshop can be found in **Appendix E**. All comments obtained at the meeting were verbal. There were no written comments received prior to, at, or after the April meeting.

INVENTORY OF EXISTING OR POTENTIAL CONFLICTS

The intergovernmental cooperation meeting conducted in and by the town of Brussels identified two primary areas of concern that may generate conflict in the future.

An area of concern that was discussed was the lack of development control adjacent to the STH 57 corridor. Brussels, is currently the only town in southern Door County that has adopted zoning controls which can adequately address the impacts of unregulated development within the corridor. Conflicts may occur if development including billboards and commercial enterprises are able to occur without due consideration as to the impacts of the development, both on adjoining lands and communities, on the county, and to the safe functioning of the highway. Both the town of Union and the town of Nasewaupsee noted that “zoning regulations” were currently being considered for adoption in their respective towns.

A second area of possible conflict was identified by the town of Lincoln in Kewaunee County. At the time of the intergovernmental meeting in Brussels the town of Lincoln was considering the

impacts of a large scale dairy farm that would be located in close proximity to the town of Brussels, and the town of Union. Because of the nature of large scale agricultural operations the impacts of the operation could likely extend across town borders, particularly with regard to noise, dust, odors and animal waste disposal.

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 listed. 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 information gathered by local units of government
2. Sharing of services
3. Sharing meeting notices, agendas and the minutes
4. Schedule annual or semi-annual meetings 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 three or four months
7. Township federation or alliance within county
8. Determine common areas of development between communities before development
9. Develop common projects

SUMMARY AND CONCLUSIONS

In general, the intergovernmental cooperation meeting hosted by the town of Brussels could be characterized as successful given the number of attendees and the fact that all participated or were given the opportunity to participate 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 town of Brussels. This plan recommends that the town pursue the above solutions as well as expand upon them.

Chapter 8 - LAND USE AND GENERAL PLAN DESIGN

INTRODUCTION

The land use and general plan design component of the plan for the town of Brussels', which follows, presents information on the current (2001) land use within the town and articulates the town's vision 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 Town 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 utilized in the development of the General Plan Design.

SUMMARY AND IMPLICATIONS

The town of Brussels is a predominantly rural town with small existing nodes of mixed use development located in the unincorporated village of Brussels and to a lesser extent the crossroad communities of Kolberg and Rosierre. The town developed and adopted a zoning ordinance in 2002, which is modeled after the county zoning ordinance, to promote the orderly development of land and to assist with implementation of their comprehensive plan.

A primary objective of the town's plan, relative to its existing and future land uses, is to preserve and protect its rural character. The "rural character" of the town is defined by its extensive agricultural base consisting of small to medium sized dairy farms, fruit orchards, scattered rural residential properties on relatively large lots, small mixed-use service centers as exemplified by the unincorporated village of Brussels, and its wooded natural resource areas such as the Brussels Hill and the Gardner Swamp.

Currently, the developed lands in the town account for less than 6.5 percent or approximately 1,499 acres of its total land area (23,081.6 acres). Nearly 94 percent of the town land is still considered undeveloped with approximately 70 percent of the town land area identified as crop and pasture land, while slightly less than 19 percent of the total land area has been identified as woodlands. Residential development accounts for less than two percent of town's total land area.

LAND USE STRATEGY

The land use strategy for the town of Brussels has been articulated through community surveys and outreach. The following land use goals, objectives and policies are derived from the previous chapters of this document.

General Plan Design Goal

Promote future development that will meet the needs of the town 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.

General Plan Design Objectives:

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 rural character of the town for both existing and future residents.
2. Encourage ground water protection within the town.
3. 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, the Brussels Hill, the Niagara Escarpment, meadows, open spaces, wetlands, etc.) into site designs creating environmental corridors throughout the Town for wildlife habitat and/or pedestrian linkages.
4. Promote the development of affordable housing.
5. Encourage harmonious and well-planned commercial developments that will serve the needs for the town and area residents, as well as the STH 57 corridor.
6. Encourage increasing the acreage that is protected from development by public ownership, environmental trust ownership, private conservation easements or other appropriate means.
7. To meet the needs of projected population growth, while retaining the stability and integrity of existing open space areas, encourage new higher density residential development in and around the present population centers.
8. The Town will continue to provide public services throughout the planning period in order to reach the desired vision of this plan regarding future land use development

General Land Use Policies:

1. Utilize the Comprehensive Plan as an illustration of the town's overall development policy.
2. Work with Door County and all neighboring town's to update applicable County Codes, and the Subdivision Ordinance to be consistent with the town's Comprehensive Plan.
3. Direct orderly future development to ensure the proper distribution of available community services.
4. Work with the towns of Union, Gardner, Nasewaupée, Forestville in Door County and the towns of Lincoln and Red River in Kewaunee County, to ensure compatible growth adjacent to the town's border areas.

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

Residential Land Use Objective

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 town 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.

Residential Land Use Policies:

1. Residential areas should be distanced, buffered, or otherwise mitigated from physical hazards, unhealthy conditions, and protected from traffic, noise, and incompatible uses.
2. Provide for sufficient densities within the planning area to meet the current and future needs of the local population.
3. Provide, through land use regulations, the potential for a broad range of housing choices to meet the needs of the community.
4. 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:
 - A. adjacent to environmental corridors; and
 - B. along major state and county highway transportation corridors.

Commercial Land Use Objective

Encourage harmonious and well-planned commercial developments that will serve the needs of the town, area residents, and the traveling public.

Commercial Land Use Policies:

1. The town shall consider developing a set of design standards that would preventing and reducing traffic congestion and distracting visual clutter associated with developments along major thoroughfares in the town.
2. Areas already characterized by commercial development and where town services and facilities are available should be given preference over scattered non-serviced areas.
3. Ready access to adequate, electrical power, natural gas supplies, and communications should be available.
4. Points of vehicle ingress and egress (driveways) 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.
5. Adequate landscape screening "buffer" should be provided between commercial uses and adjacent noncommercial uses.

6. Adequate building setbacks should be provided from town roads and highways.

Light Industrial Land Use Objective

Provide planned locations for manufacturing, warehousing, trade or contractor establishments, commercial storage, light industrial parks or business parks that have access to major traffic routes but are appropriate for the rural character of the town. By focusing development in these specific areas, the rural character of the town will be better served.

Light Industrial Land Use Policies:

1. To be permitted, the development shall not detract from the rural community appearance, over burden community services of the town.
2. Landscaping and fencing should be designed to establish a clear edge along the side of the site that is visible to motorists and others passing by or viewing the site;
3. Design entries to the site as gateways for vehicular entrances, marked by decorative columns or other features more prominent relative to the other features surrounding the site or road. The construction materials should be similar to those used for the building and other site amenities;
4. Establish lighting and sign controls allowing for soft lighting (limited only to the site) and signs that fit the community's rural character;
5. Integrate road drainage with site design;
6. Encourage landscaping continuity not fragmentation;
7. Save existing trees;
8. Utilize double or single rows of trees or shrubs, (of native plant species), when a visual screen is needed;
9. Make service areas attractive; and
10. Make vehicle entrances appealing to motorists.
11. The site should have available adequate water, stormwater drainage, natural gas and electric supplies.
12. The site needs to have adequate buffering from adjacent non-industrial uses.
13. The site needs to have adequate points of ingress and egress, an internal street system, along with adequate off-street parking and loading facilities.

Natural and Cultural Resources Land Use Objective

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

Natural and Cultural Resources Land Use 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. 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.

Transportation Land Use Objective

Establish a safe and efficient transportation system for motor vehicles, pedestrians, and bicycles that is compatible with the town's adopted Year 2020 Master Plan.

Transportation land Use Policies:

1. The proper use of land for, and adjacent to, transportation facilities should be pursued in accordance with the town's land use development objectives. The disruption of future development should be minimized by utilizing transportation corridor preservation techniques and the total amount of land used for transportation facilities should be minimized.
2. A minimum Level of Service (LOS) of 'C' should be maintained on all highways and roads.
3. Transportation facilities should be located to minimize impacts on visually pleasing buildings, structures, and natural-al features; and to enhance vistas to such features.
4. The location of transportation facilities in or through environmental corridors and natural areas should be avoided.
5. 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 town and county.
6. Bicycle lanes or wide curb lanes should be constructed on arterial and higher volume collector highways and local roads.

Community Services Land Use Objective:

The town will 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.

Community Services Land Use Policies:

1. The Town Board will continue to monitor services provided to town residents and explore options of maintaining or improving upon the level of existing services.
2. The Town Board will continue to work with adjoining towns and Door County to help provide future services as effectively and efficiently as reasonably possible.
3. The town will continue to monitor and address the facility and program needs of the elderly population and those approaching senior status.

INVENTORY OF EXISTING LAND USE CONTROLS

This section inventories and discusses the land use controls that currently exist within the town of Brussels, 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 town.

Planning Documents

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. Those three principal policies are as follows:

- Discourage commercial sprawl beyond established or planned business areas.
- Maintain the function of the county's principal arterial roads.
- Promoting development within defined communities and growth areas where such development can more easily be serviced by public facilities.

Door County Farmland Preservation Plan

The Door County Farmland Preservation Plan, adopted November, 1983, identified four areas (outlined as follows), which identify lands that are of prime agricultural importance, and for which landowners may be eligible for tax credits under the Farmland Preservation Program.

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.

Priority Watershed Plan

The *Red River/Sturgeon Bay Priority Watershed* Plan was developed to improve water quality and safeguard wells by reducing nutrients, sediment and bacteria loading, stabilizing stream flow rates, and maintaining woodland corridors and buffers. The plan covers an area of 139 square miles.

Sanitary Sewer Service Area Plan

The town does not have a Sanitary Sewer Service Area Plan for the unincorporated village of Brussels. There are no sanitary sewer service area plans adopted by adjoining communities that encompass any part of the town of Brussels.

LAND USE REGULATIONS

Zoning Ordinances

The Town of Brussels adopted the *Town of Brussels Zoning Ordinance* on August 13, 2002. The ordinance was approved by the Door County Board on August 27, 2002. The stated purpose of the ordinance is to “.. *promote and protect public health, safety, aesthetics, and other aspects of the general welfare and to preserve existing uses while the comprehensive zoning plan and comprehensive plan are being prepared.*”

In order to accomplish this purpose, the ordinance regulates and restricts the use of property. The ordinance divides the town of Brussels, into districts for the purpose of regulating and restricting: the use of all structures, lands and water; regulate and restrict lot coverage, population distribution and density; and regulate and restrict the size and location of all structures so as: to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote and to protect the public health, safety, comfort, convenience and general welfare; to provide adequate light, air, including access to sunlight for solar collectors and to wind for wind energy systems, and open space; to maintain the aesthetic appearances and scenic values of the town; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; and to foster more rational relationships between residential, business, commercial and recreational uses for the mutual benefit of all. Map 8.1 displays the zoning for the Town of Brussels.

Purpose and intent of zoning districts

The following specifies the purpose and intent of each of the zoning districts established by this Ordinance.

Wetland (W)

This district is intended to prevent the destruction and depletion of Town of Brussels 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.

General Agricultural (GA-2).

This district is intended to maintain agricultural lands which have historically demonstrated high agricultural productivity. It is also intended 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*. 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 two (2) acres are required for new lots, with a gross density of 8 units per quarter-quarter section (40 acres).

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 (slightly less than ½ acre) are required for new lots that are not served by public sewer. Generally, these districts will be located in or near existing communities where smaller lots are the norm. The permitted uses are restricted in order to maintain the strictly residential character of these areas.

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 (slightly less than one acre) are required for new lots. This district also permits manufactured home parks and home businesses. It is intended to provide additional development options to home owners by allowing certain businesses to be established in conjunction with residences. It will generally be located within the interior of the Town.

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. This district is intended to be located in areas with an existing mixture of residential types, certain regions which are served by public sewer, and other locations where high density residential developments are appropriate. This district is not intended to develop into centers of commercial activity and, thus, most commercial uses are not permitted. Lot sizes of at least *one acre* 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. The district permits a wide variety of retail, service, and office uses and is intended to maintain the vitality of town of Brussels's commercial centers. 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 the town of Brussels with an existing desirable mixture of uses, or where such a mixture of uses is wanted. Typically, this district will be located within or near existing communities, but it is also intended for outlying or smaller nodes of development. In addition, this district can be used as a transition between business centers and strictly residential areas. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer.

Light Industrial (LI)

This district is intended to provide for manufacturing, warehousing, and other light industrial operations. It is also intended that this district be used for the location of trade or contractor establishments, commercial storage facilities, and similar businesses. Such uses should not be detrimental to the surrounding area or to the town as a whole by reason of noise, dust, smoke, odor, traffic, physical appearance, degradation of groundwater, or other nuisance factors. Such uses may be subject to requirements that will reasonably ensure compatibility. 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.

Natural Area District (NA)

This overlay district is intended to conserve the existing, mostly undeveloped natural areas of the town. The NA district may be used in upland areas adjacent to, or surrounded by, wetland areas, areas associated with the Niagara Escarpment and with the Brussels Hill or in other areas where the Town considers the natural features to be significant. To conserve these areas only very low density residential uses are permitted. Lot sizes of at least 20 acres are required for new lots.

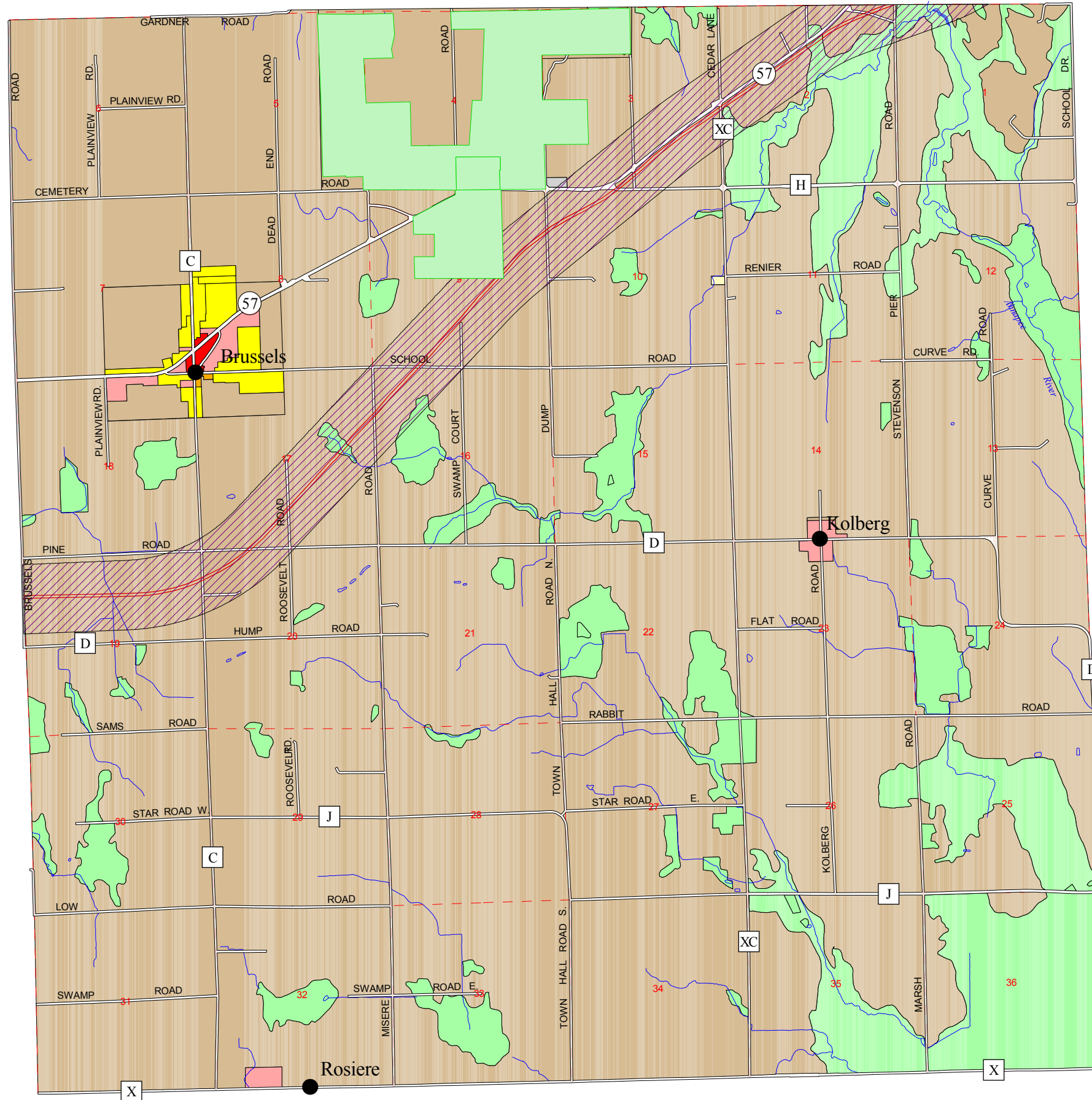
Highway Corridor Overlay District (HCO)

This overlay district is intended to preserve the lands within the proposed highway corridor for the future expansion and realignment of a state highway; to provide the public with protection from the impacts of the new four-lane highway facility on existing and future land use development; to protect the aesthetic and visual character of land in the Town of Brussels adjacent to major and existing highway corridors; to protect property owners whose proposed uses of land may be disrupted by the construction of the highway; and, to ensure adequate, safe, and efficient access to the state highway as well as to the county and local roads that intersect with the state highway.

Zoning

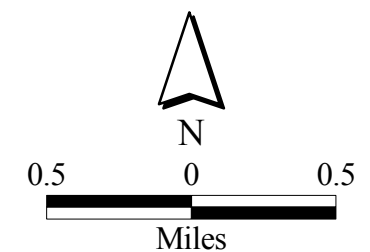
Town of Brussels

Door County, Wisconsin



- Single Family Residential (SF-20)
- Rural Residential (RR)
- High Density Residential (HD)
- Commercial Center (CC)
- Mixed Use Commercial (MC)
- Light Industrial (LI)
- General Agricultural (GA-2)
- Wetlands (W)
- Natural Area District
- STH 57 Realignment
- STH 57 Highway Corridor Overlay District (HCO)

Note:
This map is NOT an official zoning map.
This map is intended for general and
informational use only.



Source: Bay-Lake Regional Planning Commission, 2002.

Subdivision Ordinance

The Door County Land Division Ordinance was adopted in August of 1996, and regulates the division of land to promote public health, safety, aesthetics, 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.

The ordinance regulates the combining of two or more parcels of land into one parcel of 10 acres or less and the subdivision of land where the act of division creates five or more parcels or building sites which are less than 10 acres in size within a five year period. The ordinance also regulates minor land division (certified survey map or commonly referred to as CSMs) where it is proposed to divide land into at least one but not more than four parcels or building sites of less than 10 acres. 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 County. 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 county's zoning. The Town of Brussels may request that the county allow it to augment the ordinance to be more restrictive in identified town areas.

Official Map

Section 62.23(6)(b) of the *Wisconsin Statutes* provides that town 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 town 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 villages and towns 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 Town of Brussels does not currently maintain an official map. Door County is in the process of completing a county wide parcel base map. The town may want to utilize the county's parcel map as a possible start for 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. Chapter 2, Map 2.xx depicts the shoreland zone within the town of Brussels. 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 that 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 maps. 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.

Private Onsite Wastewater Treatment Systems

Chapter 21 of the Door County Code of Ordinances establishes minimum standards and criteria for the design, installation, inspection and management of a private onsite wastewater treatment system, (POWTS), so that the system is safe and will protect public health and the waters of the state. The ordinance applies to the design, installation, management, modification, replacement, addition, and alteration of all POWTS within the county. A valid permit, obtained from the county, is required to undertake any of the activities listed above.

The town may not issue a building permit to commence construction or installation of a structure that necessitates the use of a POWTS to serve the structure unless the owner of the property possesses a valid permit; a POWTS of adequate capability and capacity to accommodate the wastewater flow already exists; and, appropriate plumbing systems, fixtures, and devices exist within the structure.

CURRENT LAND USE INVENTORY

A detailed field inventory of land uses in the Town of Brussels was conducted in the summer of 2000, and updated in 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 8.2 (**Appendix F**) 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.

Table 8.1: Town of Brussels 2001 Land Use Summary

Land Use Type	Total Acres	Percentage Total Land	Percentage Developed Land
Developed Lands			
Residential	244.7	1.06	16.33
Single Family	212.6	0.92	14.19
Multi-Family	0.6	0.00	0.04
Mobile Homes	24.3	0.11	1.62
Vacant Residential	7.3	0.03	0.49
Commercial	15.4	0.07	1.02
Industrial	58.5	0.25	3.90
Transportation	735.3	3.19	49.06
Communications/Utilities	36.6	0.16	2.44
Institutional/Governmental	8.7	0.04	0.58
Recreational	59.7	0.26	3.98
Agricultural Structures	340.0	1.47	22.69
Total Developed Acres	1,498.8	6.49	100.00
Undeveloped Lands			
			Percentage Undeveloped Land
Croplands/Pasture	16,047.6	69.53	74.35
Undeveloped Open Space	7.5	0.03	0.03
Woodlands	4,350.5	18.85	20.16
Other Natural Areas	1,149.6	4.98	5.33
Water Features	27.5	0.12	0.13
Total Undeveloped Acres	21,582.7	93.51	100.00
Total Land Area	23,081.6	100.00	

Source: Bay-Lake Regional Planning Commission, September 2001.

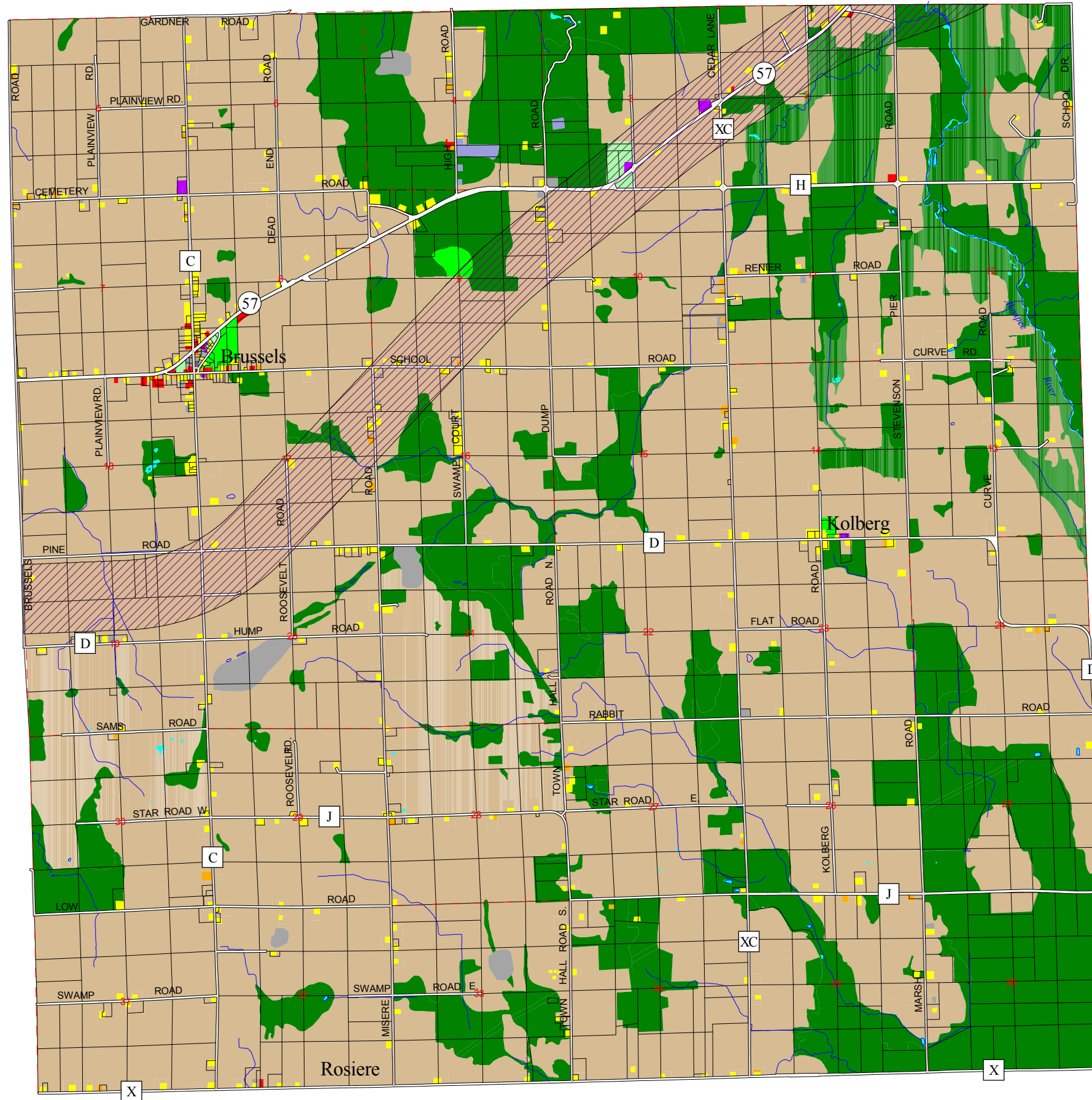
Planning Area

The Town of Brussels encompasses approximately 23,081 total acres of land. Of this, 1,499 acres, or 6.49 percent of the town, are developed, leaving 21,582 acres (93.51 percent) of undeveloped land. Of these undeveloped lands, the vast majority of the acreage is in croplands and pasture.

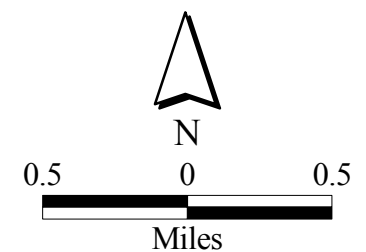
2001 Land Use

Town of Brussels

Door County, Wisconsin



- Residential
- Mobile Homes
- Commercial
- Industrial
- Roads
- Transportation
- Communications/Utilities
- Governmental/Institutional
- Parks and Recreation
- Open Space/Fallow Fields
- Agricultural
- Water Features
- Woodlands, Wetlands, Undeveloped Open Space
- Proposed STH 57 Corridor



Source: Bay-Lake Regional Planning Commission, 2002.

Residential Land

Residential land accounts for 16.33 percent of the developed land, but only 1.06 percent of the total land of the town's total land area. It is the third largest developed land use in the town. The 244.7 acres of residential land are scattered throughout the town. The majority of the residential land (86.8 percent) is classified as single family, with the remainder being two family, multi-family and mobile homes.

Commercial Land

Commercial land in the town of Brussels totals 15.4 acres of land, or slightly more than one percent of the developed land in the town. There is one commercial center in the town located adjacent to the intersection of STH 57 and CTH C, with a few commercial structures scattered throughout the town and along the existing state highway corridor.

Industrial Land

Land uses under this category include, small manufacturing operations, surface mining and other extractive activities, and private outdoor storage sheds. Within the town, approximately 58 acres or 3.9 percent of the developed land are under this category.

Transportation

Transportation accounts for the largest developed category at 49.06 percent of the developed land or 735 acres. Transportation uses in the town include the entire state, county and local road network as well as parking areas that are adjacent to commercial, industrial and institutional land uses.

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 36.6 acres. *Uses in this category in the Town of Brussels include several radio towers and a garbage disposal/transfer site.*

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 town this accounts for 8.7 acres of land including the Brussels/Union and Gardner Fire Station which also currently serves as the town hall and several churches.

Parks and Recreational Lands

Land under this category accounts for 59.7 acres or 3.98 percent of the developed land and .26 percent of the total land uses within the town. In this category, developed land is considered to be areas that are not available for further residential, commercial or industrial use. Included uses in this class are all the state, county and town parks.

Agricultural Structures

Agricultural structures include sheds, silos and other farm structures. These uses account for 340 acres of land, or 22.69 percent of the developed land in the town. This is the second largest use of that land that is developed. Agricultural structures are scattered throughout the Town of Brussels.

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 the largest undeveloped land use within the town accounting for approximately 16,048 acres, or nearly 75 percent of the undeveloped lands (and nearly 70 percent of the total land).

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 are now considered fallow. These lands are similar in character to agricultural pastures, but are no longer actively used for agricultural. More than 9.3 percent (3,176 acres) of the total undeveloped uses within the town fall into this category.

Natural Areas

Uses in this category include lands primarily in a natural state including non-wooded wetlands, grasslands and prairies.

Woodlands

Woodlands account for the second largest use in the town at 4,350.50 acres or 20.16 percent of the undeveloped land in the Town of Brussels. Large tracts of wooded upland land can be found in the north central portion of the town surrounding the Brussels Hill; along the Ahnapee River in the northeastern portion of the town, and south eastern portion of the town.

Water Features

Water features account for just 27.5 acres (just slightly more than one-tenth of one percent of the undeveloped uses) within the town. The named surface water features in the town include the Ahnapee River and Silver Creek, which are discussed in more detail in Chapter 2 of this document.

LAND SUPPLY

Amount

The amount of land available for development within the town Brussels is determined by adding the total developed land area to the total area of land that is not developable due to the presence of wetlands (including a 25 foot setback from the wetlands edge), 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.). The total developed and non-developable land is then subtracted from the total amount of land in the town, leaving an approximate acreage of developable land. It is determined that there are more than 20,000 acres of developable lands within the Town of Brussels.

The General Plan Design that follows, has identified sufficient areas of land to accommodate future growth, while protecting the natural resource base of the town. All classes of future land development are afforded sufficient land area to incorporate open spaces, buffering, additional landscaping, etc.

Demand

Based on building permit information from the Wisconsin Department of Administration and Door County, the Town of Brussels issued 38 housing permits for new (single family residential properties) and 12 permits for manufactured homes from 1990 to 1999. Therefore, based on historical trends from the past decade, the town could expect more than 100 newly constructed homes (including manufactured homes) by the year 2020.

GENERAL PLAN DESIGN

Land Use Issues and Conflicts

As residential growth takes place in what were historically agricultural areas, and commercial and industrial development takes place adjacent to residential areas, land use conflicts may arise. The town's zoning ordinance requires adequate screening, setbacks and buffering between high impact land uses such as industrial and commercial uses and low-impact uses such as single family homes and parks. The landscape buffers required by the ordinance reduce the potential adverse impacts that a particular land use might have on occupiers of adjacent properties such as glare of lights, dust, litter, and visual appearance.

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, an area identified for a possible light industrial use could include recommendations for additional design standards, to be determined by the town, to ensure minimal impact on neighboring uses.

ANTICIPATED LAND USE TRENDS

Analyzing data within previous chapters, the following land use trends were developed for the planning period. It is expected that these trends will influence the town's future growth and preservation. The town will need to address these trends over the next two decades in order to reach the town's desired vision. The following land-use trends were used to provide direction in

the development of the General Plan Design, along with the town's goals, objectives, and policies, the issue identification and the town 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. Based on past building permit data, the Town of Brussels can expect a projected 100 additional dwelling units through the year 2020.
3. The Town's rural 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.
4. The use of on-site wastewater septic systems and individual groundwater wells will continue within the town throughout the planning period.
5. Commercial uses will likely begin to increase adjacent to the major intersections within the STH 57 corridor.
6. The town will likely experience a demand for additional services (garbage pickup, road and street improvements, etc.,) as the population grows.

DEVELOPMENT STANDARDS

Environmental and Public Utility Considerations

The population projections found in Chapter 3 of this document are utilized to provide the town with an estimate of the number of acres that will be needed to accommodate future growth. The following environmental and public utility considerations should also be utilized to provide the town with an indication of which acreage of the municipality is best suited for development.

Sufficient areas of undeveloped lands exist within the town, making it unnecessary to propose development within the town's remaining "environmental corridors" that are delineated in the General Plan Design Map. These areas need to be preserved and integrated into the overall development of the town for future generations to enjoy. The town has an abundance of these unique areas including wetlands, floodplains, woodlands and topographic features (the Brussels Hill) that 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 town does not provide municipal sewer and water to its residents. The plan indicates that individual property owners will continue to install and maintain their own wells and on-site wastewater systems. Although there have been discussions about the development of a sanitary district in the unincorporated village of Brussels for the purpose of connecting to the city of Sturgeon Bay or the Green Bay Metropolitan Sewer District System, the need for the protection of the watersheds and aquifers within the town is required in order to provide town residents with safe, usable water.

An adequate network of arterial, collector, and local roads are already in place throughout the town, which could readily serve future traffic flows generated from any increased growth.

Planning Criteria

Planning criteria have been developed in order to give the community a context within which their land use decisions may be based. The planning criteria provides a defensible foundation when modifying or developing alternative sites for land use developments. The criteria used by the town, when developing the general plan design, was based upon values identified by the State, Door County and the town of Brussels.

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 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.

General Plan Design Classifications

The General Plan Design for the town of Brussels uses 11 primary classes of land use. In order to facilitate future implementation of the plan, the classifications listed correspond closely to the zoning districts defined within the *Town of Brussels Zoning Ordinance*. In addition, the General Plan Design map for the town of Brussels includes delineation of the Niagara Escarpment,

surface waters, existing nonmetallic mining sites, and, the new STH 57 alignment. A description of the classifications delineated on the General Plan Design Map, along with the town's land use strategy for each of the classifications is identified below:

Single Family Residential

This district is intended to provide for primarily single family residential and planned residential development at fairly high densities. Lot sizes of at least **20,000 square feet** are required for new single family lots which are not served by public sewer. Generally, these districts will be located in or near existing communities where smaller lots are the norm. The permitted uses are restricted in order to maintain the strictly residential character of these areas.

In addition, multi-family residential development is allowed on a case-by-case basis to provide areas for a variety of residential uses, including multiple occupancy developments along with the single family residential development at fairly high densities. Multi-family is intended to be located in areas with an existing mixture of residential types, certain regions which are, or may be served by public sewer, and other locations where high density residential developments are appropriate. Multi-family development is not intended to develop into centers of commercial activity and, thus, most commercial uses are not permitted. Lot sizes of at least **one acre** are required for new multi-family lots which are not served by public sewer.

