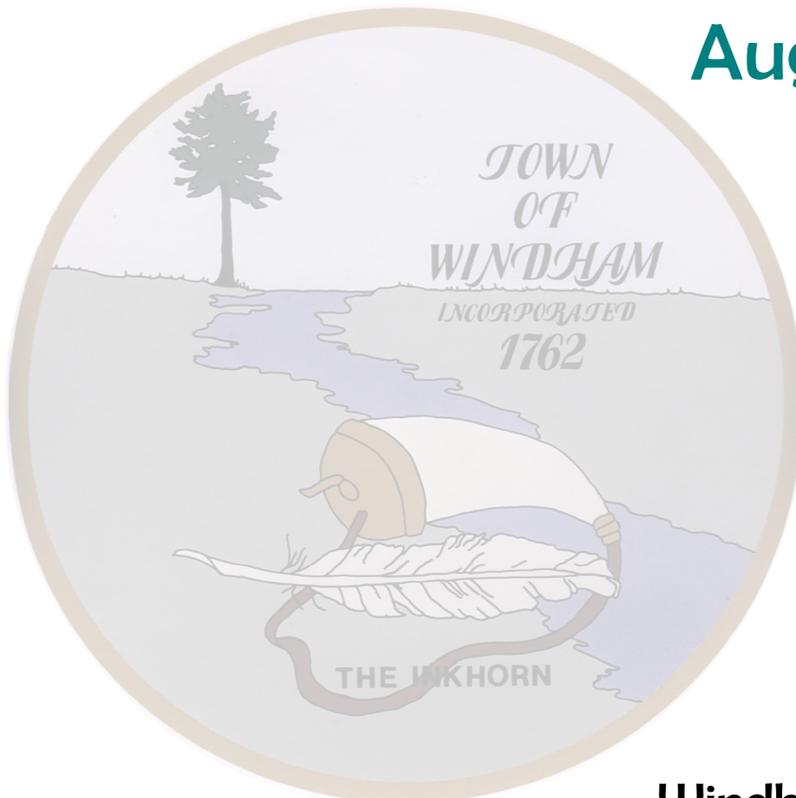


Comprehensive Master Plan

Town of Windham, Maine

Adopted
August 12, 2003



Prepared by the
Windham Comprehensive
Master Plan Steering Committee

COMPREHENSIVE MASTER PLAN FOR THE TOWN OF WINDHAM, MAINE

Adopted by the Windham Town Council

August 12, 2003

Prepared by the
Windham Comprehensive Master Plan
Steering Committee

VISION FOR THE FUTURE OF WINDHAM

Retain and protect our rural character, scenic vistas, natural features and environment by maintaining a critical balance between preservation and development through managing and directing growth in a manner that accommodates all segments of our community and provides affordable, high-quality living conditions.

TABLE OF CONTENTS

	<u>Page Number</u>
PREFACE	xi
MEMBERS WINDHAM COMPREHENSIVE MASTER PLAN STEERING COMMITTEE	xii
INTRODUCTION	Intro-1
CHAPTER 1 - A VISION FOR WINDHAM	
1. Introduction	1-1
2. Public Involvement in the Planning Process	1-2
3. A Vision for Windham	1-4
CHAPTER 2 - IMPLEMENTATION STRATEGY	
1. Introduction	2-1
2. Recommended Actions	2-1
A. Economic Development	2-1
B. Infrastructure and Municipal Services	2-5
C. Roadways and Transportation	2-7
D. Sense of Community	2-10
E. Recreation and Open Space	2-12
F. Environmental	2-14
G. Education	2-20
H. Land Use	2-21
I. Administration	2-25
J. Regional Cooperation	2-26
3. Concluding Comments	2-28
CHAPTER 3 - EXISTING LAND USE	
1. Introduction	3-1
2. Major Findings and Conclusions	3-1
3. Existing Land Use	3-2
4. Zoning Build-Out Analysis	3-8
5. Implications for the Future	3-14

Page Number

CHAPTER 4 - POPULATION AND HOUSING

1. Introduction 4-1

2. Major Findings and Conclusions 4-1

3. Historical Population Growth Trends 4-3

4. Components of Population Change 4-7

5. Household Characteristics 4-9

6. Seasonal Population Estimates 4-10

7. Population Projections 4-11

8. Windham’s Housing Supply and Construction Trends 4-13

9. Seasonal Housing 4-16

10. Age of Housing Stock and Geographic Distribution 4-17

11. Housing Values, For Sale Market Trends and Rental Rates 4-18

12. Affordable Housing 4-25

13. Affordable Housing in Windham 4-27

14. Implications for the Future 4-32

CHAPTER 5 - NATURAL RESOURCES

1. Introduction 5-1

2. Major Findings and Conclusions 5-1

3. Topography 5-2

4. Water Resources 5-5

 A. Surface Water 5-5

 B. Groundwater 5-13

 C. Wetlands 5-17

5. Soils 5-18

6. Wildlife Resources and Important Habitat Areas 5-19

7. Implications for the Future 5-23

CHAPTER 6 - ECONOMIC CONDITIONS

1. Introduction 6-1

2. Major Findings and Conclusions 6-1

3. Key Employment and Business Trends 6-2

 A. Regional Changes in Employment and Business Patterns 6-2

 B. Changes in Employment and the Number of Businesses in Windham 6-5

 C. Location, Acreage and Building Size in Windham 6-6

4. Commuting Patterns 6-10

Page Number

5. Implications for the Future 6-11

CHAPTER 7 - TRANSPORTATION

1. Introduction 7-1

2. Major Findings and Conclusions 7-2

3. Inventory of Windham’s Transportation System 7-2

 A. Identification of Streets 7-2

 B. Bridges 7-2

 C. Traffic Statistics 7-5

 D. Classification of Streets 7-6

4. Alternate Modes of Transportation 7-16

 A. Pedestrian Facilities 7-17

 B. Bike Access 7-17

 C. Commuter Bus Service 7-17

 D. Other Facilities 7-18

5. Transportation System Issues 7-18

 A. Roosevelt Trail (Route 302) 7-18

 B. Tandberg Trail (Route 115) 7-19

 C. River Road 7-19

 D. Gray Road 7-19

 E. Local Roads 7-19

 F. Public Easements 7-20

6. Recent State Actions 7-20

7. Implications for the Future 7-21

 A. Route 302 Corridor 7-21

 B. Local Roads 7-22

 C. Public Easements 7-22

CHAPTER 8 - RECREATION AND OPEN SPACE

1. Introduction 8-1

2. Major Findings and Conclusions 8-2

3. Existing Recreation Facilities and Open Space Locations 8-2

4. Non-Municipal Facilities 8-9

5. Recreation Facilities Standards and Guidelines 8-9

6. Implications for the Future 8-14

Page Number

CHAPTER 9 - MUNICIPAL SERVICES AND INFRASTRUCTURE

1.	Introduction	9-1
2.	Major Findings and Conclusions	9-1
3.	Town Offices/Community Center	9-2
4.	Police Department	9-5
5.	Fire and Emergency Services	9-7
6.	Library	9-12
7.	Public Works	9-15
8.	School Department	9-17
9.	Water Distribution	9-21
10.	Sanitary Sewer	9-21
11.	Electrical Power	9-21
12.	Telephone	9-22
13.	Natural Gas	9-22
14.	Cable Television	9-22
15.	Fiscal Capacity	9-22

CHAPTER 10 - HISTORICAL AND ARCHEOLOGICAL RESOURCES

1.	Introduction	10-1
2.	Major Findings and Conclusions	10-1
3.	Overview of Windham’s Historical Resources	10-2
4.	National Register Properties	10-5
5.	Archeological Resources	10-6
6.	Implications for the Future	10-6

REFERENCES

APPENDIX

LIST OF TABLES

<u>Table Number</u> <u>Number</u>	<u>Title</u>	<u>Page</u>
1-1	Land in Designated Growth and Transitional Areas - Windham, Maine Comprehensive Plan (2002)	1-12

<u>Table Number</u>	<u>Title</u>	<u>Page Number</u>
3-1	Total Acres by Land Use Type - 2000 Town of Windham	3-5
3-2	Total Acres and Number of Parcels on House Lots Greater Than 10 Acres in Windham - 2000	3-6
3-3	Summary of Development Trends in Designated Growth Areas 1993-2000 Town of Windham	3-8
3-4	Total Acres by Zoning District - 2000 Town of Windham	3-8
3-5	Residential Build-Out Analysis by Zoning District Town of Windham - 2001	3-11
3-6	Non-Residential Build-Out Analysis by Zoning District - Town of Windham - 2001	3-12
3-7	Projected Housing Growth - 2015 Town of Windham	3-13
4-1	Population Changes 1970-2000: Cumberland County Municipalities and the State of Maine	4-4
4-2	Components of Population Change 1970-2000: Town of Windham	4-7
4-3	Population Age Distribution 1980-2000: Town of Windham	4-8
4-4	Changes in Household Characteristics 1980-2000: Windham, Cumberland County and the State of Maine	4-9
4-5	Total Population Enumerations and Projections 1970-2000: Town of Windham and Cumberland County	4-12

<u>Table Number</u>	<u>Title</u>	<u>Page Number</u>
4-6	Total Housing Units by Type 1980-2000: Town of Windham	4-15
4-7	Age of Housing Stock: Town of Windham	4-17
4-8	Assessed Value of Residential Properties by Type of Property Town of Windham - 2000	4-21
4-9	Average Assessed Values of Residential Dwellings Town of Windham - 2000	4-21
4-10	Average Annual Sales Price of Residential Housing Units 1997-2000: Town of Windham	4-23
4-11	Number of Sales by Price Range 1997-2000: Year-Round Housing Units, Town of Windham	4-23
4-12	Average Sale Price of Residential Homes 1992-2000 based on Multiple Listing Service Sales Cumberland County Municipalities	4-25
4-13	Gross Monthly Household Rent for Windham, Cumberland County and Portland MSA - 2000	4-25
4-14	Estimated Maximum Housing Costs Based on Percentage of Median Income Levels in the Portland Metropolitan Housing Market	4-28
4-15	Estimated Annual Housing Cost Required to Purchase the Median Priced Single Family House in Windham - 2000	4-29

<u>Table Number</u>	<u>Title</u>	<u>Page Number</u>
4-16	Household Income in Windham Based on Percentage of MSA Median Family Income - 2000	4-30
4-17	Assessed Value of Year-Round Single Family Homes in Windham - 2000	4-30
4-18	Assisted Housing Units by Type: Town of Windham - 2000	4-31
5-1	Watershed Areas in Windham	5-6
6-1	Non-Residential Land Use Categories	6-9
6-2	Windham Residents by Place of Work - 1990	6-11
6-3	Windham Workforce by Place of Residence - 1990	6-11
7-1	Bridges in Windham	7-5
8-1	Open Space and Recreational Facilities - Town of Windham	8-4
8-2	Classification of Windham’s Recreation Facilities	8-11
8-3	Comparison of Windham’s Existing Recreation Program to Recommended State Guidelines	8-12
9-1	Major Equipment Roster - 2001: Windham Fire and Rescue Department	9-8
9-2	Major Equipment Roster - 2001: Windham Public Works Department	9-16

<u>Table Number</u>	<u>Title</u>	<u>Page Number</u>
9-3	Windham School Department Facilities - 2001	9-17
9-4	Projected Enrollment by Grade 2001-2009 Windham School Department	9-18
9-5	Actual Municipal Expenditures Fiscal Years 1997-2001 Town of Windham	9-23
9-6	Percent Expenditure Change by Year Fiscal years 1997-2001 Town of Windham	9-24
9-7	Actual Municipal Revenues Fiscal Years 1997-2001 Town of Windham	9-24
9-8	Percent Revenue Change by Year Fiscal Years 1997-2001 Town of Windham	9-25
9-9	Property Valuation and Tax Rates Fiscal Years 1998-2001 Town of Windham	9-25

LIST OF FIGURES

<u>Figure Number</u>	<u>Title</u>	<u>Page Number</u>
4-1	Total Population Growth 1970-2000 Town of Windham	4-3
4-2	Comparison of Percentage Population Growth Rates in Cumberland County Municipalities for the Three Decades Between 1970 and 2000	4-5

<u>Figure Number</u>	<u>Title</u>	<u>Page Number</u>
4-3	Population Age Distribution Town of Windham 1980-2000	4-8
4-4	Household Income Distribution Town of Windham 1980-2000	4-9
4-5	Total Population 1970-2020: Town of Windham	4-12
4-6	Residential Dwelling Unit Permits 1980-2000: Town of Windham	4-14
4-7	Total Residential Dwelling Unit Permits Issued 1990-1999: Cumberland County Municipalities	4-14
6-1	Employment Trends in Maine and 3 Southern Counties (1977-1998)	6-3
6-2	Business Formation in Maine and 3 Southern Counties (1977-1998)	6-3
6-3	Employment Changes by Industry State of Maine (1977 - 1997)	6-4
6-4	Employment Changes by Industry Cumberland County (1977 - 1997)	6-4
6-5	Establishment Changes by Industry State of Maine (1977 - 1997)	6-4
6-6	Establishment Changes by Industry Cumberland County (1977 - 1997)	6-5
6-7	Employment & Business Trends Town of Windham, ME (1990 - 2000)	6-5
6-8	Employment & Firms by Industry Town of Windham (2000)	6-6

<u>Figure Number</u>	<u>Title</u>	<u>Page Number</u>
6-9	Employment & Firm Changes by Sectors - Town of Windham (1995 - 2000)	6-6
6-10	Commercial & Industrial Development Town of Windham, ME (2001)	6-9
6-11	Commercial & Industrial Development Town of Windham, ME	6-9
6-12	C/I Buildings by Size and Use Town of Windham, ME (2001)	6-10

LIST OF MAPS

<u>Map Number</u>	<u>Title</u>	<u>Page Number</u>
1-1	Future Land Use 1-15	1-15
3-1	Existing Land Use 3-3	3-3
3-2	Zoning Districts 3-9	3-9
4-1	Residential Development Trends 4-19	4-19
5-1	Elevation and Slope 5-3	5-3
5-2	Watersheds and Wetland 5-9	5-9
5-3	High Yields Aquifers 5-15	5-15
5-4	Important Wildlife Habitat 5-21	5-21
6-1	Non-Residential Land Use 6-7	6-7
7-1	Transportation Network 7-3	7-3
7-2	Traffic Volume 7-7	7-7

<u>Map Number</u>	<u>Title</u>	<u>Page Number</u>
7-3	Accident Data	7-9
7-4	Summer Maintenance Responsibilities	7-13
8-1	Open Space, Recreation & Key Natural Resources	8-5
9-1	Water Service Infrastructure	9-26
9-2	Sewer Locations	9-28
9-3	Natural Gas and High Speed Internet	9-30
10-1	Key Historic and Archeological Locations	10-3

Preface

This plan reflects the dedicated efforts of the Windham Comprehensive Master Planning Steering Committee to seek and understand what Windham citizens want the town to be like in the future. Clearly, the top priority is to retain Windham's rural character, and this is the keystone of the Windham Vision Statement. We then had to go into enough detail in all areas to write a plan which will deliver Windham's Vision - what needs to be preserved and what needs to change.

The Committee, composed of individuals with diverse view points, used a consensus decision-making process and succeeded in reaching consensus on absolutely everything in this plan. We point this out because we believe that our effort to reach consensus is the real strength of a plan that will serve Windham well.

Goals and objectives capture what needs to be done to deliver this vision, but they may be modified if there are significant changes in Windham's situation.

The strategies, also referred to as implementation actions, comprise a partial list of ways to achieve the objectives which will deliver the vision. We expect some of these strategies to be fully carried out, others to fall away, and new ones to be added as Windham's elected officials, boards, committees and departments implement this plan.

There are no suggested tactics in this plan. Tactics are the myriad day-to-day actions which are needed to execute each strategy. These are all left to the individuals who are doing the work, for they best understand the implications of their decisions in the field.

The Vision should not be altered during the life of the plan and the purpose of all other components is to follow that vision. It is a statement of guidance to be referred to when one is unsure of how to proceed in serving the Town of Windham.

Most importantly, we wish to thank the following groups and individuals:

- The people of Windham for freely sharing your ideas and concerns. This is your plan.
- The Town Council for chartering this effort and selecting such a diverse and talented team.
- Jimmy Hicks and Michael Casino, consultants with RKG Associates, and Windham's own Marc Larochelle, a consultant with OEST Associates, whose wisdom we relied on in preparing this plan.
- Members of the Town's boards and committees for sharing your knowledge and insights.
- Town staff for your expertise and assistance.
- Owners of large parcels of land for helping us understand what needs to be done to preserve open space.
- The Windham Economic Development Corporation and the Natural Resources Committee for sharing your work and ideas with us.
- The South Windham/Little Falls Village Improvement Committee for providing a regional plan for the Village.
- The State Planning Office for guidance and encouragement.
- Community Development Director Rogers Timmons, who attended almost every meeting, for helping us write a plan which can be successfully implemented and Mabel Darby, the Planning Department Secretary, for keeping us organized and always finding a place for the Committee to meet.