Rural Residential

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 is intended to provide additional development options to home owners by allowing certain businesses to be established in conjunction with residences. The plan establishes areas for Rural Residential development adjacent to the unincorporated community of Brussels.

Mixed Use Commercial

This district permits both residential and commercial uses and is designed to accommodate those areas of the town of Brussels with an existing desirable mixture of uses, or where such a mixture of uses is wanted. Typically, this district will be located within or near existing communities, but it is also intended for outlying or smaller nodes of development. In addition, this district can be used as a transition between business centers and strictly residential areas. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer. The plan establishes areas for future Mixed Use Commercial growth in the unincorporated village of Brussels as well as within and adjacent to the crossroads communities at Kolberg and Rosiere.

Commercial Center

This district is intended to provide centers for commercial and mixed use development and redevelopment. The district permits a wide variety of retail, service, and office uses and is intended to maintain the vitality of the town of Brussels commercial centers. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer. The plan establishes areas for the development of future commercial centers within and immediately adjacent to the unincorporated village of Brussels, and south of the unincorporated village adjacent of either side of CTH C.

Light Industrial

This district is intended to provide for manufacturing, warehousing, and other light industrial operations. It is also intended that this district be used for the location of trade or contractor establishments, commercial storage facilities and similar businesses. Such uses should not be detrimental to the surrounding area or to the Town as a whole by reason of noise, dust, smoke, odor, traffic, physical appearance, degradation of groundwater, or other nuisance factors. Such uses may be subject to requirements that will reasonably ensure compatibility. 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. The plan establishes areas for future light industrial development in an area located south of School Road and east of CTH C.

General Agricultural

Preserving lands dedicated to agricultural practices is a primary objective of this plan. This district is intended to maintain agricultural lands that have historically demonstrated high agricultural productivity. It is also intended to accommodate certain nonagricultural uses that 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*. 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 **two (2) acres** are required for new lots, with a gross density of 8 units per quarter-quarter section (40 acres).

Communication/Utilities

The plan identifies existing sites in addition to suitable areas for the location of communication towers and utilities.

Governmental/Institutional

This plan identifies the Brussels-Union-Gardner Fire Station and various religious facilities within this classification.

Park and Recreation

This plan promotes existing recreational trails and other recreational facilities and the development of new recreational opportunities and facilities within or near the town of Brussels.

Woodlands

The General Plan Design Map identifies areas of woodlands located on the Brussels Hills and adjacent to wetlands. This classification is meant to encourage the preservation of woodlands and valuable open spaces within the town of Brussels.

Environmental Corridors

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 Door

County Shoreland Zoning Ordinance. This plan encourages preservation and protection of these natural areas in order to maintain the rural character of the town.

Brussels Hill

As previously noted, the Brussels Hill is the highest named point in Door County with an elevation of 851 feet at its summit. This hill is located in the north central part of the town of Brussels (north of STH 57, in the High Road area). The Brussels Hill encompasses an area of approximately 2.5 square miles, within both the town of Brussels and the town of Gardner. There is an elevation difference of more than 100 feet from the hills summit to the base.

Niagara Escarpment

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. 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.

Nonmetallic Mining Sites

Existing nonmetallic mining sites have been identified on the General Plan Design Map for the purpose of delineating specific areas where future (incompatible) land uses may be adversely impacted by the mining activity.

STH 57 Corridor

The proposed STH 57 Corridor has been identified on the General Plan Design map in order to delineate the new future route of the highway, and its relationship to the existing county and local road system.

DESIGN YEAR LAND USE PROJECTIONS

The general plan design that is depicted on Map 8.4 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 town-wide survey results. In addition, the town of Brussels's general plan design was based on the land allocation projections that follow.

Five Year Incremental Land Use Projections

Wisconsin statutes 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 following text details this specific requirement for the town of Brussels.

Residential Land Use Projections

The methodology used to project the town's future residential land use acreage employed: the projected housing needs presented in Chapter 3 of this document, an assumed dwelling unit per five acre ratio for each housing type, and a market factor ranging between 1.25 and 2.0 (applied over the 20-year planning period) to allow for market flexibility. In addition, the methodology develops acreage needs within the context of three growth scenarios: 1) *low-growth*, 2) *moderate-*

growth; and, 3) *high-growth* land use. The detailed land allocations for future residential, commercial, and industrial development in the town of Brussels is contained in **Appendix G**.

- it is **not** the intent of the plan to see the entire area within a classification to be developed, rather the specified uses shall be allowed if consistent with the type, location, and density of the development;
- some of the lands identified may hinder development based on the nature of the area;
- within residential growth areas, lands must be allocated for future roads, parks, and recreation areas.

In most standard residential developments, these additional factors generally account for approximately 25 - 30 percent of the gross land area. Additionally, for a town, it is extremely difficult and challenging in identifying which areas will develop first. Some ninety percent of the town is currently undeveloped, allowing a great deal of flexibility in locating future housing, especially those wanting lots greater than two acres and not relying on public services such as water or sewerage.

In the town of Brussels the low growth scenario is projecting 615 gross residential acres needed by 2020. The moderate growth scenario is projecting a need of 805 gross residential acres needed by 2020; and the high growth scenario is projecting 1,067 gross residential acres need by the end of the planning horizon.

Commercial Land Use Projections

To calculate commercial land use projections, the Commission compared the current ratio of residential acreage to commercial land use acreage by parcel in the town (15:1) based on the 2001 land use inventory. Based on this methodology, the town would need to accommodate between five and 11 acres for future commercial development over the next five years, five to 12.5 acres between 2005 and 2010, seven to 14 acres between 2010 and 2015, and 13 to 16 acres between 2015 to 2020. The town's future commercial land needs, based on this methodology, will range between 30 and 53.5 acres over the 20 year planning period.

The STH 57 bypass of the unincorporated village of Brussels with the addition of two-lanes is anticipated to create a demand for commercial lands adjacent to the major intersections with the new four-lane facility. In order to accommodate the anticipated commercial growth, to mitigate the negative impacts of the facility and that growth on to the town, and in order to preserve the function of the highway itself, adequate land should be identified that will allow commercial growth to occur in a safe and efficient manner. The area identified for commercial growth should be expansive enough to allow adequate parking lot landscaping, parking spaces and to ensure that adequate buffers are maintained between the development, the highway, and other incompatible land uses and the development.

Industrial Land Use Projections

Industrial lands are projected in the same manner as the commercial lands. According to the 2001 land use inventory, the current ratio of residential acreage to industrial land use acreage is 4:1. Therefore, the town would need to accommodate between 20 and 41 acres for future industrial development over the next five years, 18.75 and 47 acres between 2005 and 2010, 26.25 and 52.5

acres between 2010 and 2015, and 50 and 60 acres between 2015 to 2020. The total range of projected industrial land needs is therefore between 115 and 200.5 acres by 2020.

DEVELOPMENT STANDARDS

The following text discusses each of the major future land use classifications as depicted on the General Plan Design map. 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.

General Plan Design Classifications

The General Plan Design has 11 classes of future land use. The classifications generally correspond to the districts within *the Town of Brussels Zoning Ordinance* that are in existence within the town, in order to ease future implementation of the plan. The general plan design classifications detail the type, location and density of use. This portion of the plan will detail further recommendations of the land uses within the town. The following text discusses each of the major future land use classifications as depicted on the General Plan Design map. 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 to 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 general plan design for the town of Brussels is based on two overriding assumptions 1) the construction of a four lane state highway through the town that will bypass the unincorporated village of Brussels will shift development pressure from the existing two lane facility to a narrow corridor adjacent to the newly aligned four-lane facility; and, 2) new development is best accommodated and served in the area within and immediately adjacent to the existing unincorporated village of Brussels.

Single Family Residential

Future land use classified as single family residential is directed toward the existing residentially developed area within the unincorporated village of Brussels. Approximately 100 acres for this classification of land use has been identified in an area adjacent to CTH C and School Road. This district is intended to provide for primarily single family residential and planned residential or multi-family development at fairly high densities, with minimum lot sizes of 20,000 square feet on lots not served by public sewer. Overall, more than 405 acres of land have been designated for future “single family residential” use.

Rural Residential

Rural residential development that allows for medium sized lots of at least 40,000 square feet (slightly less than one-acre) is directed toward the outer west and northern portions of the unincorporated village of Brussels. Approximately 60 acres of rural residential development is identified west on School Road and north on CTH C. This district also permits manufactured

home parks and home businesses. It is intended to provide additional development options to home owners by allowing certain businesses to be established in conjunction with residences. It will generally be located within the interior of the Town. Overall, nearly 264 acres have been designated for future “rural residential” use.

Mixed Use Commercial

The mixed-use commercial category of land use is directed to existing development within the unincorporated village of Brussels, along the existing STH 57 and CTH C, and the Kolberg community adjacent to CTH D. This use accommodates both residential and commercial uses where such a mixture of uses is wanted and warranted. This land use category serves as a transition area between business centers and strictly residential areas. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer. Approximately 30 acres of land classified as mixed-use commercial has been identified within the unincorporated village of Brussels and approximately 20 acres in the area of Kolhberg. A total of approximately 163 acres have been designated for future “mixed use” commercial growth in the town.

Commercial Center

This district is intended to provide centers for commercial and mixed use development and redevelopment. The district permits a wide variety of retail, service, and office uses and is intended to maintain the vitality of the town of Brussels commercial centers. A primary commercial center includes the existing area adjacent to STH 57 and CTHC. In addition a much larger area, consisting of approximately 50 acres has been identified adjacent to both the east and west side of CTH C and north of the ultimate location of the four-lane STH 57 facility. Lot sizes of at least 20,000 square feet are required for new lots which are not served by public sewer. More than 180 acres have been designated for future “commercial” development in the town.

Light Industrial

This district is intended to provide for manufacturing, warehousing, and other light industrial operations. It is also intended that this district be used for the location of trade or contractor establishments, commercial storage facilities and similar businesses. The general plan design identifies an area of approximately 20 acres located to the west of CTH C and south of the unincorporated village of Brussels. Nearly 80 acres have been designated for future “industrial” growth in the town.

General Agricultural

Preserving lands dedicated to general crop farming are recommended in this plan. This district is intended to maintain agricultural lands that have historically demonstrated high agricultural productivity. It is also intended to accommodate certain nonagricultural uses that 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*. 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 **two (2) acres** are required for new lots, with a gross density of 8 units per quarter-quarter section (40 acres). The plan proposes the protection

(and continued future use) of more than 16,000 acres of land in “general agricultural” use.

Communication/Utilities

The plan identifies approximately 14 acres including both existing sites and additional suitable areas for the location of communication towers and utilities.

Governmental/Institutional

This plan identifies approximately 8.5 acres within this classification, which includes the Brussels-Union-Gardner Fire Station as well as the various religious facilities located within the town.

Park and Recreation

This plan promotes existing recreational trails and other recreational facilities and the development of new recreational opportunities and facilities within or near the town of Brussels. The plan identifies approximately 43 acres of existing and proposed future “park” lands in the town.

Woodlands

This classification is meant to encourage the preservation of woodlands and valuable open spaces within the town of Brussels, and specifically the Brussels Hill. The plan identifies more than 1,850 acres of land in this classification.

Environmental Corridors

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 Door County Shoreland Zoning Ordinance. This plan encourages preservation and protection of nearly 3,660 acres of land with the environmental corridors” classification, in order to maintain the rural character of the town and to protect its natural resource base.

Non-metallic Mines

The Plan identifies approximately 240 acres of land that is classified as existing and operational non-metallic mines. These locations have been depicted on the General Plan Design Map.

Table 8.2: General Plan Design Classifications and Acreage Within Each Classification

General Plan Design Classifications	Total Acreage
Single Family Residential	405
Rural Residential	264
Mixed Use Commercial	163
Commercial Center	181
Light Industrial	80
General Agricultural	16,172
Communications/Utilities	14
Governmental/Institutional	9
Park and Recreation	43
Woodlands	1,855
Environmental Corridors	3,659
Non-Metallic Mining ¹	236
Total Acreage	23,081

¹Not a General Plan Design Classification but locations of non-metallic mines are depicted on the General Plan Design Map

Source: Bay-Lake Regional Planning Commission, 2002.

DEVELOPMENT STRATEGY

Residential Development Strategy

The primary purpose of the Residential classification identified herein, is to provide adequate areas for future residential development and to direct future residential development to an area within and within close proximity of essential services located within the unincorporated village of Brussels.

Agricultural Strategy

The primary purpose of the Agricultural classification is to see the preservation of agricultural lands within the town of Brussels. It is the intent of this plan to promote the continuation of agricultural uses within this classification. Lands devoted to agricultural production are not encouraged to be converted to residential. Future residential development should be directed toward residential areas identified on the General Plan Design Map (Map 8.3). Even though a significant amount of developable land does exist in this classification and scattered development within the town will likely continue in the future, decisions to allow residential development in areas identified for agricultural uses should be limited. These decisions to approve or deny residential development must be based on sound land use planning criteria.

Factory and Mega-Farms

A Concentrated Animal Feeding Operation (CAFO) or factory farm or large farming operation is defined by federal and state statute as a facility that contains 1,000 animal units. The calculation of animal units varies by type of animal. For dairy cattle, a facility that contains 700 milking and dry cows is considered a CAFO.

Currently, factory farms are regulated by issuance of a Wisconsin Pollution Discharge Elimination System (WPDES) permit. These farms are regulated under the Federal Clean Water Act and state water law because of their potential to negatively impact water resources. The WPDES permit regulates where and how much waste can be spread on fields, how the waste is temporarily stored in lagoons, and the design of a permanent runoff control system.

Wisconsin's Administrative Code, NR 423 requires the factory farm to submit a nutrient management plan, assessment of manure lagoons, and runoff controls as part of its application for a WPDES permit.

When waste is mishandled it harms waterways, human health and aquatic life. The primary pollutants from these operations are nitrogen, phosphorus, pathogens, and heavy metals. Additionally, pathogens (including fecal coliform and other forms of coliform bacteria) can migrate into drinking water and cause serious gastrointestinal illness.

The Town of Brussels Zoning Ordinance regulates factory farms by issuance of a conditional use permit for any operation that feeds, confines, maintains or stables 500 animal units of Dairy Cattle, or 100 or more units of beef cattle, swine, sheep, horses, ducks, chickens, or turkeys. Through the conditional use permitting process the town may require increased setbacks from adjoining properties or roads, screening, buffering, lighting restrictions and hours of operation.

In as much as a factory farm operation may impact surrounding lands and natural resources, irregardless of town boundaries, it is imperative that the town of Brussels work cooperatively with the adjoining towns and Door and Kewaunee counties to ensure that large scale farm operations are adequately regulated.

Commercial Strategy

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, and retail shopping, etc. The intersection of the new four-lane STH 57 facility and CTH C, given the significant amount of traffic traveling both highways, and continued use of CTH C as the preferred travel route for travelers bound for the bayshore areas at Little Sturgeon Bay, will attract these highway commercial development. The areas classified as commercial on the 20-Year General Plan Design map shall have identified standards for the commercial uses allowed within them. The town will have minimum sign, landscaping, lighting, parking and access standards that fit the town's atmosphere. Business hours shall be regulated as well so as not to detract from the rural, natural environment of the town.

The Other Commercial category accounts for businesses such as restaurants, shops and other existing commercial uses found within the town. 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 Other Commercial category. The town 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.

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 town, the Town Plan Commission and Town Board must closely monitor the capacities of the infrastructure and community services that accommodate this new development and weigh the future costs to benefits. More intensive commercial businesses shall be directed to adjacent communities that currently have adequate infrastructure and services.

Industrial Strategy

In addition to an area for industrial use located in the southeast corner of the unincorporated village of Brussels, the General Plan Design illustrates the existing sand and gravel pits located within the town. It is the town's intent that no new mining sites be established, but to allow the existing sites to expand. The town has also identified a light industrial site just southeast of the unincorporated village of Brussels. As with the commercial development, when industrial development is proposed within the town, the Town Plan Commission and Town Board must closely monitor the capacities of the infrastructure and community services that accommodate this new development and weigh the future costs to benefits.

Governmental/Institutional Strategy

The Brussels-Union-Gardener Fire Station and various religious facilities are the Governmental/Institutional uses displayed on Map 8.3. However, the intent of this plan is to see that the Town Plan Commission and Town Board continue to monitor the services provided to the town residents. As they have in the past, these officials will work with adjoining communities and Door County to help provide future services as effectively and efficiently as reasonably possible.

The town should continue to explore the feasibility of constructing a town hall/community center within the unincorporated village of Brussels, and preferably adjacent to the town park.

The town 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 town when considering improvements to any of the town services.

Communication/Utilities

The town should ensure that services such as electric and natural gas services provided to town residents are adequate and will be available through the planning period.

It is recommended that the town address the issue of telecommunication towers and antennas. With the expanding use of "cell phones" which provide many benefits, including safety and convenience, their rapid growth also requires an expanding network of new transmission towers. The profitability of wireless communication and intense competition among wireless service providers has resulted in companies quickly erecting towers that can have adverse impacts on the local area. Problems can arise when new towers, often hundreds of feet high, are built near people's homes, next to historic buildings, or in rural, scenic areas. In many cases these towers often do not fit in with their surroundings and destroy scenic vistas. This is a nationwide occurrence and is a common sight in the state of Wisconsin.

To address the telecommunication tower issue, it is recommended that the town, along with UW-Extension, Door County, and other professional agencies develop a program to educate

community officials and citizens on the existing rules and regulations associated with these structures. In addition, the program should be used to discuss issues such as alternate structures, joint use of new and existing towers, and visual and other potential adverse impacts of telecommunication towers. In addition, the town should be informed as to when and where possible telecommunication towers may be constructed in and around the town of Brussels.

Woodland/Open Space

The Woodland/Open Space classification is intended to preserve the natural amenities within the town. By preserving the woodlands and open spaces, the Town of Brussels will maintain its rural nature which gives the town its character. However, residential development in these areas need to show that they will have a minimal affect on wildlife habitats and the rural nature of the town. In addition, care shall be given that residential development along transportation corridors in these areas do not negatively impact the view along the roads.

Park and Recreation

Any future recreational development should be coordinated with Door County, and other adjacent communities to reduce costs and to provide facilities that will serve a larger area.

The preservation and protection of natural areas within the Town of Brussels will become increasingly important as population and development pressures increase. Many natural features (ie. the Brussels Hill) are either unsuitable for development, enhance the appearance of the community, improve natural processes such as flood control, water retention or groundwater recharge. This plan recommends that the natural features within the town remain in their natural state or be minimally modified for possible recreational use.

Environmental Corridors

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 Door County 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 town that are most sensitive to development and should be preserved.

The town 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 town 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.

Transportation

The transportation network in the Town of Brussels is adequate, given the presence of STH 57 and the various County highways that are found within the town. The local road system that is in place provides good traffic flow within the town from north to south, and east to west. If any new subdivisions are proposed within the town, the Plan Commission and Town Board should require Area Development Plans. This will allow the town to review and ensure that future roads are

adequately designed to promote efficient traffic flow and to avoid unnecessary cul-de-sacs and loops that can increase the town's future maintenance costs.

STH 57 Corridor

Development with direct access to STH 57 should be prohibited. Development of lands immediately adjacent to the state highway that are accessed from CTH C, CTH D, CTH H or other local roads, should be discouraged. If development is allowed to occur adjacent to the state highway with access to the development provided from the county and local road system, the location of the access driveway should be prohibited within 1,000 feet of the state highway and connecting road intersection.

Off premise billboards should also be prohibited within the STH 57 corridor to maintain the town's rural atmosphere.

It is also recommended that the Pavement Management Plan (PMP), prepared in conjunction with this plan by the Commission be utilized by the town. The PMP provides a detailed inventory and description of all the town roads; provides a detailed surface condition survey of those streets; defines the goals and objectives of the town with respect to their street maintenance and repair; and ultimately establishes a long-term maintenance schedule that prioritizes road maintenance and repair needs.

Dark Sky Ordinance

Preservation of the town's "rural character" will entail protecting the night sky from sky glow. Good lighting serves the user, and thus will vary according to the site and circumstance. Characteristics of good lighting include but are not limited to:

1. The light fixture provides adequate lighting for the task, but does not over-light.
2. Lighting fixtures are fully shielded, so that no light is emitted above the horizontal plane and there is minimal glare.
3. Lighting fixtures are carefully installed to maximize effectiveness on the targeted area and minimize or eliminate adverse impact beyond the property borders.
4. It utilizes fixtures with high-efficiency lamps which meet the light-color needs of the design criteria.

Lighting Ordinance

Any amendments to the town's Zoning Ordinance and other initiatives related to protection of the quality of our night sky should be based on the following objectives:

Objective: Reduce light pollution caused by uplighting, excessive over lighting, glare and light trespass.

Objective: Promote lighting energy efficiency, thereby conserving private and public funds, while providing adequate lighting for the task.

Objective: Provide a safe and secure developed environment, through quality lighting design which minimizes glare and avoids creating dark areas near well lit areas.

If the lighting ordinance is to be accepted and implemented in a timely and effective manner, the parties involved in the development process - property owners, the business community, government, and the construction industry - must understand the value of dark skies and good lighting. An educational program is needed, one which adopts a proactive approach and draws upon the resources available in the community.

Strategy: Establish an advisory committee composed of representatives from business, astronomy (professional and amateur), public utilities and/or agencies, design and construction industries, county residents (urban and rural), and local community organizations, to undertake the following tasks:

1. Evaluate current lighting practices;
2. Identify dark sky/lighting issues and concerns;
3. Review ordinances from other jurisdictions;
4. Study and recommend as necessary additional lighting provisions to the Planning Commission, including by not limited to an ordinance to phase in shielding of existing lighting and establish maximum foot candle requirements for categories of uses.

Strategy: Develop a community-based educational program, for example by holding workshops on technical lighting topics, for individuals in the building materials, electrical contracting, design, construction, and associated industries, and individual homeowners.

Strategy: The town should adopt a resolution asking power companies to cease promoting unshielded and inefficient outdoor lighting in Door County:

Strategy: Explore the feasibility of the town participating in the Green Lights Program established by the Environmental Protection Agency to promote energy efficiency in building design and maintenance.

Strategy: This town should take a leadership role in developing exemplary lighting in its public building projects, street lighting and should include playing fields and parking lots.

IDENTIFIED “SMART GROWTH” AREAS

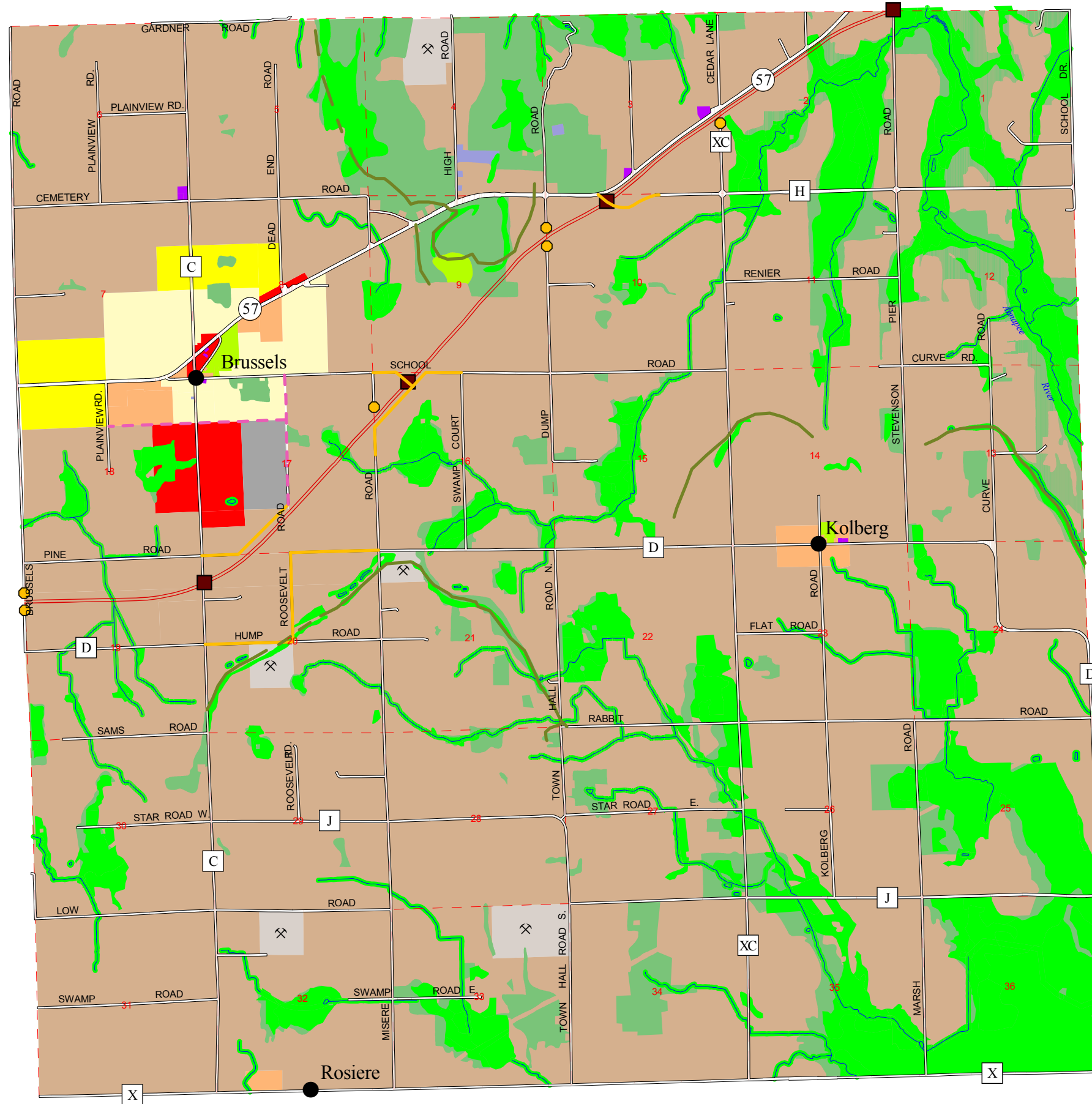
During the planning process, the Town of Brussels Plan Commission developed a recommended land use plan (Map 8.3) which identifies how the town will develop and preserve its lands throughout the planning period. During this process the Plan Commission identified areas that are considered “smart growth 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.”

Locating these areas near existing development within the town allows for more orderly and efficient development patterns. In addition, these lands will allow for a mixture of uses (residential, industrial, commercial, recreational, etc.).

General Plan Design

Town of Brussels

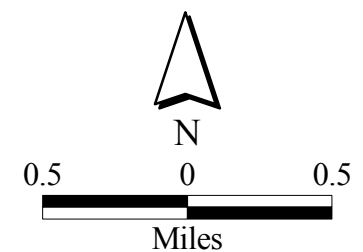
Door County, Wisconsin



- Single Family Residential
- Rural Residential
- Mixed Use Commercial
- Commercial Center
- Light Industrial
- General Agricultural
- Communications/Utilities
- Governmental/Institutional
- Parks and Recreation
- Woodlands
- Environmental Corridors

Map Features

- Niagara Escarpment
- Surface Waters
- New STH 57 Alignment
- Cul-de-sac
- At Grade - Full Intersection
- Redirected Road
- Proposed Road
- Non-Metallic Mine



Source: Bay-Lake Regional Planning Commission, 2002.



SUMMARY

Overall, the Town of Brussels 2022 General Plan Design is the result of approximately 12 months of preparation and work done by the Town of Brussels Plan Commission which generally works towards several issues including:

- finding a balance between individual property rights and community wide interests and goals;
- steering developments to specific areas within the town in order to minimize land use conflicts;
- preserving 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;
- preserving productive farmlands within the town;
- maintaining the towns rural and open space character;
- cooperation with the surrounding towns;
- identify land areas that can adequately accommodate a variety of development over a 20 year planning period.

The effect that this comprehensive plan will have on the town 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 town's existing development pattern and provides for the achievement of the town's vision and goals outlined within the plan. In simple terms, the town 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 Town Board, Town Plan Commission and all town 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 towns and the county.

The General Plan Design for the town of Brussels

- Maintains the rural character of the town by concentrating development in and adjacent to the unincorporated village of Brussels.
- Provides protection to an important natural resource by identifying the Brussels Hill as a natural area and affording it extra protection through the town zoning ordinance.
- Protects the STH 57 Highway Corridor from unsightly and unsafe (in terms of highway access) development by incorporating a highway corridor overlay district into the zoning ordinance. The corridor overlay district guides commercial development to specific locations within the corridor, imposes additional design elements to ensure that any new development will be consistent with community standards and its future vision, imposes driveway access restrictions to ensure that STH 57 and the county and local roads that intersect with it will continue to perform safely and efficiently, and protects property owners from undue costs and disruption that may be caused by the construction of the road by identifying the highway

disruption that may be caused by the construction of the road by identifying the highway alignment requiring a site plan review prior to issuing permits for land uses within the corridor.

Chapter 9 - IMPLEMENTATION

INTRODUCTION

The final element in the comprehensive planning program for the town of Brussels is the implementation of the approved 20 Year Comprehensive Plan.

Implementation can take the form of:

1. Carrying out the recommendations in the plan for specific projects, for example, revising and amending the adopted zoning ordinance, creating and adopting overlay districts or a design standards ordinance and 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 town, 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 town of Brussels. More specific information on various statutory powers which the town may utilize to implement the 20 Year 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 town. When reviewing any petition or when amending any land controls within the town, 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 town of Brussels is under the authority of the Town of Brussels Zoning Ordinance administered by the town. Many of the future land uses may need re-zoning in order to take place. The town will also need to stand firm on minimum zoning standards regarding natural features and should veto any relaxing attempts of regulations.

- A comparison between the preferred land uses and the Town of Brussels Zoning Ordinance and Zoning Map to determine compatibility of text and realignment of boundaries within various districts should take place.

- The Plan Commission should continue to address issues and to identify acceptable standards for lighting, and landscaping in order to best protect the rural look of the town, regarding future commercial and industrial uses.

Official Maps

Under §62.23(6), the town (due to its adoption of 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 town needs to acquire land for streets or parks that 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.

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.

- The town may wish to adopt stricter sign controls than currently provided in the zoning ordinance in order to preserve the rural look and character that the town currently maintains, especially as commercial businesses develop within the town along transportation corridors, as well as in adjoining communities.

Erosion and Storm Water Control Ordinances

Under § 61.354 of the Wisconsin Statutes, the town may enact a construction site erosion control and storm water management zoning ordinance. Door County has an adopted Erosion Control ordinance in place. 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 town of Brussels should support this type of ordinance and work with the county to develop, adopt, and ensure compliance by developers. In the future, the town may wish to enforce such an ordinance themselves, though it is not recommended that the town 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 town has incorporated “design review standards” into the adopted zoning ordinance within the State highway 57 Corridor Overlay District. The overlay district regulates new development within a two-mile wide corridor along the proposed new highway. Screening from the highway, parking standards, signage, lighting, exterior building material types and colors are specifically identified and regulated 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 town be expressly conveyed to this agency in order to attract the desired commercial and industrial growth.

Building/Housing Codes

The town should work closely with Door County in the enforcement of all applicable building/housing codes to ensure that properties are adequately maintained to preserve the rural character of the town and to protect property values. This is important especially for those older areas within the town and for properties that are not owner occupied. The town should review the codes with the county to determine their effectiveness within the town.

Floodplain Ordinance

Door County regulates through its Floodplain ordinance development within the designated FEMA floodplain areas. These regulations will limit development within identified areas. In some instances it will be important to re-adjust the floodplain boundaries in specific areas or within the entire town. To do so the town must follow three steps:

1. Hire an engineering firm to conduct hydrologic and hydraulic engineering models to calculate floodplain boundaries for the specified area.
2. Submit the re-calculated floodplain boundaries to the WDNR Bureau of Watershed Management and the FEMA for their review.
3. If approved, amend existing zoning maps to reflect the re-calculated floodplain boundaries.

Sanitary Codes

The town will need to work with Door County to ensure that strict compliance with all sanitary

codes is adhered to within the town. Groundwater protection is of great importance to the town and surrounding communities. Uncontrolled waste can have detrimental and wide ranging impacts on health and property values. The town will review code enforcement with the county to determine its effectiveness within the town, and the town 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

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:

Town of Brussels Action Plan

Activity: Discuss the town's intentions regarding future commercial and industrial development within the town with the Door County Economic Development Corporation.

Who: Plan Commission and Chief Elected Officials

When: Fall 2002

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

Activity: Communicate with neighboring towns in an effort to identify shared goals, visions, and efforts to further the communities developments.

Who: Chief Elected Officials, Town Plan Commission

When: Fall 2002

Activity: Develop a code of ordinances to be comprised of the existing town ordinances and additional ordinances recommended in the plan.

Who: Chief Elected Officials, Town Plan Commission

When: Fall 2002

Activity: Require Area Development Plans for all new subdivisions in lieu of an Official Map.

Who: Town Plan Commission and Chief Elected Officials

When: On-going

Activity: Work on educating the town on non-traditional methods of development such as Conservation Subdivisions, Cluster Districts, Traditional Neighborhoods - that will promote the plans of the town to allow creative development opportunities while preserving farmland and protecting and enhancing the natural resources of the town.

Who: Chief Elected Officials, Plan Commission and UW-Extension

When: Spring/Summer 2003

Activity: Continue discussions with Wisconsin Department of Transportation and Door County Highway Commission relative to acceptable and safe access to new four-lane state highway facility, intersection and highway design, access controls, et al.