People of Windham, this is your plan. While we expect that every citizen can find specific items with which they disagree, we ask that you embrace and support this entire plan as "something you can live with." Town-wide consensus for this plan will make Windham a better place for everyone who lives, work or visits here.

People of Windham, we did our best for you and for the love of our town. Thank you for giving us this opportunity to serve.

Members

Windham Comprehensive Master Plan Steering Committee

Elizabeth F. Wisecup,
Chair

William S. Plumley,
Vice Chair

Lloyd P. Bennett,
Town Council Representative

Melissa W. Brough

Valerie DeVuyst

Christopher C. Farmer, J.D.

Aldesta (Dusti) Faucher

Frank H. Koenig

Paul W. Lawrence

David J. Nadeau

David L. Tobin

Town Staff

Roger E. Timmons,
Community Development Director
George M. Dycio,
Town Planner

Consultants

Jimmy E. Hicks, RKG Associates, Inc.
Michael N. Casino, RKG Associates, Inc.
Marc J. Larochelle, OEST Associates, Inc.

Introduction

This update of the Windham Comprehensive Plan represents a continuation of a land planning process that began over 35 years ago. The initial comprehensive plan for Windham was completed in 1965 and updated in 1976, 1985 and 1993. In this sequence of comprehensive plans one plan does not end where the next one begins, but instead builds on the foundation laid by previous planning and implementation efforts. This Comprehensive Master Plan should be considered as an update of the existing Windham Comprehensive Plan (1993) and all parts of the previous Comprehensive Plan that are not inconsistent with this plan shall be considered valid. In addition, previous Windham Comprehensive Plans that have been adopted by the Windham Town Council shall remain in effect until this Comprehensive Master Plan is certified by the Maine State Planning Office as being consistent with procedures, goals and guidelines established under the proper chapters and sub-chapters covering Local Growth Management Programs.

This plan was prepared in compliance with the Maine Planning and Land Use Regulations Act, commonly referred to as the Growth Management Law (see Appendix A). The plan contains ten chapters and several attachments. The first two chapters provide policy guidance and recommendations for implementing the plan. The remaining eight chapters contain an inventory and analysis of a wide variety of characteristics that are impacted by growth or have an influence on development in Windham. Key features of each chapter are noted below.

- Chapter 1 - A Vision for Windham

This chapter identifies a vision for the use of land in Windham along with key goals, policies and objectives for guiding development and maintaining the intrinsic character of the community. Designated growth and rural areas, as required under state statute, are also identified and techniques used to encourage community involvement in the planning process are discussed.

- Chapter 2 - Implementation Strategy

Recommendations for achieving the goals and objectives outlined in the plan are presented in this chapter.

- Chapter 3 - Existing Land Use

The existing use of land in Windham and the potential for future development in the community are discussed in this portion of the plan. Previous development trends in growth areas identified in the 1993 comprehensive plan are also briefly examined.

- Chapter 4 - Population and Housing

This chapter examines the changing characteristics of Windham's population and housing stock. Projections of possible future population growth in the town are also evaluated.

- Chapter 5 - Natural Resources

In this chapter specific environmental features in Windham are examined including topography, soils, wetlands, water resources and fish and wildlife habitat.

- Chapter 6 - Economic Conditions

Key economic conditions and trends in Windham, Cumberland County and the State of Maine are examined in this chapter. Non-residential land development patterns in Windham are also evaluated.

- Chapter 7 - Transportation

This chapter examines existing roadway characteristics and highway usage patterns in Windham. Road conditions, traffic volume data and crash location data are also analyzed in order to identify key roadway problems.

- Chapter 8 - Recreation and Open Space

Existing recreational facilities and demand for recreational services are highlighted in this chapter. In addition, the need for protecting undeveloped open space land for a variety of uses is discussed.

- Chapter 9 - Municipal Services and Infrastructure

This chapter examines Windham's municipal services from the perspective of capital facilities and equipment needs.

- Chapter 10 - Historical and Archeological Resources

An analysis of Windham's historical and archeological resources is highlighted in this chapter.

Chapter 1

A Vision for Windham

1. Introduction

Preparing a municipal comprehensive plan is a difficult and demanding undertaking. Updating an existing plan, especially in a community dealing with the impacts of growth and development, can, however, be even more difficult.

Since its creation by the Windham Town Council on February 1, 2000, the members of the Comprehensive Master Plan Steering Committee have been grappling with a wide range of natural resource protection, community character and development related issues. At the same time the members of the Steering Committee have also endeavored to provide a variety of opportunities for the residents of Windham, and other interested individuals, to provide direction and suggestions during the preparation of this comprehensive plan update.

This chapter of the comprehensive plan provides guidance about how land should be preserved and developed in Windham. The contents of this chapter are based, to a significant extent, on the Maine Growth Management Statute that requires that municipal comprehensive plans include "...a policy development section that relates the findings contained in the inventory and analysis section [of the comprehensive plan] to ...state goals." (M.R.S.A. 30A Section 4326:2). In addition, state statutes require that the policies outlined in the comprehensive plan promote identified state goals, address any possible conflicts with state goals, or with regional and local issues. Finally, the policy section, if appropriate, should address coastal policies of the State of Maine.

In this chapter key goals, policies and objectives for guiding development and maintaining the intrinsic character of Windham are identified and discussed. The procedures used to encourage public involvement, which played a significant role in the preparation of these policy statements, are also highlighted.

Although this chapter was completed, in part, to comply with state requirements, these policy statements represent more than just a series of quickly prepared platitudes. These policy statements are designed to reflect the values of Windham residents about how they would like to manage development. The various policy statements recognize that Windham will continue to grow and change in the future, but growth should not determine how town residents live and relate to one another as neighbors.

2. Public Involvement in the Planning Process

A critical component in the preparation of this updated comprehensive plan was the desire of the Steering Committee to involve town residents at important intervals throughout the entire planning process. It was initially decided that rather than just hold a series of meetings at the beginning and end of comprehensive plan preparation activities, various types of issue identification meetings, vision forums and discussion groups would be held during the two-year planning effort. In addition, a variety of different techniques would be used to disseminate information to town residents about growth and development issues in Windham. Outlined below are highlights of the different approaches used to involve the residents of Windham in the process of preparing this comprehensive plan.

■ Common Ground - A Community Concerns Forum

At this initial planning meeting (April 26, 1999) over 190 town residents, members of the business community, town council members, and members of other town boards and organizations met to discuss and identify key concerns that should be addressed in an updated comprehensive plan. Participants were divided into twelve groups and asked to address three distinct areas:

- What comprises an ideal community?
- Describe Windham's character.
- List activities or policy initiatives the town should undertake.

Based on these discussions volunteer facilitators then worked with each group to identify priorities for each of the three subject areas noted above.

■ Issues Identification Sessions

In the spring of 2001, two issues identification meetings were conducted. The first, with town department heads (April 2, 2001), focused on the delivery of existing municipal services and the possible impacts of growth and development on the demand for services in the future. The second was a town-wide meeting (May 21, 2001) that asked participants to review various categories of issues identified during the Common Ground Forum. These categories included:

- Economic development/expand municipal tax base
- Manage/plan for growth and development
- Provision of municipal facilities/information
- Recreation/open space/natural resources
- Community character/cohesion

Over 100 residents attended the town-wide issues identification sessions. During the meeting participants were divided into seven groups in order to discuss and rank factors that defined an ideal community. Participants were also asked to rate how Windham compared to an ideal community and to identify areas where improvements were needed in the town.

■ Vision Forums

Two vision forums were conducted in Windham in order to begin the process of identifying policy and goal alternatives for the town, as well as possible land use options. At the first vision forum (June 4, 2001) a short handout, titled “Shaping a Vision of Windham’s Future - Summary of Key Elements that Define an Ideal Community” was used to promote discussion about community features and characteristics important to residents of Windham (a copy of this handout is located in Appendix C of this comprehensive plan). In effect this discussion, based on the results of the two issues sessions, was structured to identify what mix of characteristics defined an ideal community, how Windham was like an ideal community, and what types of changes were needed for Windham to become more like an ideal community. Participants at the meeting were also divided into groups and asked to identify, on maps of the town, how land in Windham should be used in the future. At the end of the first vision forum about 30 individuals were given disposable cameras and asked to take photographs of places, activities, or features that they liked or disliked about Windham. The individuals that received cameras were also asked to briefly note the reasons that they liked or disliked the images they photographed.

During the second vision forum (October 1, 2001) participants were asked to refine their vision of Windham and relate these concepts to specific land use policies and goals for the town. A short hand out, “A Vision for Windham’s Future - Conceptual Land Use Alternatives” was provided as a basis for this discussion (a copy of this handout is located in Appendix D of this comprehensive plan). The hand-out related land use patterns and photographic images prepared by town residents to a variety of goals and policy issues identified earlier during the planning process. Approximately 70 people attended the two vision forums.

■ Steering Committee Meetings

Beginning in the spring of 2000, the Windham Comprehensive Master Plan Steering Committee initiated monthly public meetings to discuss procedures and issues associated with updating the comprehensive plan. In 2001, the Steering Committee began meeting twice a month. At some

of the meetings members of the Steering Committee invited other town organizations and agencies such as members of the Planning Board and Zoning Board of Appeals, heads of town departments, and the Windham Economic Development Corporation. At other meetings specific groups of individuals were invited, such as large land owners or residents of specific areas in Windham, to offer comments and suggestions. Finally the Steering Committee met to review and discuss various draft chapters of the comprehensive plan. In all the Steering Committee held over 40 public meetings and forums during the preparation of this updated comprehensive plan. At all of these meetings, no matter the purpose, people in attendance were encouraged to offer suggestions and comments.

- **Public Review of Draft Chapters**

Two town-wide public forums were held to review various draft chapters of the inventory and analysis portion of the comprehensive plan. The first forum (October 29, 2001) reviewed land use, housing, transportation and economic conditions. The second forum (December 3, 2001) reviewed recreation, natural resources, historic and archeological features, and municipal services/infrastructure. Handouts that summarized the various inventory and analysis chapters were provided to the attendees (copies of these handouts are located in Appendix E and F of this comprehensive plan). Approximately 100 people attended these two public forums.

- **Posting of Comprehensive Planning Material**

All draft material, prepared specifically for public meetings and draft chapters of the comprehensive plan reviewed by the Steering Committee, were posted on the town's website. Phone numbers and e-mail addresses were also distributed in order to elicit follow-up questions and comments.

- **Presentation of Draft Comprehensive Plan**

A presentation of the final draft comprehensive plan was made to the Town Council and at a general public meeting.

3. A Vision for Windham

As described in greater detail in subsequent chapters of this comprehensive plan, the Town of Windham has undergone significant changes during the past 20 to 30 years. The character of Windham, especially how land is used, will most likely continue to change in the future. Although numerous factors will influence these changes, some, such as national and regional economic trends, are beyond the town's control. The future of Windham, however, is too important to rely just on happenstance to determine the community's character and future land development patterns.

During the process of preparing this comprehensive plan the members of the Steering Committee participated, as noted in the previous section, in numerous meetings and discussions about the future of Windham that were held with a wide variety of residents, business people and town officials. While opinions do differ about certain specific issues, there is a certain degree of agreement about basic goals for the future of Windham. These goals and policies, which are discussed on the next several pages, should not be regarded as an inflexible blueprint for the future development of Windham, but as a guide for directing and managing future land use changes within the community.

During the preparation of this policy statement, it was determined that an overall vision for the future of Windham should be identified. In addition, it was felt that because vision statements tend to be rather broad in scope, specific policy guidance should be provided in order to amplify and clarify this vision for Windham. Outlined below is the overall vision statement and policy guidance identified for Windham.

VISION FOR THE FUTURE OF WINDHAM

Retain and protect our rural character, scenic vistas, natural features and environment by maintaining a critical balance between preservation and development through managing and directing growth in a manner that accommodates all segments of our community and provides affordable, high-quality living conditions.

Managing and Directing Development Policy Guidance

- *Recognize that times have changed and that densely developed portions of Windham, including some existing village areas, may require municipal water and sewer.*
- *Not every land parcel in Windham is suitable for every type of possible development. In addition, some land parcels should not be developed at all, but instead preserved as open space.*
- *Retain and enhance the different village land use patterns that now exist in Windham.*
- *Diversity in land development patterns should be encouraged in the future growth of Windham.*
- *The property tax implications of development activities should be considered in managing the growth of Windham.*

Retain Rural Character Policy Guidance

- *Maintain a low density of development in major portions of Windham (see Map 1-1).*
- *Woodlands, open space and farmlands should be regarded as key elements of the town's rural landscape.*
- *Parts of Windham should retain the characteristics commonly associated with a New England village, including the preservation of historic and older structures.*
- *Land areas adjacent to Route 202 (except for existing areas in South Windham Village, Windham Center and Foster's Corner) should not be developed for commercial purposes.*
- *Wildlife habitats are an important element of the town's rural character.*

Sense of Community Policy Guidance

- *Every town resident should have an opportunity to participate in local government decision making.*
- *Encourage the participation of citizen/volunteers in a wide range of municipal and community activities.*
- *Provide various places in Windham for all residents to meet, interact and recreate.*
- *Provide opportunities for a wide range of individuals and families, of all ages and income levels, to live in Windham.*

In order to achieve this vision for Windham, general goals and objectives for various substantive issue areas (e.g., transportation, economic development, environmental protection, etc.) have also been prepared. These goals and objectives, as is the vision statement, are based on comments and suggestions received during the various public meetings discussed earlier, and were then refined by the members of the Steering Committee to reflect their understanding of specific planning related issues.

A. Economic Development Goal

Economic development initiatives that improve the town's tax base and promote new quality employment opportunities, should be directed to specific growth areas of the community.

Primary Objectives

1. The Route 302 corridor, and adjacent land areas, should, over time, be the primary location for economic development in Windham. This may require, after additional evaluation (as noted on page 2-3), the installation of a municipal sewer system.
2. A corridor land management plan, that also identifies future development opportunities, should be prepared for the Route 302 corridor. In essence, future economic development patterns must be related to the town's ability to provide safe and reasonable roadway access along this roadway corridor.
3. Infrastructure improvements, including roadway improvement, a municipal sewer system (if approved), improved electrical service and expanded high-speed Internet access should be coordinated with private sector development initiatives. Economic development expansion should also be supportable by available municipal infrastructure and/or planned improvements. In essence, the ability to provide adequate municipal services should be a key requirement in evaluating and approving significant development proposals.
4. Some form of development and design standards for commercial development should be adopted for North Windham and then extended, as appropriate, along the entire Route 302 corridor.

B. Infrastructure Goal

Increasing demands for infrastructure improvements in Windham will require careful consideration of the timing of expenditures and future debt service payment schedules.

Primary Objectives

1. The town should prepare a long range plan, such as a Capital Improvements Plan (CIP) budget, for major physical improvements that includes all anticipated municipal and school capital costs over a specific time period (i.e., six years). This will require the cooperation of both school and municipal officials.
2. Capital funding should, to the maximum extent feasible, be based on recommendations contained in the updated comprehensive plan in terms of location (growth areas). Major public investments in non-growth areas should be avoided in order to minimize the potential for more intense development activities in these areas of town.
3. Capital improvement spending should be structured to avoid significant and sudden property tax increases.

C. Roadways and Transportation Goal

There should be a continuing effort to maintain and improve the safety and operation of the network of highways and arterials in Windham including Routes 35, 115, 202 and 302, as well as alternative methods of transportation. Significant attention should be focused on Route 302, which is known as the lifeline of Windham and the Lakes Region and carries some of the highest traffic volumes and has one of the highest accident rates of any highway in the state.

Primary Objectives

1. Future highway plans for Windham should include alignment and design changes in order to improve traveling safety on key roadways in Windham such as River, Windham Center and Falmouth Roads (see Chapter 7).
2. New roadway standards, based on a detailed evaluation of existing conditions, should be prepared for Windham. These roadway standards should include an examination of the feasibility of reducing roadway widths in portions of the community including those designated as rural or village areas.
3. The Maine Department of Transportation (MDOT) is planning to reconstruct Route 302 (from the Fosters Corner intersection with Route 202 to the Westbrook line) in 2003 and Route 115 (from Route 302 one half mile easterly to the bridge) in 2002. Windham should cooperate with the "Route 302 and You Committee" (a branch of the Lake Region Development Council) to widen and improve Route 302 from the Whites Bridge Road intersection northwesterly through Raymond and realigning the intersection of Anglers Road and Route 302. This is considered to be one of the worst bottlenecks and accident prone areas along the entire Route 302 corridor.
4. Consider the proposal of the "302 and You Committee" to study the feasibility of constructing a connector highway between Route 302 and the Maine Turnpike to reduce traffic volumes on Route 302 and improve overall highway safety in Windham.