Who: Chief Elected Officials, WisDOT, Door County

When: Ongoing

Activity: Initiate discussions with Wisconsin DNR, city of Sturgeon Bay, Southern Door

School District, and Green Bay Metropolitan Sewerage District, relative to establishing a Sewer District and future extension of sewer into the unincorporated village of Brussels.

Who: Chief Elected Officials

When: On-Going

APPENDIX A

TOWN OF BRUSSELS - 1998 LAND USE SURVEY

**THE NOVEMBER 1998 LAND USE SURVEYS
FOR THE SOUTHERN DOOR COUNTY TOWNS OF:
BRUSSELS
FORESTVILLE
GARDNER
NASEWAUPEE
UNION**

Introduction

Mariah Goode, Door County Planning Department
Greg Lamb, Door County University of Wisconsin-Extension

Survey Development: In November of 1998, as part of a collaborative town planning effort, 4,821 surveys were mailed to people who owned land or were registered to vote in the five subject towns. The issues explored in the surveys came from discussions, comments, and questions raised by Town Planning Committee members and the general public attending one of four community meetings held at the Southern Door Schools Auditorium in the summer and fall of 1998. Additional questions probed attitudes toward recommendations in the Door County Development Plan.

The Town Planning Committee and Town Board members, along with Greg Lamb, Door County University of Wisconsin-Extension, and Mariah Goode, Door County Planning Department, developed the wording of each of the questions used in the surveys.

Response Rates: The responses totaled 1,678, or 34.8% of those mailed. Since most survey response rate calculations subtract the number of surveys returned because of an inaccurate address, the real response rate for this survey is probably higher (no returns were requested of the postal service in the survey mailing). A minimal target for an acceptable return rate is 100 responses or a 10% sample. That minimum was exceeded in each town:

TOWN	PERCENT RETURNED	NUMBER RETURNED
Brussels	30.1%	173 of 562 mailed
Forestville	32.7%	178 of 545 mailed
Gardner	36.8%	445 of 1,209 mailed
Nasewaupee	34.9%	654 of 1,873 mailed
Union	36.1%	228 of 632 mailed

Respondent Profiles: The surveys had 26 questions in common, including three questions on the newsletters mailed during the summer of 1998 and four questions on demographics (age, gender, year-round residency, and land ownership). The rest of the survey contained land use questions specific to that community and questions about unique sites in the town.

The question regarding year-round residency resulted in the following percentages from those who answered the question:

Percent of Respondents by Residence

	Brussels	Forestville	Gardner	Nasewaupee	Union
Residents	78.7%	68.5%	40.8%	50.2%	49.3%
Non-Residents	21.3%	31.5%	59.3%	49.8%	50.7%

Of those who answered the question regarding property ownership, 96.4% indicated that they owned property in the town for which they were completing the survey.

The following is the breakdown by town for respondents who answered the question about gender, as well as the gender breakdown for each town from the 1990 Census.

Percent by Gender

		Brussels	Forestville	Gardner	Nasewaupee	Union
Respondents	Male	76.1%	74.0%	72.0%	70.8%	71.1%
	Female	23.9%	26.0%	28.0%	29.2%	28.9%
Census	Male	51.8%	53.2%	51.0%	50.3%	48.4%
	Female	48.2%	46.8%	49.0%	49.7%	51.6%

The following table is a breakdown of the respondents by age group, which can be compared with the same breakdown of the five towns from the 1990 Census. The 1990 Census categories have been incremented by 8 years to account for the fact that the survey was done eight years after the Census.

Percent by Age Group

	Brussels	Forestville	Gardner	Nasewaupee	Union
Respondents					
Under 28	3.8%	3.7%	0.0%	1.0%	4.8%
28-37	17.6%	14.8%	11.8%	9.5%	13.5%
38-47	24.4%	32.4%	23.5%	24.3%	20.2%
48-57	26.0%	16.7%	25.5%	23.7%	25.0%
58-67	12.2%	11.1%	21.6%	23.0%	26.0%
68 and over	16.0%	21.3%	17.6%	18.4%	10.6%
1990 Census					
Under 28	33.6%	31.8%	28.1%	28.8%	30.3%
28-37	12.4%	12.9%	12.5%	10.7%	16.3%
38-47	15.2%	17.7%	15.6%	18.1%	11.2%
48-57	13.1%	12.6%	12.8%	12.4%	12.5%
58-67	7.2%	8.7%	11.5%	10.2%	12.5%
68 and over	18.7%	16.2%	19.5%	20.0%	16.3%

Newsletters: Five Southern Door Land Use Newsletters were mailed to all property owners and registered voters in the five towns in the summer and fall of 1998. When asked how many of the five newsletters were read, respondents most frequently said all five (812 respondents). 198 indicated that they read four, 222 said three, 118 said two, 69 said one, and 111 said none.

When asked how informative the newsletters were, 23 said they were not informative, 871 said they were somewhat informative, and 504 said they were very informative.

The most common response when asked how many people in their household read the newsletters was two (55.2%, or 811). A single reader was indicated by 39.4% of the respondents (579).

Volunteers: The following volunteers helped compile the results of the surveys:

Anne Bernklau
Mark Finger
Lois Hanson
Donna Henderson
Mary Horn
JoAnn Neinas

Additional Information: You may contact either Lamb (920-746-2260), Goode (920-746-2323), or one of the Town Planning Committee or Board Members whose names follow for more information on planning efforts in Southern Door.

SOUTHERN DOOR PLANNING COMMITTEE AND TOWN BOARD MEMBERS

BRUSSELS

Dan Vandertie
1144 County C
Brussels, WI 54204
825-7444

Mike Vandenhouten
1756 County C
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825-1377

Charlie Massart
9504 County D
Forestville, WI 54213
825-7620

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856-6889

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825-7002

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856-6849

*George Delveaux
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825-1450

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825-7277

*Galen DeJardin
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856-6237

Joanne Bongle
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Algoma, WI 54201
856-6497

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856-6692

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856-6531

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856-6508

*Gerald Uecker
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856-6620

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856-6592

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743-9037

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743-7716

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Sturgeon Bay, WI 54235
743-3397

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Sturgeon Bay, WI 54235
743-9010

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Sturgeon Bay, WI 54235
743-5155

Chuck Wagner
4461 County M
Sturgeon Bay, WI 54235
743-4579

*Leroy Liebe
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Sturgeon Bay, WI 54235
743-5750

*Gladys Schommer
4312 Park Drive
Sturgeon Bay, WI 54235
743-5112

*Dan Polecheck
6479 Emerald Drive
Sturgeon Bay, WI 54235
743-8913

GARDNER

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824-5204

Janice Englebert
9834 County N
Brussels, WI 54204
824-5108

Mary Ann DuBois
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Sturgeon Bay, WI 54235
824-5829

Dave Pagel
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Sturgeon Bay, WI 54235
824-5707

Pat O'Hern
2933 Stevenson Pier Road
Sturgeon Bay, WI 54235
824-5171

Don Krause
9116 County C
Sturgeon Bay, WI 54235
824-5044

Barth Guilette
3491 Rileys Point Road
Sturgeon Bay, WI 54235
824-5120

*Colin Sacotte
8360 County K
Brussels, WI 54204
825-7285

*Fred J. Malvitz
8678 County C
Sturgeon Bay, WI 54235
824-5625

*Glenn Dart
2963 County C
Sturgeon Bay, WI 54235
824-5292

*William Berglund
3870 Rileys Point Road
Sturgeon Bay, WI 54235
824-5763

*Michael LaViolette
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Sturgeon Bay, WI 54235
824-5000

UNION

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Luxemburg, WI 54217
825-7452

Wayne Eisenman
592 Highway 57
Brussels, WI 54204
825-7276

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Brussels, WI 54204
825-1495

Pauline Pigeon
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Brussels, WI 54204
825-1478

John Monfort
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Luxemburg, WI 54217
866-9882

Allen Alexander
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Brussels, WI 54204
825-1328

*Leroy Klein
1641 Forest Murmur Road
Brussels, WI 54204
825-1401

*Richard Maurer
1157 Brussels Road
Brussels, WI 54204
825-7216

*David Englebert
1003 Pleasant Ridge Road
Brussels, WI 54204
825-7864

* Town board member.

Town Clerks

Brussels	JoAnn Neinas	825-7618
Forestville	Ruth Kerscher	856-6551
Gardner	Kay Blizel	824-5851
Nasewaupée	Charlene Schinktgen	743-4632
Union	Sylvan Baudhuin	825-1201

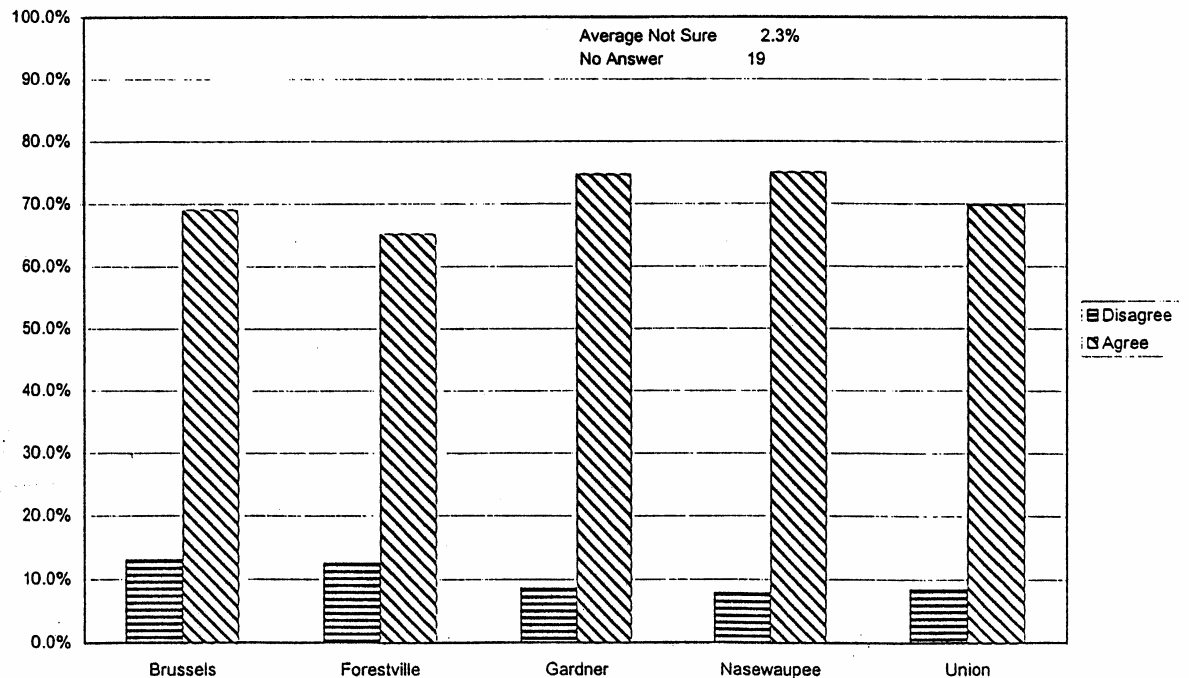
**LAND USE
QUESTIONS COMMON TO ALL FIVE
TOWN SURVEYS**

Common Questions

Question One A program should be undertaken to inform people of the natural features of our town and how to protect them.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	3	2	5	5	4
Not Sure					
Number	5	3	8	10	8
Percent	3.0%	1.7%	1.9%	1.5%	3.6%
Strongly Disagree					
Number	10	9	15	29	11
Percent	6.0%	5.1%	3.6%	4.5%	4.9%
Disagree					
Number	12	13	21	22	8
Percent	7.1%	7.4%	5.0%	3.4%	3.6%
Neutral					
Number	26	37	63	102	41
Percent	15.5%	21.1%	15.0%	15.7%	18.2%
Agree					
Number	59	63	159	232	81
Percent	35.1%	36.0%	37.9%	35.8%	36.0%
Strongly Agree					
Number	57	51	154	254	76
Percent	33.9%	29.1%	36.8%	39.2%	33.8%
% Total Disagree	13.1%	12.6%	8.6%	7.9%	8.4%
% Total Agree	69.0%	65.1%	74.7%	75.0%	69.8%

Question 1. A program should be undertaken to inform people of the natural features of our town and how to protect them



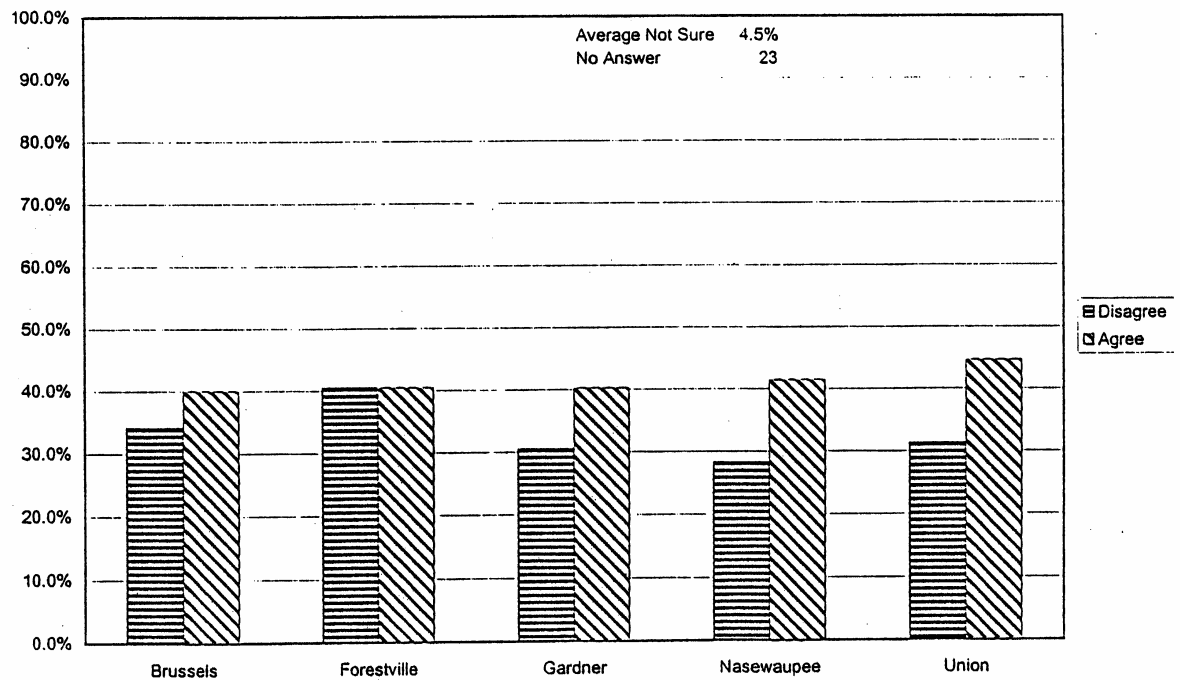
Common Questions

Question Two

Land use policies should require a buffer area between agricultural land and residential land to reduce complaints about farming operations.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	4	4	9	5
Not Sure					
Number	6	6	28	27	10
Percent	3.5%	3.5%	6.7%	4.2%	4.5%
Strongly Disagree					
Number	30	29	53	86	32
Percent	17.6%	16.8%	12.6%	13.4%	14.3%
Disagree					
Number	28	41	75	96	38
Percent	16.5%	23.7%	17.9%	14.9%	17.0%
Neutral					
Number	39	28	96	169	44
Percent	22.9%	16.2%	22.9%	26.2%	19.6%
Agree					
Number	39	40	107	173	51
Percent	22.9%	23.1%	25.5%	26.9%	22.8%
Strongly Agree					
Number	29	30	62	94	49
Percent	17.1%	17.3%	14.8%	14.6%	21.9%
% Total Disagree	34.1%	40.5%	30.5%	28.3%	31.3%
% Total Agree	40.0%	40.5%	40.2%	41.5%	44.6%

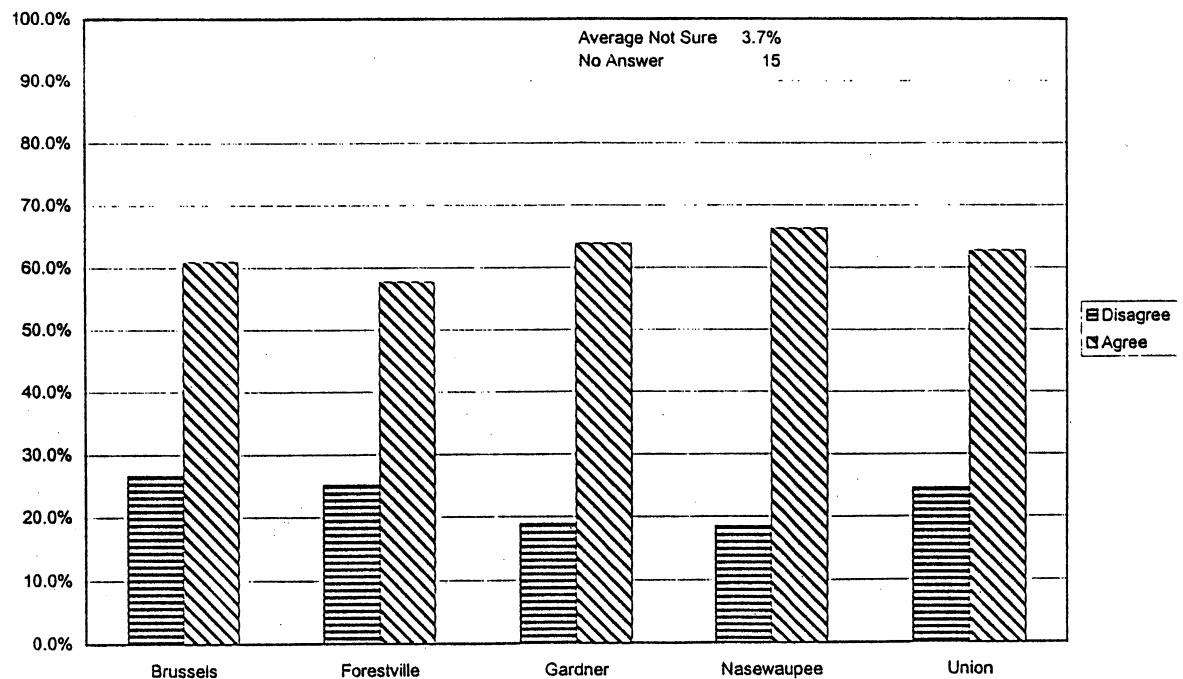
Question 2. Land use policies in our town should require a buffer area between agricultural land and residential land to reduce complaints about farming operations.



Question Three Wetlands should have a buffer area around them in which development is prohibited.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	2	6	4	1
Not Sure					
Number	6	7	24	21	5
Percent	3.6%	4.0%	5.7%	3.2%	2.2%
Strongly Disagree					
Number	23	20	39	58	26
Percent	13.6%	11.4%	9.3%	8.9%	11.4%
Disagree					
Number	22	24	40	62	30
Percent	13.0%	13.7%	9.6%	9.6%	13.2%
Neutral					
Number	16	24	49	79	24
Percent	9.5%	13.7%	11.7%	12.2%	10.5%
Agree					
Number	49	48	110	165	51
Percent	29.0%	27.4%	26.3%	25.4%	22.4%
Strongly Agree					
Number	54	53	157	265	92
Percent	32.0%	30.3%	37.6%	40.8%	40.4%
% Total Disagree	26.6%	25.1%	18.9%	18.5%	24.6%
% Total Agree	60.9%	57.7%	63.9%	66.3%	62.7%

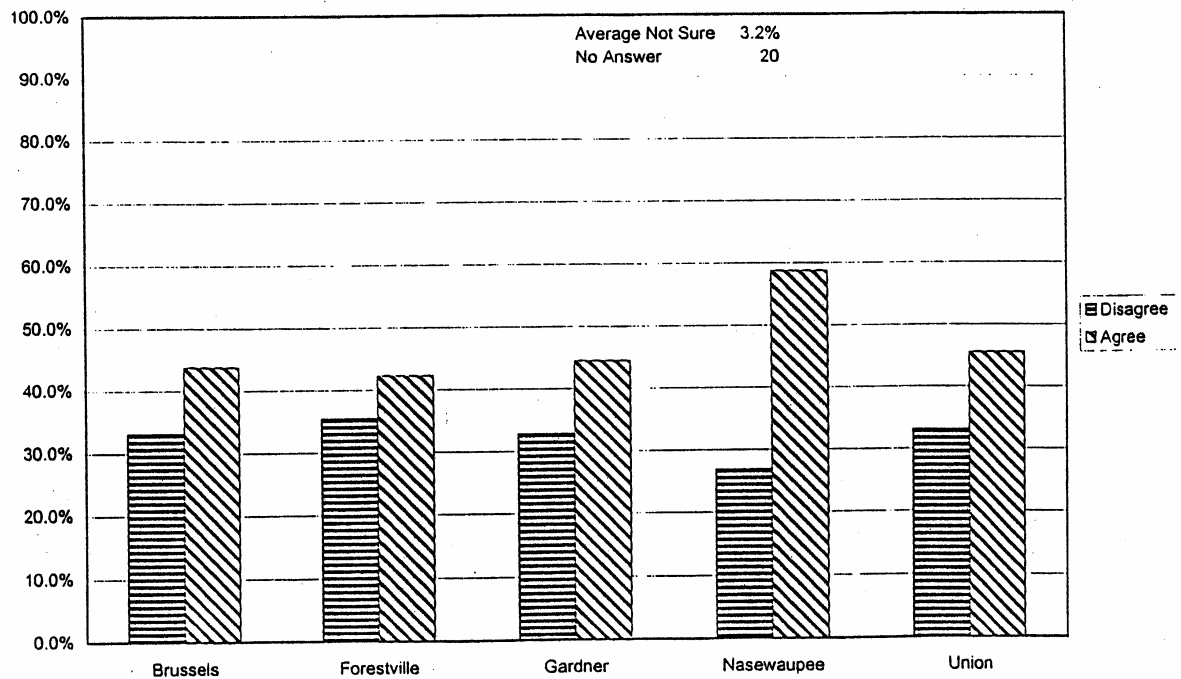
Question 3. Wetlands should have a buffer area around them in which development is prohibited.



Question Four Future buildings in the town should only be allowed if they are on a similar physical scale to existing buildings in the surrounding area.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	2	6	5	5
Not Sure					
Number	5	7	15	21	5
Percent	3.0%	4.0%	3.6%	3.2%	2.2%
Strongly Disagree					
Number	27	24	66	92	37
Percent	16.0%	13.7%	15.8%	14.2%	16.5%
Disagree					
Number	29	38	71	82	37
Percent	17.2%	21.7%	17.0%	12.7%	16.5%
Neutral					
Number	35	33	81	73	43
Percent	20.7%	18.9%	19.4%	11.3%	19.2%
Agree					
Number	48	50	98	174	58
Percent	28.4%	28.6%	23.4%	26.9%	25.9%
Strongly Agree					
Number	26	24	88	207	44
Percent	15.4%	13.7%	21.1%	31.9%	19.6%
% Total Disagree	33.1%	35.4%	32.8%	26.9%	33.0%
% Total Agree	43.8%	42.3%	44.5%	58.8%	45.5%

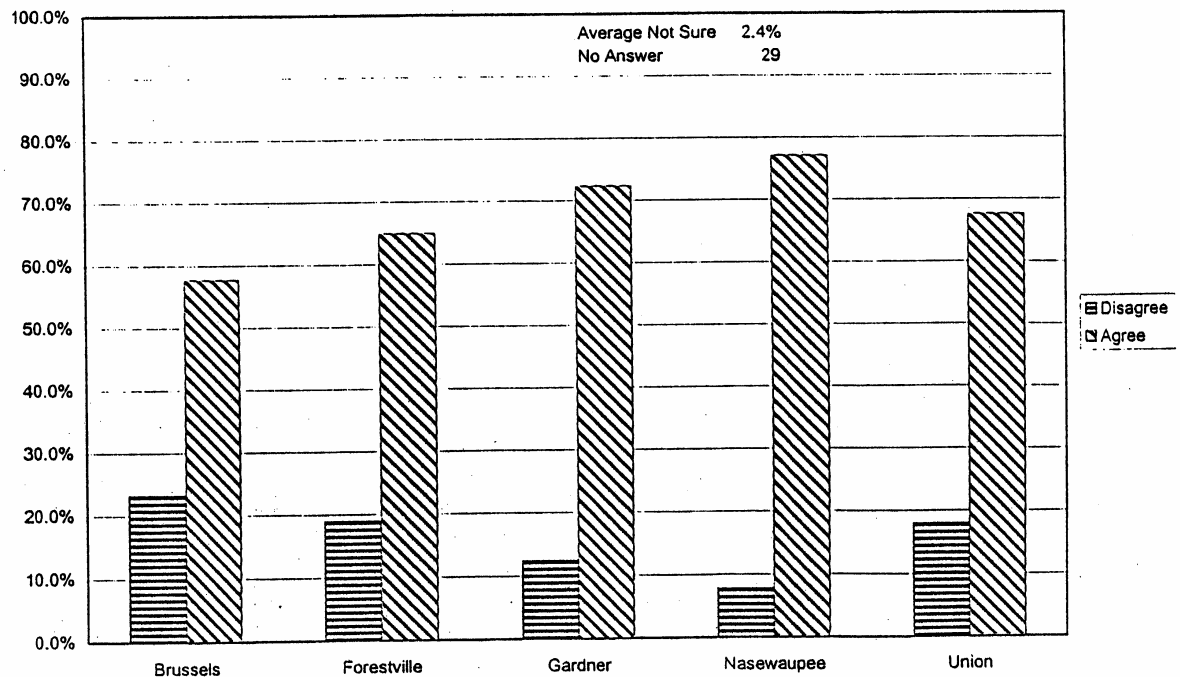
Question 4. Future buildings in our town should only be allowed if they are on a similar physical scale to existing buildings in the surrounding area.



Question Five **Septic systems should be monitored, and those which are failing should be replaced.**

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	3	3	5	11	7
Not Sure					
Number	3	4	12	16	6
Percent	1.8%	2.3%	2.9%	2.5%	2.7%
Strongly Disagree					
Number	16	17	23	18	17
Percent	9.5%	9.8%	5.5%	2.8%	7.7%
Disagree					
Number	23	16	29	32	23
Percent	13.7%	9.2%	6.9%	5.0%	10.4%
Neutral					
Number	30	25	53	82	26
Percent	17.9%	14.4%	12.6%	12.8%	11.7%
Agree					
Number	54	58	136	226	59
Percent	32.1%	33.3%	32.5%	35.2%	26.6%
Strongly Agree					
Number	43	55	167	269	91
Percent	25.6%	31.6%	39.9%	41.9%	41.0%
% Total Disagree	23.2%	19.0%	12.4%	7.8%	18.0%
% Total Agree	57.7%	64.9%	72.3%	77.1%	67.6%

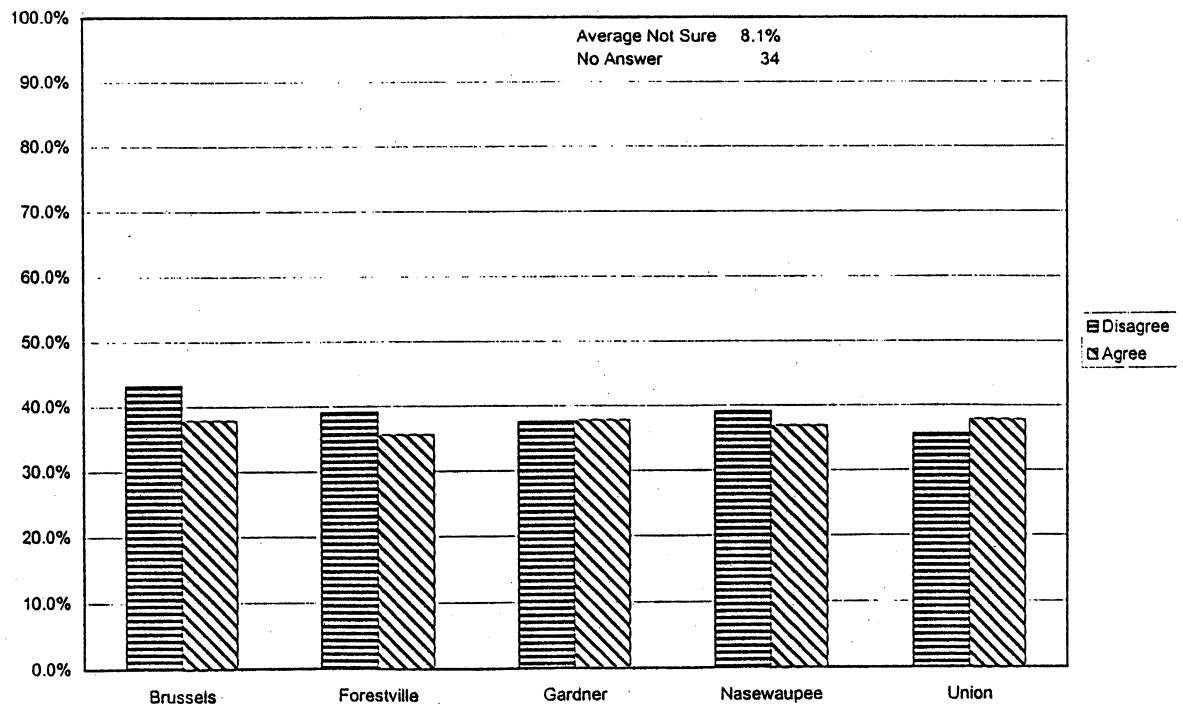
Question 5. Septic systems should be monitored, and those which are failing should be replaced.



Question Six The town should allow holding tanks only to replace failing septic systems.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	3	6	16	7
Not Sure					
Number	10	14	35	57	21
Percent	5.9%	8.0%	8.4%	8.9%	9.5%
Strongly Disagree					
Number	37	27	84	115	32
Percent	21.9%	15.5%	20.1%	18.1%	14.4%
Disagree					
Number	36	41	73	134	47
Percent	21.3%	23.6%	17.5%	21.0%	21.2%
Neutral					
Number	23	31	69	97	38
Percent	13.6%	17.8%	16.5%	15.2%	17.1%
Agree					
Number	42	39	91	132	40
Percent	24.9%	22.4%	21.8%	20.7%	18.0%
Strongly Agree					
Number	22	23	67	103	44
Percent	13.0%	13.2%	16.0%	16.2%	19.8%
% Total Disagree	43.2%	39.1%	37.6%	39.1%	35.6%
% Total Agree	37.9%	35.6%	37.8%	36.9%	37.8%

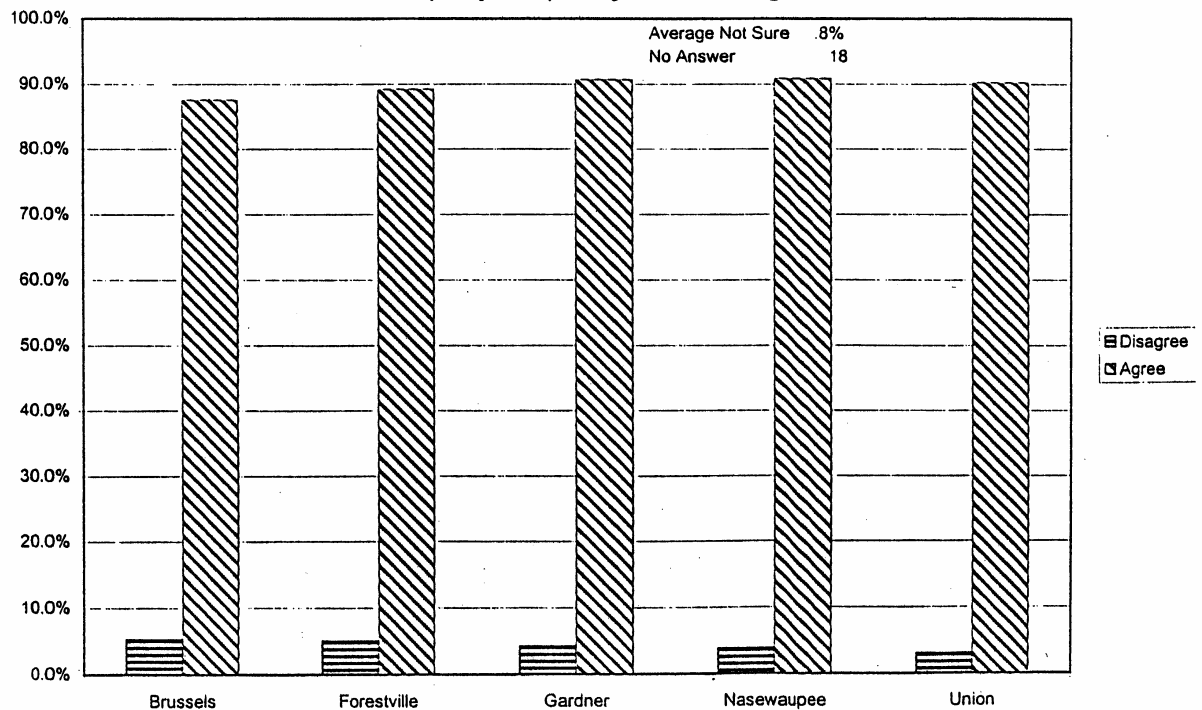
Question 6. Our town should allow holding tanks only to replace failing septic systems.