5. Support the North Windham District Development Advisory Committee in developing secondary roads easterly and westerly of Route 302, from Routes 35 and 115, to the Whites Bridge Road area to help alleviate traffic on Route 302 and provide better access for residents and retail shoppers.
6. Alternative methods of transportation, including bus and rail service, should be investigated by town, regional and state officials.

D. Sense of Community Goal

Even though the population of Windham has increased substantially during the last several decades, the town is still a community of individuals and families that care about their neighbors and fellow citizens. The town has a rich history of volunteerism and community involvement that should be supported and enhanced.

Primary Objectives

1. As the town has grown it has become more difficult to attract local residents to volunteer for community and civic activities. Town government should work to encourage the expansion of volunteer opportunities including new methods for citizen involvement in local governmental activities and decision making.
 2. Recognize that Windham should be a community that provides a range of opportunities for families and individuals of different income levels to live, as required under state statutes (MRSA 30A - Section 4358), and work.
 3. Encourage and establish options for elderly residential developments that are safe and suitable and provide lower cost alternatives for retired and older individuals.
4. Identify sites for residents of Windham to congregate, such as parks, and establish a community center for special events, meetings and recreational opportunities.
 5. Support the efforts of the Windham Historic Commission and Historical Society in preserving historic structures in Windham, especially in the existing village areas of the community.
 6. Local officials should provide a variety of methods for citizens to comment about issues that impact the Town of Windham.
 7. Design and construct identifiable gateways that signify the entrance to Windham on major roadways. Also consider providing incentives to private landowners for the redevelopment of property adjacent to gateways.

E. Recreation Goal

Promote a variety of recreational opportunities, including outdoor activities, for Windham residents of all ages and income levels.

Primary Objectives

1. Examine other methods for financing, including a more diverse funding base, for recreational activities in order to ensure that opportunities are available to residents of all income levels and ages.

2. Provide a community center in order to offer recreation and meeting space opportunities for all Windham residents. Special attention should also be focused on the needs of senior citizens in designing and planning activities for the facility.
3. Work with land owners and other organizations to ensure that open space, woodlands and access to water bodies remain available for outdoor activities such as hunting, fishing, snowmobiling, cross country skiing, and hiking.

F. Environmental Goal

In both municipal government activities and the consideration and review of development proposals, the Town of Windham should promote a sense of environmental stewardship and prevent the degradation of any existing natural resources within the town.

Primary Objectives

1. Citizens, local organizations and governmental bodies in Windham should endeavor to protect and enhance key natural resources of the community that define the town's rural character such as scenic vistas, river corridors, lakes and ponds, woodlands, fields and farmlands.
2. In order to protect the wide variety of environmental and natural resources important to the residents of Windham, the standards and procedures contained in the town's existing zoning ordinance, and other land use regulations, should be examined and, where appropriate, improved. Specific changes should focus on methods for protecting steep slopes and land adjacent to water bodies and near wetlands from inappropriate and harmful development.
3. Groundwater quality and availability in Windham is an important issue today and will become even more important in the future. Due to the fact that a significant number of town residents rely on groundwater as their basic supply source, better information about the quantity and use of groundwater resources in Windham will be required. This data should be collected from federal, state and local agencies and organizations and used for planning purposes and the evaluation of future development proposals.
4. The Town of Windham should evaluate alternatives for determining and mapping the existing condition of key environmental attributes within Windham (especially lakes, ponds and rivers) and then periodically monitor these sites over time to determine any changes in quality or possible sources of degradation.
5. Create a municipal organization, such as a Natural Resource Commission, to monitor, evaluate and report to local residents about the condition of natural resources and changes in environmental quality within the town. This organization could also assist the Planning Board in evaluating development proposals and operate as an educational resource for the community about environmental protection issues. The possibility of providing future staff support for this type of organization should also be considered.
6. Due to increased development activities in Windham, noise and light pollution regulations, as well as standards for blasting, should be adopted in order to minimize adverse impacts on town residents, wildlife, natural resources and neighboring land owners.

G. Education Goal

In Windham the School Board is responsible for oversight in managing the educational system and maintaining school facilities. The Board has established various goals and policies to accomplish these tasks. For example, the Windham School Board has stated that its mission "...is to create an educational environment that promotes positive and successful learning experiences which enable all members of the school community to develop their unique potential." A key vision statement of the School Board also notes that "Our schools are active and support centers of learning that encourage personal challenge, honor diversity, and nurture growth in individuals of every age." In support of these School Board's policies, it should be recognized that school facilities are an important part of the community that have an impact on Windham much greater than just providing education to the children of Windham. In this context continued cooperation between the School Board and other town departments and organizations will be necessary to meet the needs of all Windham residents in the future.

Primary Objectives

1. School financial needs, especially the timing of bond financing, should be coordinated with other municipal capital expenditures in order to minimize sudden and steep increases in bond repayments by local property tax payers.
2. School facilities play a significant role in providing space for recreation and other community needs. The School Board should be encouraged to continue working with town officials and organizations to maximize the use of school facilities for non-school events.
3. School facilities should be available for a variety of continuing educational programs and activities.
4. A well trained work force is key to the economic vitality of Windham and the region. The School Board and Department are encouraged to work with town officials and private sector firms in meeting, to the extent feasible, education and training needs of local and regional business.

H. Land Use Goal

Standards used to evaluate and manage land development in Windham should be changed. These changes should focus on identifying portions of Windham suitable for commercial and industrial growth, as well as more densely populated types of residential development. The balance of Windham should be designated for rural related types of land uses and limited residential development.

Primary Objectives

1. Changing how land is developed in the future, as recommended in the Land Use Goal, will not be a simple task. Existing land use patterns in Windham have been created by a multitude of decisions made during the last two centuries. In addition, municipal zoning and other regulations adopted during the past several decades have significantly influenced both individual and business decision-making about land acquisition and development initiatives. Changes concerning how land can be developed in the future should, to the extent possible, seek to balance community needs with the rights of private property owners while protecting the environment and natural resources.

2. Portions of the North Windham Growth Area (See Map 1-1) should be designated for industrial and commercial land uses. This area also includes the Enterprise Development District as a location for future industrial and commercial land uses. Only minimal impact industrial activities, commonly referred to as light industrial uses, should be permitted in this area of Windham. Performance standards for industrial uses should also be prepared that define the limits of possible development related impacts such as noise, glare, air pollution, wastewater discharge, development size and traffic impacts. Various residential uses, with different density requirements, should also be permitted in North Windham.
3. Retail land uses should primarily be located along the northern portion of Route 302. However, the southern portion of Route 302 (see Map 1-1) should be designated as a Commercial Transitional Area that permits the development of a limited amount of retail and commercial activities.
4. Windham Center should be designated as a growth area that would include a mix of residential and limited commercial/retail land uses, possibly through the use of a village overlay zone. Institutional uses, especially governmental and school facilities, already located in the area, are also considered key land use components for this portion of town. In essence Windham Center should continue to be the primary location for all new institutionalized land uses, such as schools and local governmental offices. The Black Brook Preserve, an undeveloped open space site (about 104 acres) that was recently acquired by the Windham Land Trust, is also located within the Windham Center Growth Area.
5. A portion of South Windham, directly across the Presumpscot River from Gorham, should be designated as a growth area. It is anticipated that residential and limited commercial/retail land uses, possibly through the use of a village overlay zone, would be complementary to similar types of adjacent development in Gorham. This growth area also includes the existing state prison site.
6. A Residential Growth Area is recommended for northern Windham, adjacent to the North Windham Growth Area. This portion of town would be designed for high and medium density residential land uses (see Map 1-1).
7. A Residential Transitional Area is also recommended for the northern portion of Windham. It is anticipated that the transitional area would be a location for residential development, but at density levels lower than the designated growth areas (see Map 1-1).
8. The Growth and Transitional Areas identified for Windham are serviced by the municipal water system (see Map 1-1) and involve a significant portion of the land area of Windham (27%) as illustrated in Table 1-1.
9. River resource protection areas are designated for both the Presumpscot and Pleasant Rivers. Development activities should be limited in these resource protection districts. As discussed in Chapter 2 (Implementation Strategy) this will involve limiting development through revised land use regulations, property acquisition, and promoting cluster housing outside the resource protection districts.
10. The remainder of Windham should be designated for rural and residential land uses. The density of residential development should vary throughout the town, with higher densities in existing developed areas and in designated growth areas. Development should be restricted in rural areas in order to protect farmlands, woodlands, open space, wildlife habitat and scenic areas. Special and unique approaches, as discussed in Chapter 2 (Implementation Strategy), for protecting specific critical rural areas should also be identified and enacted during the implementation of this comprehensive plan.
11. A revised zoning ordinance and land use regulations should be prepared in order to achieve the land use objectives outlined under the Land Use Goal. The ordinance should incorporate performance standards and natural resource protection initiatives, such as environmental overlays and river protection zones. As noted earlier, changes in existing land use ordinances will not be a simple or easy task. If necessary a moratorium, as permitted under

M.R.S.A. 30A Section 4356, may be required during the preparation and review of significant changes in zoning or other land use regulations.

- 12. Land use requirements in rural areas should include standards for protecting key environmental features such as wetlands, and natural constraints, such as steep slopes, from the impacts of development.
- 13. New site plan and subdivision regulations should be prepared in conjunction with the new zoning ordinance. A key element of these regulations should be requirements relating to the construction and maintenance of private roads, especially in terms of providing access and sufficient right-of-way for fire and emergency vehicles.
- 14. Periodically monitor and analyze land development trends in Windham.

**Table 1-1
Land in Designated Growth and Transitional Areas
Windham, Maine Comprehensive Plan (2002)**

Growth Areas	Acres	Percent of Total Land Area
North Windham	2,905	10.1%
South Windham	683	2.4%
Windham Center	1,879	6.5%
Residential	698	2.4%
Total	6,165	21.4%
Transitional Areas		
Residential	1,448	5.0%
Commercial	178	0.6%
Total	1,626	5.6%
Grand Total	7,791	27.0%
Note: For purposes of this analysis it is estimated that Windham has 28,812 acres. This does not include roadways or water bodies. The 1993 Comprehensive Plan estimated that the town contained about 35,200 acres, including water bodies and roadways. Source: RKG Associates, Inc.		

I. Regional Cooperation Goal

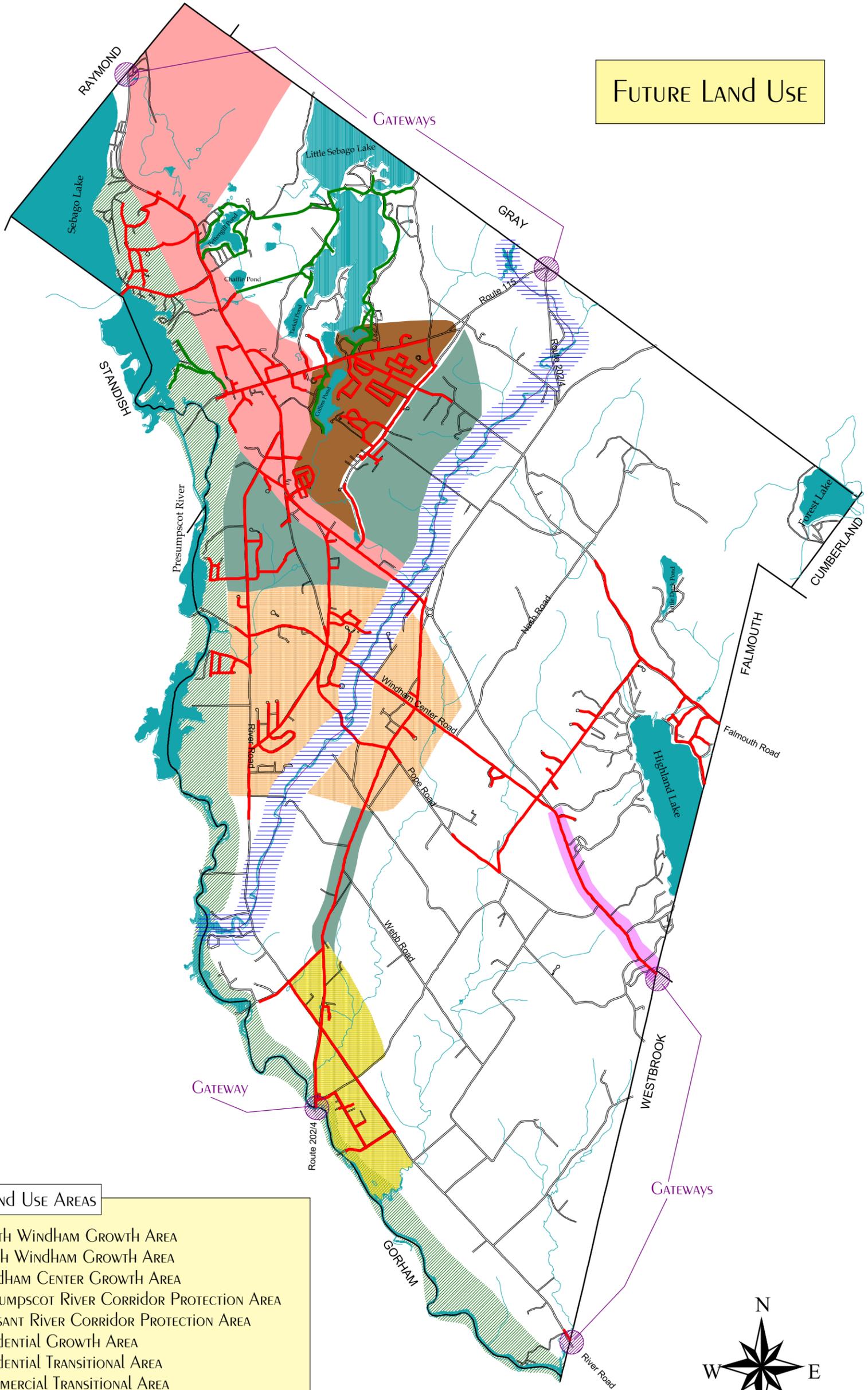
As Windham has grown, the number of problems confronting the town has increased significantly. A number of these problems will require cooperating with a variety of adjacent communities, as well as participating in joint regional endeavors.

Primary Objectives

1. Improvements to Route 302 will require the involvement of not only the Maine Department of Transportation, but also other communities adjacent to this highway corridor. Consequently, Windham should identify and discuss roadway improvement options with neighboring communities.
2. The Town of Windham should, based on recently enacted state legislation, investigate the possibility of developing the proposed business park on Enterprise Drive in cooperation with neighboring communities.
3. The Town of Windham should consider formalizing relationships with neighboring communities in dealing with surface water monitoring (lakes and rivers) and in the protection of watersheds.
4. Joint efforts with regional organizations should be undertaken to identify possible alternatives for providing affordable housing on a regional basis.
5. The plan for the revitalization of South Windham/Little Falls should be implemented in a cooperative manner with Gorham.
6. The Town of Windham should work with other communities in establishing designated gateways to the community. These gateways (see Map 1-1) should also designate, as appropriate, gateways to the Lakes Region of Maine.

COMPREHENSIVE MASTER PLAN TOWN OF WINDHAM, MAINE

FUTURE LAND USE



FUTURE LAND USE AREAS	
	NORTH WINDHAM GROWTH AREA
	SOUTH WINDHAM GROWTH AREA
	WINDHAM CENTER GROWTH AREA
	PRESUMPCOT RIVER CORRIDOR PROTECTION AREA
	PLEASANT RIVER CORRIDOR PROTECTION AREA
	RESIDENTIAL GROWTH AREA
	RESIDENTIAL TRANSITIONAL AREA
	COMMERCIAL TRANSITIONAL AREA
	RURAL AREAS
WATER LINES	
	SEASONAL
	YEAR-ROUND



Chapter 2

Implementation Strategy

1. Introduction

The Windham Comprehensive Plan is a document that defines where the community wants to be in the future and how it will get there. In order for the town to realize this collective *Vision* and achieve the results identified by the community, an effective *Implementation Strategy* must be established. This chapter of the comprehensive plan outlines key actions that the town should take over the next decade to realize the goals outlined during this planning process.