Question Seven Large developments should be required to show what effect they will have on the water quality and quantity of surrounding wells.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	1	5	7	3
Not Sure					
Number	3	0	4	1	2
Percent	1.8%	0.0%	1.0%	0.2%	0.9%
Strongly Disagree					
Number	2	5	12	12	2
Percent	1.2%	2.8%	2.9%	1.9%	0.9%
Disagree					
Number	7	4	6	13	5
Percent	4.1%	2.3%	1.4%	2.0%	2.2%
Neutral					
Number	10	11	18	34	13
Percent	5.9%	6.3%	4.3%	5.3%	5.8%
Agree					
Number	61	64	119	173	57
Percent	36.1%	36.4%	28.4%	26.8%	25.2%
Strongly Agree					
Number	87	93	261	414	147
Percent	51.5%	52.8%	62.3%	64.1%	65.0%
% Total Disagree	5.3%	5.1%	4.3%	3.9%	3.1%
% Total Agree	87.6%	89.2%	90.7%	90.9%	90.3%

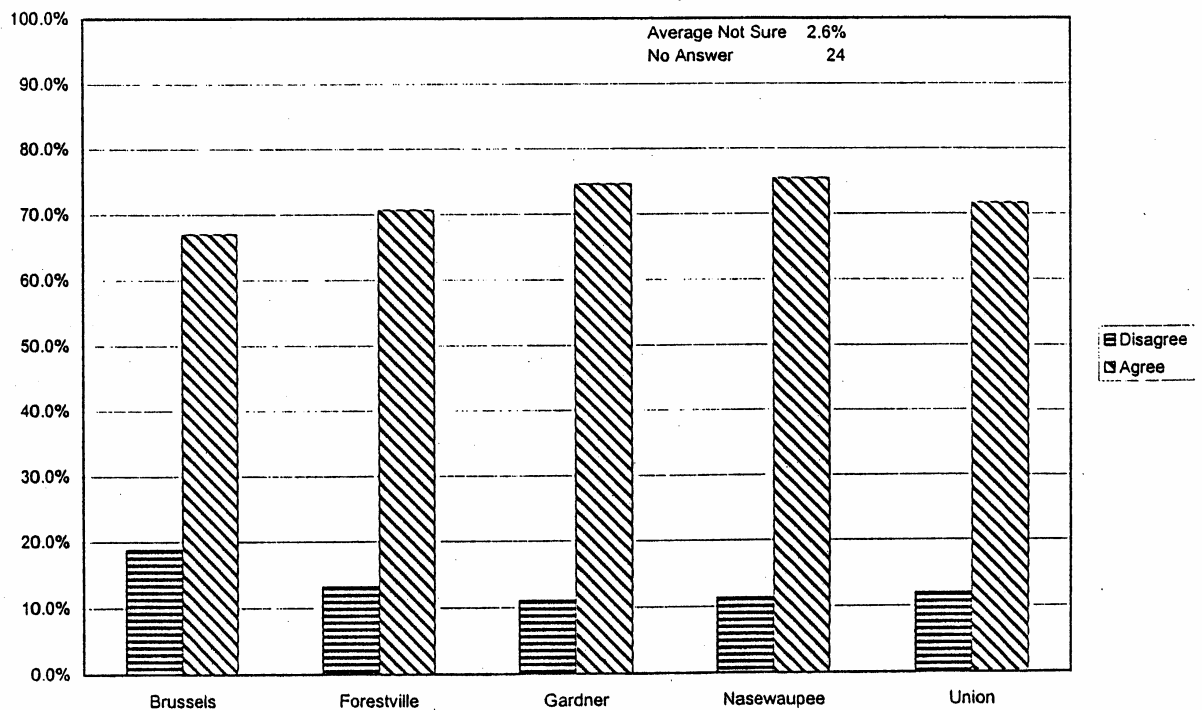
Question 7. Large developments should be required to show what effect they will have on the water quality and quantity of surrounding wells.



Question Eight **Developments which consume significant amounts of wildlife habitat should be prohibited.**

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	3	7	10	3
Not Sure					
Number	2	7	9	15	8
Percent	1.2%	4.0%	2.2%	2.3%	3.5%
Strongly Disagree					
Number	13	8	19	35	11
Percent	7.6%	4.6%	4.6%	5.4%	4.9%
Disagree					
Number	19	15	27	38	16
Percent	11.2%	8.6%	6.5%	5.9%	7.1%
Neutral					
Number	23	22	52	71	29
Percent	13.5%	12.6%	12.5%	11.0%	12.8%
Agree					
Number	36	57	113	171	49
Percent	21.2%	32.8%	27.1%	26.6%	21.7%
Strongly Agree					
Number	78	66	198	314	113
Percent	45.9%	37.9%	47.5%	48.8%	50.0%
% Total Disagree	18.8%	13.2%	11.0%	11.4%	11.9%
% Total Agree	67.1%	70.7%	74.6%	75.4%	71.7%

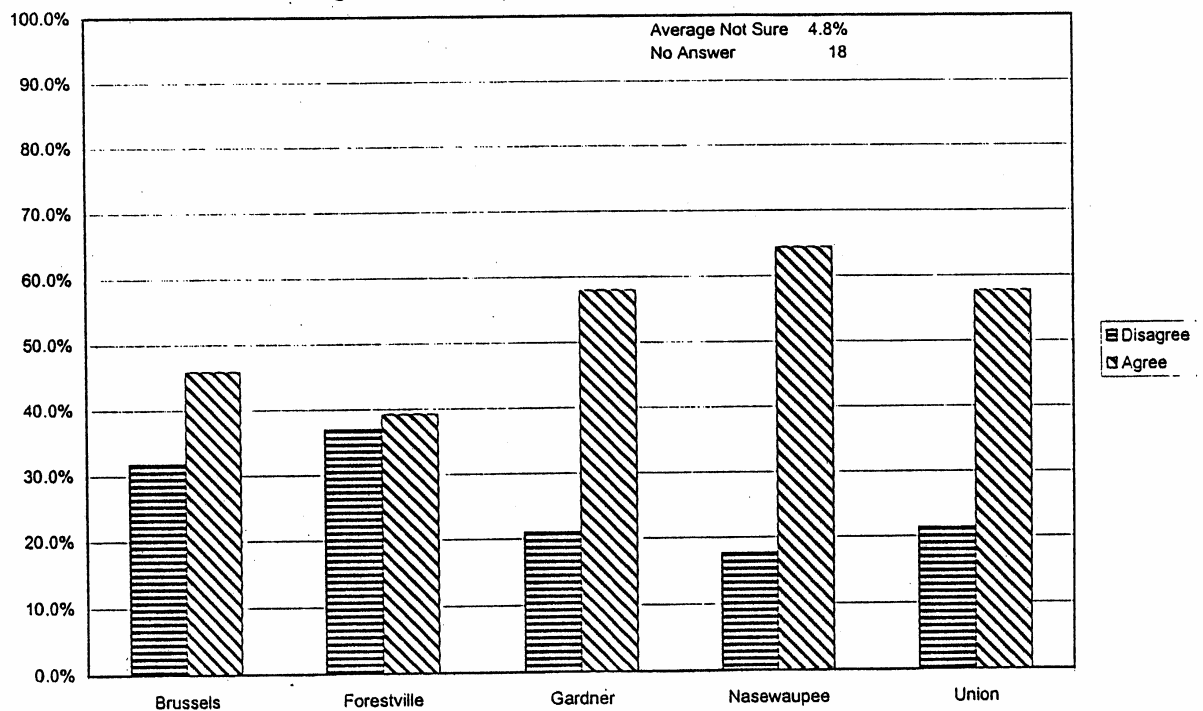
Question 8. Developments which consume significant amounts of wildlife habitat should be prohibited.



Question Nine - There should be districts in the township for different types of land uses (such as agricultural, single-family residential, commercial, etc.)

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	1	5	7	4
Not Sure					
Number	7	6	25	33	12
Percent	4.1%	3.4%	6.0%	5.1%	5.3%
Strongly Disagree					
Number	26	28	37	55	25
Percent	15.3%	15.9%	8.8%	8.5%	11.1%
Disagree					
Number	28	37	51	59	23
Percent	16.5%	21.0%	12.2%	9.1%	10.2%
Neutral					
Number	32	37	64	84	35
Percent	18.8%	21.0%	15.3%	13.0%	15.6%
Agree					
Number	49	40	147	203	66
Percent	28.8%	22.7%	35.1%	31.4%	29.3%
Strongly Agree					
Number	29	29	96	213	64
Percent	17.1%	16.5%	22.9%	33.0%	28.4%
% Total Disagree	31.8%	36.9%	21.0%	17.6%	21.3%
% Total Agree	45.9%	39.2%	58.0%	64.4%	57.8%

Question 9. There should be districts in our town for different types of land uses (such as agricultural, single-family residential, commercial, etc.).

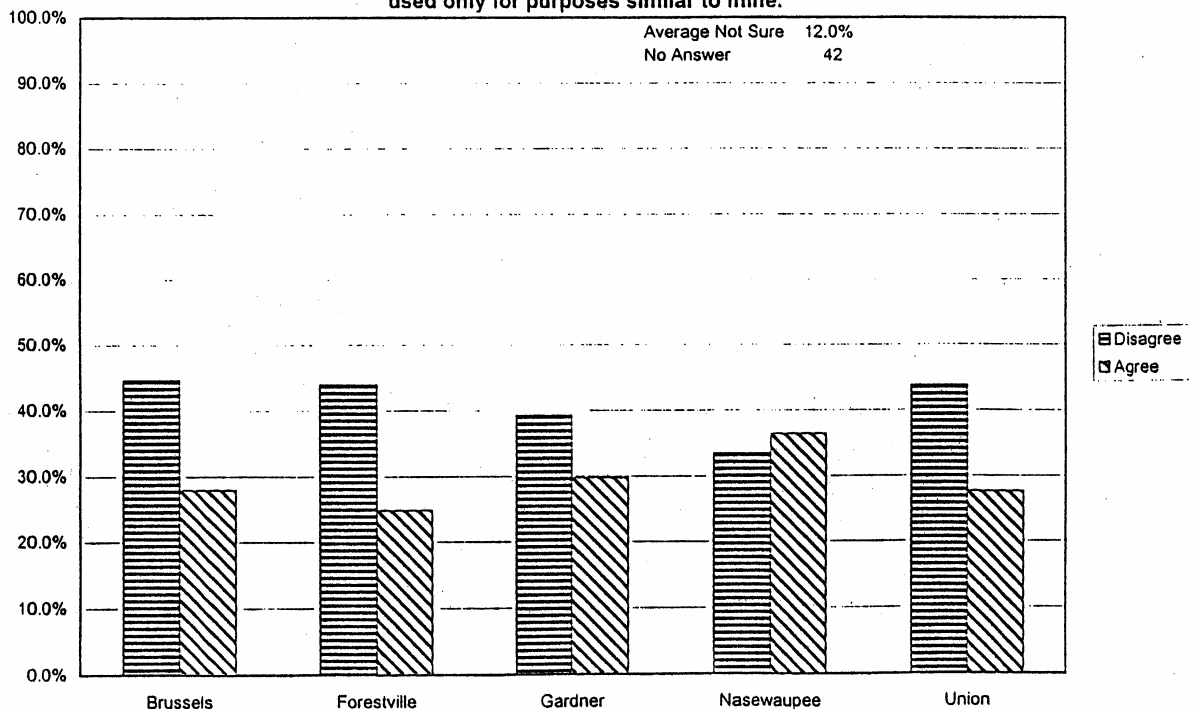


Question Ten

I would be willing to give up the right to use my land for some purposes in return for knowing that neighboring properties would be used only for purposes similar to mine.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	3	4	11	19	5
Not Sure					
Number	17	22	63	73	23
Percent	10.1%	12.7%	15.3%	11.5%	10.3%
Strongly Disagree					
Number	48	46	96	120	57
Percent	28.6%	26.6%	23.2%	18.9%	25.4%
Disagree					
Number	27	30	66	92	41
Percent	16.1%	17.3%	16.0%	14.5%	18.3%
Neutral					
Number	30	33	66	119	41
Percent	17.9%	19.1%	16.0%	18.8%	18.3%
Agree					
Number	30	28	79	143	41
Percent	17.9%	16.2%	19.1%	22.6%	18.3%
Strongly Agree					
Number	17	15	44	88	21
Percent	10.1%	8.7%	10.7%	13.9%	9.4%
% Total Disagree	44.6%	43.9%	39.2%	33.4%	43.8%
% Total Agree	28.0%	24.9%	29.8%	36.4%	27.7%

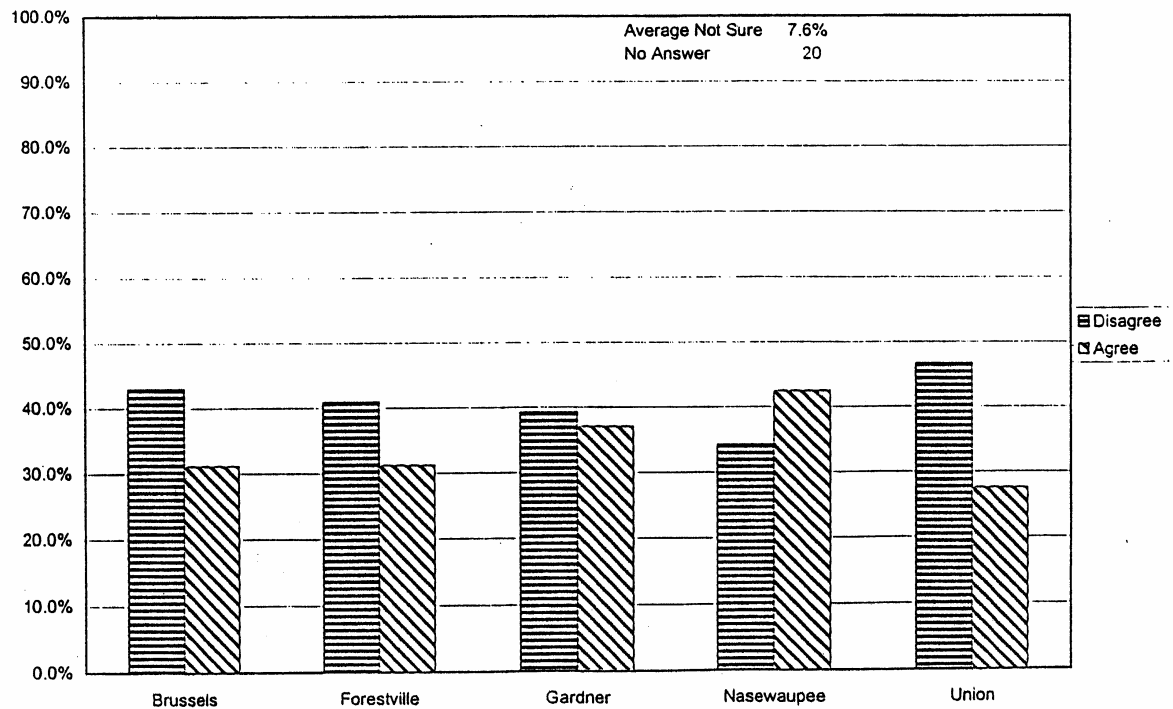
Question 10. I would be willing to give up the right to use my land for some purposes in return for knowing that neighboring properties would be used only for purposes similar to mine.



Question Eleven I would be willing to see my property taxes raised by approximately 50 cents per thousand dollars of valuation (\$50 on a \$100,000 property) so the town can preserve unique parcels of land.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	1	6	8	4
Not Sure					
Number	16	14	29	43	16
Percent	9.4%	8.0%	6.9%	6.7%	7.1%
Strongly Disagree					
Number	42	39	94	124	60
Percent	24.7%	22.2%	22.5%	19.2%	26.7%
Disagree					
Number	31	33	70	97	45
Percent	18.2%	18.8%	16.7%	15.0%	20.0%
Neutral					
Number	29	36	71	108	42
Percent	17.1%	20.5%	17.0%	16.7%	18.7%
Agree					
Number	29	33	100	164	42
Percent	17.1%	18.8%	23.9%	25.4%	18.7%
Strongly Agree					
Number	24	22	55	110	20
Percent	14.1%	12.5%	13.2%	17.1%	8.9%
% Total Disagree	42.9%	40.9%	39.2%	34.3%	46.7%
% Total Agree	31.2%	31.3%	37.1%	42.5%	27.6%

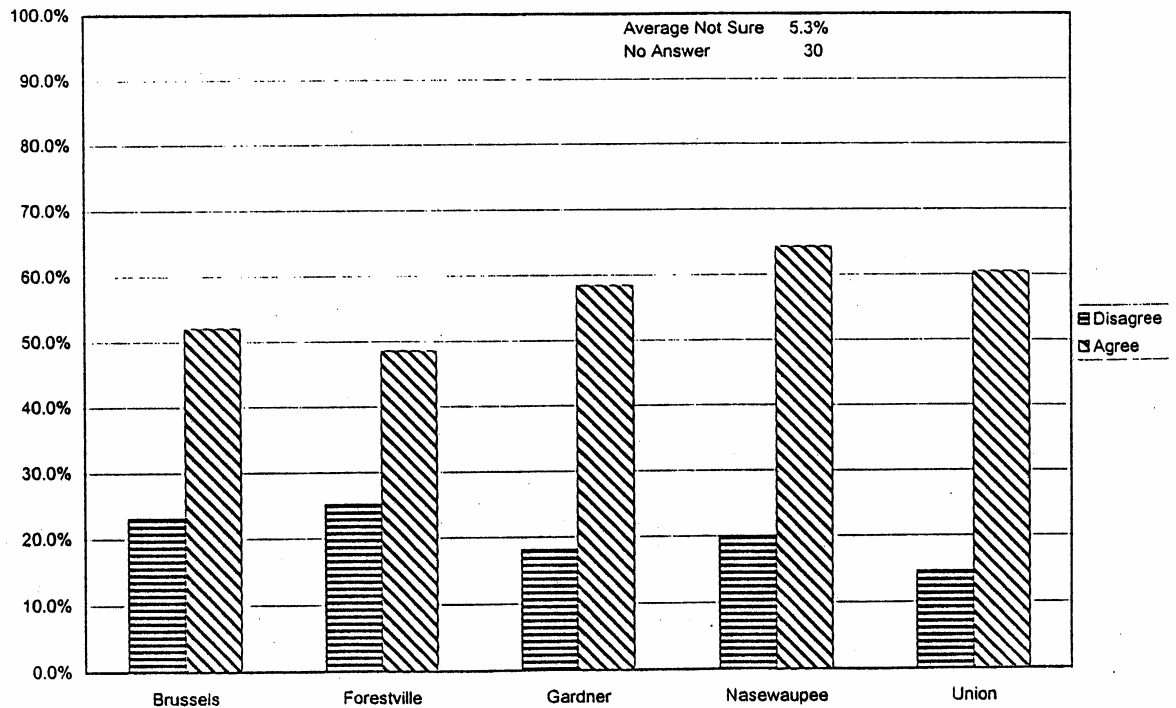
Question 11. I would be willing to see my property taxes raised by approximately 50 cents per thousand dollars of valuation (\$50 on a \$100,000 property) so the town can preserve unique parcels of land.



Question Twelve Our town should have a moratorium on specific types of development while a plan is being developed.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	2	10	12	4
Not Sure					
Number	9	10	22	20	16
Percent	5.3%	5.7%	5.3%	3.1%	7.1%
Strongly Disagree					
Number	15	23	33	63	21
Percent	8.9%	13.1%	8.0%	9.8%	9.3%
Disagree					
Number	24	21	42	65	12
Percent	14.2%	12.0%	10.1%	10.1%	5.3%
Neutral					
Number	34	37	76	82	40
Percent	20.1%	21.1%	18.4%	12.8%	17.8%
Agree					
Number	50	53	114	181	65
Percent	29.6%	30.3%	27.5%	28.2%	28.9%
Strongly Agree					
Number	38	32	128	231	71
Percent	22.5%	18.3%	30.9%	36.0%	31.6%
% Total Disagree	23.1%	25.1%	18.1%	20.0%	14.7%
% Total Agree	52.1%	48.6%	58.5%	64.3%	60.4%

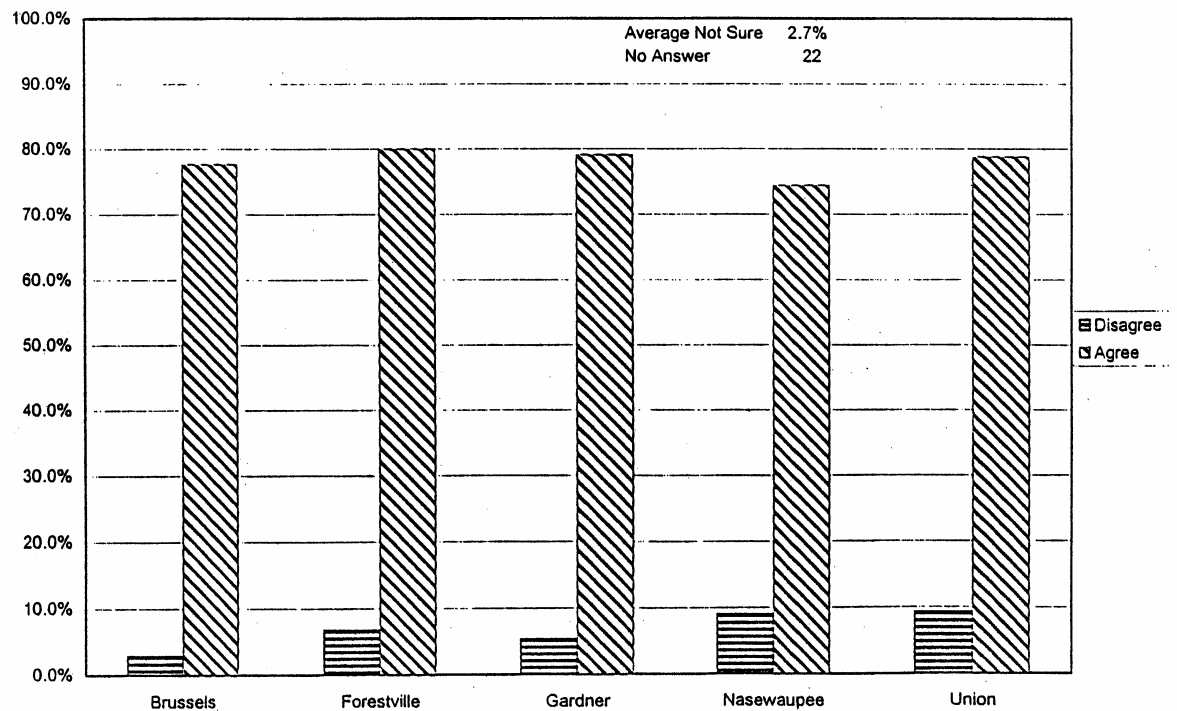
Question 12. Our town should have a moratorium on specific types of development while a plan is being developed.



Question Thirteen Public access land for the waters of Green Bay and Sturgeon Bay should be identified by signs.

	Brussels	Forestville	Gardner	Nasewaupée	Union
No Answer	1	2	3	13	3
Not Sure					
Number	6	6	7	19	4
Percent	3.5%	3.4%	1.7%	3.0%	1.8%
Strongly Disagree					
Number	2	5	14	31	10
Percent	1.2%	2.9%	3.3%	4.8%	4.4%
Disagree					
Number	3	7	9	27	11
Percent	1.8%	4.0%	2.1%	4.2%	4.9%
Neutral					
Number	28	18	59	88	23
Percent	16.5%	10.3%	14.0%	13.8%	10.2%
Agree					
Number	79	76	191	259	94
Percent	46.5%	43.4%	45.4%	40.5%	41.6%
Strongly Agree					
Number	53	64	142	217	84
Percent	31.2%	36.6%	33.7%	33.9%	37.2%
% Total Disagree	2.9%	6.9%	5.5%	9.1%	9.3%
% Total Agree	77.6%	80.0%	79.1%	74.4%	78.8%

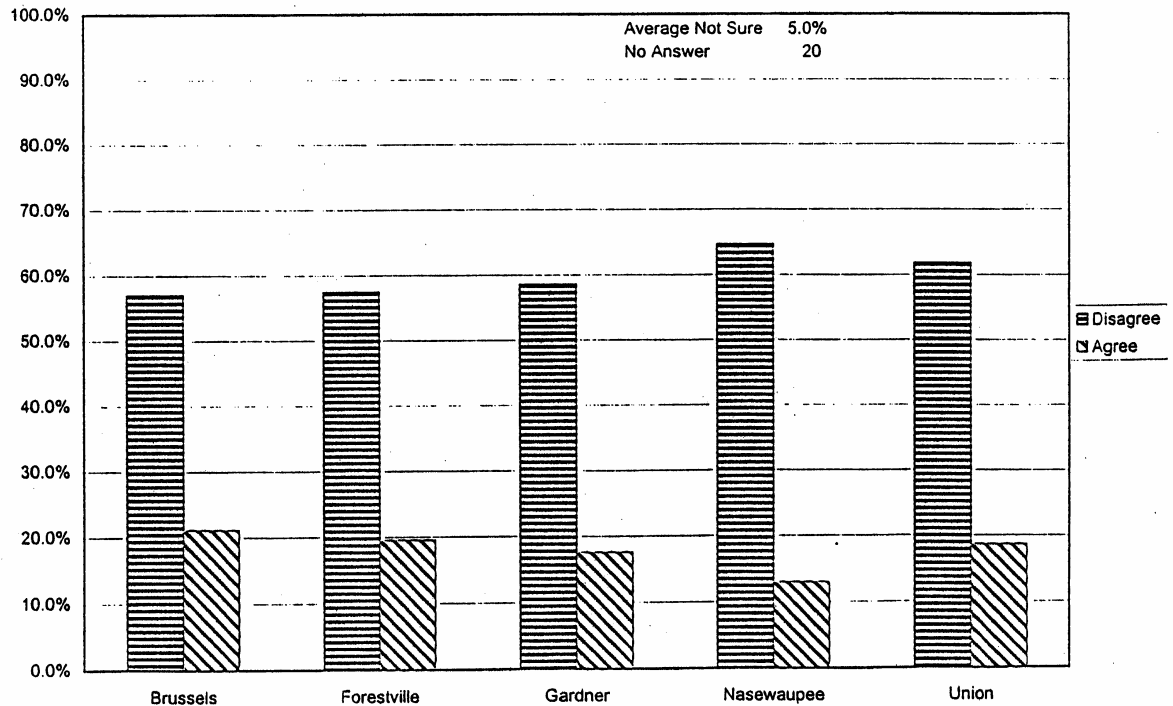
Question 13. Public access land for the waters of Green Bay and Sturgeon Bay should be identified by signs.



Question Fourteen I prefer smaller lots and an increased number of homes as opposed to larger residential lots and fewer homes.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	3	4	8	4
Not Sure					
Number	10	9	27	27	8
Percent	5.9%	5.2%	6.4%	4.2%	3.6%
Strongly Disagree					
Number	57	66	143	249	81
Percent	33.5%	37.9%	34.0%	38.6%	36.0%
Disagree					
Number	40	34	103	168	58
Percent	23.5%	19.5%	24.5%	26.0%	25.8%
Neutral					
Number	28	32	74	118	36
Percent	16.5%	18.4%	17.6%	18.3%	16.0%
Agree					
Number	23	19	43	47	22
Percent	13.5%	10.9%	10.2%	7.3%	9.8%
Strongly Agree					
Number	13	15	31	37	20
Percent	7.6%	8.6%	7.4%	5.7%	8.9%
% Total Disagree	57.1%	57.5%	58.6%	64.7%	61.8%
% Total Agree	21.2%	19.5%	17.6%	13.0%	18.7%

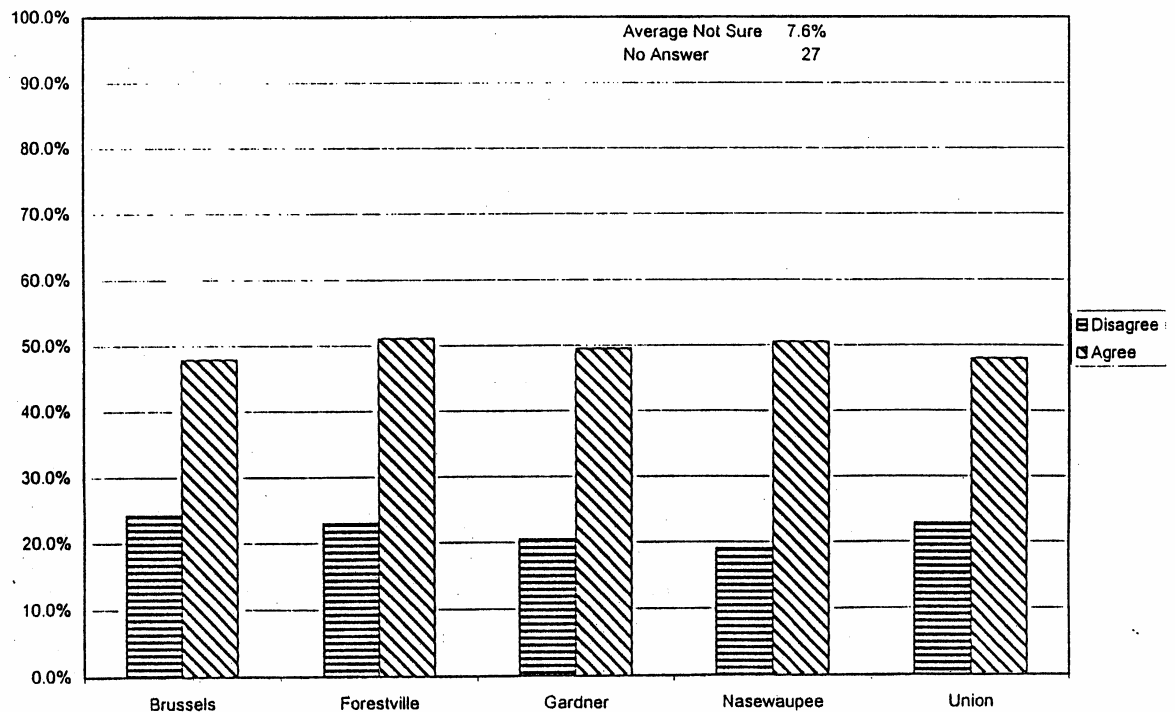
Question 14. I prefer smaller lots and an increased number of homes as opposed to larger residential lots and fewer homes.



Question Fifteen Development on agricultural land should be encouraged first on that which is less productive.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	2	3	4	12	6
Not Sure					
Number	12	10	40	53	16
Percent	7.1%	5.7%	9.5%	8.3%	7.2%
Strongly Disagree					
Number	19	16	42	56	24
Percent	11.2%	9.2%	10.0%	8.7%	10.8%
Disagree					
Number	22	24	44	66	27
Percent	13.0%	13.8%	10.5%	10.3%	12.1%
Neutral					
Number	36	36	87	143	49
Percent	21.3%	20.7%	20.7%	22.3%	22.0%
Agree					
Number	61	62	149	230	68
Percent	36.1%	35.6%	35.5%	35.9%	30.5%
Strongly Agree					
Number	20	27	59	94	39
Percent	11.8%	15.5%	14.0%	14.7%	17.5%
% Total Disagree	24.3%	23.0%	20.5%	19.0%	22.9%
% Total Agree	47.9%	51.1%	49.5%	50.5%	48.0%

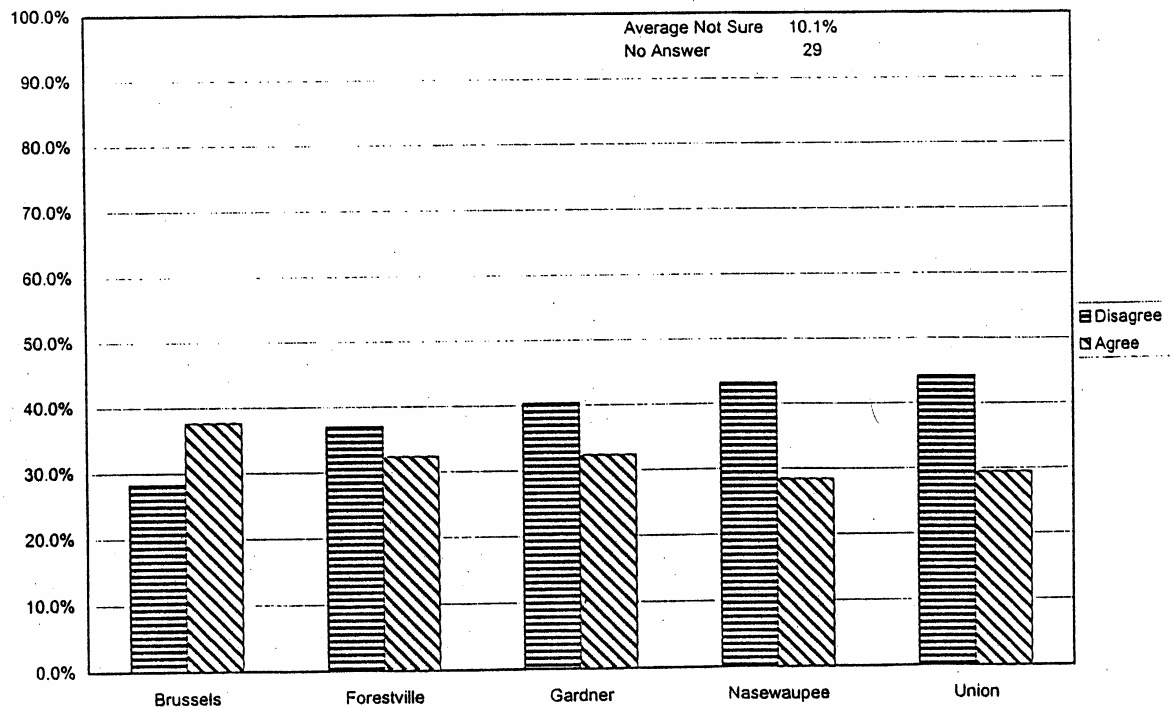
Question 15. Development on agricultural land should be encouraged first on that which is less productive.