The implementation strategy is organized within 10 areas of *Recommended Actions*. These 10 areas include: Economic Development; Infrastructure and Municipal Services; Roadways and Transportation; Sense of Community; Recreation and Open Space; Environmental; Education; Land Use; Administration; and Regional Cooperation. Each *Recommended Action* area is composed of one or more issue statements that identifies the strategic objective being addressed. These are followed by a series of specific actions, along with an accompanying time frame for the proposed action and suggestions for organizational responsibility for implementation. Specific policy goals and primary objectives discussed in Chapter 1 (A Vision for Windham) are also identified for each *Recommended Action*.

It must be recognized that the Implementation Strategy, like the comprehensive plan, is not a stagnant document. Once adopted it must be revised and updated periodically to ensure the proposed actions, based on current conditions in Windham, are still appropriate.

2. Recommended Actions

A. Economic Development

Issue A1 - A significant public investment decision for Windham involves the need and desirability

for installing one or more new sewer collection and treatment systems in order to manage and guide future development within the town (see Chapter 1). Some members of the community feel new sewer systems would enable the town to better facilitate new economic development initiatives, such as the Enterprise Development District located in the North Windham Growth Area, as well as provide a means for improving several smaller sewer treatment facilities located in the town (including the High School complex, South Windham and the State of Maine correctional facility), retaining the character of existing rural areas by allowing greater development in designated growth areas and protecting existing aquifer areas. Other town residents, however, are concerned about the overall capital construction costs and subsequent operating costs of newer systems, including how these costs will be allocated among residents and business owners in the community. There is also concern about possible environmental consequences associated with sewer discharge after treatment and development impacts on the portions of Windham identified as rural areas in the comprehensive plan.

The town recently completed (2001) a study of wastewater management alternatives and is now in the process of conducting a more detailed evaluation of the feasibility of constructing new sewer systems in designated portions of Windham. It is anticipated that this additional study will include a plan for new sewer facilities and also provide critical information and criteria for evaluating (1) financial feasibility, (2) development implications and (3) environmental impacts.

If, after careful review of appropriate independent studies, a decision is made to construct new sewer systems, then only specific areas in Windham should be identified for sewer usage. These would include: (1) designated growth areas, such as the Enterprise Development District in the North Windham Growth Area; (2) areas with existing sewer systems, as noted earlier, that are experiencing problems; and (3) other areas that have unique environmental problems or other primary public health needs. Sewers constructed outside growth areas, in order to deal with public health or environmental problems, should not be considered as a justification for increasing development density in portions of Windham designated as rural areas.

Issue A2 - Since the completion of the 1993 Comprehensive Plan Windham has made significant strides in terms of improving the town's economic development capability. For example, the Windham Economic Development Corporation (WEDC), a private nonprofit organization, was created to support existing local businesses and to encourage new businesses in order to provide job opportunities and broaden the town's tax base. In addition, the town hired an Economic Development Director, in 1998, who also serves as the Executive Director of the WEDC.

During the past several years the WEDC and the town have attracted new business and commercial investment to Windham that have resulted in increased employment and expansion of the municipal property tax base. The WEDC has also acquired property for development purposes, managed infrastructure improvements and initiated efforts to create a regional business park, the Enterprise Development District, in cooperation with the Lake Region Development Council.

Future economic development initiatives will build on past accomplishments. Key issues that confront the community include: Directing development to designated growth areas that currently have, or will have, the infrastructure capacity to service commercial and business requirements; attracting businesses that best fit the economic and employment needs of the community; providing the communications infrastructure required for tomorrow’s business activities; maintaining the diverse landscape and environment that makes Windham a unique place to work and live; and continued cooperation with neighboring communities in order to address regional economic development concerns.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
A. Economic Development			
<p>1. A complete, professional and independent study should be made to determine the community benefits and costs of public sewer. Only to the extent that a compelling community benefit can be demonstrated, as a matter of public policy, should municipal sewer be considered for construction in designated growth areas of Windham. If determined to be appropriate, plans for constructing a public sewer system should be prepared and implemented. Municipal sewer service should not, however, be provided in rural or non-growth portions of Windham unless a unique environmental or other extraordinary public need exists.</p> <p>Policy Goals and Objectives: A-1, A-3 Implementation Responsibility: Town Council</p>	x		
<p>2. Establish a business recruitment strategy that includes criteria for the growth areas of Windham in order to target specific industrial (business) clusters that can provide the best fit for the community’s economic and employment needs, that maintains or improves environmental quality, and that are fiscally positive for the town. The criteria should also provide guidance for evaluating the benefits and costs associated with proposed business initiatives.</p> <p>Policy Goals and Objectives: A-2, A-3 Implementation Responsibility: Windham Economic Development Corporation (WEDC) & Economic Development Office</p>	x		

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Economic Development (continued)			
<p>3. Currently non-residential (business and industrial) land uses represent about 20 percent, in terms of value, of Windham’s property tax base. It is recommended that economic development initiatives focus on increasing this to 30 percent, by 2010, within designated growth areas.</p> <p>Policy Goals and Objectives: Goal A Implementation Responsibility: WEDC & Economic Development Office</p>			X
<p>4. Work with existing public utilities to improve the availability of electrical service, specifically three phase power, and high-speed Internet service, including fiber optics, especially in the designated growth areas.</p> <p>Policy Goals and Objectives: A-3 Implementation Responsibility: Town Council, WEDC & Economic Development Office</p>		X	
<p>5. Require that non-residential developments, particularly in the North Windham Growth Area and along the Route 302 corridor as currently being examined by the North Windham District Development Advisory Committee, include open space and landscaping requirements, design standards, and the potential for joint driveway access. Changes in parking requirements should also be considered. Possible changes could include provisions for overflow parking on alternative surfaces, such as grass pavers, in order to reduce the amount of impervious surface or a reduction in the number of parking spaces if coupled with a shared parking layout. This will likely require changes in the zoning ordinance and land use regulations, especially site plan review standards.</p> <p>Policy Goals and Objectives: A-4, F-2, H-2 Implementation Responsibility: Planning Board & Community Development Department</p>	X	X	X

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Economic Development (continued)			
<p>6. The State of Maine identifies certain communities in the state as regional service centers. These service centers are currently provided, on a competitive basis, financial support in dealing with growth and development issues. Since Windham is not presently classified as a service center under existing state regulations, town officials should work with state agencies and the legislature in changing the criteria used to designate service centers in Maine in order to include sub-regional centers, such as Windham, that are located in larger metropolitan areas.</p> <p>Policy Goals and Objectives: Goal A, I-2 Implementation Responsibility: Economic Development Office</p>	x		
<p>7. Alternative methods for increasing back lot development in growth areas, especially in the business and industrial portion of North Windham, should be evaluated and implemented if appropriate. This will likely require changes in existing zoning and land use regulations.</p> <p>Policy Goals and Objectives: A-3, H-2 Implementation Responsibility: Planning Board & Community Development Department</p>		x	
<p>8. Continue to work with neighboring communities on key regional economic development issues, such as the Enterprise Development Park proposal, in order to address shared development related problems and concerns.</p> <p>Policy Goals and Objectives: A-2, I-2 Implementation Responsibility: WEDC & Economic Development Office</p>	x	x	x

B. Infrastructure and Municipal Services

Issue B1 - As discussed in the Municipal Services and Infrastructure portion of this plan (Chapter 9) there is a growing need for a wide variety of improvements in the town’s municipal infrastructure. However, rather than recommend specific improvements it was felt that the most appropriate approach would be the establishment of a six year Capital Improvements Plan (CIP) that would be updated yearly. The CIP should be realistic and be funded yearly, as a component of the operating budget, in order to address, in a fiscally prudent manner the municipal service needs of residents and business owners. The CIP would entail both municipal and school facilities and involve an assessment of bonding and property tax impacts.

Issue B2 - All proposed infrastructure improvements in Windham should be evaluated in terms of possible impacts on future growth and development. To the maximum extent feasible, capital improvements should not be undertaken if it is determined that these improvements will foster excessive growth and development in portions of Windham identified as rural areas.

Recommended Actions	Time Period (years)		
	1-2	3-4	5-6
B. Infrastructure and Municipal Services			
<p>1. Prepare an annual Capital Improvements Plan (CIP) that addresses the financing and construction of public facilities in order to accommodate growth and development, as well as protect public health and safety. The CIP should include both municipal and school related capital projects and indicate potential impacts on local property taxes.</p> <p>Policy Goals and Objectives: A-3, B-1, B-2, B-3, G-1 Implementation Responsibility: Town Manager, Town Council & School Board</p>	x	Yearly	Yearly
<p>2. It is critical that infrastructure improvements, especially in the growth areas of Windham, be coordinated with future development activities. A variety of approaches should be undertaken to achieve this objective:</p> <ul style="list-style-type: none"> • Recognize that because it may require several years to bring municipal services, in terms of financing, in-line with existing needs, growth controls may be required for an interim period while new and upgraded municipal facilities are completed. • An impact fee system, in accordance with this comprehensive plan, should be initiated that includes fees for various municipal facilities such as roadways, water, wastewater disposal, emergency services, recreation and education. Impact fees should be assessed on all residential and non-residential development activities. • The primary location for most new capital investments such as water lines and municipal sewer service (if constructed) should be within designated growth areas. Development activities should also be directed to growth areas through changes in zoning and other land use regulations. <p>(Continued on next page)</p>	x	x x	

Recommended Actions	Time Period (years)		
	1-2	3-4	5-6
Infrastructure and Municipal Services (continued)			
<ul style="list-style-type: none"> Alternatives for financing municipal capital investment needs, such as tax increment financing, economic development districts and various other funding approaches that involve developer participation, should be explored to ensure that necessary infrastructure improvements are in place when a development activity is completed. <p>Policy Goals and Objectives: A-3, B-2, E-1 Implementation Responsibility: Town Council & Town Manager</p>	x	x	x
<p>3. Prepare an inventory of the condition of existing town maintained roads, including the width and length of each roadway. Results should be included in the town’s geographical information system (GIS) and made available to local residents over the town’s website. Priorities for roadway improvement should also be identified and included in this inventory.</p> <p>Policy Goals and Objectives: B-2 Implementation Responsibility: Department of Public Works</p>	x		

C. Roadways and Transportation

Issue C1 - As noted in Chapter 7 the most critical roadway problem in Windham is Route 302, an arterial, which has significant congestion and safety problems, especially in North Windham. Part of the congestion problem is due to the fact that the roadway serves not only the commercial district of Windham, but also operates as a regional transportation corridor. Improvements on this roadway will require state, regional and local cooperation, as well as improved management of land development patterns along the corridor.

Issue C2 - Conversion of seasonal housing, primarily along lakes, to year round dwellings has resulted in increased traffic on numerous private roads and roadways that are designated as public easements (see Chapter 7). Many of these roads are narrow and have a gravel surface. Maintaining these roads is generally the responsibility of homeowners and/or associations, although the town often provides winter maintenance on public easements. Travel on these roads, especially by emergency vehicles, can be difficult and has become more problematic as people seek building permits in order to construct new dwellings adjacent to these roadways. Long term improvements to private roadways will require cooperation between public and private entities.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Roadways and Transportation (continued)			
4. Establish an outreach effort that provides technical assistance and possible financial alternatives for private road associations relating to the improvement and maintenance of private roads. One financing approach could involve recently enacted legislation in Maine that authorizes the establishment of a Municipal Capital Improvement District. Policy Goals and Objectives: A-3, B-3, H-13 Implementation Responsibility: Department of Public Works & Community Development Department	x		

D. Sense of Community

Issue D1 - Between 1980 and 2000, according to the U.S. Census Bureau, approximately 1,600 dwelling units were added to the town’s housing supply. Although the majority of these units were single family homes, a significant percentage were condos, multi-family apartments and mobile homes. In fact, Windham has one of the highest percentages of multi-family housing of all non-urban municipalities in Cumberland County (see Chapter 4). Changes in Windham’s population, however, are following the national trend which involves the movement of a greater percentage of people into the older age brackets of 55 and older. This type of demographic change will likely require the construction of additional lower cost multi-family housing units for elderly residents of Windham.

Issue D2 - Windham has a long history of public involvement in municipal and community affairs. This type of volunteer effort is extremely important in maintaining the small town atmosphere so important to the residents of Windham. It is becoming more difficult, however, to attract volunteers to participate in municipal and civic endeavors (see Chapter 1). The community needs to make a renewed commitment to attracting and encouraging local residents to participate in local government decision making and volunteer for civic activities.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
D. Sense of Community			
<p>1. Alter, as required, existing land use regulations in order to encourage the construction of affordable housing in Windham, including the location of mobile homes and mobile home parks as required under state statutes (MRSA 30A-Section 4358). In addition, adjust existing building standards, primarily the size of permissible dwelling units, to permit the construction of smaller housing units and apartments for the elderly. Also retain existing site plan and subdivision standards for the protection of both archeological and historic resources.</p> <p>Policy Goals and Objectives: D-2, D-5, H-1, I-4 Implementation Responsibility: Community Development Department & Planning Board</p>	x		
<p>2. Establish a “customer friendly” model for public participation in Windham. This approach should focus on increased opportunities for public involvement and participation at Town Council and Planning Board meetings. Alternative techniques for making information available, like expanded use of the town web-site, should also be considered.</p> <p>Policy Goals and Objectives: D-1, D-6 Implementation Responsibility: Town Council</p>	x		
<p>3. Designate a town government agency that could coordinate the scheduling of town wide activities and celebrations organized by various social and volunteer organizations in Windham such as patriotic events (July 4, Memorial Day), and occasions of local importance or statewide significance. It is not intended that the town staff manage these events, but assistance be provided in terms of scheduling and the use of town facilities and property.</p> <p>Policy Goals and Objectives: D-1 Implementation Responsibility: Town Council</p>		x	
<p>4. Obtain state matching funds to establish gateways adjacent to major roadways in order to signify entrances to Windham.</p> <p>Policy Goals and Objectives: D-7, I-6 Implementation Responsibility: Department of Public Works</p>		x	

E. Recreation and Open Space

Issue E1 - There is a deep concern that future development in Windham could result in a decline in the amount of open space and undeveloped land in the community, as well as access to these resources (see Chapters 1 and 5). A decline in open space would most likely result in a decrease in existing outdoor recreation opportunities, eliminate wildlife habitat and damage the diversity of woodland and plant species within Windham. It is extremely important that the community take action to identify and preserve open space, especially in the designated rural areas of Windham.