Question Sixteen Land use policies in our town should be based primarily on the economic consequences to the property owner.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	4	10	9	5
Not Sure					
Number	20	17	47	49	22
Percent	11.8%	9.8%	11.4%	7.6%	9.8%
Strongly Disagree					
Number	18	24	55	131	37
Percent	10.6%	13.9%	13.3%	20.3%	16.5%
Disagree					
Number	30	40	112	147	62
Percent	17.6%	23.1%	27.1%	22.8%	27.7%
Neutral					
Number	39	37	67	135	37
Percent	22.9%	21.4%	16.2%	21.0%	16.5%
Agree					
Number	43	38	90	115	38
Percent	25.3%	22.0%	21.7%	17.9%	17.0%
Strongly Agree					
Number	21	18	44	68	28
Percent	12.4%	10.4%	10.6%	10.6%	12.5%
% Total Disagree	28.2%	37.0%	40.3%	43.2%	44.2%
% Total Agree	37.6%	32.4%	32.4%	28.4%	29.5%

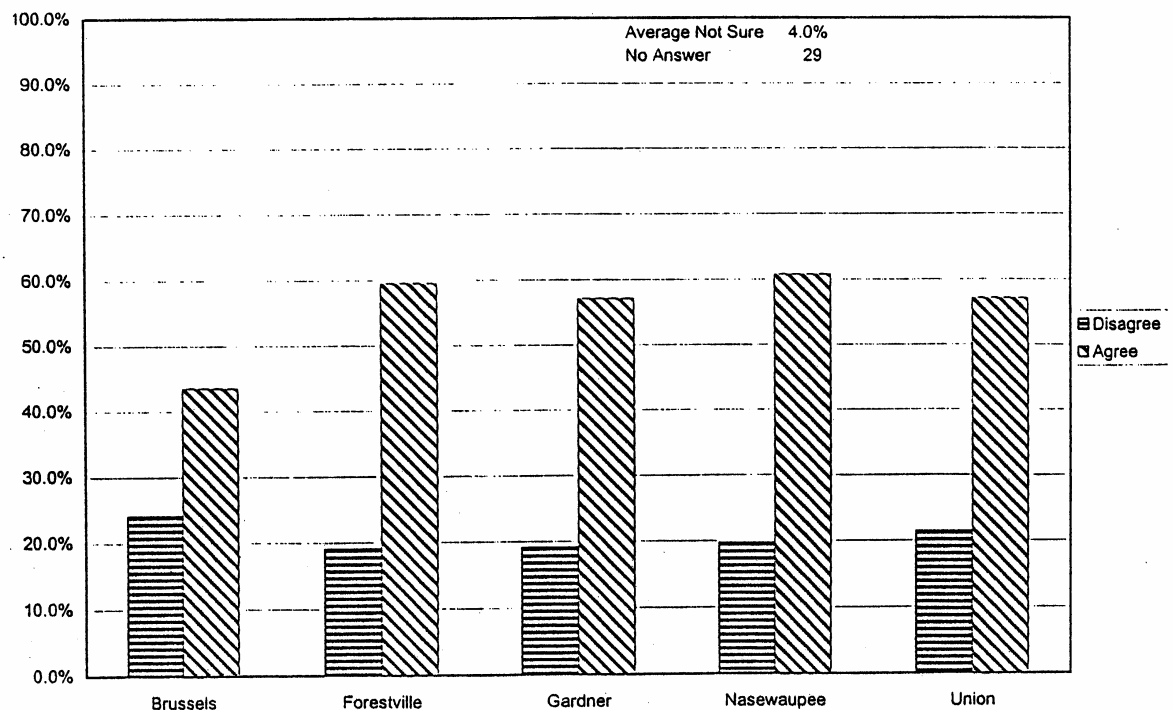
Question 16. Land use policies in our town should be based primarily on the economic consequences to the property owner.



Question Seventeen Land use policies in our town should be based primarily on the impact of development on the environment.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	1	4	11	8	5
Not Sure					
Number	8	4	17	27	10
Percent	4.7%	2.3%	4.1%	4.2%	4.5%
Strongly Disagree					
Number	16	7	23	36	17
Percent	9.4%	4.0%	5.6%	5.6%	7.6%
Disagree					
Number	25	26	56	91	31
Percent	14.7%	15.0%	13.6%	14.1%	13.8%
Neutral					
Number	48	34	82	100	38
Percent	28.2%	19.7%	19.9%	15.5%	17.0%
Agree					
Number	48	72	150	248	83
Percent	28.2%	41.6%	36.3%	38.4%	37.1%
Strongly Agree					
Number	26	31	86	144	45
Percent	15.3%	17.9%	20.8%	22.3%	20.1%
% Total Disagree	24.1%	19.1%	19.1%	19.7%	21.4%
% Total Agree	43.5%	59.5%	57.1%	60.8%	57.1%

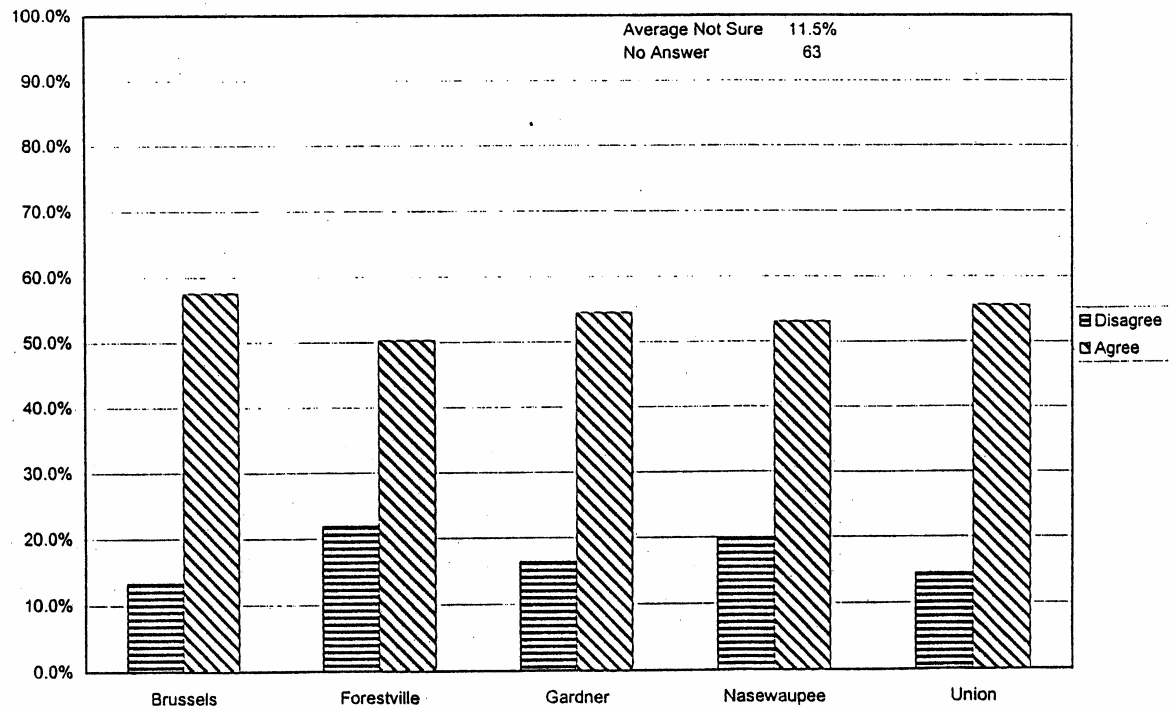
Question 17. Land use policies in our town should be based primarily on the impact of development on the environment.



Regarding: I want my town to be responsible for the administration, enforcement, and associated costs of any land use regulations it adopts.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	6	8	15	26	8
Not Sure					
Number	19	18	43	63	33
Percent	11.5%	10.7%	10.5%	10.0%	14.9%
Strongly Disagree					
Number	11	18	24	57	16
Percent	6.7%	10.7%	5.9%	9.1%	7.2%
Disagree					
Number	11	19	43	68	16
Percent	6.7%	11.2%	10.5%	10.8%	7.2%
Neutral					
Number	30	30	77	107	33
Percent	18.2%	17.8%	18.8%	17.1%	14.9%
Agree					
Number	59	62	131	215	72
Percent	35.8%	36.7%	32.0%	34.3%	32.6%
Strongly Agree					
Number	36	23	92	118	51
Percent	21.8%	13.6%	22.5%	18.8%	23.1%
% Total Disagree	13.3%	21.9%	16.4%	19.9%	14.5%
% Total Agree	57.6%	50.3%	54.5%	53.1%	55.7%

I want our town to be responsible for the administration, enforcement, and associated costs of any land use regulations it adopts.

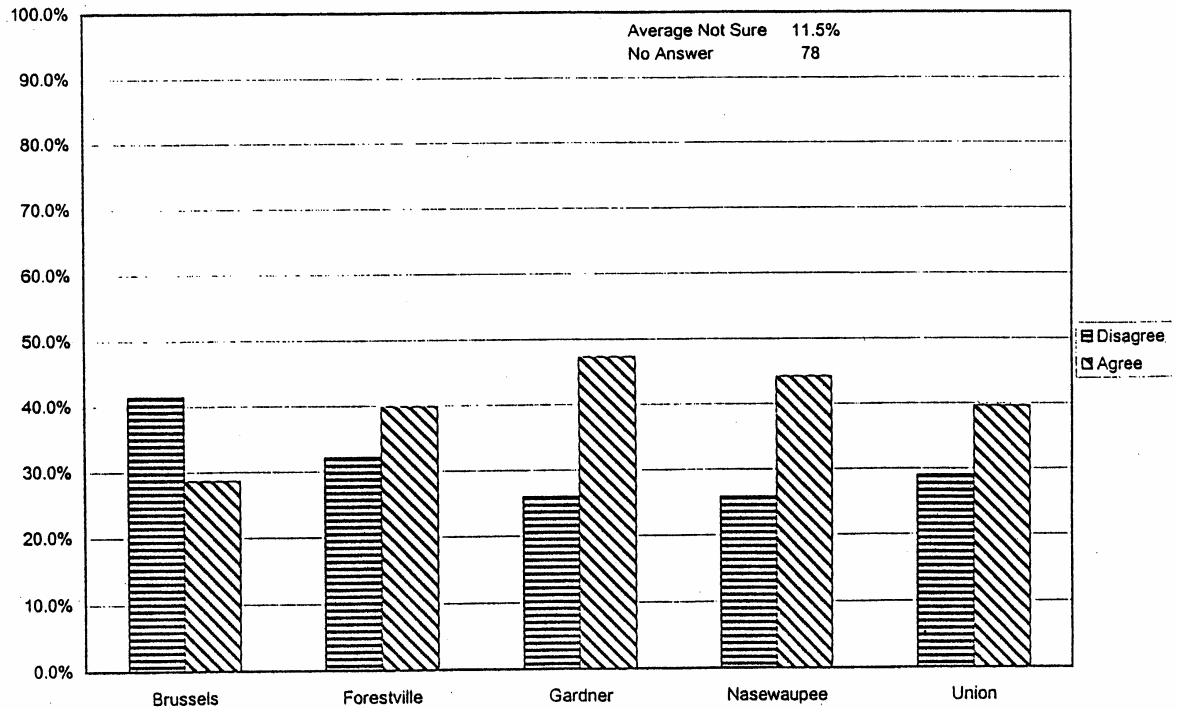


Regarding:

I want the county to be responsible for the administration, enforcement, and associated costs of any land use regulations our town adopts.

	Brussels	Forestville	Gardner	Nasewaupee	Union
No Answer	7	9	16	34	12
Not Sure					
Number	21	13	43	65	34
Percent	12.8%	7.7%	10.5%	10.5%	15.7%
Strongly Disagree					
Number	37	30	52	79	30
Percent	22.6%	17.9%	12.7%	12.8%	13.8%
Disagree					
Number	31	24	54	81	33
Percent	18.9%	14.3%	13.2%	13.1%	15.2%
Neutral					
Number	29	35	67	121	34
Percent	17.7%	20.8%	16.4%	19.5%	15.7%
Agree					
Number	31	46	125	174	50
Percent	18.9%	27.4%	30.6%	28.1%	23.0%
Strongly Agree					
Number	16	21	68	100	36
Percent	9.8%	12.5%	16.7%	16.2%	16.6%
% Total Disagree	41.5%	32.1%	26.0%	25.8%	29.0%
% Total Agree	28.7%	39.9%	47.3%	44.3%	39.6%

I want the county to be responsible for the administration, enforcement, and associated costs of any land use regulations the town adopts.



**LAND USE QUESTIONS
SPECIFIC TO BRUSSELS**

Question 18. Land use policies should consider land as a family's heritage, savings, investment, and retirement income.

No Answer	2
Not Sure	
Number	11
Percent	6.36%
Strongly Disagree	
Number	2
Percent	1.16%
Disagree	
Number	8
Percent	4.62%
Neutral	
Number	20
Percent	11.56%
Agree	
Number	88
Percent	50.87%
Strongly Agree	
Number	42
Percent	24.28%
% Total Disagree	5.78%
% Total Agree	75.14%
Not Sure	6.36%
No Answer	2

Question 19. Agricultural uses define the essential character of Brussels.

No Answer	2
Not Sure	
Number	12
Percent	6.94%
Strongly Disagree	
Number	8
Percent	4.62%
Disagree	
Number	14
Percent	8.09%
Neutral	
Number	32
Percent	18.50%
Agree	
Number	76
Percent	43.93%
Strongly Agree	
Number	29
Percent	16.76%
% Total Disagree	12.72%
% Total Agree	60.69%
Not Sure	6.94%
No Answer	2

Question 20. As much as possible of the existing farmland in Brussels should be maintained in agricultural use.

No Answer	2
Not Sure	
Number	6
Percent	3.47%
Strongly Disagree	
Number	8
Percent	4.62%
Disagree	
Number	23
Percent	13.29%
Neutral	
Number	40
Percent	23.12%
Agree	
Number	53
Percent	30.64%
Strongly Agree	
Number	41
Percent	23.70%
% Total Disagree	17.92%
% Total Agree	54.34%
Not Sure	3.47%
No Answer	2

Question 21. New commercial or high-density residential developments should be located in "downtown" Brussels.

No Answer	4
Not Sure	
Number	15
Percent	8.67%
Strongly Disagree	
Number	12
Percent	6.94%
Disagree	
Number	25
Percent	14.45%
Neutral	
Number	24
Percent	13.87%
Agree	
Number	60
Percent	34.68%
Strongly Agree	
Number	33
Percent	19.08%
% Total Disagree	21.39%
% Total Agree	53.76%
Not Sure	8.67%
No Answer	4

Question 24. Endangered or rare species should be identified and protected from potentially harmful impacts of development.

No Answer	4
Not Sure	
Number	3
Percent	1.73%
Strongly Disagree	
Number	9
Percent	5.20%
Disagree	
Number	21
Percent	12.14%
Neutral	
Number	40
Percent	23.12%
Agree	
Number	51
Percent	29.48%
Strongly Agree	
Number	45
Percent	26.01%
% Total Disagree	17.34%
% Total Agree	55.49%
Not Sure	1.73%
No Answer	4

Question 25. Brussels should have a unique identity as a town rather than a general "Southern Door" identity.

No Answer	3
Not Sure	
Number	5
Percent	2.89%
Strongly Disagree	
Number	8
Percent	4.62%
Disagree	
Number	10
Percent	5.78%
Neutral	
Number	53
Percent	30.64%
Agree	
Number	58
Percent	33.53%
Strongly Agree	
Number	36
Percent	20.81%
% Total Disagree	10.40%
% Total Agree	54.34%
Not Sure	2.89%
No Answer	3

Question 22. Local governmental protection of important natural resources and critical habitats, such as the Brussels Hill and the Niagara escarpment, is needed to ensure their preservation.

No Answer	2
Not Sure	
Number	8
Percent	4.62%
Strongly Disagree	
Number	14
Percent	8.09%
Disagree	
Number	12
Percent	6.94%
Neutral	
Number	20
Percent	11.56%
Agree	
Number	59
Percent	34.10%
Strongly Agree	
Number	58
Percent	33.53%
% Total Disagree	15.03%
% Total Agree	67.63%
Not Sure	4.62%
No Answer	2

Question 23. Remaining woodlands should be preserved or managed to maintain current wooded acreage.

No Answer	3
Not Sure	
Number	2
Percent	1.16%
Strongly Disagree	
Number	13
Percent	7.51%
Disagree	
Number	18
Percent	10.40%
Neutral	
Number	26
Percent	15.03%
Agree	
Number	62
Percent	35.84%
Strongly Agree	
Number	49
Percent	28.32%
% Total Disagree	17.92%
% Total Agree	64.18%
Not Sure	1.16%
No Answer	3

Question 26. Population increases should be monitored to see if they are affecting water availability and quality.

No Answer	4
Not Sure	
Number	3
Percent	1.73%
Strongly Disagree	
Number	6
Percent	3.47%
Disagree	
Number	11
Percent	6.38%
Neutral	
Number	37
Percent	21.39%
Agree	
Number	68
Percent	39.31%
Strongly Agree	
Number	44
Percent	25.43%
% Total Disagree	9.83%
% Total Agree	64.74%
Not Sure	1.73%
No Answer	4

Question 27. New homes should be located to take advantage of shared wells and septic systems.

No Answer	2
Not Sure	
Number	19
Percent	10.98%
Strongly Disagree	
Number	35
Percent	20.23%
Disagree	
Number	46
Percent	26.59%
Neutral	
Number	38
Percent	21.97%
Agree	
Number	20
Percent	11.56%
Strongly Agree	
Number	13
Percent	7.51%
% Total Disagree	46.82%
% Total Agree	19.08%
Not Sure	10.98%
No Answer	2

Question 28. Public sewer should be considered for the Brussels "downtown" area.

No Answer	2
Not Sure	
Number	18
Percent	10.40%
Strongly Disagree	
Number	15
Percent	8.67%
Disagree	
Number	16
Percent	9.25%
Neutral	
Number	42
Percent	24.28%
Agree	
Number	46
Percent	26.59%
Strongly Agree	
Number	34
Percent	19.65%
% Total Disagree	17.92%
% Total Agree	46.24%
Not Sure	10.40%
No Answer	2

Question 29. Our town should recognize, understand, and preserve all cultures in Brussels.

No Answer	3
Not Sure	
Number	7
Percent	4.05%
Strongly Disagree	
Number	7
Percent	4.05%
Disagree	
Number	12
Percent	6.94%
Neutral	
Number	33
Percent	19.08%
Agree	
Number	72
Percent	41.62%
Strongly Agree	
Number	39
Percent	22.54%
% Total Disagree	10.98%
% Total Agree	64.16%
Not Sure	4.05%
No Answer	3

RESPONSES TO THE STATEMENT:

**“THE FOLLOWING PLACES ARE ESSENTIAL
TO THE IDENTITY OF BRUSSELS...”**

Site 1. Black Ash Swamp.

No Answer	9
Not Sure	
Number	8
Percent	4.62%
Strongly Disagree	
Number	7
Percent	4.05%
Disagree	
Number	11
Percent	6.36%
Neutral	
Number	38
Percent	21.97%
Agree	
Number	50
Percent	28.90%
Strongly Agree	
Number	50
Percent	28.90%
% Total Disagree	10.40%
% Total Agree	57.80%
Not Sure	4.62%
No Answer	9

Site 2. Brussels High School.

No Answer	7
Not Sure	
Number	5
Percent	2.89%
Strongly Disagree	
Number	21
Percent	12.14%
Disagree	
Number	25
Percent	14.45%
Neutral	
Number	52
Percent	30.06%
Agree	
Number	35
Percent	20.23%
Strongly Agree	
Number	28
Percent	16.18%
% Total Disagree	26.59%
% Total Agree	36.42%
Not Sure	2.89%
No Answer	7

Site 3. Brussels Hill.

No Answer	7
Not Sure	
Number	2
Percent	1.16%
Strongly Disagree	
Number	3
Percent	1.73%
Disagree	
Number	6
Percent	3.47%
Neutral	
Number	13
Percent	7.51%
Agree	
Number	67
Percent	38.73%
Strongly Agree	
Number	75
Percent	43.35%
% Total Disagree	5.20%
Agree	82.08%
Not Sure	1.16%
No Answer	7

Site 4. Brussels Hill caves.

No Answer	7
Not Sure	
Number	3
Percent	1.73%
Strongly Disagree	
Number	3
Percent	1.73%
Disagree	
Number	7
Percent	4.05%
Neutral	
Number	19
Percent	10.98%
Agree	
Number	56
Percent	32.37%
Strongly Agree	
Number	78
Percent	45.09%
% Total Disagree	5.78%
% Total Agree	77.46%
Not Sure	1.73%
No Answer	7

Site 5. Brussels Post Office.

No Answer	7
Not Sure	
Number	3
Percent	1.73%
Strongly Disagree	
Number	16
Percent	9.25%
Disagree	
Number	17
Percent	9.83%
Neutral	
Number	57
Percent	32.95%
Agree	
Number	36
Percent	20.81%
Strongly Agree	
Number	37
Percent	21.39%
% Total Disagree	19.08%
% Total Agree	42.20%
Not Sure	1.73%
No Answer	7

Site 6. Brussels Town Park.

No Answer	6
Not Sure	
Number	0
Percent	0.00%
Strongly Disagree	
Number	5
Percent	2.89%
Disagree	
Number	2
Percent	1.16%
Neutral	
Number	21
Percent	12.14%
Agree	
Number	72
Percent	41.62%
Strongly Agree	
Number	67
Percent	38.73%
% Total Disagree	4.05%
% Total Agree	80.35%
Not Sure	0.00%
No Answer	6

Site 7. BUG Fire Department.

No Answer	6
Not Sure	
Number	3
Percent	1.73%
Strongly Disagree	
Number	5
Percent	2.89%
Disagree	
Number	3
Percent	1.73%
Neutral	
Number	28
Percent	16.18%
Agree	
Number	60
Percent	34.68%
Strongly Agree	
Number	68
Percent	39.31%
% Total Disagree	4.62%
% Total Agree	73.99%
Not Sure	1.73%
No Answer	6

Site 8. Chaudoir Store.

No Answer	7
Not Sure	
Number	14
Percent	8.09%
Strongly Disagree	
Number	19
Percent	10.98%
Disagree	
Number	30
Percent	17.34%
Neutral	
Number	63
Percent	36.42%
Agree	
Number	22
Percent	12.72%
Strongly Agree	
Number	18
Percent	10.40%
% Total Disagree	28.32%
% Total Agree	23.12%
Not Sure	8.09%
No Answer	7

Site 9. Escarpment ridge west of North Town Hall Road (old Milt Hafeman and Marv Hafeman properties).

No Answer	8
Not Sure	
Number	12
Percent	6.94%
Strongly Disagree	
Number	19
Percent	10.98%
Disagree	
Number	18
Percent	10.40%
Neutral	
Number	43
Percent	24.86%
Agree	
Number	35
Percent	20.23%
Strongly Agree	
Number	38
Percent	21.97%
% Total Disagree	21.39%
% Total Agree	42.20%
Not Sure	6.94%
No Answer	8

Site 10. Kolberg community.

No Answer	7
Not Sure	
Number	10
Percent	5.78%
Strongly Disagree	
Number	11
Percent	6.36%
Disagree	
Number	19
Percent	10.98%
Neutral	
Number	54
Percent	31.21%
Agree	
Number	44
Percent	25.43%
Strongly Agree	
Number	28
Percent	16.18%
% Total Disagree	17.34%
% Total Agree	41.62%
Not Sure	5.78%
No Answer	7

Site 11. Marchants Foods.

No Answer	7
Not Sure	
Number	6
Percent	3.47%
Strongly Disagree	
Number	12
Percent	6.94%
Disagree	
Number	15
Percent	8.67%
Neutral	
Number	40
Percent	23.12%
Agree	
Number	55
Percent	31.79%
Strongly Agree	
Number	38
Percent	21.97%
% Total Disagree	15.61%
% Total Agree	53.76%
Not Sure	3.47%
No Answer	7

Site 12. Misere Road area (cemetery, old tavern, farm).

No Answer	8
Not Sure	
Number	12
Percent	6.94%
Strongly Disagree	
Number	14
Percent	8.09%
Disagree	
Number	16
Percent	9.25%
Neutral	
Number	53
Percent	30.64%
Agree	
Number	50
Percent	28.90%
Strongly Agree	
Number	20
Percent	11.56%
% Total Disagree	17.34%
% Total Agree	40.46%
Not Sure	6.94%
No Answer	8

Site 13. St. Francis Church.

No Answer	7
Not Sure	
Number	5
Percent	2.89%
Strongly Disagree	
Number	9
Percent	5.20%
Disagree	
Number	11
Percent	6.36%
Neutral	
Number	26
Percent	15.03%
Agree	
Number	57
Percent	32.95%
Strongly Agree	
Number	58
Percent	33.53%
% Total Disagree	11.56%
% Total Agree	68.47%
Not Sure	2.89%
No Answer	7

Site 14. Vandertie's Meat Market.

No Answer	6
Not Sure	
Number	13
Percent	7.51%
Strongly Disagree	
Number	16
Percent	9.25%
Disagree	
Number	31
Percent	17.92%
Neutral	
Number	62
Percent	35.84%
Agree	
Number	26
Percent	15.03%
Strongly Agree	
Number	19
Percent	10.98%
% Total Disagree	27.17%
% Total Agree	26.01%
Not Sure	7.51%
No Answer	6

Site 15. Vandertie's water hole, 1/4 mile south of Highway 57
on CTH C.

No Answer 8

Not Sure
Number 19
Percent 10.98%

Strongly Disagree
Number 19
Percent 10.98%

Disagree
Number 18
Percent 10.40%

Neutral
Number 64
Percent 36.99%

Agree
Number 27
Percent 15.61%

Strongly Agree
Number 18
Percent 10.40%

% Total Disagree 21.39%
% Total Agree 26.01%
Not Sure 10.98%
No Answer 8

RESPONSES TO THE FOLLOWING:

**“WHAT ONE ACTION WOULD IMPROVE THE
TOWN OF BRUSSELS?”**

and

**“PLEASE DESCRIBE WHAT YOU WOULD LIKE
BRUSSELS TO BE LIKE IN 15 YEARS.”**

What one action would improve the Town of Brussels?

Written land use/zoning regulations.

Clean up salvage yard on High Road. The way that place is run groundwater can be polluted. When wrecks are left lying around for years, there is chance for gas tanks to leak and oil discarded engines and transmissions to get in groundwater.

Get rid of trailer park dump site on Cnty Trunk "C" 4 miles south of Brussels.

A zoning plan.

Your idea to develop a land use plan or code is a great idea to maintain the aesthetic rural quality of the township.

Land sales per 40 acres be limited to 1 dwelling per 10 acres of land.

Limiting commercial development.

No more gravel pits and junkyards.

Industry moving in and providing jobs.

Better parking for post office.

Temp moratoriums on towers and mines now!

Stop lights at C and 57.

Zoning.

A museum or information center which would improve awareness of the area's history and heritage.

YMCA in Brussels.

Less government.

Please restore town cemetery on Misere Road that has been neglected for far too many years!!

No opinion.

Forget about zoning and let property owners do what they want with the land they're paying taxes on.

Welcome all new developments.

What one action would improve the Town of Brussels?

Good zoning.

Active zoning policies with community involvement would improve community relations and establish a visible community pride.

Zoning.

Planning without infringing on people's freedoms and rights over that of geographical or historical values with rising cost prompted by committees.

Senior housing for the elderly residents of Brussels. No multi-housing or large residential housing development.

Don't repeat the same actions taken by northern Door town boards on development.

Land use policies adopted soon! Stop wind turbine!

Let it develop on it's own. Look into the human waste disposal problem and look at alternative methods such as composting toilets. Many of these claim to totally eliminate the waste, are very sanitary and protect the environment.

Aside from keeping major industrial - commercial development to a minimum, keeping individual property development to property owners.

Prevent full scale housing developments.

Cleaning the town and village of Brussels itself up.

Get rid of gangs.

Don't be afraid of new developments and let people move in the area.

Sewer and water.

Stop more mobile home sites.

Expand the park to include other things besides a baseball diamond.

Low income housing.

Get rid of the juvenile delinquents!

Develop and implement an effective zoning policy.

What one action would improve the Town of Brussels?

Prohibiting families from having more than 2 or 3 working vehicles - not numerous non-working ones, and checking on junk.

Adopt a zoning ordinance.

Zoning.

Follow Sevastopol township, 20 acres or more to build.

Implement and do their own zoning.

Industrial development, more jobs.

I feel there should be someone/something to monitoring the air pollution (dust/debris) coming from the feed mills (during the corn season mainly). There is so much red debris coming down it looks like its snowing, and you have to try not to inhale it (forget hanging clothes out to dry they just get dirty).

The intersection of Hwy. 57 and Cty C is a very dangerous one because of your visibility due to the vehicles parked in front of the restaurant and to add to that in the winter there is big snow banks in the way to be able to see oncoming traffic. (What a headache.)

Reroute that stupid highway - to the lakeshore.

Public pool.

?

New Hwy 57 4 lane!

Keep people involved and informed of ideas in order to reduce the fear of change.

Bring in more business, for more jobs.

Senior home for elderly.

Sewers - more subdivisions.

Establish a land use plan for the town NOW! Fix it later if needed.
Sewer/water.

Sewers and zoning.

What one action would improve the Town of Brussels?

Take charge of our future by having a strict and well designed zoning plan (ordinance to preserve our environment and rural character and limit/restrict residential/commercial development.)

Stop residential junk yards. The cars and trucks you have in your yard should be licensed.

Prevent the eyesore on the Brussels hill - logging of all trees, campground with ugly party lights. Building must require certain acreage - 20.00 (example).

It would be nice to see more residents cleaning up their property and letting fewer trailer homes in.

I think we need a little more police cars in the area for robberies and vandalism. Police should patrol the area more.

No wind generators. No big developments on Brussels hill.

No mobile homes allowed in country unless alongside present farm house to allow people to have parents or children stay on farm and live with them.

By not letting developers run wild.

It is just fine now.

Residential facilities so younger, middle class families can move in.

(locations)

Restrict commercial development and trailer parks indiscriminate locations not good.

Land use classification.

Have a cross representation on town board, rather than mostly farmers.

We should have a dept. store of some kind.

Get rid of "Brussels Gang".

If leave woods owners should receive compensation.

Better roads and road repair.

Have some land use regulation and enforce it to stop junk yards - quarries - and other businesses as such from taking over areas.

What one action would improve the Town of Brussels?

Keep farm animals a reasonable distance from neighbor's homes.

A youth center.

Unsure.

Zoning laws.

Leave it alone!

Bypass

More business.

There should be zoning laws in this area.

Public sewer.

The protection of farmland.

The school offering more use to the public (libraries, recreation).

Tax rates based upon land use; reduced rates for agricultural and preserved natural areas.

Expansion of 57 to four lanes from Green Bay.

Get out of Door County.

Sewer and water would probably promote development in the village of Brussels.

That the borderline of the National Historical Belgian District would be moved to include lot more area such as the village of Brussels and surrounding farms.

Implement zoning A.S.A.P.

Let the property owners do what they want with their own land.

No Zoning.

Put in water treatment plant.

Leave us along - why should someone here 6 months tell me who have lived here 60 years what to do - Send the bastards back to Ill.

Please describe what you would like Brussels to be like in 15 years.

The way it is now with less crime.

Quiet, friendly town with mostly residential structures within the village. No more feed mill expansion or at least beautify the buildings.

Development confined to "downtown" and immediately surrounding area. Ag land preserved.

Better.

A well established zoning plan intact with limited amount of development, focused mainly "in town". Outlying land with an increase in natural habitats, farm lands preserved, and limited to single family new construction.

Hopefully not a whole lot different than now.

Homes spaced out at least 400' apart on the main road in rural areas.

Much the same as now, with the natural areas protected.

Quaint unique hometown flavor preserved. Development grouped in a certain appropriate area. Neat looking homes with woods and farmland.

A small town with some industry, maybe a subdivision or two.

Less bars, more eating establishments.

No change.

Residential centered and agriculturally reserved for existing parcels.

Still a small local community.

Downtown developed or industry rest of town stay rural.

Still populated with family farms - rural flavor - not dependent on tourism - more ethnic diversity while maintaining the Belgian heritage. Environmentally healthy - forests - wildlife.

Desirable place for families. Home for elderly.

No change.

No significant change in character or people.

To remain a farming community.

Please describe what you would like Brussels to be like in 15 years.

Let the natural order of things make it what it will be.

A full grown town.

Well zoned.

Much the same, but with distinct community "flavor" - small-town, agricultural, "country" feel. May become a "bedroom" community for Green Bay, but should do so in a very controlled way which will preserve the strong heritage of this area.

Not Northern Door County.

Mainly the same, showing heritage and history of the residents. No sub-division developments. Slower speed limits thru town, with turn lanes off main and widely used off streets.

We would like to see more residential housing in downtown Brussels. Possibly some kind of retirement home, car wash, 1 more fast food restaurant.

The same as it is today.

No change.

Farms and small businesses.

To stay the same farm type community.

A slow growing, safe community.

A small town atmosphere with a lot of culture and heritage and preservation of land and wildlife.

Drug free.

Remain small.

Prosperous - landowners own large amounts of land they live on.

Like it is. Small friendly little town with its own cultures any ways.

Very similar to how it is today.

A small town which keeps up with progress.

Please describe what you would like Brussels to be like in 15 years.

Similar to it is now.

Residential developments (such as Town of Scott along Hwy 57). Some type of business development. Low housing complex for elderly.

Same as it is today.

Similar like it is today - small businesses, single family homes, rural - farm town mix.

Not much more populated.

The same small town.

Keep village residential - lot size to be established by zoning. Lots outside established. Village should be 2 acres or more.

Fleet Farm or Menards - movie house, Burger King.

I don't want to see over development and over population. Just improve and take care of what we have. I like Brussels to be a family oriented, neighbor friendly place to call home where you still feel safe to walk down the street.

If the highway is built, Brussels will become a dump.

A safe place to live and raise a family.