Issue E2 - As a community, Windham has done an excellent job in providing recreation facilities and programs with limited resources (see Chapter 8). Working through schools and various volunteer groups, many of the existing recreational resources in the town have been created. Increasing demand for organized recreational activities is now beginning to stress the capabilities of existing facilities. The community needs to identify future needs for recreational facilities and possible options for financing these facilities and programs.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
E. Recreation and Open Space			
1. In order to protect open space for recreation, wildlife habitat and the preservation of plant species, including woodlands, the following actions should be taken: <ul style="list-style-type: none"> • Establish specific criteria and identify key open space, scenic vistas, river corridors and important farmland locations within Windham for protection. • Identify corridors for linking open space areas, especially within designated growth areas. • Identify various alternatives for property and easement acquisition. • Establish a transfer of development rights (TDR) program that permits the owners of property in rural areas to sell (transfer) development potential to property owners in designated growth areas. 	x		
(Continued on next page)			

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Recreation and Open Space (continued)			
<ul style="list-style-type: none"> Work with large landowners in identifying different approaches for minimizing potential future development. Recognize that this approach may require a combination of financial incentives, tax reduction and limiting development potential. It also must be understood that this type of approach may require changes in existing state laws, local ordinances and the Town’s Charter. <p>Policy Goals and Objectives: D-4, E-3, F-1, F-2, H-1, H-11, H-12 Implementation Responsibility: Community Development Department, Parks and Recreation Department, Planning Board & Town Council</p>	x	x	x
<p>2. Establish a volunteer committee to examine parks, recreation and open space needs within Windham. The committee should create an action plan that identifies open space areas appropriate for preservation and possible linkages of these areas. The committee should also identify additional locations for public access to rivers and lakes for Windham residents. Finally the committee, in cooperation with the Windham Recreation Department, should examine alternative approaches for financing recreation opportunities, possibly through state and/or federal grant programs.</p> <p>Policy Goals and Objectives: D-4, E-3, F-1, F-3 Implementation Responsibility: Town Council & Parks and Recreation Department</p>	x		
<p>3. During the process of examining alternative approaches for financing recreation opportunities, the volunteer committee should also create an action plan that identifies priorities for replacing and improving recreation facilities in Windham. Suggestions for improvements should be based on existing community needs and statewide recreation standards (see Chapter 8).</p> <p>Policy Goals and Objectives: D-4, E-1 Implementation Responsibility: Town Council & Parks and Recreation Department</p>	x		

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Recreation and Open Space (continued)			
<p>4. Establish a green belt along the length of Black Brook and linkage, possibly along existing power line corridors, to an existing snowmobile trail that provides access to New Hampshire.</p> <p>Policy Goals and Objectives: D-4, E-3, F-1, F-2, F-5 Implementation Responsibility: Community Development Department, Parks and Recreation Department & Planning Board</p>		X	
<p>5. Recommend methods to maintain and protect sufficient land to preserve wildlife and hunting in Windham.</p> <p>Policy Goals and Objectives: E-3, F-1 Implementation Responsibility: Community Development Department & Parks and Recreation Department</p>		X	
<p>6. Create a volunteer or part-time position in town government to work with large land owners in protecting open space and land available for outdoor types of activities. This person could also work with organizations interested in protecting open space such as the Windham Land Trust, snowmobile clubs, trail groups and the Windham/Gorham Rod and Gun Club.</p> <p>Policy Goals and Objectives: E-3, F-1, F-5 Implementation Responsibility: Community Development Department & Parks and Recreation Department</p>	X		
<p>7. Create an open space protection fund, as part of the Capital Investment Plan, for the acquisition of key land parcels and recreation sites. Also attempt to leverage additional funds by working with local organizations such as the Windham Land Trust, Friends of the Presumpscot River, and state funding sources such as the Land for Maine’s Future.</p> <p>Policy Goals and Objectives: B-1, B-2, D-4, E-3 Implementation Responsibility: Town Council & Parks and Recreation Department</p>		X	

F. Environmental

Issue F1 - The increasing amount of land development in Windham has raised a number of concerns

about impacts on the town's environment and natural resources (see Chapters 3 and 5). There is also concern that the town does not presently have the information and data required to evaluate the various environmental impacts associated with development proposals. Although the town currently has a Natural Resources Committee, there is a need for expanded actions in monitoring, evaluating and recommending actions to the residents of the town about the condition of natural resources within Windham. Recommended changes in existing local ordinances, however, should be commensurate with potential environmental risks and seek to balance environmental protection needs with suggested development alternatives. Accomplishing this task will likely require changes in the responsibilities of the existing Natural Resources Committee or the creation of a new organization with increased responsibilities.

Issue F2 - A vital element in protecting and maintaining natural resources and protecting environmental quality is accurate data and information about key environmental characteristics (see Chapter 5). Windham needs to begin a process of assembling existing environmental information and then using that information in evaluating development initiatives. Of equal importance is the quality of key environmental features (such as lakes, rivers, ponds and groundwater) in the community. These key environmental features should be monitored in order to track cumulative changes in these natural resources over time. This data also needs to be made available in a format that can easily be accessed by town residents.

Issue F3 – In 1995, the wells serving many of Windham's residents with drinking water were in danger of contaminated by the gasoline additive MTBE. The problem was resolved when the Portland Water District connected the Windham distribution system to the existing supply from Sebago Lake. Sebago Lake has the capacity to provide an adequate quantity of water to Windham for the foreseeable future. However, even short of a catastrophic contamination of the supply, any degradation of water quality will impact the District's treatment costs and therefore Windham ratepayers.

A small portion of the Sebago Lake watershed is in the town of Windham. Development in this area should be planned and implemented to avoid adversely impacting lake water quality. In addition, six other towns border Sebago Lake (Raymond, Standish, Frye Island, Casco, Naples, and Sebago). Windham should seek to partner with these towns to ensure that all are working in concert to protect the resource they share.

Issue F4 – In the past three years the State of Maine has identified invasive aquatic species as a significant threat to Maine lakes. Both Sebago Lake and Little Sebago Lake have significant colonies of variable leaf watermilfoil along their shorelines. Other Windham lakes may also be infested; if not, the presence of the plant in Sebago and Little Sebago puts all lakes in Windham at risk. The town should seek to complement the state effort by providing educational materials to lakefront property owners, lake associations, and boaters.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
F. Environmental			
1. Establish a Natural Resources Commission in Windham, composed of town residents, to protect the town’s environmental and natural resources by focusing on and overseeing the following activities:	x		
<ul style="list-style-type: none"> • Collect environmental data and information relating to the Town of Windham. Initially the data should be acquired from other regional, state and federal agencies, as well as private organizations. 	x		
<ul style="list-style-type: none"> • Acquire previously completed environmental and natural resource studies relating to Windham, evaluate the data collected, and identify the types of additional information required. 		x	
<ul style="list-style-type: none"> • Establish procedures for storing and making collected environmental data, including GIS generated maps, available to the general public. 	x		
<ul style="list-style-type: none"> • At the request of the Planning Board, the code enforcement officer or other town organizations, provide assistance in reviewing possible environmental and natural resource impacts associated with development proposals. 	x		
<ul style="list-style-type: none"> • Provide assistance to local, regional, state and federal agencies in the evaluation of development proposals that might impact the Town of Windham. 		x	x
<ul style="list-style-type: none"> • Provide education and outreach assistance to Windham residents and organizations, such as road and lake associations, about environmental issues and concerns in the town. Also, attend and encourage town staff to participate in professional training activities relating to environmental issues. 		x	
<ul style="list-style-type: none"> • Establish procedures and techniques for monitoring the quality of key environmental resources in Windham, including lakes, ponds, rivers and groundwater. Initial efforts should focus on the use of town residents as volunteers in coordination with existing state and regional programs. 		x	x
(Continued on next page)			

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Environmental (continued)			
<ul style="list-style-type: none"> • Work with other communities in identifying regional environmental issues and possible solutions. • Consider the need for full or part-time professional staff to assist the Natural Resources Commission in carrying out the activities outlined above. <p>Policy Goals and Objectives: E-3, F-1, F-2, F-4, F-5, F-6, I-3 Implementation Responsibility: Town Council, Community Development Department & Natural Resources Commission</p>	x		
<p>2. The Town of Windham should identify, based on updated state information, the location of groundwater supplies in Windham. Also, to the extent information is available, determine both the quality and quantity of existing groundwater supplies in the town, and the connection of these groundwater supplies to sources in adjacent communities. Based on this information the following actions should be undertaken:</p> <ul style="list-style-type: none"> • Prepare changes in the zoning ordinance and land use regulations to minimize discharge on land areas that act as a recharge source for the groundwater supply. This may require some type of overlay zone. • Develop a database and approach for monitoring the quality of existing groundwater supplies and for evaluating the cumulative impacts of water withdrawal on existing groundwater resources within Windham. This type of effort may require an increase in the number of groundwater monitoring wells in the town’s high yield aquifer. • Include in revised land use regulations a requirement for a technical assessment of any development proposal that would require a significant use of existing groundwater supplies. • Develop standards that may result in a development moratorium if, based on groundwater quantity data, the supply of groundwater for existing users could be negatively impacted by future development activities. <p>(Continued on next page)</p>	x		
	x		
		x	
	x		
	x		

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Environmental (continued)			
<ul style="list-style-type: none"> Provide educational information and advice to local residents about how to protect and maintain the quality of existing groundwater in Windham. Consider requiring information about the adequacy of water availability before a building permit is issued. <p>Policy Goals and Objectives: E-3, F-1, F-2, F-3, F-4, F-5, H-1, H-13, I-3 Implementation Responsibility: Community Development Department, Natural Resources Commission & Planning Board</p>	x	x	
<p>3. Recognizing that even though the State of Maine has established standards for lakes and ponds, the Town of Windham should establish management goals for large water bodies in the town. These management goals should focus on, at a minimum, shoreline character, wildlife impact, intensity of surface water use, protection of resources of state significance and type of public access appropriate for the intensity of use.</p> <p>Policy Goals and Objectives: F-1, F-2, F-4, H-1, H-11, H-12 Implementation Responsibility: Community Development Department & Natural Resources Commission</p>	x		
<p>4. Work with the State of Maine in the preparation of maps of streams in Windham not currently on the United States Geological Survey (USGS) 7.5-minute maps and establish development setbacks for these streams.</p> <p>Policy Goals and Objectives: F-4, I-3 Implementation Responsibility: Community Development Department</p>		x	
<p>5. Enact a Phosphorous Control Ordinance relating to streams, ponds and lakes in Windham.</p> <p>Policy Goals and Objectives: F-2, H-11, H-12 Implementation Responsibility: Community Development Department, Planning Board & Town Council</p>		x	

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Environmental (Continued)			
<p>6. Make changes in the existing land use ordinance and regulations in order to protect wetlands and streams from cumulative negative impacts. These changes should include consideration of the following approaches:</p> <ul style="list-style-type: none"> • Manage storm water runoff by minimizing possible disturbance to land areas at the site. • Preserve vegetated buffers • Minimize the creation of new impervious surface areas <p>Policy Goals and Objectives: F-2, H-11, H-12 Implementation Responsibility: Community Development Department, Planning Board & Town Council</p>	x		
<p>7. Participate in a “Sebago Lake Protection Council” made up of key municipal officials in Raymond, Standish, Frye Island, Casco, Naples, and Sebago. This “Council” should evaluate opportunities for joint cooperation in protecting water quality.</p> <p>Policy Goals and Objectives: F-1, F-2, F-4, F-5, H-1, H-2, H-11, I-3 Implementation Responsibility: Town Council, Community Development Department, Natural Resources Commission & Planning Board</p>		x	
<p>8. Work with Little Sebago Lake Association and Maine DEP to develop materials to raise awareness about the existence and potential for spread of invasive plants in Windham. Also, create a “response toolkit” comprised of materials (signage, markers, implementation manuals) to be used in the event of an infestation. Make the kit available for use in any Windham lake.</p> <p>Policy Goals and Objectives: E-3, F-1, F-4, F-5, I-3 Implementation Responsibility: Natural Resources Commission</p>		x	

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Environmental (Continued)			
<p>9. Watershed planning should be initiated in Windham. This could result in an overlay zoning ordinance for protecting environmentally sensitive parcels of land in growth areas. One technique that should be explored is linking watershed protection with the “Smart Growth” initiatives currently being promoted by the Maine State Planning Office.</p> <p>Policy Goals and Objectives: F-2, F-4, H-1, H-10, H-11, H-12, H-13 Implementation Responsibility: Community Development Department, Planning Board & Town Council</p>		x	
<p>10. Require that development proposals consider watershed impacts, especially nitrogen loading, in preparing subdivision and site plan review proposals.</p> <p>Policy Goals and Objectives: F-2, F-4, F-5, H-1, H-11, H-12, H-13 Implementation Responsibility: Planning Board</p>		x	
<p>11. Establish development standards relating to existing slopes.</p> <p>Policy Goals and Objectives: F-2, H-11, H-12, H-13 Implementation Responsibility: Planning Board</p>	x		

G. Education

Issue G1 - The Windham School Board is responsible for overseeing the operation of schools in the community. The actions of the School Board and Department, however, impact the community in a variety of ways other than just education. Consequently, it is important, as noted in Chapter 1, that opportunities for cooperation between the School Board and other town departments and organizations be identified in order to better serve all of Windham’s residents.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
G. Education			
<p>1. Encourage the formation of a group of volunteers to work with the School Board and Department in identifying alternatives for maximizing the use of school facilities and grounds during nights, weekends and the summer months.</p> <p>Policy Goals and Objectives: D-4, G-2, G-3 Implementation Responsibility: School Board & Parks and Recreation Department</p>	x		
<p>2. After renovations to the High School building, improved auditorium space will be available at the facility. Similar to the recommendations above, alternatives for maximizing the use of the facility should be identified with the cooperation of school officials. Recognize that this may require some type of fee to cover additional maintenance and insurance costs.</p> <p>Policy Goals and Objectives: D-4, E-2, G-2, G-3 Implementation Responsibility: School Board & Parks and Recreation Department</p>		x	
<p>3. Establish and maintain a communication link between the School Department and the business community in an effort to ensure that educational programs relate to society's expectations for high school graduation.</p> <p>Policy Goals and Objectives: G-3, G-4 Implementation Responsibility: School Board & WEDC</p>	x		

H. Land Use

Issue H1 - In order to accomplish the policies suggested in this comprehensive plan, including the designation of land areas as growth and rural areas, the zoning ordinance and other land use regulations in Windham will have to be changed (see Chapter 1). In addition other approaches, such as open space acquisitions by private and nonprofit organizations, will also be required in order to achieve the land use objectives outlined in this plan.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
H. Land Use			
<p>1. The existing zoning ordinance, as well as other land use regulations in Windham, should be revised in order to accomplish the various goals and policies outlined in Chapter 1 of the comprehensive plan. This will not be an easy or simple task and it is recommended that a Technical Land Use Regulations Committee, in cooperation with the Planning Board, be established by the Town Council to undertake these changes. The revised ordinance and regulations should include, if possible, the following concepts:</p> <ul style="list-style-type: none"> • Revise zoning district boundaries, and update current zoning regulations as appropriate to support the goals and objectives outlined in Chapter 1 of this comprehensive plan. • Use the concept of overlay zoning for the creation of village districts in designated growth areas. • Offer incentives, such as density bonuses, for the clustering of housing in village growth areas and transitional areas. • Require that open space be designated in subdivisions located in rural areas of Windham. In addition, promote the clustering of housing in rural areas in order to maximize contiguous open space for wildlife and recreational uses. This approach in rural areas, however, should not involve any type of increase in net density. • Evaluate the need for creating a temporary limit on residential building permits and subdivisions during the preparation of a revised zoning ordinance. • Establish performance and design standards, under the revised zoning ordinance and site plan review regulations, in order to evaluate commercial and industrial development proposals. Specific attention should focus on requirements for signage, parking lot layout and landscaping. The design standards should include illustrations in order to better communicate practical design alternatives. 	<p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p>		
(Continued on next page)			

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
<p>Land Use (continued)</p> <ul style="list-style-type: none"> • Create alternative development and improvement standards for different portions of the town. For example, the design and width of streets in rural and village areas should be different than the requirements for designated growth areas. • Authorize the creation of industrial and business parks within the North Windham Growth Area in order to avoid narrow strips of commercial development adjacent to roadways. This approach should also encourage connections between adjacent parking lots and the construction of interior private roadways to connect commercial lots. <p>Policy Goals and Objectives: A-2, A-4, C-2, F-2, F-6, H-1 to H-13 Implementation Responsibility: Technical Land Use Regulations Committee, Planning Board, Community Development Department & Town Council</p>	x		
<p>2. Fund and maintain a town-wide geographical information system (GIS) for Windham. This recommendation, which is currently being initiated, should include data and information relating to such factors as property characteristics, roadways, environmental features and other types of municipal infrastructure. The information should also be used to monitor and evaluate development patterns in Windham and be made available, through the town’s website, to residents of the community.</p> <p>Policy Goals and Objectives: F-3, F-4, F-5, H-1, H-14 Implementation Responsibility: Community Development Department & Economic Development Office</p>		x	
<p>3. Enact overlay and/or floating zones to protect important environmental resources such as the Presumpscot and Pleasant River Corridor Protection Areas. Coordinate this zoning effort with work of the Friends of the Presumpscot River and similar types of organizations.</p> <p>Policy Goals and Objectives: F-2, H-1, H-2, H-9, H-10, H-11 Implementation Responsibility: Planning Board & Community Development Department</p>	x		

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Land Use (Continued)			
<p>4. Establish a mechanism for creating parks and open space in areas designated as growth areas. One financing alternative could involve the use of impact fees.</p> <p>Policy Goals and Objectives: B-1, B-2, D-4, E-1, E-3, H-4, H-9 Implementation Responsibility: Community Development Department</p>			x
<p>5. Establish standards that can be used to determine the viability of new dwelling units permitted on private roads. Standards would be based on public health and safety issues such as access for police, fire, rescue and snow plowing, if appropriate.</p> <p>Policy Goals and Objectives: C-2, H-13 Implementation Responsibility: Planning Board & Community Development Department</p>	x		
<p>6. Create specific standards for improvements of private roads. The standards should be flexible and permit consideration of existing conditions and potential build-out on land adjacent to the roadway. Technical assistance and the identification of possible financial alternatives for property owners in improving and maintaining private roads should also be provided. One financing approach could involve, as noted earlier, recently enacted legislation in Maine that authorize the establishment of a Municipal Capital Improvement District.</p> <p>Policy Goals and Objectives: C-2, H-13 Implementation Responsibility: Department of Public Works & Community Development Department</p>	x		
<p>7. Establish a transfer of developments rights program that links property in rural and designated growth areas.</p> <p>Policy Goals and Objectives: F-1, H-1, H-9, H-10, H-12 Implementation Responsibility: Planning Board, Community Development Department & Town Council</p>		x	