?

Rural community with low crime and a good tax base with sewer and water offered to all residences in the township.

Basically the same small town atmosphere.

A clean and organized village maintaining its Belgian heritage.

A place to work and live.

Limit development. Keep strong agricultural base.

Same as now - except maybe more new homes built - up in the surrounding area!

We like the town the way it is with significant agricultural land as well as wildlife habitat. We don't want to see further urban sprawl which disrupts wildlife and hunting. Our farm is near the Ahnapee River and we want to preserve and improve the habitat.

Please describe what you would like Brussels to be like in 15 years.

About the same, a nice little town.

Able to function within itself with prominent small business opportunities expanding from town, clean, 'nice' village as we pretty much have now, along with the recent talk of community active additions to S.D. Schools. Continued improvements to the town park. Friendly, recreational, open community.

New highway and new business.

Still a strongly rural character - limited residential/commercial development - restricted to "downtown" area. Farms and wildlife habitat preserved. Safe community. A vital, active, agriculture-based area, NOT A BEDROOM SUBURB OF GREEN BAY.

Home with space between. Small acreage in the downtown area. Small business, easy access off new highway for local and visitors to access small business.

A quiet community like it is now.

Clean place to live that is not too populated.

I like it the way it is. I hope it doesn't become a big city. I like to keep it as a small friendly town.

Quiet residential town.

Quiet and undeveloped and the highway not going through our land at all.

Pretty much what it is now. A small close knit farming community.

Close all the taverns.

Planned development areas so you do not see a nice home spoiled by sticking mobile homes next to them. An area where mobile homes are only allowed.

Same rural small town atmosphere as now, but with a small number of shops (craft supplies, local interest type stores; tourist traps on a small scale if you will).

A place where people want to visit instead of being known as place to drive through to get to "Door County" - People in Brussels are stereotyped as being "dump Belgians".

Quiet, small, picturesque community - still friendly and unassuming.

A larger downtown area with more retail developments.

The same way it is now.

Please describe what you would like Brussels to be like in 15 years.

Still rural and ag based, Belgian influence remaining evident.
Changes need to be made. Promote other businesses and property owners. Not only be concerned about village of Brussels, but the whole town.

I would like to see it built up, to make our town more profitable.

Peace making community without any fears, and have things for children to do.

People own land not just a lot to build.

Like today.

More homes in village, also possibly sewer and water.

I have only lived in Brussels for 2 years. I enjoy the atmosphere of a smaller town and the country life. The town should remain about the same size with modern updates.

I'd love to see agriculture all around, the business thriving and people neighborly!

Not much different than now, stay quaint and not overrun by quarries!

The same.

I like it the way it is now.

Family community.

More business.

No different than now - small town, good people and no heavy industry - quarries, junkyards, etc.

A family community.

Essentially the same with no artsy fartsy revamped buildings turned into tourist traps.

Much the same as it is now, with any growth and development planned and organized to make the best use of our town's financial and natural resources.

Should be able to benefit from Door County North expansion - the same but better commercial locally.

Sewer and water and possibly a senior citizen home in the village of Brussels.

Please describe what you would like Brussels to be like in 15 years.

I'd like to see the village of Brussels included in the historical district and preserve its history like (Cedarburg, Wi.).

Removed.

The same small, people oriented community with no sewer system.

Better controlled town possible growth.

Free of outside interference.

A safe and peaceful town.

Comments written next to numbered survey questions, listed by the number of the question.

1. My wife would be willing to volunteer for this project.
2. If this means that the town/county/state will purchase these buffer areas and return them to their natural habitat. This would return much needed corridors for wildlife.

3. Need more info.

4. What kind of buildings? Factories? Plants? Condos?

Question too vague.

"similar physical scale" - What does this mean"

I support no trailer parks, or large condo complexes.

6. Should only be allowed when no other system can be installed.

Question can be taken two ways.

9. District for commercial use only.

10. Too vague!

12. Need specific details.

Yes, for trailer parks and gravel pits. Golf course, no!

14. Only in defined residential areas.

15. Need more info.

"less productive" - What?

17. Further explanation needed.

Should be considered as one of the factors.

18. This is a strange question. What are you getting at? Sell off to developers?

21. Where?

22. Need case by case assessment.

! Yes

24. Within logical limits.

26. But is that practical?

28. Where population level make it economical.

29. Hmong?

30. Who else would do it?

31. To back the administration and enforcement of the Town, but not the costs. That should be Town assoc.

No Door County Planning Commission, please!

**Comments written next to the sites listed below following this statement in the survey:
"The following places are essential to the identity of Brussels."**

1. Black Ash Swamp - where is it?
2. Brussels High School - Sturgeon Bay cleaned up theirs.
5. Brussels Post Office - We need one, but doesn't need to be in that location.
7. BUG Fire Dept. - Need also but can be relocated.
11. Marchants Foods - Can be relocated, but we need merchants.
15. Vandertie's water hole - Is this of historical value.

APPENDIX B
ADOPTED PUBLIC PARTICIPATION POLICY AND PROCEDURES
PUBLIC NOTICES AND LIST OF ATTENDEES

TOWN OF BRUSSELS COMPREHENSIVE PLAN

PUBLIC PARTICIPATION POLICY & PROCEDURES

TOWN OF BRUSSELS COMPREHENSIVE PLAN
WRITTEN PROCEDURES TO FOSTER PUBLIC PARTICIPATION

In accordance with Wisconsin State Statute 66.0295(4), which defines "Procedures For Adopting Comprehensive Plans", the following written procedures will be followed in order to involve the public in the comprehensive planning process to the greatest extent practicable.

Appointment of Planning Commission or Plan Committee

The Town of Brussels shall appoint either the Town of Brussels Plan Commission to facilitate development and review of the Plan.

Comprehensive Plan Update Meetings

All Planning Commission meetings will be posted in advance and open to the public.

Open Houses

Two open houses shall be held in order to present information regarding the comprehensive plan. One shall be held at the "midway" point to present background data and the other will be held at the end of the process prior to the public hearing. The open houses will be noticed and posted in three locations by the Town Clerk. In addition, the final open house at which the findings and the recommended plan of actions will be presented shall be noticed in the local newspaper. The open houses will provide the public with an opportunity to review and comment on work that has been accomplished by the Bay-Lake Regional Planning Commission and the Plan Commission.

Additional Steps of Public Participation

The Town reserves the right to execute additional steps/means/methods in order to gain additional public participation and or additional understanding of the Comprehensive Plan and the process of its development and adoption. These optional steps may include informational memos/postcards/letters/ and/or additional postings such as informational posters or fliers.

Planning Commission Adopts Plan by Resolution

The Planning Commission shall adopt a Resolution by a majority vote, recommending adoption of the Comprehensive Plan by the Town Board. The resolution and majority vote will take place at a regularly scheduled and publicly noticed meeting of the Planning Commission. The vote shall be recorded in the official minutes of the Planning Commission. The resolution shall refer to maps and other descriptive materials that relate to one or more elements of the Comprehensive Plan.

After Adoption of a Resolution by the Planning Commission

In accordance with State Statute 66.0295(4), *Procedures for Adopting Comprehensive Plans*, one copy of the plan recommended for adoption by the Planning Commission will be sent to the following:

1. Every governmental body that is located in whole or in part within the boundaries of the local governmental unit.
2. Every local governmental unit that is adjacent to the local governmental unit which is the subject of the plan.
3. The Wisconsin Land Council.

In addition, copies of the plan will be made available for public review at a local library of the community and at the Town Hall. Citizens will have a minimum (two week opportunity) to review and provide written comments on the Comprehensive Plan. After the Town Board has received all written comment, the Board shall respond in writing to the comments received as specified in State Statute 66.0295(4)(a).

Adoption of Comprehensive Plan by the Town Board

After adoption of a resolution by the Plan Commission, the Town Board shall adopt the Comprehensive Plan by ordinance. A majority vote is necessary for adoption. The Town Board will hold one public hearing at which the ordinance relating to the Comprehensive Plan will be discussed. The hearing will be preceded by a class 1 notice under ch. 985 that is published at least 30 days before the hearing is held. The class 1 notice shall contain at least the following information:

1. The date, time, and place of the hearing.
2. A summary, which may include a map, of the proposed Comprehensive Plan.
3. The name of an individual employed by the Town of Brussels who may provide additional information regarding the proposed ordinance.
4. Information relating to where and when the proposed comprehensive plan may be inspected before the hearing, and how a copy of the plan may be obtained.

Class 2 Notice under Chapter 985 of the Wisconsin Statutes

TOWN OF BRUSSELS
NOTICE OF PUBLIC HEARING
TOWN OF BRUSSELS 2020 COMPREHENSIVE PLAN

PLEASE TAKE NOTICE THAT, at the direction of the Town Board, the Town of Brussels Planning Commission will conduct a public hearing to obtain public comment and input correspondent to the adoption, by ordinance, of the *Town Of Brussels 2020 Comprehensive Plan*. The public hearing will be conducted on Tuesday, November 12, 2002, beginning at 6:00 PM at the Brussels-Union-Gardener (B.U.G.) Fire Station, 9863 State Road 57, Brussels, Wisconsin.

The *Town of Brussels 2020 Comprehensive Plan* contains detailed descriptions, inventories, and maps of the town's existing physical and social conditions. Specifically the town's existing natural features, cultural resources, population, economic and housing data, its existing transportation and community facilities, the existing land uses and land use regulatory controls are inventoried and analyzed within the plan. The Plan also contains a "vision statement" that articulates the preferred appearance and social condition of the town in 2020. Using the town's vision statement, the land use inventories and details, and current and projected socio-economic data; the Plan Commission identified specific land use goals, objectives, and policies, and developed a preferred twenty-year land use and land use policy plan for the town. The comprehensive plan will serve to provide guidance relative to the town's future growth and development over the next 20 years.

The Public Hearing will be preceded by an Open House at which the *Town Of Brussels 2020 Comprehensive Plan* will be presented for review. Staff of the town's planning consultant, the Bay-Lake Regional Planning Commission, will be on hand to present the principal features of the plan and to answer question regarding the planning process. The Open House will be held from 4:30 PM to 5:45 PM.

Following the Public Hearing, at 7:00 PM, the Brussels Town Board will meet in regularly scheduled session and will "take action" on a Planning Commission resolution to adopt by ordinance, the *Town of Brussels, 2020 Comprehensive Plan*.

Copies of the Town of Brussels 2020 Comprehensive Plan are available for public review at the Brussels-Union-Gardener (B.U.G.) Fire Station, BayLake Bank 9679 Hwy 57 Brussels, and at the Town Clerk's office, at 8674 CTH RD H, Sturgeon Bay, WI 54235, Phone 920-825-7618.

Any person wishing to attend who because of disability requires special accommodations should contact the Town Clerk at 8674 CTH RD H, Sturgeon Bay, WI 54235, Phone 920-825-7618 at least 48 hours in advance so that arrangements can be made.

JoAnn Neinas, Clerk
Town of Brussels, Door County

MEMORANDUM

DATE: October 28, 2002
TO: Local Officials and Other Interested Parties
FROM: Jim Van Laanen, Regional Transportation Planner
RE: *Town of Brussels Open House*

You are invited to an Open House for the Town of Brussels comprehensive plan, scheduled for **Tuesday, November 12th from 4:30 PM to 5:45 PM.** The meeting will be held at the **Brussels-Union-Gardner Fire Station, at 9863 State Road 57, Brussels Wisconsin.** The open house is intended to give residents and other interested individuals a chance to review the Town's comprehensive plan and to ask questions of the Town of Brussels Plan Commission and the Bay-Lake Regional Planning Commission.

The *Town of Brussels, 2020 Comprehensive Plan* represents a cooperative, 14-month effort between the Town of Brussels Plan Commission and the Bay-Lake Regional Planning Commission. The plan is a statement of public policy concerning the future conservation and development of the town over the next 20 years. The plan inventoried and analyzed the town's physical setting, natural features, land use, population, economics, housing stock, transportation facilities, outdoor recreation and community facilities. Using these inventories, the results of a community survey, and the plan's goals and objectives established by the Plan Commission, the town developed a preferred land use plan for the town of Brussels.

Your attendance at this meeting will be greatly appreciated. **Hope to see you on November 12th.**

If you have any questions, please call me at (920) 448-2820

MEMORANDUM

DATE: October 28, 2002

TO: Local Officials and Other Interested Parties

FROM: Jim Van Laanen, Regional Transportation Planner

RE: *Town of Brussels Comprehensive Plan and Open House*

Enclosed herein is a draft copy of *the Town of Brussels 2020 Comprehensive Plan* for your review. Your comments and questions may be directed to myself - or expressed at the open house and public hearing which will be conducted on **Tuesday, November 12th from 4:30 PM to 5:45 PM.** The meeting will be held at the **Brussels-Union-Gardner Fire Station, at 9863 State Road 57, Brussels Wisconsin.** The open house is intended to give residents and other interested individuals a chance to review the Town's comprehensive plan and to ask questions of the Town of Brussels Plan Commission and the Bay-Lake Regional Planning Commission.

The *Town of Brussels, 2020 Comprehensive Plan* represents a cooperative, 14-month effort between the Town of Brussels Plan Commission and the Bay-Lake Regional Planning Commission. The plan is a statement of public policy concerning the future conservation and development of the town over the next 20 years. The plan inventoried and analyzed the town's physical setting, natural features, land use, population, economics, housing stock, transportation facilities, outdoor recreation and community facilities. Using these inventories, the results of a community survey, and the plan's goals and objectives established by the Plan Commission, the town developed a preferred land use plan for the town of Brussels.

Your attendance at this meeting will be greatly appreciated. **Hope to see you on November 12th.**

If you have any questions, please call me at (920) 448-2820

AGENDA

PUBLIC HEARING FOR TOWN OF BRUSSELS 2020 COMPREHENSIVE PLAN

TOWN OF BRUSSELS PLAN COMMISSION
BRUSSELS/UNION/GARDNER (BUG) FIRE STATION
9683 STH 57, BRUSSELS, WISCONSIN
NOVEMBER 12, 2002
6:00 PM

1. Open Public Hearing
2. Explanation of Public Hearing Process
3. Solicitation of Public Comment and Input Correspondent to the Adoption, by Ordinance, of the Town of Brussels 2020 Comprehensive Plan
4. Close Public Hearing

Town of Brussels Plan Commission
Mike Vandenhouten
Plan Commission Chairperson
(920) 825-1377

Any person wishing to attend the Public Hearing, who, because of a disability, requires special accommodations should contact the Town of Brussels at (920)-825-1377 two days prior to the meeting so that arrangements can be made.

Please note that a quorum of the Town Board may be present.

	<u>Name</u>	<u>Address/Representing</u>
1.	George Whiffel	Nesewander
2.	Cindy Kerscher	Nesewander
3.	Clay Bmii	" "
4.	Susan Havel	Brussels
5.	Arden Tronfeld	Town of Lincoln
6.	Pam Kohlmeier	Brussels
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Town of Brussels 2020 Comprehensive Plan
November 12, 2002
Public Hearing

	<u>Name</u>	<u>Address/Representing</u>
1.	Jim Van Laanen	Bay-Lake RBC
2.	Michael Hamblin	Brussels
3.	Dan Darden	Brussels
4.	Edm DeJardin	Brussels
5.	Lois Maeske	Brussels
6.	Cindy Kerschen	Nasauwaupee
7.	George W. Ruffel	Nasauwaupee
8.	John Nemas	Brussels
9.	Joe Wautier	Brussels
10.	George Delvaux	Brussels
11.	Arline Monfils	Town of Lincoln
12.	Susan Havel	Brussels
13.		
14.		
15.		

TOWN OF BRUSSELS

NOTICE OF OPEN HOUSE “20 YEAR COMPREHENSIVE PLAN”

PLEASE TAKE NOTICE THAT the Brussels Town Board and the Brussels Planning Commission will hold an *Open House* (information meeting) on the proposed adoption of the *Town of Brussels, 2020 Comprehensive Plan*. The *Open House* will be held on Tuesday December 11, **2001**, from 5:00 p.m. to 6:30 p.m. at the Brussels Town Hall.

The *Open House* will give residents and other interested individuals a chance to review the proposed *Town of Brussels 2020 Comprehensive Plan* preliminary growth map, ask questions of the Town of Brussels Plan Committee, Town Board Members, and the Bay-Lake Regional Planning Commission staff. Copies of the preferred plan text, goals, Town vision statement, and identified trends will be available for review at the meeting.

The Town's Comprehensive Plan (once adopted) will be a statement of public policy concerning the conservation and development of the town. The plan provides a guide to where future growth and development should occur within the town over the next 20 years. When the town makes future decisions concerning land use development, the plan will be consulted. The plan inventoried and analyzed the town's physical setting, natural features, land use, population figures, economics, housing stock, transportation, and community facilities - some of which were presented at the June 6, 2001 *Open House*. Using these inventories and the plan's approved goals and objectives, the Town Plan Committee developed a preferred land use plan for the town.

Complete Drafts of the document will be made available for further review starting April, 2001. The Open House is designed to receive additional input on the planning process from citizens and other interested individuals. The final hearing on the plan will be held on November 12, 2001. Your comments are welcome and encouraged at the Open House and the Public Hearing. Additional questions and/or comments can be addressed to Brandon Robinson at Bay-Lake Regional Planning anytime between these two meetings.

If special arrangements are necessary to accommodate individuals with disabilities, please contact Brandon Robinson at (920) 448 - 2820 (24 Hrs. prior to the Open House).

NOTICE OF AN OPEN HOUSE and INFORMATIONAL MEETING
FOR THE DEVELOPMENT OF
THE TOWN OF BRUSSELS 2022 COMPREHENSIVE PLAN

December 11, 2001
5:00 PM to 6:30 PM.
BUG Fire Station

PLEASE TAKE NOTICE THAT the Town of Brussels Plan Commission will host an open house and informational meeting for town residents and other interested parties. The meeting will be held at the Brussels/Union/Gardner (BUG) Fire Station at 9683 STH 57, on Tuesday, December 11, 2001, from 5:00 p.m. to 6:30 p.m. At this meeting, the background information that will be incorporated into the *Town of Brussels, 2022 Comprehensive Plan* will be made available for review. The plan will contain an inventory and analysis the town's physical setting, natural features, land use, population figures, economics, housing stock, transportation, and community facilities. Using these inventories and the plan's goals and objectives, a preferred land use plan for the Town of Brussels will be developed. The background information presented on December 11th will include survey results, the draft vision statement, various maps, population figures, housing stock, and transportation facilities information.

Members of the Town Planning Commission and Bay-Lake Regional Planning Commission staff will be on hand to answer questions and record comments. The meeting will also afford you an opportunity to provide the direction and insight that is essential in developing a plan that addresses all the community's needs.

If you have any questions or would like more information or if special arrangements are necessary to accommodate individuals with disabilities, please contact Jim Van Laanen, Bay-Lake RPC at (920) 448-2820 prior to the meeting.

THE TOWN OF BRUSSELS
2022 COMPREHENSIVE PLAN
“OPEN HOUSE”
And
“PUBLIC INFORMATION MEETING”

Tuesday, December 11, 2001
5:00 PM to 6:30 PM
Brussels- Union-Gardner Fire Station

Purpose: The purpose of this Open House is to provide residents an opportunity to review the background data that will be incorporated into the town's future plans. The background data that will be presented will include the most recent population data, the physical features and setting of the town, the existing transportation system, and current land-use.

This is your chance to review the background data and ask questions of the Town Plan Committee and Town Board members, as well as staff from Bay-Lake Regional Planning Commission.

Displays: Maps on display will include the 2002 Existing Land Use, Interim Zoning Map, Environmental Features and Transportation System. The Plan's Draft Vision Statement, Physical Features Population and Housing, Transportation Facilities, and Land Use chapter drafts will also be available for review and comment.

"MID-POINT" OPEN HOUSE

TOWN OF BRUSSELS 20 YEAR COMPREHENSIVE PLAN

TUESDAY, December 11, 2001

ATTENDANCE LIST (PLEASE PRINT LEGIBLY)

	<u>Name:</u>	<u>Address:</u>
1.	John Nemas	8624 Cty H Stur. Bay
2.	John Nemas	"
3.	Lyle DeBury	9720 Hwy 57 - Brussels, W. 54201
4.	Dawn Mung	280 S. Hall Rd Forestville, W. 54213
5.	Ken Mraz	" " " "
6.	Jodi Milshe Rice	719 N. Town Hall Rd Forestville 54213
7.	Phil & Bonnie Vogel	9025 Hwy 57 Brussels
8.	Salv DeFuchi	P.O. Box 52 Brussels
9.	TIM LAVINE	9093 CTH J FORESTVILLE 54213
10.	Dan Dabner	8691 Cty Rd J Forestville 54213
11.	Becky Tremble	9656 School Rd Brussels 54204
12.	Dennis Hemblay	9656 School Rd Brussels 54204
13.	Michael Hemblay	1756 Cty C Brussels 54204
14.	Don Vanderhe	1144 Cty C Brussels 54204
15.	George Dehman	4984 Cemetery Rd Brussels
16.	Bill Vanderhe	646 N TOWN HALL Rd Forestville
17.	Joe Wauter	9490 Hwy 57 Brussels 54213
18.		
19.		
20.		
21.		
22.		

WE NEED YOUR INPUT

Public Involvement is an important element of the *Town of Brussels 20 Year Comprehensive Plan*. Brussels is your community and your views have an impact. Please take a few minutes to comment below.

All comments received will be forwarded to the Town Board and Planning Commission for their consideration prior to adoption of the *Town of Brussels 20 Year Comprehensive Plan*.

Groups and individuals wishing to provide more detailed submittals may submit the comments to the Town board or Planning Commission or send them to the address listed on the back of this page.

Town of Brussels Comprehensive Plan Vision Statement

The town of Brussels is a culturally diverse and dynamic rural community that through the conscientious implementation of its comprehensive plan; has been able to balance the protection of its natural and cultural resources with the inevitable economic and residential growth and change that occurs over time.

The town's charm and character, and ultimately its appeal to the families that have lived and farmed here for generations, as well as those who are newcomers to the community, is intrinsically linked to its abundant open spaces, its rich cultural heritage, its family-owned farms, and small town friendliness.

Over the past 20 years suitably scaled and appropriate commercial and industrial development has been directed to the crossroads communities of Brussels to ensure that essential services are provided to residents, while the towns rural character is preserved.

By conscientiously adhering to this plan, the town of Brussels has maintained its small town rural character, protected its valuable natural resources, supported its family-owned agricultural base, and has preserved its history and heritage for future generations.

YOUR COMMENTS

(Please write on the back if you run out of space.)

1. My comments on the Open House are: _____

2. Do you agree with the Vision Statement? Yes _____ No _____

Please explain (should something be changed or added to the statement):

3. My comments on the Background Data and the Displays are:

4. My comments on Other Related Topics are:

5. General Comments and Questions:

Considerations of where an initial sewer district may be, and how that would affect rapid, small lot development

Historical structure designation guidelines that may be more suited to our immediate area. Not just State Historical guidelines

If you have additional comments questions or materials you would like to submit concerning the Town of Brussels 20 Year Comprehensive Plan, send them to:

Bay-Lake Regional Planning Commission
Suite 211, Old Fort Square
211 N. Broadway
Green Bay, WI 54303-2757
Attn. Jim Van Laanen

APPENDIX C
LIST OF RARE, THREATENED AND ENDANGERED SPECIES -
DOOR COUNTY

RARE, THREATENED AND ENDANGERED SPECIES AND NATURAL COMMUNITIES IN DOOR COUNTY

Rare, Threatened, and Endangered Plants in Door County

Common Name	Species Name	Wisconsin Status ¹
Adder's Tongue	<i>Ophioglossum vulgatum</i> var <i>pseudopodium</i>	Special Concern
American Sea-Rocket	<i>Cakile edentula</i>	Special Concern
Beautiful Sedge	<i>Carex concinna</i>	Threatened
Bird's-Eye Primrose	<i>Primula mistassinica</i>	Special Concern
Canada Gooseberry	<i>Ribes oxyacanthoides</i>	Threatened
Chilean Sweet Cicely	<i>Osmorhiza chilensis</i>	Special Concern
Christmas Fern	<i>Polystichum acrostichoides</i>	Special Concern
Climbing Fumitory	<i>Adlumia fungosa</i>	Special Concern
Coast Sedge	<i>Carex exilis</i>	Threatened
Common Bog Arrow-Grass	<i>Triglochin maritimum</i>	Special Concern
Cooper's Milkvetch	<i>Astragalus neglectus</i>	Endangered*
Crawe Sedge	<i>Carex crawei</i>	Special Concern
Crinkled Hairgrass	<i>Deschampsia flexuosa</i>	Special Concern
Cuckoo Flower	<i>Cardamine pratensis</i> var <i>palustris</i>	Special Concern
Downy Willow-Herb	<i>Epilobium strictum</i>	Special Concern
Dune Thistle	<i>Cirsium pitcheri</i>	Threatened**
Dwarf Lake Iris	<i>Iris lacustris</i>	Threatened**
Elk Sedge	<i>Carex garberi</i>	Threatened
Fairy Slipper	<i>Calypso bulbosa</i>	Threatened
Few-Flower Spike-Rush	<i>Eleocharis quinqueflora</i>	Special Concern
Giant Pinedrops	<i>Pterospora andromedea</i>	Endangered
Green Spleenwort	<i>Asplenium viride</i>	Endangered
Hair-Like Sedge	<i>Carex capillaris</i>	Special Concern
Heart-Leaved Foamflower	<i>Tiarella cordifolia</i>	Endangered
Hidden-Fruited Bladderwort	<i>Utricularia geminiscapa</i>	Special Concern
Hooker Orchis	<i>Platanthera hookeri</i>	Special Concern
Indian Cucumber-Root	<i>Medeola virginiana</i>	Special Concern
Lake Huron Tansy	<i>Tanacetum huronense</i>	Endangered
Lanceolate Whitlow-Cress	<i>Draba lanceolata</i>	Endangered
Large-Flowered Ground-Cherry	<i>Leucophysalis grandiflora</i>	Special Concern
Large Roundleaf Orchid	<i>Platanthera orbiculata</i>	Special Concern
Leafy White Orchis	<i>Platanthera dilatata</i>	Special Concern
Lesser Fringed Gentian	<i>Gentianopsis procera</i>	Special Concern
Limestone Oak Fern	<i>Gymnocarpium robertianum</i>	Special Concern
Livid Sedge	<i>Carex livida</i> var <i>radicalis</i>	Special Concern
Long-Spur Violet	<i>Viola rostrata</i>	Special Concern
Low Calamint	<i>Calamintha arkansana</i>	Special Concern
Low Spike-Moss	<i>Selaginella selaginoides</i>	Endangered
Maidenhair Spleenwort	<i>Asplenium trichomanes</i>	Special Concern
Marsh Horsetail	<i>Equisetum palustre</i>	Special Concern
Marsh Ragwort	<i>Senecio congestus</i>	Special Concern
Marsh Willow-Herb	<i>Epilobium palustre</i>	Special Concern
Moonwort Grape-Fern	<i>Botrychium lunaria</i>	Endangered
Slim-Stemmed Small Reed Grass	<i>Calamagrostis stricta</i>	Special Concern

Source: WDNR, 2002.

Rare, Threatened, and, Endangered Plants in Door County Cont.

Common Name	Species Name	Wisconsin Status ¹
Northern Black Currant	<i>Ribes hudsonianum</i>	Special Concern
Northern Bog Sedge	<i>Carex gynocrates</i>	Special Concern
Northern Comandra	<i>Geocaulon lividum</i>	Endangered
Ohio Goldenrod	<i>Solidago ohioensis</i>	Special Concern
One-Flowered Broomrape	<i>Orobanche uniflora</i>	Special Concern
Pale Green Orchid	<i>Platanthera flava</i> var <i>herbiola</i>	Threatened
Purple False Oats	<i>Trisetum melicoides</i>	Endangered
Ram's-Head Lady's-Slipper	<i>Cypripedium arietinum</i>	Threatened
Rock Whitlow-Grass	<i>Draba arabisans</i>	Special Concern
Rocky Mountain Sedge	<i>Carex backii</i>	Special Concern
Round-Leaved Orchis	<i>Amerorchis rotundifolia</i>	Threatened
Sand Reed-Grass	<i>Calamovilfa longifolia</i> var <i>magna</i>	Threatened
Seaside Spurge	<i>Euphorbia polygonifolia</i>	Special Concern
Sheathed Sedge	<i>Carex vaginata</i>	Special Concern
Showy Lady's-Slipper	<i>Cypripedium reginae</i>	Special Concern
Slender Bog Arrow-Grass	<i>Triglochin palustre</i>	Special Concern
Slenderleaf Sundew	<i>Drosera linearis</i>	Threatened
Sm.-Flowered Grass-Of-Parnassus	<i>Parnassia parviflora</i>	Endangered
Small Yellow Lady's-Slipper	<i>Cypripedium parviflorum</i>	Special Concern
Small Yellow Water Crowfoot	<i>Ranunculus gmelinii</i> var <i>hookeri</i>	Endangered
Spoon-Leaf Moonwort	<i>Botrychium spathulatum</i>	Special Concern
Sticky False-Asphodel	<i>Tofieldia glutinosa</i>	Threatened
Sticky Goldenrod	<i>Solidago simplex</i> var <i>gillmanii</i>	Threatened*
Swamp-Pink	<i>Arethusa bulbosa</i>	Special Concern
Thickspike	<i>Elymus lanceolatus</i> ssp <i>psammophilus</i>	Threatened
Tufted Hairgrass	<i>Deschampsia cespitosa</i>	Special Concern
Tussock Bulrush	<i>Scirpus cespitosus</i>	Threatened
Variegated Horsetail	<i>Equisetum variegatum</i>	Special Concern
White Adder's-Mouth	<i>Malaxis brachypoda</i>	Special Concern
Western Fescue	<i>Festuca occidentalis</i>	Threatened
Yellow Gentian	<i>Gentiana alba</i>	Threatened

Source: WDNR, 2002

¹Wisconsin Status:

Endangered: continued existence in Wisconsin is in jeopardy.

Threatened: appears likely, within the foreseeable future, to become endangered.

Special Concern: species for which some problem of abundance or distribution is suspected but not yet proven.

Rule: protected or regulated by state or federal legislation or policy; neither endangered nor threatened.

* indicates: A candidate for federal listing.

** indicates: Federally Endangered or Threatened.

Last Revised: March 2002

Rare, Threatened, and, Endangered Animals in Door County

Common Name	Species Name	Wisconsin Status ¹	Taxa
Black-Crowned Night-Heron	<i>Nycticorax nycticorax</i>	Special Concern	Bird
Cerulean Warbler	<i>Dendroica cerulea</i>	Threatened*	Bird
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Endangered*	Bird
Piping Plover	<i>Charadrius melodus</i>	Endangered**	Bird
Red-Shouldered Hawk	<i>Buteo lineatus</i>	Threatened	Bird
Yellow Rail	<i>Coturnicops noveboracensis</i>	Threatened	Bird
Dion Skipper	<i>Euphyes dion</i>	Special Concern	Butterfly
Two-Spotted Skipper	<i>Euphyes bimacula</i>	Special Concern	Butterfly
Arrowhead Spiketail	<i>Cordulegaster obliqua</i>	Special Concern	Dragonfly
Aurora Damselfly	<i>Chromagrion conditum</i>	Special Concern	Dragonfly
Hine's Emerald	<i>Somatochlora hineana</i>	Endangered**	Dragonfly
Swamp Darner	<i>Epiaschna heros</i>	Special Concern	Dragonfly
Banded Killifish	<i>Fundulus diaphanus</i>	Special Concern	Fish
Bloater	<i>Coregonus hoyi</i>	Special Concern	Fish
Lake Herring	<i>Coregonus artedii</i>	Special Concern	Fish
Lake Sturgeon	<i>Acipenser fulvescens</i>	Special Concern *	Fish
Striped Shiner	<i>Luxilus chrysocephalus</i>	Endangered	Fish
Blanchard's Cricket Frog	<i>Acris crepitans blanchardi</i>	Endangered	Frog
Lake Huron Locust	<i>Trimerotropis huroniana</i>	Special Concern	Insect
Oithona Tiger Moth	<i>Grammia oithona</i>	Special Concern	Moth
Phyllira Tiger Moth	<i>Grammia phyllira</i>	Special Concern	Moth
Angular Disc	<i>Discus catskillensis</i>	Special Concern	Snail
Bark Snaggletooth	<i>Gastrocopta corticaria</i>	Special Concern	Snail
Cherrystone Drop	<i>Hendersonia occulta</i>	Threatened	Snail
Fine-Ribbed Striate	<i>Striatura milium</i>	Special Concern	Snail
High Spire Column	<i>Columella simplex</i>	Special Concern	Snail
Midwest Pleisocene	<i>Vertigo hubrichti</i>	Endangered*	Snail
Variable Vertigo	<i>Vertigo gouldi</i>	Special Concern	Snail
Northern Ribbon Snake	<i>Thamnophis sauritus</i>	Endangered	Snake
Northern Ringneck Snake	<i>Diadophes punctatus edwardsii</i>	Special Concern	Snake

Source: WDNR, 2002

¹Wisconsin Status:

Endangered: continued existence in Wisconsin is in jeopardy.

Threatened: appears likely, within the foreseeable future, to become endangered.

Special Concern: species for which some problem of abundance or distribution is suspected but not yet proven.

Rule: protected or regulated by state or federal legislation or policy; neither endangered nor threatened.

* indicates: A candidate for federal listing.

** indicates: Federally Endangered or Threatened.

Last Revised: March 2002

Natural Communities

Important examples of the following natural community types have been found in this county. Although communities are not legally protected, they are critical components of Wisconsin's biodiversity and may provide the habitat for rare, threatened and endangered species.