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Land Use (continued)			
8. Establish procedures to work with the Windham Land Trust, and similar organizations, such as the Friends of the Presumpscot River, snowmobile clubs, trails groups, and the Windham/Gorham Rod and Gun Club, in the acquisition of conservation land and open space areas. Policy Goals and Objectives E-1, E-3, F-1, F-2, H-4, H-9 Implementation Responsibility: Department of Parks and Recreation		x	
9. Establish criteria for implementing a Rate of Growth Ordinance (temporary or ongoing), in accordance with 30A MRSA Section 4360, that would provide for the safety and welfare of the people of Windham by ensuring that the capacity of municipal facilities and services is not exceeded by the rate of growth. Policy Goals and Objectives B-1, B-2, B-3, C-1, C-2, H-11 Implementation Responsibility: Technical Land Use Regulations Committee, Planning Board and Community Development Department		x	

I. Administration

Issue II - All too often planning documents, such as municipal comprehensive plans, are greeted with a great deal of fanfare and then collect dust on a variety of different office shelves. This usually happens for a number of different reasons such as a lack of interest and the pressure of solving more immediate problems. The result is that change, especially at the local level of government, is often difficult to achieve. If this comprehensive plan is important enough to prepare, it should also be important enough to assign responsibility for managing the implementation of the plan. Therefore, a key recommendation of this comprehensive plan involves a process for monitoring progress in implementing the various actions recommended in the plan.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
I. Administration			
1. The Town Council should create a Comprehensive Master Plan Implementation Committee to monitor progress in making the changes recommended in the comprehensive plan as well as prepare progress reports for the Town Council and the residents of Windham. In undertaking this task the Implementation Committee should: (Continued on next page)	x	x	

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
Administration (continued)			
<ul style="list-style-type: none"> Meet periodically with the Town Council, possibly quarterly, to discuss progress, problems and possible mid-course changes in the plan. 	X	X	
<ul style="list-style-type: none"> Advise and assist the Technical Land Use Regulations Committee, the group assigned responsibility for revising the zoning ordinance and other land use regulations, concerning land use recommendations contained in the comprehensive plan. The Comprehensive Plan Committee should also review draft changes prepared by the Technical Land Use Committee before submittal to the Planning Board. 	X		
<ul style="list-style-type: none"> Hold public meetings to solicit comments about planning and development activities in Windham, especially in relationship to the comprehensive plan. 	X	X	
<ul style="list-style-type: none"> Evaluate the effectiveness of changes accomplished under recommendations contained in the comprehensive plan. 	X	X	
<ul style="list-style-type: none"> Prepare a short report about implementation efforts for inclusion in the annual Town Report. 	X	X	
<ul style="list-style-type: none"> Monitor how changes in Maine statutes and regulations could impact planning and development in Windham. 	X	X	
Policy Goals and Objectives: D-1, D-6, H-1, H-13 Implementation Responsibility: Town Council, Comprehensive Master Plan Implementation Committee & Community Development Department			

J. Regional Cooperation

Issue J1 - An increasing number of problems confronting Windham involve issues, such as roadway improvements and protecting environmental quality, that will require cooperation with neighboring communities in order to identify practical solutions. Although Windham has been actively involved in several regional planning initiatives, this type of effort will have to be expanded in the future.

Recommended Actions	Time Period (years)		
	1-2	3-5	6-10
J. Regional Cooperation			
<p>1. Establish working relationships with neighborhood communities, possibly through the Greater Portland Council of Governments, in working on issues of shared concerns such as transportation, economic development, housing and environmental protection of rivers, lakes and aquifers. The work undertaken through the existing Lake Region Development Council involving improvements to Route 302 and the creation of the regional Enterprise Development Park are good examples of benefits associated with this type of regional cooperation.</p> <p>Policy Goals and Objectives: C-4, C-6, D-3, I-1, I-3, I-4 Implementation Responsibility: Economic Development Office & Community Development Department</p>	x	x	x
<p>2. Partner with Non-Governmental Organizations (NGOs) such as the Mountain Division Alliance, Windham Land Trust, Sebago/Gorham Regional Land Trust, Gorham Trails Highland Lake Association, Little Sebago Lake Association to present educational and recreational opportunities for Windham residents. This approach will also require cooperative efforts to ensure that land use regulations and zoning ordinances around shared water bodies and along municipal borders are consistent or complementary among the various communities. This regional approach also offers opportunities to prepare joint funding proposals for state and federal agencies.</p> <p>Policy Goals and Objectives: I-3 Implementation Responsibility: Town Council & Natural Resources Commission</p>		x	
<p>3. Implement the South Windham/Little Falls Village Improvements Plan in cooperation with Gorham.</p> <p><u>Policy Goals and Objectives: I-5</u> Implementation Responsibility: Community Development Department, Economic Development Office and Town Council</p>		x	

3. Concluding Comments

An examination of recommendations outlined in the 1993 Comprehensive Plan indicated that the plan contained approximately 120 recommendations.¹ An evaluation of the various recommendations determined that about 31 recommendations were successfully implemented, seven (7) were partially implemented, and 40 recommendations were judged to be “ongoing.” An additional 42 recommendations had no action taken or the results of the recommendation were classified as unknown.

What this evaluation indicates is somewhat unclear. On one-hand only 32 percent of the recommendations were fully or partially completed during an eight year period (1993 to 2001). Conversely, about 35 percent of the recommendations were never implemented. However, actions are still ongoing in an effort to implement 33 percent of the recommendations made in 1993. Part of the problem in completing specific implementation actions may be due to unspecified objectives identified in some of the recommendations or the lack of identifying one organization responsible for overall implementation management².

The 2002 Windham Comprehensive Plan contains approximately 95 recommendations. To the extent possible, the vast majority of the recommendations address specific objectives to be achieved. Organizations responsible for implementation are also identified, as well as tentative time periods for achieving these objectives. Finally one organization, involving the establishment of a Comprehensive Master Plan Implementation Committee, is recommended to monitor and provide advice about the implementation of the plan.

Implementation of this Comprehensive Plan will not be a simple undertaking. In several instances the plan contains recommendations for the creation of new volunteer committees composed of town residents, in order to identify specific agendas in such areas as recreation and open space, environmental management, public use of school facilities, and the preparation of new land use regulations. In a few instances recommendations are made concerning the need for additional town staff, especially in areas relating to the collection and analysis of a wide variety of the data and information dealing with the impacts associated with future growth and development.

Windham has changed significantly during the past several decades. It will most likely continue to change in the future. The Windham Comprehensive Master Plan Steering Committee believes that these recommendations will improve the town’s ability to manage and direct these changes.

¹The Implementation Strategy listed 87 specific recommendations. However, since some recommendations contained multiple tasks it was estimated that the 1993 Comprehensive Plan contained approximately 120 specific recommendations. A copy of this evaluation is located in Appendix B.

² For example the phrase “work with” is often used, but the recommendation may not identify what should be specifically accomplished.

Chapter 3 Existing Land Use

1. Introduction

This chapter presents an overview of land uses within the Town of Windham. The first section of the chapter provides an assessment of existing land use trends from the perspective of major land use types, such as residential, commercial, public, agriculture, and undeveloped, that currently exist within the community. Also examined is the amount of growth over the past decade that has occurred within the designated growth areas identified in the previous comprehensive plan. The second part of the chapter presents an analysis of the town's current zoning regulations and the build-out potential for future development based on those regulations.

The data used to conduct this land use analysis was derived primarily from information in the town's computerized property assessment database, combined with input from local planning officials, a review of aerial photographs, and a visual reconnaissance of the community. The assessment database contains characteristics related to the use and value of each land parcel and building within the town including a detailed set of land use codes that divides property use into over ninety different categories. By combining the town's assessment data with the geographic information system (GIS) parcel base map prepared for this update of the comprehensive plan, an Existing Land Use Map has been created that provides a snapshot of existing land utilization within Windham. The data obtained from the assessment records, as well as the GIS base map, were updated through December 2000.

2. Major Findings and Conclusions

- Approximately 40% of the town's land area (over 11,500 acres) is categorized as parcels used for residential purposes. However, many of these properties represent single residences on large lots and therefore include a large amount of undeveloped land that may have future development potential.
- It is estimated that over 9,700 acres of the town (approximately 34%) is still undeveloped.

About 16% of that total is included in the Tree Growth management and tax reduction program.

- An additional 4,500 acres is currently classified as some type of agriculturally oriented use. This represents approximately 16% of the town's land area which remains largely undeveloped in terms of structures.
- A relatively small amount of the town's land area is currently developed for commercial and industrial uses. Approximately 900 acres, or just over 3%, is classified as this type of use.
- The build-out analysis completed for this plan suggests that between 3,000 and 4,000 single family dwellings could potentially be constructed on the town's remaining undeveloped land.
- For non-residential development, the build-out analysis estimates that an additional 2.7 million square feet of commercial and industrial building space could be constructed on undeveloped land zoned for those types of uses.
- A relatively small percentage (21%) of total growth between 1993 and 2000 occurred in the growth areas that were designated in Windham's previous comprehensive plan (1993).

3. Existing Land Use

Land use patterns in Windham are illustrated on Map 3-1, Existing Land Use. The map divides land use activities into six major categories which include residential, commercial and industrial, public and semi-public, agriculture, tree growth, and undeveloped (Also see Table 3-1).

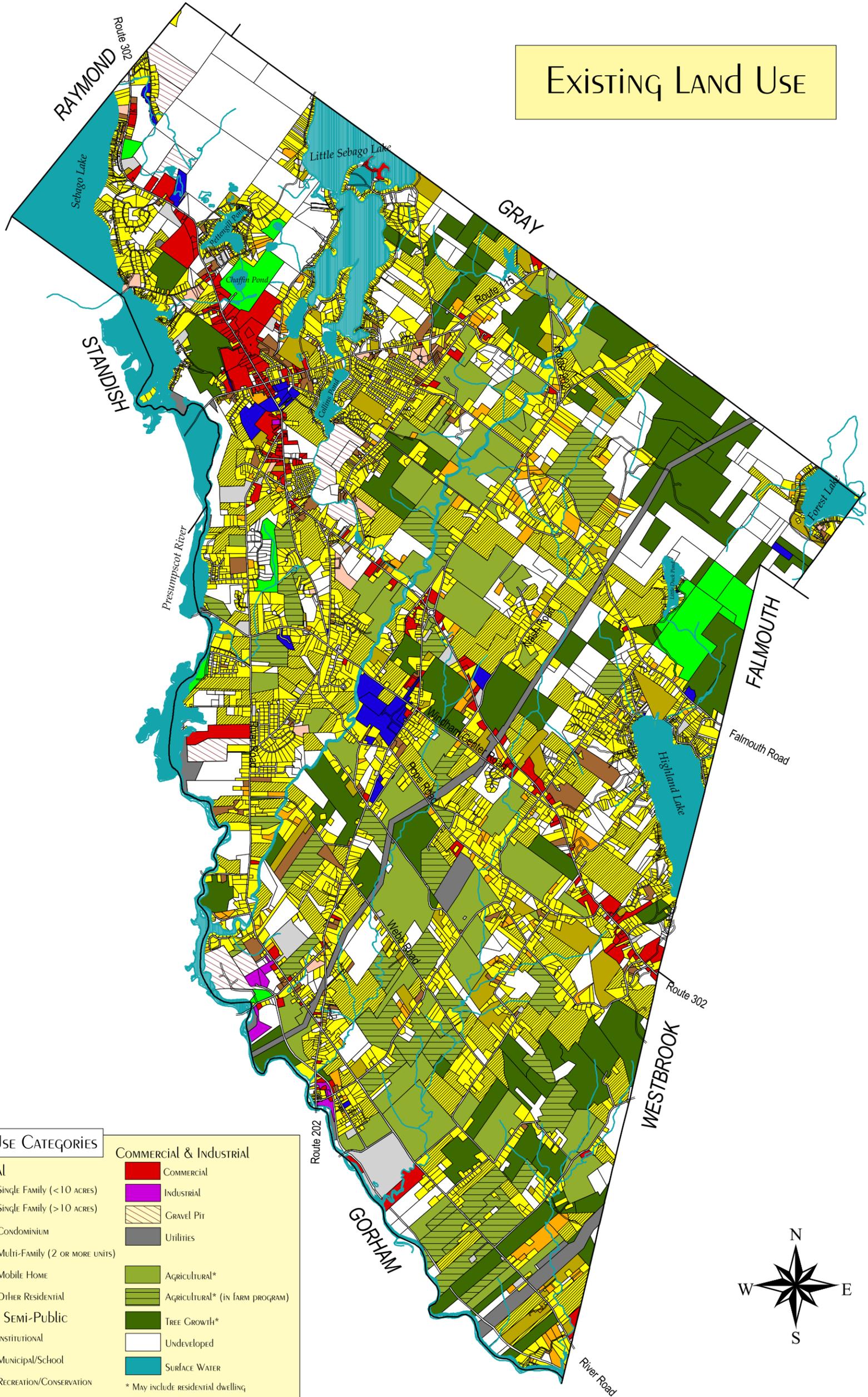
The residential category is further subdivided based on the type and number of dwelling units located on an individual parcel. The residential subcategories include single family, condominiums (also referred to as single family attached), multi-family (which are structures containing two or more units), mobile homes (on individual lots or in parks) and other residential (which includes multiple buildings on a lot, multiple uses on a lot, or outbuildings). Single family homes have been divided into two categories on the map; those that are on parcels of less than 10 acres and those on parcels greater than 10 acres. The purpose of this is to illustrate those properties that have an existing house but still have a reasonable potential to be further subdivided in the future. This issue is discussed in more detail under the build-out analysis in this chapter.

The commercial and industrial categories include all businesses that are non-agricultural in nature. This would include such uses as banks, offices, gas stations, restaurants and retail stores, manufacturing, and warehouse operations. The utilities category includes powerlines and pipelines, hydro-electric facilities, and other associated uses. It should be noted that only utilities that have dedicated parcels are shown on the land use map. There are other rights-of-ways, such as those for major overhead electric lines, that are not depicted on this map. The location of those facilities are

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

EXISTING LAND USE



LAND USE CATEGORIES

RESIDENTIAL

- Single Family (< 10 ACRES)
- Single Family (> 10 ACRES)
- Condominium
- Multi-Family (2 OR MORE UNITS)
- Mobile HOME
- OTHER RESIDENTIAL

Public & Semi-Public

- INSTITUTIONAL
- Municipal/School
- RECREATION/CONSERVATION

COMMERCIAL & INDUSTRIAL

- COMMERCIAL
- INDUSTRIAL
- GRAVEL PIT
- UTILITIES
- AGRICULTURAL*
- AGRICULTURAL* (IN FARM PROGRAM)
- TREE GROWTH*
- UNDEVELOPED
- SURFACE WATER

* May include residential dwelling



Prepared by RKG Associates, Inc. - September 2001
 Data Sources: Land use data compiled by RKG Associates, Inc. based on Windham Municipal Assessment Records - December 2000
 Map Sources: Base map from Casco Bay Estuary Study ca. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall tax map - April 2000

discussed in the Municipal Services and Infrastructure chapter of this plan (Chapter 9).

The public and semi-public category of land uses are associated with government and institutional functions. These include such uses as municipal buildings, police and fire stations, schools, churches, and cemeteries. It also includes the State-owned correctional facility located on River Road. Also contained in this grouping is the use category entitled recreation/conservation. These parcels represent those properties that are municipally owned, leased, or otherwise controlled, that are primarily dedicated to passive and active conservation and recreation uses. This subcategory does not include all active recreation facilities in the community. That information can be found in Chapter 8 (Recreation and Open Space) of this plan.

The final land use categories are associated with resource based activities and comprise the majority of the town’s remaining undeveloped land area. The agriculture category includes all parcels that are known to be actively used for crops, hay, livestock, or similar uses. This category also includes a few building sites, such as veterinary clinics or farm buildings, which while agriculturally oriented also have associated structures. Based on assessment records, 42 of the agriculture parcels depicted on Map 3-1 are participating in the farm and open space tax program that, under State law, allows for a reduced tax levy for actively used agricultural operations. These parcels are identified on the map as being in the “farm program”. The second resource category, tree growth, represents those properties that are enrolled in the tax program that encourages the conservation and management of forest resources by allowing for a reduced level of property tax levy. This category does not represent all of the forested land in Windham, only those properties that are enrolled in the tax program. Some of the parcels categorized as either agriculture or tree growth may also include a residence but are, for the most part, dedicated to the management of these resources.