Alder Thicket	Hardwood Swamp	Northern Sedge Meadow
Bat Hibernaculum	Interdunal Wetland	Northern Wet Forest
Boreal (Rich) Fen	Lake Dune	Northern Wet-Mesic Forest
Boreal Forest	Lake--Shallow, Hard, Drainage	Open Bog
Emergent Aquatic	Lake--Shallow, Hard, Seepage	Moist Cliff
Forested Ridge And Swale	Lake—Shallow, Very Hard, Drainage (Marl)	Southern Mesic Forest
Great Lakes Alkaline Shoreline	Northern Dry-Mesic Forest	Springs And Spring Runs, Hard
Great Lakes Beach	Northern Mesic Forest	

¹Wisconsin Status:

Endangered: continued existence in Wisconsin is in jeopardy.

Threatened: appears likely, within the foreseeable future, to become endangered.

Special Concern: species for which some problem of abundance or distribution is suspected but not yet proven.

Rule: protected or regulated by state or federal legislation or policy; neither endangered nor threatened.

*** indicates:** A candidate for federal listing.

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Last Revised: March 2002

APPENDIX D
STATUTORY TOWN ROAD CONSTRUCTION STANDARDS AND
TYPICAL CROSS SECTIONS

Chapter Trans 204

EXISTING TOWN ROAD IMPROVEMENT STANDARDS

Trans 204.01 Purpose
Trans 204.02 Definitions

Trans 204.03 Town road standards
Trans 204.04 Exceptions to standards

Trans 204.01 Purpose. The purpose of this chapter is to establish uniform minimum design standards for the improvement of existing town roads, as required by s. 86.266, Stats.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92.

Trans 204.02 Definitions. In this chapter:

(1) "Average daily traffic" or "ADT" means the total traffic volume during a stated period divided by the number of days in that stated period; unless otherwise specified, the stated period is one year.

(2) "Bridge rehabilitation" means the preservation or restoration of the structural integrity of an existing bridge as well as work to correct safety defects.

(3) "Bridge replacement" means building a new bridge to replace an existing bridge.

(4) "Design speed" means the maximum safe speed that can be maintained over a specified section of a highway when conditions are so favorable that the design features of the highway govern.

(5) "Improvement" means a town road construction project with a projected design life of at least 10 years.

(6) "Improvement level" means the type of construction improvement. It can range from resurfacing to complete reconstruction of a town road.

(7) "Load posted" means the placement of regulatory signs at a bridge indicating the safe load carrying capacity of the bridge.

(8) "Recondition" means work in addition to resurfacing, and includes pavement widening, shoulder paving, and improvement of an isolated grade, curve, intersection or correction of a sight distance problem to improve safety.

(9) "Reconstruction" means total rebuilding of an existing town road to improve maintainability, safety, geometrics and traffic service.

(10) "Resurfacing" means placing a new surface, exclusive of seal coating, on an existing roadway to provide a better all weather surface, a better riding surface, and to extend or renew the pavement life.

(11) "Roadway" means the portion of a highway, including shoulders, for vehicular use.

(12) "Shoulder" means the portion of a roadway that is contiguous to the traveled way and is used primarily for vehicular stopping in an emergency.

(13) "Traveled way" means the portion of the roadway designed for movement of vehicles exclusive of the shoulders.

(14) "Usable bridge width" means the clear width between curbs or rails, whichever is less.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92.

Trans 204.03 Town road standards. (1) The minimum design standards for each of the town road improvement levels are as shown in the following tables:

TABLE A—RECONSTRUCTION

TRAFFIC VOLUME			ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Current ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway
T1	Under 250	40	20	3	26
T2	250–750	50	22	4	30
T3	Over 750	55	24	6	36

TABLE B—RESURFACING AND RECONDITIONING

TRAFFIC VOLUME			ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Current ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway
TR1	Under 250	—	18	2	22
TR2	250 – 400	40	20	2	24
TR3	401 – 750	50	22	2	26
TR4	Over 750	55	22	4	30'

Note: Examples of resurfacing and reconditioning improvements which may be appropriate for existing town roads include, but are not limited to, pavement rehabilitation; widening lanes and shoulders; replacing bridge elements to correct structural deficiencies; bridge deck overlays; bridge and culvert replacement; and other related improvements such as minor grading, subgrade work and correction of drainage problems.

(2) The geometry of the town road shall be designed to safely accommodate vehicles traveling at the design speed selected for the road improvement.

(3) The minimum design standards for existing town bridges are as shown in the following table:

TABLE C – EXISTING BRIDGES

CURRENT TRAFFIC VOLUME ADT	USABLE BRIDGE WIDTH
Under 400	Traveled way
400 – 750	Traveled way plus 1 foot each side
Over 750	Traveled way plus 2 feet each side

(4) Bridge replacement, rehabilitation or widening is required where a bridge is either load posted or has a usable width that is less than the traveled way width. Bridge replacement or widening should be evaluated if the usable bridge width is less than the val-

ues shown in Table C. If widening of the traveled way is planned as part of the town road improvement, the usable bridge width should be compared to the approaches after they are widened to determine whether or not bridge replacement or widening should be evaluated.

(5) The minimum design standards for new bridges on town roads are as shown in ch. Trans 214.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92.

Trans 204.04 Exceptions to standards. The secretary or the secretary's designee may authorize deviation from the standards in this chapter in special cases in which strict application of the standards is impractical and in which deviation is not contrary to the public interest and safety.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92.

Chapter Trans 205

COUNTY TRUNK HIGHWAY STANDARDS

Trans 205.01 Purpose
Trans 205.02 Definitions
Trans 205.03 County trunk highway standards

Trans 205.035 Use of alternative "3R" standards
Trans 205.04 Exceptions to design standards
Trans 205.05 Project review

Note: Chapter Hy 34 as it existed on December 31, 1986 was repealed and a new chapter Trans 205 was created effective January 1, 1987.

Trans 205.01 Purpose. (1) Pursuant to s. 84.01 (9) (b), Stats., the department of transportation adopts these rules relating to projects for constructing or reconstructing and relating to processes incidental to building, fabricating or bettering a county trunk highway, but not relating to maintenance of a county trunk highway. Maintenance includes all those measures and activities necessary to preserve a highway, as nearly as possible, in the condition of its construction. Maintenance generally involves no change in horizontal alignment, roadway widths or grade.

(2) Any county trunk highway improvement project, on which construction is started after January 1, 1987, shall follow this chapter.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87.

Trans 205.02 Definitions. As used in this chapter:

(1) "Average daily traffic" or "ADT" means the average 24-hour traffic volume during a stated period divided by the number of days in that stated period; unless otherwise specified, the stated period is one year.

(2) "Bridge design load" means the maximum vehicle loading that a bridge is designed to accommodate without exceeding the allowable working capacity of any structural member or group or system of structural members.

(3) "Design speed" means the maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable that the design features of the highway govern.

(4) "District director" means a Wisconsin department of transportation, division of highways and transportation services, district office director.

Note: The department of transportation district offices and addresses are as follows:

District 1 ..	2101 Wright Street	Madison 53704
District 2 ..	141 N.W. Barstow Street	Waukesha 53187
District 3 ..	944 Vanderperren Way	Green Bay 54304
District 4 ..	1681 2nd Avenue South	Wisconsin Rapids 54494
District 5 ..	3550 Mormon Coulee Road	LaCrosse 54601
District 6 ..	718 W. Clairemont Avenue	Eau Claire 54701
District 7 ..	Hanson Lake Road	Rhineland 54501
District 8 ..	1701 N. Fourth Street	Superior 54880

(5) "Functional classification" has the meaning set forth in ch. Trans 76.

(6) "HS20" has the meaning set forth in the American association of state highway and transportation officials (AASHTO)

standard specifications for highway bridges, 13th edition 1983, as amended by interim specifications—bridges 1984 and 1985, published by AASHTO.

Note: The AASHTO standard specifications for highway bridges are available from AASHTO, 444 North Capitol Street, N.W., Washington, D.C. 20001. Copies of the relevant portion of the AASHTO standard are on file at the offices of the department of transportation, secretary of state and revisor of statutes.

(7) "Regional engineer" means a Wisconsin department of transportation division of highways central office design chief road design engineer.

(8) "Rehabilitation" means replacing a major structural element of an existing highway to extend its service life for a substantial period of years and to enhance safety.

(9) "Restoration" means returning an existing highway to an acceptable condition to extend its service life for a substantial period of years and to enhance safety.

(10) "Resurfacing" means installing new or additional layers of surfacing on existing highway pavement to extend its service life for a substantial period of years and to enhance safety.

(11) "Roadway" means the portion of a highway, including shoulders, for vehicular use.

Note: Under this definition, a divided highway has 2 or more roadways.

(12) "Shoulder" means that portion of a roadway that is contiguous to the traveled way and is used primarily for vehicle stopping in an emergency.

(13) "Traveled way" means the portion of the roadway designed for movement of vehicles, exclusive of the shoulders.

History: Cr. Register, December, 1986, No. 372, eff. 1-1-87; renum. (7) to (9) to be (11) to (13), cr. (7) to (10), Register, February, 1992, No. 434, eff. 3-1-92.

Trans 205.03 County trunk highway standards. (1)

The design standards for urban county trunk highway improvement projects shall conform with the applicable department of transportation criteria, and, if applicable, with the federal criteria for the class of highway involved. The minimum design standards for rural county trunk highway improvement projects shall be as set forth below for each of the rural county trunk highway functional classifications. The functional classification for a particular rural county trunk highway segment shall be that shown for the segment on the most current department of transportation rural functional system map prepared under ch. Trans 76 for local transportation aids purposes or, if applicable, on the most current federal aid system map.

(2) The rural county trunk highway minimum design standards for each of the rural county trunk highway functional classifications are as shown in the following tables:

TABLE (a) – ARTERIALS*

TRAFFIC VOLUME		ROADWAY WIDTH DIMENSIONS IN FEET				BRIDGES***	
Design Class	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	Design Load	Clear Roadway Width in Feet
A1	Under 3500	60**	24	6	36	HS20	36
A2	3500–7000	60	24	10	44	HS20	44
A3	Over 7000	65	24(2)	6 Left / 10 Right	40(2)	HS20	40

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**For design class A1 the desirable design speed is 60 mph, but a minimum design speed of 55 mph is acceptable.

***The full width of bridge approach roadways shall continue across all new bridges, except when a bridge is a major structure on which design dimensions are subject to individual economic studies because of high unit cost.

TABLE (b) – COLLECTOR*

TRAFFIC VOLUME		ROADWAY WIDTH DIMENSIONS IN FEET**					BRIDGES	
Design Class	Current ADT	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	Design Load	Clear Roadway Width in Feet
C1	0–400		40	22–24	2–4	26–32	HS20	26–30
C2	400–750	Under 1500	50	22–24	6	34–36	HS20	28–30
C3		1500–3500	55	24	6	36	HS20	32–34***
C4		Over 3500	60	24	8	40	HS20	40***

*Minimum design standards for sight distance, horizontal alignment, and vertical alignment shall conform to the applicable department of transportation criteria.

**Where a range of widths is shown, the smaller number is the minimum width and the larger number is the maximum width eligible for federal or state project participation.

***Bridges in design classes C3 or C4 having a total length over 100 feet may be designed with a clear roadway width of 30 feet.

TABLE (c) – LOCAL*

TRAFFIC VOLUME		ROADWAY WIDTH DIMENSIONS IN FEET**				BRIDGES		
Design Class	Current ADT	Design ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway	Design Load	Clear Roadway Width in Feet
L1	0–250		40	20–22	2–4	24–30	HS20	24–28
L2	250–400		40	22	2–4	26–30	HS20	26–30
L3	400–750	Under 1500	50	22–24	6	34–36	HS20	28–30
L4		1500–3500	55	24	6	36	HS20	30–34***
L5		Over 3500	60	24	8	40	HS20	40***

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**Where a range of widths is shown, the smaller number is the minimum width and the larger number is the maximum width eligible for federal or state project participation.

***Bridges in design class L4 or L5 having a total length over 100 feet may be designed with a clear width of 30 feet.

History: Cr. Register, December, 1986, No. 372, eff. 1–1–87.

Trans 205.035 Use of alternative “3R” standards. (1) The standards in s. Trans 205.03 shall be used for all county trunk highway improvement projects, unless a district director expressly authorizes, in writing, the use of the department’s “Design Criteria for Resurfacing, Restoration, and Rehabilitation Projects,” also known as “3R” standards, for a resurfacing, restoration, or rehabilitation project on an existing highway located in his or her district.

Note: Examples of improvement projects which may be appropriate for “3R” standards include resurfacing highway pavement; grinding and repairing pavement joints; replacing or recycling pavement; widening lanes and shoulders; replacing bridge elements to correct structural deficiencies; bridge deck overlays; and other related improvements such as minor incidental subgrade work and correction of minor drainage problems.

(2) A district director may not authorize or approve the use of the department’s “3R” standards for the construction of a new highway or for the complete reconstruction of an existing highway.

(3) A request to use the department’s “3R” standards in lieu of the standards in s. Trans 205.03 may be submitted to a district

director only by a county highway commissioner, or by a county highway commissioner’s designee.

(4) A district director shall grant or deny a request to use the department’s “3R” standards within 90 days after receiving a request.

(5) In determining whether to grant or deny a request to use the department’s “3R” standards in lieu of the standards in s. Trans 205.03, a district director shall consider all of the following:

- (a) Adequacy of design.
- (b) Cost effectiveness.
- (c) Safety improvement.
- (d) Environmental impact.
- (e) Social and economic impact, including dislocation or relocation of property owners.

(6) The rural county trunk highway minimum “3R” standards for roadway dimensions, by functional classification, and usable bridge widths are as shown in the following tables:

TABLE (A) – ARTERIALS*

TRAFFIC VOLUME		Design Speed MPH	ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Design ADT		Traveled Way	Shoulder	Roadway
3RA1	Under 750	55	22**	3	28
3RA2	750–2 000	55	24	4	32
3RA3	Over 2000	55	24	6	36

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**A traveled way width of 24 feet is required on federally designated long truck routes and is desirable on state designated truck routes and non-designated routes where the current heavy vehicle (six or more tires) traffic volume is more than 10 percent of design ADT.

TABLE (B) – COLLECTORS AND LOCALS*

TRAFFIC VOLUME		Design Speed MPH	ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Design ADT		Traveled Way**	Shoulder	Roadway
3RC1	Under 750	55	20	3	26
3RC2	750–2000	55	22	4	30
3RC3	Over 2000	55	22	6	34

*Minimum design standards for sight distance, horizontal alignment and vertical alignment shall conform with applicable department of transportation criteria.

**A traveled way width of 24 feet is required on federally designated long truck routes and is desirable on state designated truck routes and non-designated routes where the current heavy vehicle (six or more tires) traffic volume is more than 10 percent of design ADT.

TABLE (C) – BRIDGE WIDTH*

DESIGN ADT	USABLE BRIDGE WIDTH IN FEET**
0–750	Traveled way
751–2000	Traveled way plus 2 feet
2001–4000	Traveled way plus 4 feet

Over 4000	Traveled way plus 6 feet
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*Bridge replacement or widening should be evaluated if the bridge is less than 100 feet long and the usable width is less than the values in the table.

**If lane widening is planned as part of the "3R" project, the usable bridge width should be compared with the planned width of the approaches after they are widened.

History: Cr. Register, February, 1992, No. 434, eff. 3–1–92.

Trans 205.04 Exceptions to design standards. (1) After a district director has decided whether to use either the design standards in s. Trans 205.03 or the alternative "3R" standards in s. Trans 205.035, he or she may expressly authorize, in writing, exceptions to either of these standards, if federal or state funds are not used for the improvement project.

(2) Exceptions to either the design standards in ss. Trans 205.03 or Trans 205.035 for improvement projects using federal or state funds must be approved in writing by a regional engineer and, when federal funds are used, by the division administrator of the federal highway administration.

(3) In determining whether to authorize exceptions to the construction standards in s. Trans 205.03 or the alternative "3R" standards in s. Trans 205.035, a district director shall consider all of the following:

- Adequacy of design.
- Cost effectiveness.
- Safety improvement.
- Environmental impact.
- Social and economic impact, including dislocation or relocation of property owners.

Note: "Exceptions to Standards" is located at the department's offices, in the Facilities Development Manual, procedure number 11–1–2.

History: Cr. Register, December, 1986, No. 372, eff. 1–1–87; r. and recr. Register, February, 1992, No. 434, eff. 3–1–92.

Trans 205.05 Project review. (1) On or before December 1 of each year, each county highway commissioner shall file with the appropriate district director a report for the county certifying that any and all county trunk highway improvement projects for which funds were expended or obligated during that year conformed to the minimum standards established under s. 84.01 (9) (b), Stats. The certification shall be on forms prescribed by the department of transportation. All county trunk highway improvement projects shall be reviewed by the district director for compliance with the standards stated in s. Trans 205.03.

(2) If any county has not complied with the standards, the district director shall notify the county in writing stating the items which are noncomplying. When the noncomplying projects have subsequently been made to comply with the standards, the district director shall certify compliance on forms designated for this purpose by the department of transportation. If on July 1 of any year there are in a county any remaining non-complying projects that have not been made to comply as certified by the district director, those projects shall be reported by the department of transportation to the appropriate legislative committees.

History: Cr. Register, December, 1986, No. 372, eff. 1–1–87.



Facilities Development Manual

ORIGINATOR Director, Bureau of Highway Development		PROCEDURE 11-15-1
CHAPTER 11	Design	
SECTION 15	Cross-Section Elements for Rural Highways and Freeways	
SUBJECT 1	Dimensions and Design Classes	

Design criteria for various highway systems are given in this procedure. Figures 1, 2 and 3 are for both state trunk highways and county trunk highways classified as arterials, collectors and locals respectively. Figure 4 applies to new construction of town roads.

Cross Slope

The normal cross slope of all pavement types should be 2%. See Procedure 11-40-1 for cross slope criteria for 3R projects.

Shoulders

Shoulders should have adequate strength and stability to support occasional vehicle tire loads under all weather conditions without rutting or other surface variations. On tangent sections and crown runoff sections, shoulders should slope 4% downward from the adjacent pavement edge. In superelevated sections the shoulder slope will be a continuation of the pavement slope on the high side and 4% downward on the low side, except when the superelevation rate exceeds 4%, in which case the low side shoulder slope shall equal the rate of superelevation. However, when the shoulders of two lane highways are paved as an integral part of the travel lanes - and the paved portion is 3 feet (900 mm) or less in width - the paved shoulder slope shall be the same as the cross slope of the travel lanes. The remaining unpaved portion of the

shoulder should be sloped 4% except as previously noted for superelevated sections.

Width requirements for paved shoulders are shown on Figure 5.

Rumble strip corrugations shall be provided in both paved shoulders of freeways and expressways. For ramps, only the last 600 feet (183 m) on the right shoulder of entrance ramps shall have rumble strips.

There may be places on urban freeways and expressways where shoulder rumble strips are not installed. These situations may include residential areas or other areas where road noise from rumble strips is undesirable.

In other cases shoulder rumble strips may not be desirable because traffic needs to use the shoulders on a recurring basis to get around mainline blockages.

Asphaltic Shoulder Rumble Strips on expressways shall not be constructed on tapers to right or left turn lanes, along turn lanes, across side road intersections or across commercial driveways. They may be constructed across field entrances and private driveways but this is not recommended. The location of rumble strips at interchanges is clearly identified on SDD 13A5.

See standard detail drawing "Asphaltic Shoulder Rumble Strip, Milling" for design details. The relatively narrow width of the strip and its location offset onto the right shoulder will permit a vehicle to travel on the

shoulder with its wheels straddling the rumble strip. There are several advantages to this design compared to wider rumble strips located close to the traveled way.

1. Drivers of vehicles traveling slowly along the shoulder in an emergency will be encouraged to fully leave the through lane by moving right to straddle the strip;
2. The shoulder can be temporarily used for through traffic in the event the pavement of the normal lanes must be repaired or replaced;
3. Snow plow drivers are not as likely to have to drive on the rumble strips which can cause excessive vibration to the driver and equipment; and
4. The strips are removed far enough from the traffic lanes to prevent vehicles, especially trucks, from inadvertently running on the strips. The resulting noise from vehicles running on the strips can be a nuisance, especially where the highway is located near residential areas.

The policy for paving shoulders on two-lane rural state trunk highways shall be as follows:

1. When constructing new highway surfaces or when resurfacing existing roadways, the shoulder next to designated driving lanes shall be paved on highways functionally classified as arterials, regardless of traffic volume. Shoulders on state trunk highways classified as collectors or locals and having a current ADT in excess of 1250 vehicles shall also be paved.

When the pavement structure is PC concrete and the current ADT on the state trunk highway is greater than 1250; (a) two lane, two way highways shall be constructed with three foot (900 mm) monolithic shoulders (b) four lane divided highways shall be constructed with a two foot (600 mm) monolithic shoulder on the right. The total paved

width shall be as shown in Figure 5 of this procedure and as shown in the SDD for Doweled Non-Reinforced Concrete Pavement, Section A-A.

2. Segments of highway having a current ADT in excess of 1,000 vehicles and consistently carrying bicycle traffic of 25 or more per day two way during the normal bicycling season shall have the shoulders paved. See Procedure 11-45-10 for guidance on shoulder bikeways.
3. Shoulders may also be paved full width along highways in suburban areas where closely spaced driveways and/or frequent turning movements cause unpaved shoulders to require excessive maintenance.
4. Continuity of shoulder paving between logical termini is desirable. Gaps of unpaved shoulders should not be left due to a short segment of highway not meeting the warranting criteria. Similarly, if only a short segment of highway meets the warrants, then paved shoulders may not be appropriate. Also, for purposes of continuity and the closing of short gaps, it may be desirable to pave the shoulders on sections of highway where surfacing of traffic lanes may not be planned for several years, provided the shoulder paving is done in conjunction with surfacing or resurfacing an abutting highway segment.
5. On highways with existing narrow pavements when paving is warranted, the 3-ft. (900 mm) width shall be in addition to any widening to increase the width of traffic lanes.
6. The thickness of shoulder paving should be based on usual design consideration appropriate for each situation (see Chapter 14).

The above policy on paving shoulders is for rural state trunk highways only. Projects on county trunk highways which fit the above criteria may also have their shoulders

paved at the discretion of local officials. If the shoulders of a county trunk highway are to be paved, the paved width shall conform to the dimensions given in Figure 5 of this procedure.

Auxiliary Lanes

For a definition of auxiliary lanes see Procedure 11-25-35.

On PC concrete pavement projects, auxiliary lanes longer than 800-feet (244m), including tapers, shall have a construction joint at the proposed pavement marking location. See FDM Procedure 14-15-10, Construction Joints for more information.

Subgrade Width

A constant horizontal width between subgrade shoulder points based upon normal tangent section dimensions should generally be utilized throughout the length of each project. Exceptions to this requirement include roadway widening necessary to accommodate steel plate beam guard or in superelevated sections to avoid side slopes steeper than 3:1.

Side Ditches

The normal side ditch configuration is shown in Figures 6 and 7. Greater ditch widths may be used in earth cuts as necessary to provide increased drainage capacity or more space for snow storage and falling rock from unstable cut slopes. The minimum depth of ditch should be 1 ft. (300 mm) below the subgrade shoulder point to ensure positive drainage of the subgrade. The desirable minimum gradient in side ditches is 0.5 percent. Minimum ditch gradients should be avoided when excessive vegetation or debris may restrict drainage. Ditch cross sections and gradients should be designed according to the criteria in Chapter 13.

All cross drain culvert ends and cattle passes on new construction and major reconditioning projects shall be marked with *Marker Post, Flexible, for Culvert Ends*.

This includes single and multiple culvert ends and cattle passes in shielded and unshielded locations either inside or outside the clear zone on the public right-of-way. Do not mark driveway culvert ends or field entrances or underdrain outfalls.

Clear Zone

The term "clear zone" is used to designate the roadside border, starting at the edge of the traveled way, available for safe use by errant vehicles. For new construction, establishment of a minimum clear zone implies that rigid objects and certain other hazards with clearances less than the minimum width shall be treated in one of the following ways:

1. Removed
2. Relocated to an inaccessible position or outside the minimum clear zone
3. Remodeled to make it either safely traversable or breakaway
4. Shielded

Figures 9 and 9M are graphs for determining adequate clear zone width and Figures 10 and 10M list clear zone widths for various combinations of design speed, ADT and side slope. Both of these figures are from the 1988 AASHTO Roadside Design Guide. The values in Figures 10 and 10M are based on limited empirical data which was extrapolated to provide information for a wide range of conditions. These widths represent only the approximate center of a range to be explored and not a precise distance to be held as absolute. The designer may modify these widths, within reason, in consideration of site specific conditions, design speeds, accident history, and practicality.

Reduced widths of clear zone may be warranted to avoid extensive right of way taking, excessive property or environmental damage or on a relatively short project to provide a cross section compatible with the

abutting sections of the highway. Wider clear zones should be considered on the outside of horizontal curves (see Figure 11 for adjustment factors). Clear zone widths shall be increased at all roadside locations where warranted because of accident history.

Clear zone width shall be increased where necessary to include the roadside ditch. Roadside ditches shall be traversable (see Figure 12 for preferred ditch sections). Utility poles or other non-breakaway hazards shall not be located in or near ditch bottoms. See procedure 11-40-1 for clear zone requirements on 3R projects.

Embankment slopes created by driveways or intersection side roads within the clear zone shall be 6:1 or flatter where design ADT exceeds 3500. The foreslopes of median crossovers shall be 10:1 or flatter. Culvert pipes should be located as far from the main roadway as practicable.

Sideslopes

Design guide values for the selection of sideslopes in relation to the height of cut and fill are illustrated on Figure 6, 7 and 8. Embankment slopes of 4:1 or flatter are considered recoverable and should, therefore, be provided where feasible. Motorists who encroach on recoverable slopes can generally stop their vehicles or slow them enough to return to the roadway safely.

Embankment slopes between 3:1 and 4:1 are generally non-recoverable. A non-recoverable slope is one on which most motorists will be unable to stop or return to the roadway easily. Since many vehicles on slopes this steep will continue to the bottom, a clear runout area at least 10 feet (3 m) wide should be provided beyond the toe of non-recoverable slopes. See Figure 10 for an explanation and illustration of how a recovery area is computed. Slopes steeper than 3:1 are considered critical, vehicles are likely to overturn. If a slope steeper than 3:1 begins closer to the traveled way than the suggested clear zone width, a barrier may be

warranted.

Clear zones with variable sideslopes ranging from essentially flat to 4:1 may be averaged to produce a composite clear zone. Slopes which change from negative to positive cannot be averaged and should be treated as ditch sections and analyzed for traverseability using Figure 12.

Sideslopes should be flattened and rounded to fit the topography consistent with site conditions, traffic safety, and cost effectiveness of design. Slope transitions from cut to fill or within a cut or fill should be gradual to avoid unattractive bulges and sharp depressions. Fill slopes of adjacent full stations should not vary more than 1:1, except under unusual conditions.

Design guide values for rock slopes are shown on Figure 8. Selection of rock slopes should be determined in consultation with the District Chief Materials Engineer. (See p. 358 GDHS.)

Mailboxes

Mailboxes are one item that has a legal right to occupy the clear zone. While most of them are safe, there are a few that present a real hazard to the traveling public. WisDOT does not have the authority to order the removal of these hazardous mailboxes. Instead, the district design staff shall use the following procedure for improvement projects on the STH system.

1. During the investigation phase of rural STH improvement projects, hazardous mailbox installations shall be identified along the route under consideration. The "AASHTO Guide for Erecting Mailboxes on Highways" will be the basis for determining hazardous situations.
2. WisDOT staff will contact the owners of identified hazardous mailboxes and encourage them to correct the situation.
3. This contact and its results will be documented in the project file.

If hazardous mailboxes are identified within the limits of a federal/state funded project on a local road or county trunk highway, then a local official should contact the owner. Again, the results of this contact shall be documented in the project file.

Median

The primary function of a median is to separate opposing streams of traffic and provide a recovery area for out-of-control vehicles. (See pp. 509-519 and 655-660 GDHS). On rural highways (Design Class A3) the minimum median width shall be 60 feet (18 m) for freeways and 50 feet (15 m) for expressways.

Median ditch(es) should be sufficiently lower than the adjacent subgrades to provide positive drainage of the subgrades. Normally this requires at least a median depth of one foot (300 mm) below the subgrade shoulder point. The desirable maximum depth should be based on a 6:1 slope from the subgrade shoulder. For medians between widely separated roadways the side slopes of normal cut and fill sections should be used. The longitudinal gradient of median ditches should desirably be at least 0.5 percent to assure good drainage.

Median crossovers should be located according to need after considering the number and spacing of interchanges and the maintenance requirements for the highway. See GDHS, pp 656-657. In all cases median crossovers should be kept to a minimum and be designed to be as inconspicuous as possible. There should be a sag profile between shoulder extremities so that the height of fill at the midpoint in the median is the minimum that will permit reasonable access between adjacent roadways. See standard detail drawing "Maintenance Crossovers for Freeways" for design details.

Transition From Divided to Two-Way Roadways

A transition between divided and single

roadways generally should be made on a tangent section and never at a location with horizontal or vertical sight restrictions.

The entire transition should be visible to the driver of a vehicle approaching the divided section to prevent indecision, error, or wrong-way entry. The lane(s) carrying traffic onto the divided facility should not change horizontal alignment from that of the approaching two-lane roadway until reaching a point beyond the beginning of the median divider. The design standards of the superior facility should be carried through the transition to the extent feasible rather than confront the driver with an abrupt change in geometrics (see Figure 13).

Marsh Section

The use of geotextile fabric should normally not be specified in lieu of marsh excavation. Many of the shallow marshes are not a problem to excavate. Excavation does bring up the need for hauling and disposal, and the accompanying DNR and environmental concerns, but these considerations should not be avoided by improper design.

Geotextile fabrics have many appropriate uses, in which they satisfy a need and function very well. However, roadway fills placed on fabric over marsh will eventually settle, as the underlying marsh is consolidated. The fabric will tend to provide a more uniform settlement, but will not prevent consolidation.

When the designer is considering the use of geotextile fabric in lieu of marsh excavation, the concurrence of the Central Office Soils Unit is required. The designer will continue to be responsible for the necessary project design activities, and the Central Office Soils Unit must then be contacted and provided the opportunity to review and concur in both the fabric specified and the intended use.

The design for marsh removal and

backfill will be influenced by several factors, including depth of marsh, height of fill, slopes of marsh bottom, quality of marsh material, quality of backfill material, and location of water table. Because of these many variables a standard detail for marsh excavation is not practical. Figure 14 is a typical marsh section that may be used as a guide when designing marsh excavation details for a specific project. The District Soils Supervisor should be consulted to ensure adequate treatment of a marsh area.

The following general guidelines should be considered:

1. Earthwork balance points should not be located in areas of marsh excavation. Excavation and backfill should progress across the marsh from one end to the other.
2. Excavation of marsh is usually feasible to a maximum depth of 20 feet (6 m). With rolling surcharges and excavation, marsh removal to depths of 40 feet (12 m) in peat is usually possible, but the chances of total removal decreases with depth. In organic silts successful displacement depends on strength of the silts, and individual studies will be necessary to evaluate this.
3. Care must be exercised when using a surcharge in order that loads do not exceed the shearing strength of the marsh and cause failure of the fill and excessive settlement.
4. Clays or silty clays ordinarily will not displace satisfactorily; therefore, other methods will be required in such soils.
5. Provide for disposal area in the immediate vicinity of the excavation.

Local Service

Local service roads (frontage roads) are most often used adjacent to freeways, where their primary function is to serve abutting development and to collect and distribute

traffic between local streets and roads and the freeway interchanges. Local service roads are also used to control access to arterials, including freeways.

Two-way service roads should normally be used in rural areas to avoid the inconvenience and added travel distance to local traffic often required by a one-way service road system.

Local service roads do not necessarily have to parallel, abut, or front on and along the main highway, but may be located some distance away from the highway on separate, non-contiguous right-of-way.

Local service roads normally become part of a local road system, i.e., town road, county trunk highway, or city street, and should therefore be designed in accordance with the appropriate design standards for that road system.

Rural Driveways and Entrances

The design and location of driveway terminals merit special consideration, to minimize potentially hazardous conflicts with highway traffic. Driveways should conform to the standards included in the Wisconsin Administrative Code, Section Hy 31, "Permits for Driveways and Alterations in State Trunk Highways" and the following guidelines. Driveways serving farm or residential property should be 16 to 24 feet (4.9 m to 7.2 m) wide. The maximum width of commercial driveways is 35 feet (10.7 m). Field entrances should generally not exceed a width of 20 feet (6 m).

The foreslope of driveways should be 6:1 or flatter within the clear zone of the highway. A foreslope of 6:1 or flatter shall be provided on driveways within the clear zone of highways having a design ADT of 3500 or more. Errant vehicles from the highway will impact this slope at an approximate right angle. Steeper slopes could cause the vehicle's bumper to dig in, or cause excessive vehicle vaulting.

The approaches to driveways which are used on a regular and fairly frequent basis should be paved. Pavement is generally not warranted for the approaches to field entrances, or to driveways having only occasional use.

Approach surfacing should be limited to either the total width of the highway shoulder, or to the limits of any existing

driveway pavement that is within the highway right of way (see Figure 15).

The approach pavement in most cases will be asphaltic concrete 2 to 3 inches (**50 to 75 mm**) thick, or the same thickness as required for the paved shoulders. Portland cement concrete may be warranted to match or replace existing concrete driveways.