Table 3-1 Total Acres by Land Use Type - 2000 Town of Windham		
Land Use	Total Acres	% Total Acres
Residential	11,572	40.2
Commercial	849	2.9
Industrial	59	0.2
Utilities	457	1.6
Gravel Pits	455	1.6
Municipal/School	287	1.0
Institutional	310	1.1
Recreation/Conservation	538	1.9
Agriculture	4,506	15.6
Undeveloped (Total)	9,779	33.9
Tree Growth	3,899	13.5
Other	5,880	20.4
Total	28,812*	100.0
* This figure does not represent the total acreage of the town since it does not include roadways and water bodies. Windham’s 1993 Comprehensive Plan reported the total town acreage as 35,200. Source: Windham’s Assessment Records, December 2000, and RKG Associates, Inc.		

The final map category, undeveloped, includes all of the remaining parcels in town that are not identified within the municipal

assessment database as having an existing structure. Based on a review of aerial photographs it can be generally stated that while a good portion of these parcels are forested, this category also includes fields, wetlands, and other forms of non-developed land cover.

The acreage within all of the land use categories described above is summarized in Table 3-1. This information is based on the parcel size recorded in the town’s assessment records. As noted in the table’s footnote, the total acreage of 28,812 does not represent the total area within the town’s municipal boundary since it does not include water bodies or roadways. The total area of the town, reported in the 1993 Windham Comprehensive Plan, was estimated at approximately 35,000 acres, or 55 square miles.

As illustrated in the table, the largest amount of the town’s land area is dedicated to residential uses which account for over 11,500 acres, or approximately 40% of the total. However, it is important to note that many of these parcels are large properties with a single house on them. These parcels therefore, contain a significant land base for the town that has potential for further subdivision and development in the future. An examination (See Table 3-2) of large land parcels (greater than 10 acres) with a single structure indicates that most of these types of land uses are located in portions of Windham designated as Rural Areas on the Future Land Use Map (Chapter 1; Map 1-1).

Future Land Use Areas*	Land Parcels	Acres
North Windham	3	99
South Windham	4	143
Windham Center	20	347
Residential Growth	0	0
Residential Transitional	9	202
Commercial Transitional	0	0
Rural	114	2,665
Total	150	3,456
<small>*These categories represent land use areas identified on the Future Land Use Map located in Chapter 1 (Map 1-1). This data only includes land parcels greater than 10 acres. Source: RKG Associates, Inc.</small>		

Commercial and industrial properties are shown to be relatively minor uses within the town’s land development mosaic, accounting for a little over 900 acres, or approximately 3% of the total acreage. The majority of these properties are located along Route 302 with the largest concentration centered in the North Windham area.

Aside from residential land uses, the remaining land use categories, illustrated in Table 3-1, that contain the most significant amount of acreage are agriculture, tree growth, and undeveloped. Combined, these three categories represent approximately 14,000 acres, which is roughly half of the total acreage recorded in the town’s assessment records.

It should be emphasized that the total acreage reported for agriculture is somewhat inflated since the entire parcel may not be devoted to agricultural uses. This is primarily due to the limitations of the

method used to map land use by means of a parcel base map. However, this approach still provides a good representation of the town's overall land use pattern. A review of aerial photography for Windham (flown in 1995) indicates that the remaining land use on the majority of these agriculture parcels is predominantly undeveloped and wooded.

When the town's previous comprehensive plan was completed in 1993 it recommended, as part of the implementation strategy, that certain portions of the community be designated as *growth areas*. These growth areas were considered to be more appropriate, in comparison to other portions of the community, for receiving a greater percentage of future growth. The previous comprehensive plan contained the following statement.

The Planning Board will continue to recognize commercial, industrial, business park and medium-residential zones as growth areas while ensuring appropriate development through its land use regulations.

The zoning districts identified above are illustrated on Map 3-2. However, the business park zone was eliminated subsequent to adoption of the 1993 comprehensive plan, and therefore is not shown on Map 3-2, which reflects the town's current zoning districts.

By using the town's assessment database, in conjunction with the GIS, an estimation was made regarding how much of the growth in Windham since 1993 actually occurred within the designated growth areas. Table 3-3 presents a summary of this analysis. The assessment database contains information that denotes the year the primary structure was built (referred to as *year built*), on a parcel, which was used to estimate where growth occurred over the past decade. As shown in the table, almost 860 properties were identified in the assessment database as having a structure that was built between 1993 and 2000. This includes 845 residential properties and 14 non-residential properties.

Table 3-3 provides a more detailed breakdown of the types of properties and whether or not they were located in a growth area. Approximately 845 residential dwelling units were built during this time period of which, the vast majority were single family homes (818). Of the total residential units built, 184 (21.7%) were located in growth areas. It should be noted that some of these residential units may represent replacement homes, versus new construction, which is likely to be the case for many of the 31 mobile homes included in the single family category. The total acreage associated with the residential development over this eight year time period was 2,257 acres. Of that total, only 221 acres, or 9.8%, were located within designated growth areas.

The number of non-residential structures built between 1993 and 2000, according to the assessment database, totaled only 14. However, because the *year built* information in the database was often incomplete for these types of properties, this figure is not considered to represent all non-residential

Table 3-3 Summary of Development Trends in Designated Growth Areas 1993 - 2000 Town of Windham						
	Total Development			Development Within Designated Growth Areas		
Type of Structure	Number of Units	Assessed Bldg. Value	Acres of Parcels	Number of Units	Assessed Bldg. Value	Acres of Parcels
Single Family	818	\$80,619,200	2,250	159	\$12,978,500	195
Duplex	8	\$346,600	2.9	6	\$285,200	2.2
4 Family	4	\$151,800	1.5	4	\$151,800	1.5
5+ Family	15*	\$1,550,600	3	15*	\$1,550,600	23
Subtotal	845	\$82,668,200	2,257.4	184	\$14,966,100	221.7
Non-residential Properties	14	\$2,114,900	56	9	\$1,222,600	18

* Total number of units are estimated
 Source: Windham Assessment Records, December 2000, and RKG Associates, Inc.

building activity within the town during this time period. Of the 14 properties for which dates could be identified, 64% (9) were located in designated growth areas. This represents approximately 32% of the total acreage associated with non-residential development in Windham during this time period.

4. Zoning Build-Out Analysis

This section examines the town’s zoning regulations and the potential for future development within Windham. The zoning regulations are the primary determinant of land use within the community. As of September 2000, Windham’s land area was divided into nine primary use districts as illustrated on Map 3-2. These districts are accompanied by a set of development standards that define the size, location, and density of permitted uses within various areas of the town. The nine districts are listed in Table 3-4 along with the approximate acreage of land area contained in each district.

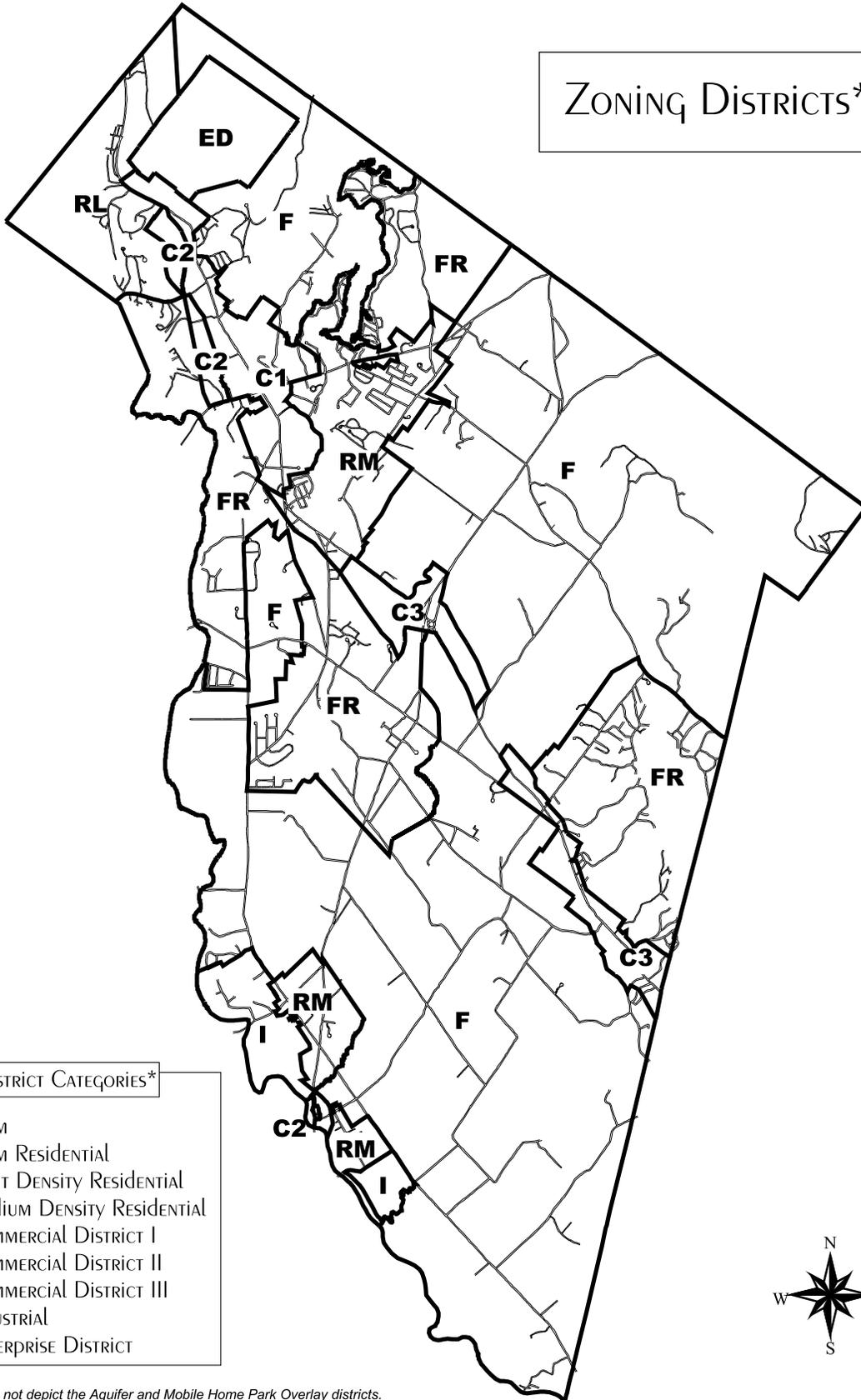
The residential districts include the Farm, Farm Residential, Light Density Residential, and Medium Density Residential districts. These districts contain over 25,000 acres representing

Table 3-4 Total Acres by Zoning District - 2000 Town of Windham		
Zoning District	Total	%
Farm (F)	18,224	63.3%
Farm Residential (FR)	4,778	16.6%
Light Density Residential (RL)	1,704	5.9%
Medium Density Residential	615	2.1%
Commercial District I (C1)	889	3.1%
Commercial District II (C2)	519	1.8%
Commercial District III (C3)	758	2.6%
Industrial (I)	575	2.0%
Enterprise District (ED)	750	2.6%
Total	28,812	100.0

Source: Windham Assessor’s Records, December 2000; Digital Zoning Boundaries, Sewall Company, August 2001; and RKG Associates, Inc.

COMPREHENSIVE MASTER PLAN
TOWN OF WINDHAM, MAINE

ZONING DISTRICTS*



ZONING DISTRICT CATEGORIES*

- F FARM
- FR FARM RESIDENTIAL
- RL LIGHT DENSITY RESIDENTIAL
- RM MEDIUM DENSITY RESIDENTIAL
- C1 COMMERCIAL DISTRICT I
- C2 COMMERCIAL DISTRICT II
- C3 COMMERCIAL DISTRICT III
- I INDUSTRIAL
- ED ENTERPRISE DISTRICT

*Note: This map does not depict the Aquifer and Mobile Home Park Overlay districts. Those districts are illustrated on the Town's official zoning map which is on file at the town offices.

Prepared by RKG Associates, Inc. - September 2001
Source: James W. Sewall Co. digital zoning boundaries map - August 2001

approximately 88% of the town's land base.

The three commercial districts, C1 through C3, have a combined total area of approximately 2,100 acres, or 7.5% of the town's land area. As illustrated on Map 3-2, these districts are focused on the Route 302 corridor encompassing most of the roadway's frontage throughout the town.

The two remaining districts, the Industrial and Enterprise Districts, are the areas designated for manufacturing and processing facilities, as well as research and office related uses. These districts, which are located in the North and South Windham Village areas, contain roughly 1,300 acres, or approximately 4.5% of the total land area.

Future development potential in Windham can be estimated by identifying the amount of developable land that remains in each zoning district. A geographic information system (GIS), which includes the digital parcel and zoning maps, as well as the computerized assessment database, was used to determine this development potential.

The build-out analysis examined the potential future development of both residential and non-residentially zoned land in Windham. Within both of these categories the analysis identified the amount of undeveloped and "underdeveloped" land within each district. The term underdeveloped refers to those properties that may already be developed, such as with a single family house, but which have sufficient acreage to be further subdivided.

The residential build-out analysis, which is summarized in Table 3-5, evaluated development potential based on the number of single family dwellings that could be constructed at two different levels of density. The first density level is that which is permitted by zoning as the *minimum lot size*. The minimum lot size required for each of the districts is illustrated in the table. In reality, all newly subdivided lots are seldom created at the minimum lot size density due to natural constraints, the shape of the parcel being subdivided, market demands, and other factors. Therefore, the second density level used to calculate build-out is referred to as the *average lot size*, which is the actual size of lots within each of the districts taken as an average across all lots. It should be noted that these build-out estimates are reflective of the fact that the majority of development in Windham is presently serviced by on-site septic systems for the treatment of wastewater.

Part A of Table 3-5 illustrates the amount of undeveloped acreage remaining in each district, which includes all parcels that presently contain no structures. The total undeveloped land in all residential districts is approximately 8,000 acres. This gross acreage figure was then reduced by 25% to allow for the construction of roads, utilities, and other constraints encountered during the subdivision process. This yielded a net developable acreage figure of approximately 6,000 acres. Dividing this net figure within each district by the minimum and average lot sizes suggests that there is the potential for construction of between 2,964 and 4,077 additional single family homes on undeveloped land in the town.

Table 3-5 Residential Build-Out Analysis by Zoning District Town of Windham - 2001					
	Zoning District				TOTAL
	Farm	Farm Residential	Low Density Residential	Medium Density Residential	
	F	FR	RL	RM*	
Minimum Lot Size - sq. ft. (1)	80,000	50,000	40,000	20,000	
Average Lot Size - sq. ft. (2)	113,256	56,628	47,916	34,412	
PART A. Potential Development on Vacant Land					
Gross Undeveloped Acreage	6,279	1,167	266	310	8,022
Potentially Developable Acreage (3)	4,709	875	200	233	6,017
Additional Single Family Units based on Minimum Lot Size	2,573	768	219	517	4,077
Additional Single Family Units based on Average Lot Size	1,811	673	181	298	2,964
PART B. Potential Housing Development on Subdividable Land With Existing Single Family Dwelling					
Subdividable Acreage with Existing Single Family House	7,149	2,978	139	530	10,796
Total Existing Single Family Lots	403	1,648	41	85	2,177
Potentially Developable Acreage (3)	4,807	815	76	368	6,066
Additional Single Family Units based on Minimum Lot Size	2,617	710	83	802	4,212
Additional Single Family Units based on Average Lot Size	1,849	627	69	466	3,011
(1) Based on Windham Zoning Ordinance amended through September 21, 2000					
(2) Based on lot sizes of existing single family homes in the Windham Assessor's database					
(3) Represents the gross undeveloped acreage less 25% for roads, utilities & constraints					
* Assumes all parcels have access to the municipal water system					
Source: RKG Associates, Inc.					

A similar analysis was conducted for parcels that have an existing dwelling but which are considered underdeveloped based on permitted zoning densities. Part B of Table 3-5 illustrates that there is an additional 6,066 net acres of potentially developable land available in these parcels after allowing for the existing residence and the installation of roads and utilities. It is estimated that an additional 3,011 to 4,212 single family homes could potentially be constructed on these parcels.

The non-residential build-out analysis of commercial and industrial districts employed the GIS mapping and assessment database in a similar fashion to that described above. However, the potential development density was measured by means of a floor area ratio (FAR). This is the ratio that exists between the amount of building square footage and the size of the parcel. For example, a parcel that is one acre in size (43,560 square feet) containing a building with 4,356 square feet would have an FAR of 10% (4,356 divided by 43,560). Based on a review of the town's assessment records for non-residential properties, average floor area ratios were generated for existing commercial and industrial properties which were then applied to potentially developable parcels to

estimate build-out.