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**Design Criteria For Rural State Trunk Highways and
County Trunk Highways Functionally Classified As Arterials**

TRAFFIC VOLUME		ROADWAY				BRIDGES ¹	
Design Class	Design AADT	Design Speed	Traveled Way Width	Shoulder Width	Roadway Width	Minimum Design Loading	Clear Roadway Width of Bridges ²
A1	Under 3500	60 mph ³ (100 km/h)	24' (7.2 m)	6' (1.8 m)	36' (10.8 m)	HS20 (MS18)	36' (10.8 m)
A2 ¹	3500-8200 ^A 3500-13800 ^B	60 mph (100 km/h)	24' (7.2 m)	10' (3.0 m)	44' (13.2 m)	HS20 (MS18)	44' (13.2 m)
A3	over 8200 ^A over 13800 ^B	70 MPH ⁴ (110 km/h)	24' (2) (7.2 m)	6'L(1.8 m) 10'R(3.0 m)	40' (2) (12.0 m)	HS20 (MS18)	40' (12.0 m)

^A For Corridors 2020 backbone and connector routes

^B For other principal and minor arterials

See Procedure 11-1-2 for guidance on how to obtain authorization to use the metric standards above for county trunk highway projects.

Source: For County Trunk Highway Standards see TRANS 205.

¹ The top of the traffic volume range for design class A2 is 8,200 AADT for a Corridors 2020 route (LOS trigger of 4.0) and 13,800 AADT for a non-corridors 2020 route (LOS trigger of 5.0). These volumes are based on the 1998 Highway Capacity Manual assuming; level terrain, 12-foot lanes, ≥ 6-foot shoulders, 80 percent passing, 10 percent trucks, K100 design factor, and directional split of 62/38. In cases where a reduced level of service is determined to be acceptable and the use of passing lanes is found to be adequate treatment for the facility, the 8,200 ADT value for C2020 Connector routes may be increased to 12,000. See Procedure 11-5-3 for additional information on threshold triggers, level of service for different facility types and the respective numerical value.

² The full width of approach roadways should normally be provided across all new bridges. Exceptions may be made when the bridge is considered a major structure on which design dimensions should be subject to individual economic studies because of the high unit cost.

³ Lateral clearance requirements for underpass bridges are included in procedure 11-35-1.

⁴ For County Trunk Highways in design class A1 the desirable design speed is 60 mph (100 km/h); however, a minimum design speed of 55 mph (90 km/h) is acceptable.

⁵ See discussion in Procedure 11-10-1.

DESIGN CRITERIA FOR RURAL STATE TRUNK HIGHWAYS AND
COUNTY TRUNK HIGHWAYS FUNCTIONALLY CLASSIFIED AS COLLECTORS

TRAFFIC VOLUME			ROADWAY ¹ WIDTH DIMENSIONS				BRIDGES ^{1,2}	
Design Class	Current ADT	Design ADT	Design Speed	Traveled Way	Shoulder	Roadway	Minimum Design Loading	Clear Roadway Width of Bridges
C1	0-400		40 MPH (60 km/h)	22'-24' (6.6 m-7.2 m)	2'-4' (0.6 m-1.2 m)	26'-32' (7.8 m-9.6 m)	HS20 (MS18)	26'-30' (7.8 m-9.0 m)
C2	400-750	Under 1500	50 MPH (80 km/h)	22'-24' (6.6m-7.2 m)	6' (1.8 m)	34'-36' (10.2 m-10.8 m)	HS20 (MS18)	28'-30' (8.4 m-9.0 m)
C3		1500-3500	60 MPH (100 km/h)	24' (7.2 m)	6' (1.8 m)	36' (10.8 m)	HS20 (MS18)	32'-34' (9.8 m-10.4 m)
C4		Over 3500	60 MPH (100 km/h)	24' (7.2 m)	8' (2.4 m)	40' (12.0 m)	HS20 (MS18)	40' (12.0 m)

¹ Where a range of width values is shown, the minimum width should generally be used except where the highway is subject to jurisdictional transfer in which case a greater width may be selected in cooperation with the county.

² Bridges in Design Classes C3 and C4 with a total length over 100 feet (30 m) may be designed with a clear roadway width of 30 feet (9.0 m).

³ For County Trunk Highways in design class C3, a design speed of 55 mph (90 km/h) is acceptable.

⁴ Lateral clearance requirements for roadways under bridges are included in Procedure 11-35-1.

See Procedure 11-1-2 for guidance on how to obtain authorization to use the metric standards above for county trunk highway projects.

**DESIGN CRITERIA FOR RURAL STATE TRUNK HIGHWAYS AND
COUNTY TRUNK HIGHWAYS FUNCTIONALLY CLASSIFIED AS LOCAL ROADS**

TRAFFIC VOLUME			ROADWAY ¹ WIDTH DIMENSIONS				BRIDGES ^{1,2}	
Design Class	Current ADT	Design ADT	Design Speed	Traveled Way	Shoulder	Roadway	Minimum Design Loading	Clear Roadway Width of Bridges
L1	0-250		40 MPH (60 km/h)	20'-22' (6.0-6.6 m)	2'-4' (0.6 m-1.2 m)	24'-30' (7.2 m-9.0 m)	HS20 (MS18)	24'-28' (7.2 m-8.4 m)
L2	250-400		40 MPH (60 km/h)	22' (6.6 m)	2'-4' (0.6 m-1.2 m)	26'-30' (7.8 m-9.0 m)	HS20 (MS18)	26'-30' (7.9 m-9.0 m)
L3	400-750	Under 1500	50 MPH (80 km/h)	22'-24' (6.6 m-7.2 m)	6' (1.8 m)	34'-36' (10.2 m-10.8 m)	HS20 (MS18)	28'-30' (8.4 m-9.0 m)
L4		1500-3500	60 MPH (100 km/h)	24' (7.2 m)	6' (1.8 m)	36' (10.8 m)	HS20 (MS18)	30'-34' (9.0 m-10.4 m)
L5		Over 3500	60 MPH (100 km/h)	24' (7.2 m)	8' (2.4 m)	40' (12.0 m)	HS20 (MS18)	40' (12.0 m)

¹ Where a range of width values is shown, the minimum width should generally be used except where the highway is subject to jurisdictional transfer in which case a greater width may be selected in cooperation with the county.

² For County Trunk Highways in design class L4, a design speed of 55 mph (90 km/h) is acceptable.

³ Bridges in Design Classes L4 and L5 with a total length over 100 feet (30 m) may be designed with a clear roadway width of 30 feet (9 m).

⁴ Clearance requirements for underpass bridges are included in Procedure 11-35-1.

See Procedure 11-1-2 for guidance on how to obtain authorization to use the metric standards above for county trunk highway projects.

Source: For County Trunk Highway standards see TRANS 205.

**Minimum Design Standards for Town Roads
(New Construction Only)**

Design Class	Traffic Volume	Roadway							Structure	
	ADT Current	Rdwy. Width	Surfacing Width	Minimum Shoulder Width	Horizontal Curve		% Grade		Highway Load	Clear Rdwy. Width for Structures FT. **
					Des. Max	Max	Des Max	Max		
T1	Local Service intermittent traffic	20', *22' (6.6 m)	16', *18' (5.4 m)	2' (0.6 m)					H 15 *(HS 20) (MS18)	24' (7.2 m)
T2	Under 100	24' (7.2 m)	18' (5.4 m)	3' (0.9 m)			9	11	H 15 *(HS 20) (MS18)	24' (7.2 m)
T3	100 - 250	26' (7.8 m)	20' (6.0 m)	3' (0.9 m)			8	11	H 15 *(HS 20) (MS18)	24' (7.2 m)
T4	251 - 400	32' (9.6 m)	22' (6.6 m)	5' (1.5 m)	6° (290 mR)	12.25° (140 mR)	6	8	H 20 *(HS 20) (MS18)	26' (7.8 m)
T5	401 - 1000	34' (10.2 m)	22' (6.6 m)	6' (1.8 m)	5° (350 mR)	12.25° (140 mR)	5	8	H 20 *(HS 20) (MS18)	28' (8.4 m)
T6	1001-2400	44' (13.2 m)	24' (7.2 m)	10' (3.0 m)	4.5° (390 mR)	7.5° (235 mR)	5	7	H 20 *(HS 20) (MS18)	30' (9.0 m)
T7	Over 2400	USE STATE TRUNK STANDARDS								

* These design values shall be used for Projects involving Federal Aid.

** For Federal-aid funded Projects with a design hourly volume greater than 400, the clear roadway width for structures shall equal the approach roadway width.

Source: Section 86.26(1) Wisconsin Statutes Except Maximum

Horizontal Curve Values are from Table V-6, Page 424, GDHS

See Procedure 11-1-2 for guidance on how to obtain authorization to use the metric standards above.

RURAL STATE TRUNK HIGHWAY
PAVED SHOULDER WIDTH REQUIREMENTS ¹

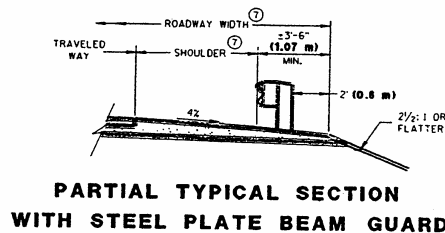
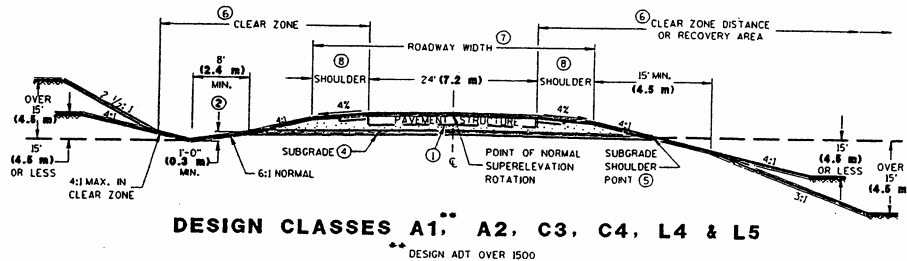
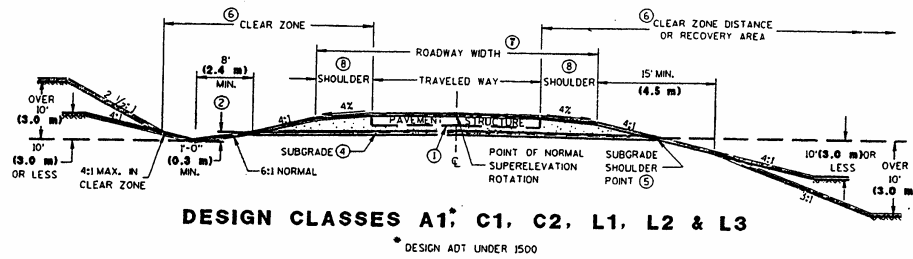
DESIGN CLASS		DESIGN TRAFFIC (ADT)	PAVED SHOULDER WIDTHS	TOTAL SHOULDER
A1		UNDER 3500	3 ft. (0.9 m)	6 ft. (1.8 m)
C3, L4		1500 - 3500	3 ft. (0.9 m)	6 ft. (1.8 m)
A2		3500 - 8,200*	3 ft. (0.9 m)	10 ft. (3 m)
C4, L5		OVER 3500	3 ft. (0.9 m)	8 ft. (2.4 m)
A 3	4 - LANE DIVIDED EXPRESSWAY	8,200 - 22000	R ² - 8 ft. (2.4 m) L - 3 ft. (0.9 m)	R - 10 ft. (3 m) L - 6 ft. (1.8 m)
A 3	6 - LANE DIVIDED EXPRESSWAY	OVER 22000	R - 8 ft. (2.4 m) L - 8 ft. (2.4 m)	R - 10 ft. (3 m) L - 10 ft. (3 m)
A 3	4 - LANE INTERSTATE OR FREEWAY		R - 10 ft. (3 m) L - 4 ft. (1.2 m)	R - 10 ft. (3 m) L - 6 ft. (1.8 m)
A 3	6 - LANE INTERSTATE OR FREEWAY		R - 10 ft. (3 m) L - 10 ft. (3 m)	R - 10 ft. (3 m) L - 10 ft. (3 m)
A 3	1 - LANE RAMPS		R - 5 ft. (1.5 m) L - 3 ft. (0.9 m)	R - 8 ft. (2.4 m) L - 4 ft. (1.2 m)

* See Figure 1 in this procedure, for more detailed information and discussion on the design ADT.

¹ This policy applies to new construction or reconstruction projects. See Procedure 11-15-5 for shoulder width criteria for projects on the Great River Road. See Procedure 11-45-10 for shoulder criteria to accommodate bicycles.

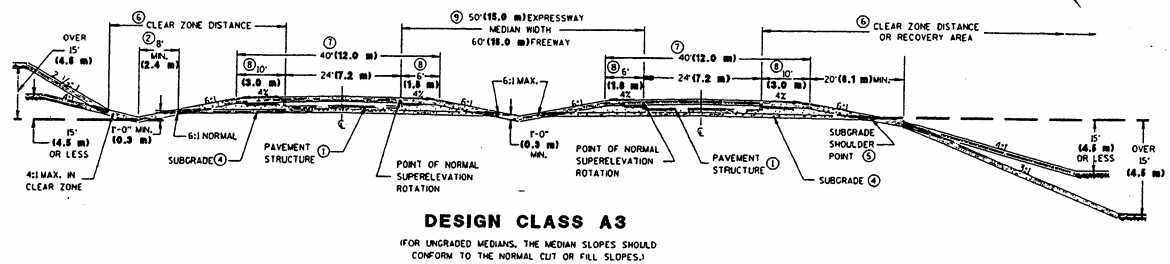
² These shoulder widths also apply to the initial two-lane roadways of ultimate four-lane highways except when construction of the second roadway is not expected for at least six years. In these cases, initially pave only 3 ft. (0.9 m) R.

TYPICAL SECTIONS FOR TWO LANE RURAL HIGHWAYS

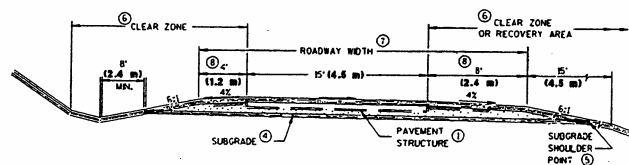


Notes

1. The elements of the pavement structure for flexible and rigid pavements will vary according to the individual pavement design.
2. When a special ditch grade or greater ditch capacity is necessary for longitudinal drainage. It may be accomplished by varying the width or slope of the ditch.
3. Earth cuts - backslopes in earth cuts should be blended into the natural topography by using a combination of flat slopes and rounding. Special attention should be given to the design of the transitions for cuts to fills to insure that slopes are gradually steepened to produce a natural and aesthetically pleasing cross section.
4. Subgrade slope is parallel to pavement structure.
5. Constant width subgrade dimensions should be determined from the typical tangent section. This constant width should generally be carried throughout the project. Exceptions include widening on new construction and reconstruction for steel plate beam guard or in superelevated segments to avoid foreslopes steeper than 4:1 for design classes as shown on Figure 6; or 6:1 for design class A3 and one-lane ramps as shown on Figure 7.
6. See Figure 9 or 10 for clear zone distance. Recovery area is illustrated on Figure 10.
7. Widen the roadway by 3 1/2 feet (1.07 m) where steel plate beam guard is required. (see illustration on this Figure) Additional roadway and shoulder widening is required to accommodate the buried end terminal and energy absorbing terminal end. See SDD's for appropriate terminal earthwork requirement.
8. See Figure 5 and text for paved shoulder width requirements. If the pavement structure is PC concrete 3 foot (0.9 m) monolithic shoulders are required.



**TYPICAL SECTION FOR FOUR LANE
DIVIDED HIGHWAY**



TYPICAL SECTION ONE-LANE RAMP

Notes

1. The elements of the pavement structure for flexible and rigid pavements will vary according to the individual pavement design.
2. When a special ditch grade or greater ditch capacity is necessary for longitudinal drainage, it may be accomplished by varying the width or slope of the ditch.
3. Earth cuts - backslopes in earth cuts should be blended into the natural topography by using a combination of flat slopes and rounding, special attention should be given to the design of the transitions from cuts to fills to insure that slopes are gradually steepened to produce a natural and aesthetically pleasing cross section.
4. Subgrade slope is parallel to pavement structure.
5. Constant width subgrade dimensions should be determined from the typical tangent section. This constant width should generally be carried throughout the project. Exceptions include widening on new construction and reconstruction for steel plate beam guard or in superelevated segments to avoid foreslopes steeper than 4:1 for design classes as shown on Figure 6; or 6:1 for design class A3 and one-lane ramps as shown on Figure 7.
6. See Figure 9 or 10 for clear zone distance. Recovery area is illustrated on Figure 10.
7. Widen the roadway by 3 1/2 ft (1.07 m) where steel plate beam guard is required. (See Figure 6 for illustration.) Additional roadway and shoulder widening is required to accommodate buried end terminal and energy absorbing terminal end. (see SDD's for appropriate terminal earthwork requirements.)
8. See Figure 5 and text for paved shoulder width requirements. If the mainline pavement structure is PC concrete 2 foot (0.6 m) monolithic shoulders are required on the right. (excluding ramps.)
9. The median width shall be 60 ft (18.0 m) min. on freeways and expressways which will ultimately be freeways.

APPENDIX E
INTERGOVERNMENTAL COOPERATION MEETING NOTICE AND
LIST OF ATTENDEES

April 2, 2002

(Correspondence mailed to the Chair Persons and Representatives of the Agencies and Departments Listed Below)

The town of Brussels is currently working with the Bay-Lake Regional Planning Commission to develop a Comprehensive Plan that will meet the requirements of Wisconsin's "Smart Growth" law (s66.1001). The plan will include background information regarding population, economics, housing, land use, transportation, and community facilities/utilities. The plan will also include a recommended land use plan and implementation strategy that is intended to serve as a guide to help local officials make decisions concerning land use, zoning, and other development issues over the next twenty years.

One element of Wisconsin's "Smart Growth" law requires that **intergovernmental cooperation** issues be addressed in the plan. Intergovernmental cooperation deals with such things as school districts, volunteer fire departments, police protection, ambulance services, parks and trails, woodlands and river corridors, boundary agreements, and shared public services. To address the intergovernmental cooperation element, the town of Brussels would like to **bring together representatives** from the following units of governments and agencies to identify potential conflicts and common issues, and to discuss future plans for the area:

- Town of Union
- Town of Gardner
- Town of Nasewaupée
- Town of Forestville
- Town of Red River (Kewaunee County)
- Town of Lincoln (Kewaunee County)
- Door County Land & Water Conservation
- Door County Zoning
- UWEX, Community Development Educator
- The Nature Conservancy
- USDA Natural Resources Conservation Service
- Wisconsin Public Service
- Southern Door School District
- WI Dept. of Natural Resources
- WI Dept of Transportation
- Door County Sheriff's Dept.
- Door County Land Trust

This **intergovernmental cooperation meeting** has been scheduled for **Monday, April 15, 2002 at 6:30 PM**. The meeting will be held at the **Brussels/Union/Gardner (BUG) Fire Station, 9683 STH 57**. The meeting will adjourn by 8:30 PM. Your attendance at this meeting will be greatly appreciated. If you can not personally attend, please send a representative from your organization to participate in the discussion. Please contact us at the telephone number below to tell us who will be attending from your organization.

If you have any questions about this meeting, or if you would like additional information about the Town of Brussels 2020 Comprehensive Plan, please contact me at (920) 448-2820. We look forward to seeing you on the 15th.

Sincerely,

Jim Van Laanen
Regional Transportation Planner

Town of Brussels
Intergovernmental Cooperation Meeting
April 15, 2002

List of Attendees

<u>Name</u>	<u>Representing</u>
Bill Vandertie	Self
Arlin Minfils	Town of Lincoln (Kewaunee County)
Larry Kirchman	Town of Lincoln (Kewaunee County)
Michael Bergman	WDNR - Potawatomi State Park
Maggie Kailhofer	WDNR - Potawatomi State Park
Richard Maurer	Town of Lincoln (Kewaunee County)
George Whitford	Town of Nasewaupee (Door County)
Leroy Liebe	Town of Nasewaupee (Door County)
Greg Coulthurst	Door County Soil & Water Conservation
Robert W. Florence	Door County Planning Department
Charles G. Brann	Door County Sheriff's Department
Jim Van Laanen	Bay-Lake Regional Planning Comm.
JoAnn Neinas	Town of Brussels, Clerk
George Delveaux Jr.	Town of Brussels, Chairman
Mike Vandenhouten	Town of Brussels Plan Commission
Galen DeJardin	Town of Brussels Plan Commission
Dan Daubner	Town of Brussels Plan Commission

APPENDIX F

2001 LAND USE CALCULATIONS

Bay-Lake Regional Planning Commission				
Land Use Inventory Summary Form				
100	RESIDENTIAL	600	INSTITUTIONAL/GOVERNMENTAL	
200	COMMERCIAL	700	OUTDOOR RECREATION	
300	INDUSTRIAL	800	AGRICULTURE/SILVICULTURE	
400	TRANSPORTATION	900	NATURAL AREAS	
500	COMMUNICATION/UTILITIES			
CODE	LAND USE CLASSIFICATION		CODE	LAND USE CLASSIFICATION
100	RESIDENTIAL		500	COMMUNICATION/UTILITIES
110	Single Family Residential		510	Generation/Processing of Communication/Utilities
130	Two Family		511	Electric Power Plants
150	Multi-Family		512	Wind Turbine
170	Group Quarters		514	Telephone and Telegraph Terminals/Dispatch Centers
180	Mobile Homes		516	Radio/Television Stations
190	Land Under Residential		521	Natural Gas Terminals/Plants
	Development		525	Other Liquid Fuel Terminal Plants
199	Vacant Residence		535	Water Supply Filter Treatment Plants
			537	Water Supply Wells
200	COMMERCIAL		540	Transmission of Communication/Utilities
210	Retail Sales		541	Major Electric Power Transmission Lines R/W
230	Shopping Centers		542	Electric Power Substations
250	Retail Services		546	Radio/Television Transmission Towers/Antennae
270	Office Parks		551	Major Natural Gas Transmission Lines R/W
299	Vacant Commercial		552	Natural Gas Substations
			555	Other Major Liquid Fuel Transmission Lines R/W
300	INDUSTRIAL		556	Other Liquid Fuel Substations
310	Manufacturing		572	Water Supply Booster/Pumping Stations
340	Wholesaling		577	Water Supply Storage Tanks/Reservoirs
360	Extractive		580	Waste Processing/Disposal/Recycling
380	Storage		581	Trash/Garbage Landfills
381	Open		582	Other Trash/Garbage Dumps
382	Enclosed		583	Sewage Treatment Plants
399	Vacant Industrial		584	Sewage Sludge or Water Supply Chemical Disposals
			585	Fly Ash and Other Fire Residue Disposal
400	TRANSPORTATION		586	Auto Salvage/Recycling/Disposals
410	Motor Vehicle Related		587	Abandoned Landfill
411	Federal Highways		588	Yard Waste
412	State Highways		591	Solid Waste Separation/Recycling Plants
413	County Highways		595	Incinerators
414	Local Streets and Roads			
415	County Forest Roads			
416	Federal Forest Roads			
417	Off-Street Parking			
418	Bus Terminals			
419	Truck Terminals			
420	Other Motor Vehicle Related			
440	Rail Related			
460	Air Related			
480	Marine Related			
484	Piers/Docks			
490	Nonmotorized Related			

600	INSTITUTIONAL/GOVERNMENTAL FACILITIES	700	OUTDOOR RECREATION
610	Administrative Institutions/Governmental Facilities	710	Cultural/Natural Activities
611	Administrative Buildings	712	Zoos
612	Post Offices	716	Nature Study Areas
613	Military Installations	721	Designated Historic/Cultural/Archaeological Sites
614	Municipal Garages	730	Land Related Activities
630	Safety Institutions/Governmental Facilities	731	Campgrounds
631	Police/Fire Stations/Offices	735	Lawns/Yards
637	Ancillary Municipal Safety Facilities	736	Parks/Parkways/Forest-Related Picnic Areas
638	Prisons or Jails	737	Separate Picnic Areas
640	Educational Institutions/Governmental Facilities	738	Lookout Tower
641	Pre-School/Day Care	741	Playfields/Ball Diamonds/Volleyball Courts
642	Primary Schools	745	Swimming/Wading Pools
643	Middle Schools	746	Tennis Courts
644	Secondary Schools	747	Trails
645	Vocational Schools	751	Athletic Fields
647	Two-Year Colleges/Universities	756	Ice Skating Rinks
648	Four-Year and Graduate Colleges/Universities	757	Roller Skating Rinks
651	Libraries	758	Ski Areas
652	Community Center	761	Golf Courses
655	Museums	762	Golf Driving Ranges
660	Health Institutions/Governmental Facilities	766	Archery/Gun/Skeet Ranges
661	Hospitals	768	Hunting Preserves
663	Clinics	769	Race Tracks
665	Long-Term Health Care Facilities	770	Other
680	Assembly Institutions/Governmental Facilities	780	Water Related Activities
681	Fairgrounds	781	Boat Launching Sites/Areas
682	Gymnasiums	782	Other Water Access Sites/Areas
683	Sports Stadium/Arenas	783	Marinas
684	Fraternal Organizations/Clubhouses	784	Lighthouse
690	Religious and Related Facilities		
691	Churches/Temples/Synagogues	800	AGRICULTURE/SILVICULTURE
694	Cemeteries	805	Open Space
		810	Croplands/Pastures
		830	Long-Term Specialty Crops
		850	Animal Husbandry
		851	Fish Hatchery/Aquaculture
		870	Farm Buildings/Accessories
		880	Commercial Forests
		900	NATURAL AREAS
		910	Water
		911	Lakes
		912	Reservoirs and Ponds
		913	Rivers and Streams
		914	Canals and Channels
		930	Vital Natural Functions
		936	Wildlife Refuges
		937	Designated Scientific Sites/Areas
		950	Other Natural Areas
		951	Woodlands
		952	Wetlands
		953	Grasslands
		954	Beaches
		955	Bluffs
		960	Other Publicly-Owned Natural Areas
		990	Land Under Development

TOWN OF BRUSSELS - 2001 LAND USE		
CODE	LAND USE CLASSIFICATION	ACRES
100	RESIDENTIAL	
110	Single Family Residential	235.619
150	Multi-Family	0.568
180	Mobile Homes	24.245
199	Vacant Residence	7.29
200	COMMERCIAL	
210	Retail Sales	13.954
250	Retail Services	2.753
300	INDUSTRIAL	
310	Manufacturing	2.331
340	Wholesaling	2.264
360	Extractive	98.112
381	Storage - Open	3.899
382	Storage - Enclosed	14.22
400	TRANSPORTATION	
414	Highways, Streets and Roads	735.488
500	COMMUNICATION/UTILITIES	
514	Telephone and Telegraph Terminals/Dispatch Centers	0.177
546	Radio/Television Transmission Towers/Antennae	1.928
580	Waste Processing/Disposal/Recycling	2.414
586	Auto Salvage/Recycling/Disposal	10.556
600	INSTITUTIONAL/GOVERNMENTAL FACILITIES	
612	Post Offices	0.27
614	Municipal Garages	2.713
631	Police/Fire Stations/Offices	0.261
641	Pre School/Day Care	1.312
684	Fraternal Organizations/Clubhouses	0.347
691	Churches/Temples/Synagogues	1.2
694	Cemetaries	2.563
700	OUTDOOR RECREATION	
731	Campgrounds	18.226
736	Parks/Parkways/Trails/Forest Related Picnic Areas	19.303
741	Playfields/Ball Diamonds/Volleyball Courts	5.113
746	Tennis Courts	0.816
800	AGRICULTURE/SILVICULTURE	
805	Open Space	23.803
810	Croplands/Pastures	15780.037
830	Long-Term Specialty Crops	36.149
870	Farm Buildings/Accessories	338.218
880	Commercial Forest/Tree Farms	156.094
899	Abandoned/Dilapalated Farm Structures	4.143
900	NATURAL AREAS	
912	Reservoirs and Ponds	12.61
913	Rivers and Streams	14.944
950	Other Natural Areas	1167.743
951	Wildlife Refuges	4344.996
	TOTAL ACREAGE	23086.679

Town of Brussels - 2001 Land Use

Land Use Type	Total Acres	Percentage Total Land	Percentage Developed Land
DEVELOPED			
Residential	244.7	1.06%	16.33%
<i>Single Family</i>	212.6	0.92%	14.19%
<i>Multi-Family</i>	0.6	0.00%	0.04%
<i>Mobile Homes</i>	24.3	0.11%	1.62%
<i>Vacant Residential</i>	7.3	0.03%	0.49%
Commercial	15.4	0.07%	1.02%
Industrial	58.5	0.25%	3.90%
Transportation	735.3	3.19%	49.06%
Communications/Utilities	36.6	0.16%	2.44%
Institutional/Governmental	8.7	0.04%	0.58%
Recreational	59.7	0.26%	3.98%
Agricultural Structures	340.0	1.47%	22.69%
Total Developed Acres	1,498.8	6.49%	100.00%
UNDEVELOPED			
			Percentage Undeveloped Land
Croplands/Pasture	16,047.6	69.53%	74.35%
Undeveloped Open Space	7.5	0.03%	0.03%
Woodlands	4,350.5	18.85%	20.16%
Other Natural Areas	1,149.6	4.98%	5.33%
Water Features	27.5	0.12%	0.13%
Total Undeveloped Acres	21,582.7	93.51%	100.00%
Total Land Area	23,081.6	100.00%	

Source: Bay-Lake Regional Planning Commission, 2001.

APPENDIX G

LAND USE ALLOCATIONS

LAND ALLOCATIONS FOR FUTURE RESIDENTIAL DEVELOPMENT IN THE TOWN OF BRUSSELS

Scenario 1: High Population Growth Series

From 2000 census (403 HU)

2005= (13 new HU) * (5 acre/du) * 1.25 (market value) = 81.25 acres needed

2010= 10 * 5 * 1.5 = 75 acres

2015= 12 * 5 * 1.75 = 105 acres

2020= 20 * 5 * 2 = 200 acres

Total = 55 new HU w/ 461.25 acres needed by 2020 (Net)

Additional factors must be taken into consideration such as lands that would hinder development due to their nature, also lands must be allocated for future roads, parks, etc., and the fact that it would not be the intent of the plan to see an entire area develop, rather have uses allowed if they are consistent with type, location, density, etc. These additional factors account for 25 % of the gross land area. Therefore the gross land needed for this scenario would be:

Gross acres needed = 615 'LOW GROWTH'

Scenario 2: Linear Census

From 2000 census (403 HU)

2005= (20 new HU) * (5 acre/du) * 1.25 (market value) = 125 acres needed

2010= 20 * 5 * 1.5 = 150 acres

2015= 17 * 5 * 1.75 = 148.75 acres

2020= 18 * 5 * 2 = 180 acres

Total = 75 new HU w/ 603.75 acres needed by 2020 (Net)

Gross Acres Needed = 805

Scenario 3: Growth Census

From 2000 census (403 HU)

2005= (26 new HU) * (5 acre/du) * 1.25 (market value) = 162.5 acres needed

2010= 25 * 5 * 1.5 = 187.5 acres

2015= 24 * 5 * 1.75 = 210 acres

2020= 24 * 5 * 2 = 240 acres

Total = 99 new HU w/ 800 acres needed by 2020 (Net)

Gross Acres Needed = 1,067

"HIGH GROWTH"

LAND ALLOCATIONS FOR FUTURE COMMERCIAL DEVELOPMENT IN THE TOWN OF BRUSSELS

To calculate commercial land use projections, the Commission compared the current ratio of residential acreage to commercial land use acreage by parcel in the Town (15:1) based on the existing land use inventory.

Scenario 1: High Population Growth Series

2005= 81.25 residential acres/15 = 5 commercial acres

2010= 75 residential acres/15 = 5 commercial acres

2015= 105 residential acres/15 = 7 commercial acres

2020= 200 residential acres/15 = 13 commercial acres

Total = 30 commercial acres by 2020

“LOW GROWTH”

Scenario 2: Linear Census

2005= 125 residential acres/15 = 8 commercial acres

2010= 150 residential acres/15 = 10 commercial acres

2015= 148.75 residential acres/15 = 10 commercial acres

2020= 180 residential acres/15 = 12 commercial acres

Total = 40 commercial acres by 2020

Scenario 3: Growth Census

2005= 162.5 residential acres/15 = 11 commercial acres

2010= 187.5 residential acres/15 = 12.5 commercial acres

2015= 210 residential acres/15 = 14 commercial acres

2020= 240 residential acres/15 = 16 commercial acres

Total = 53.5 commercial acres by 2020

“HIGH GROWTH”

LAND ALLOCATIONS FOR FUTURE INDUSTRIAL DEVELOPMENT IN THE TOWN OF BRUSSELS

To calculate industrial land use projections, the Commission compared the current ratio of residential acreage to industrial land use acreage by parcel in the Town (4:1) based on the existing land use inventory.

Scenario 1: High Population Growth Series

2005= 81.25 residential acres/4 = 20 industrial acres

2010= 75 residential acres/4 = 18.75 industrial acres

2015= 105 residential acres/4 = 26.25 industrial acres

2020= 200 residential acres/4 = 50 industrial acres

Total = 115 industrial acres by 2020

“LOW GROWTH”

Scenario 2: Linear Census

2005= 125 residential acres/4 = 31.25 industrial acres

2010= 150 residential acres/4 = 37.5 industrial acres

2015= 148.75 residential acres/4 = 37 industrial acres

2020= 180 residential acres/4 = 45 industrial acres

Total = 150.75 industrial acres by 2020

Scenario 3: Growth Census

2005= 162.5 residential acres/4 = 41 industrial acres

2010= 187.5 residential acres/4 = 47 industrial acres

2015= 210 residential acres/4 = 52.5 industrial acres

2020= 240 residential acres/4 = 60 industrial acres

Total = 200.5 industrial acres by 2020

“HIGH GROWTH”

Bay-Lake Regional Planning Commission

November 2002

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