	Zoning District					TOTAL
	Commercial District I	Commercial District II	Commercial District III	Enterprise District	Industrial District	
	C1	C2	C3	ED	I	
Floor Area Ratio (FAR)*	12%	7%	7%	5%	4%	
PART A. Potential Development on Vacant Land						
Gross Undeveloped Acreage	122	23	229	750	298	1,124
Potentially Developable Acreage (1)	92	17	172	563	224	843
Square footage of new building space	478,289	52,599	523,700	1,225,125	389,426	2,669,139
PART B. Potential Development on Underdeveloped Parcels With Existing Businesses						
	# Parcels Underdeveloped	Existing Building SF	FAR	Potential Additional Building SF		
Retail/Restaurants	45	580,959	12%	271,260		
Industrial	19	340,482	4%	226,059		
Office	21	151,916	5%	91,416		
TOTAL	85	1,073,357		588,735		
(1) Represents gross undeveloped acreage less 25% for roads, utilities & constraints Source: Windham Assessment Records and RKG Associates, Inc. *Floor Area Ratio (FAR) is the ratio that exists between the amount of building square footage and the size of the parcel						

Table 3-6 illustrates the amount of non-residential building square footage that could be constructed in the town’s five commercial and industrial zoning districts. Part A of the Table indicates that there is approximately 1,200 gross acres of undeveloped land and 843 net acres of developable land remaining in these districts. By applying the average FAR for each district to the net figure it is estimated that approximately 2.7 million square feet of additional non-residential building space could be constructed in the future¹.

Part B of Table 3-6 evaluates the underdeveloped commercial and industrial properties which were defined as those parcels that had an existing structure, but which were developed at a lower FAR

¹A recent wastewater management study conducted for the town by Woodard & Curran indicates that the potential non-residential building square footage that could be constructed in Windham would be substantially increased beyond the 2.7 million square feet estimated in Table 3-5 if a municipal sewer system were available (*Wastewater Management Alternatives Study, North Windham, Maine, July 2001*).

than the town-wide average. For example, a commercial property that has an existing building and a FAR of 7%, but which on average would be expected to have an FAR of 12%, was assumed to have the potential to add an additional 5% of FAR. In essence, this approach accounts for the expansion of existing commercial and industrial establishments that may continue to grow after the initial development of the property. This analysis suggests that there is the potential for an additional 588,000 square feet of building space on previously developed commercial and industrial properties.

It must be emphasized that both the residential and non-residential build-out scenarios presented here are based on existing regulations and a set of assumptions that are appropriate at this point in time. If the regulations are changed in the future then potential build-out results would also be altered. Neither of these scenarios is intended to suggest an absolute potential for future development in the town. Nor is there any implied time-frame as to the rate at which this development may occur. This analysis offers a “big picture” perspective on the development potential in Windham and should serve as a starting point for more detailed, site specific analysis.

Future residential development trends can also be estimated based on projected population growth. For example, data presented in Chapter 4 (Population and Housing) indicates that by 2015 the population of Windham is expected to increase within a range of 16,826 to 17,981.² In 2000, the U.S. Census determined that Windham had a population of 14,904. These projections equate to an average annual population increase of approximately 0.8% to 1.3%. For comparison purposes Windham’s population grew at an annual average rate of about 1.5% between 1980 and 2000.

Based on the population projection generated data contained in Table 3-7, it is estimated that by 2015 between 103 and 72 new year-round dwelling units will have been added annually to the Windham housing stock. The upper

Table 3-7 Projected Housing Growth - 2015 Town of Windham			
	High	MSPO	Low
Population Projections - 2015	17,981	16,938	16,826
Less Estimate of Group Quarters Population	650	650	650
Total Projected Residential Population	17,331	16,288	16,176
Projected Number of Households	7,074	6,648	6,602
Increase in the Number of Households (2000 to 2015)	1,552	1,126	1,080
Projected Annual Average Increase from 2000 to 2015	103	75	72
Notes: 1. MSPO - Maine State Planning Office 2. Group Quarters Population is an estimate based on the existing number residents in group quarters in 2000. 3. Projected Number of Households is based on an estimate of 2.45 persons per household 4. Increase in the Number of Households is based on 5,522 households identified in the 2000 Census Source: U.S. Census Bureau and RKG Associates, Inc.			

² These numbers represent a range of population projections based on different assumptions about future population growth in Maine and Cumberland County. The Maine State Planning Office projects that Windham will have a population of 16,938 in 2015 (prepared January 2002).

limit of this range is slightly lower than the annual average of 106 new dwelling units added from 1980 to 1990 and 119 new dwelling units added from 1990 to 2000. However it should be noted that since the number of estimated dwelling units by 2015 is based on population projections, this technique does not account for the construction of new seasonal housing which are included in the historical count of residential units.

For planning purposes, based on the population projection noted in Table 3-7, it is estimated that the number of residential dwellings will increase by 720 to 1,030 over the next ten years (2013). This represents an increase of 12% to 17% over the total year-round and seasonal dwelling units identified in the 2000 Census (6,088 total dwelling units).³

5. Implications for the Future

The information presented in this chapter is relevant to all other aspects of municipal planning under consideration within this comprehensive plan update. This includes such areas as housing construction, commercial and industrial development, open space and resource conservation, and the provision of municipal and school facilities.

It is clear from the information presented in this chapter that a substantial amount of Windham's land area still remains largely undeveloped. However, growth trends discussed in Chapter 4 (Population and Housing) of this plan indicate that the town will have to make some important decisions about how its remaining land base will be used to support future growth. These decisions will determine whether or not the land is used in the most efficient way possible to accommodate that growth while also minimizing the impact on the provision of municipal and school services. These decisions will also establish the town's policies with regard to preserving its agricultural and historical heritage, as well as its natural resources.

One question that should be considered with regard to future land use relates to the long-term development of commercial and industrial establishments in Windham. Although the creation of the Enterprise District represents a substantial land base for these types of uses, it may not be appropriate for all types of businesses due to its location and lack of a municipal sewer system. Therefore, the town may want to consider other alternative locations within the community while there is still a suitable land base to select from, as well as the possibility of making sewer available in some areas in order to maximize the remaining commercial and industrial land. Another option might also include a re-evaluation of the C3 commercial zone along Route 302 which in its present configuration, encourages strip development.

The provision of open space and the protection of natural resources will be an important consideration with regard to future land use decisions. Although efforts are being made to protect

³ See Chapter 4 (Housing and Population) for data concerning the number and type of dwelling units identified during the 2000 Census.

some of the town's important resources, a relatively small percentage of the total acreage is presently considered to have permanent protection status. The establishment of a long-term strategy for protection of these resources would help to provide policy directives that ensure a more sustained effort with regard to this issue.

Finally, the provision of municipal and school facilities must also be considered when evaluating the future land use needs of the community. As discussed in Chapter 9 (Municipal Services and Infrastructure), a number of town departments have identified the need for upgraded facilities that may involve the need for relocation and expansion. Therefore, it will be important for the town to continue securing suitably located parcels in a timely fashion before these properties are used for other development purposes.

Chapter 4

Population and Housing

1. Introduction

This chapter of the comprehensive plan examines the changing characteristics of Windham's population and housing stock. The first few sections focus on the historical population growth rate, as well as its composition with regard to age and income. Comparisons are presented with regard to Windham's population growth relative to those of other municipalities in Cumberland County. Estimates are also provided for the seasonal fluctuation in Windham's total population, and several long-term growth projection scenarios are examined as well.

The second portion of the chapter delves into the changing environment associated with the town's housing supply. Initially, an overview is presented concerning total housing growth, changes in the housing mix in terms of types of units being constructed, and the effect that this housing growth has had on the town's land use patterns. This is followed by an assessment of Windham's local and regional housing market with regard to residential property values, changes in the for-sale cost of housing, and finally, an overview assessment of affordable housing needs.

For the most part, the data presented in this chapter focused on the time period between 1970 and 2000 because these three decades have had a particularly substantial effect on Windham, as well as Cumberland County and most of Southern Maine. The data presented as part of this analysis have been acquired from a variety of state, regional and local sources. Significant use was made of the town's municipal assessment database and building permit records in order to present the most detailed and current information available. Secondary data sources were used as well including the U.S. Censuses and private data sources.

2. Major Findings and Conclusions

- Windham added over 8,300 residents to its total year-round population between 1970 and

2000. This was the second largest increase, in terms of net growth, of all municipalities in Cumberland County.

- Within the last 30 years, the period between 1970 and 1980 was the time when Windham experienced its largest population surge both in terms of actual and percentage growth. In addition, Windham's growth outpaced the County and the State for all three decades between 1970 and 2000 from a percentage growth standpoint.
- Although the town continued to grow at a considerable rate during the 80s and 90s, it was at a reduced rate to that which occurred during the 70s. In fact, at least half of the towns in Cumberland County grew at a faster rate than Windham during the 80s and 90s.
- During the 1970's almost 80% of the town's growth was due to the migration of new residents into the community. However, over the last two decades almost 50% of the town's growth has been the result of natural increases from resident births.
- Windham's population is following the national trend which involves the movement of a greater percentage of people into the older age brackets of 55 and over. At the same time the town has maintained a substantial and relatively stable number of residents in the 17 and under age groups.
- Windham's median household income has been consistently higher than that of the County and the State since 1970 and has grown at a slightly faster rate. However, as of the year 2000 there were still an estimated 21% of all households in town with incomes below 50% of the median income for the Portland metropolitan area.
- The rate of housing growth in Windham exceeded the rate of population growth during the 80s and 90s. This is indicative of a reduction in the town's average household size (persons per household) which has resulted in total households growing at a faster rate than the total population.
- Between 1980 and 2000, approximately 1,600 dwelling units were added to the town's housing supply according to the U.S. Census. Although the majority of these units were single family homes, a significant percentage were condos, multi-family apartments and mobile homes. In fact, Windham has one of the highest percentages of multi-family housing of all non-urban municipalities in Cumberland County.
- The average sale price of a single family home in Windham was approximately \$141,000 in 2000. This represents an increase of about 28% since 1997. Despite this increase in cost, over 40% of the total units sold in Windham during that time had a sale price of less than \$100,000, which would be considered relatively affordable starter housing prices.

3. Historical Population Growth Trends

The three decades between 1970 and 2000 were particularly notable for Windham from a population growth perspective. As illustrated in Figure 4-1, the town's year-round population increased from 6,593 in 1970 to 14,904 in 2000, according to the U. S. Census Bureau. This represents more than a doubling (a 126% increase) of the town's total population over the 30-year time period. Within this time frame the decade between 1970 and 1980 was the single most expansive of the three decades during which the town's population increased by approximately 71%, or 4,689 people.

The town's growth during the 80s and 90s was also significant, but the increases occurred at a diminishing rate (15.4% and 14.5% respectively) when compared to the exceptional growth experienced during the 70s. However, despite this slowing in the rate of growth, the town's overall percentage increase exceeded both that of the County and the State for each of the three decades examined.

There are many factors that affect how growth is distributed within the Cumberland County region, which makes it important to have an understanding of Windham's population growth relative to the context of the larger geographic region. Table 4-1 presents a summary of population change for all towns in Cumberland

County between 1970 and 2000, as well as the County and the State as a whole. The data in this table shows that the County grew at a fairly consistent rate for the two decades between 1970 and 1980, supporting a population increase of just over 12% for both time periods. What is also evident is that the total population growth was not evenly distributed throughout the County since some towns grew by as much as 91%, while several communities, mainly the urban areas, actually lost population or grew at a slower rate than the County as a whole.

Figure 4-2 presents a comparison of how the County's growth, from a percentage growth perspective, has been distributed over the last 30 years. Because the percentage change in growth rates has fluctuated substantially for each of the decades in question, it is difficult to compare Windham's rate of growth to other communities on a consistent basis from one decade to the next. In order to address this issue, the percentage growth rates for all three time periods have been converted into

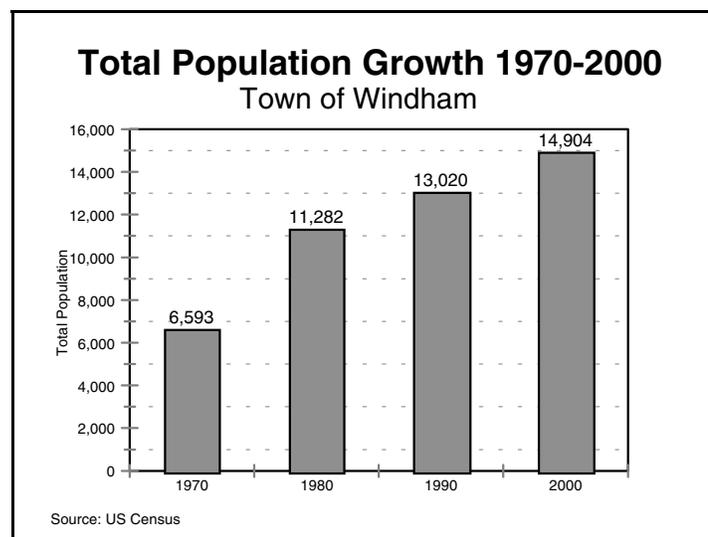


Figure 4-1

Table 4-1
Population Change 1970 - 2000
Cumberland County Municipalities and the State of Maine

	1970	1980	1990	2000	Total Change			% Change			Change 70-00	
					70-80	80-90	90-00	70-80	80-90	90-00	Total	%
Baldwin	878	1,140	1,219	1,290	262	79	71	29.8%	6.9%	5.8%	412	46.9%
Bridgton	2,967	3,528	4,307	4,883	561	779	576	18.9%	22.1%	13.4%	1,916	64.6%
Brunswick	16,195	17,366	20,920	21,172	1,171	3,554	252	7.2%	20.5%	1.2%	4,977	30.7%
Cape Elizabeth	7,873	7,838	8,908	9,068	(35)	1,070	160	-0.4%	13.7%	1.8%	1,195	15.2%
Casco	1,256	2,243	3,004	3,469	987	761	465	78.6%	33.9%	15.5%	2,213	176.2%
Cumberland	4,096	5,284	6,103	7,159	1,188	819	1,056	29.0%	15.5%	17.3%	3,063	74.8%
Falmouth	6,291	6,853	7,681	10,310	562	828	2,629	8.9%	12.1%	34.2%	4,019	63.9%
Freeport	4,781	5,863	6,974	7,800	1,082	1,111	826	22.6%	18.9%	11.8%	3,019	63.1%
Gorham	7,839	10,101	11,720	14,141	2,262	1,619	2,421	28.9%	16.0%	20.7%	6,302	80.4%
Gray	2,939	4,344	5,858	6,820	1,405	1,514	962	47.8%	34.9%	16.4%	3,881	132.1%
Harpswell	2,552	3,796	4,993	5,239	1,244	1,197	246	48.7%	31.5%	4.9%	2,687	105.3%
Harrison	1,045	1,667	1,951	2,315	622	284	364	59.5%	17.0%	18.7%	1,270	121.5%
Naples	956	1,833	2,860	3,274	877	1,027	414	91.7%	56.0%	14.5%	2,318	242.5%
New Gloucester	2,811	3,180	3,878	4,803	369	698	925	13.1%	21.9%	23.9%	1,992	70.9%
North Yarmouth	1,383	1,919	1,996	3,210	536	77	1,214	38.8%	4.0%	60.8%	1,827	132.1%
Portland	65,116	61,572	63,106	64,249	(3,544)	1,534	1,143	-5.4%	2.5%	1.8%	(867)	-1.3%
Pownal	800	1,189	1,213	1,491	389	24	278	48.6%	2.0%	22.9%	691	86.4%
Raymond	1,328	2,251	3,410	4,299	923	1,159	889	69.5%	51.5%	26.1%	2,971	223.7%
Scarborough	7,845	11,347	12,504	16,970	3,502	1,157	4,466	44.6%	10.2%	35.7%	9,125	116.3%
Sebago	708	974	1,257	1,433	266	283	176	37.6%	29.1%	14.0%	725	102.4%
South Portland	23,267	22,715	24,098	23,324	(552)	1,383	(774)	-2.4%	6.1%	-3.2%	57	0.2%
Standish	3,122	5,946	7,532	9,285	2,824	1,586	1,753	90.5%	26.7%	23.3%	6,163	197.4%
Westbrook	14,444	14,976	16,208	16,142	532	1,232	(66)	3.7%	8.2%	-0.4%	1,698	11.8%
Windham	6,593	11,282	13,020	14,904	4,689	1,738	1,884	71.1%	15.4%	14.5%	8,311	126.1%
Yarmouth	4,854	6,585	8,085	8,360	1,731	1,500	275	35.7%	22.8%	3.4%	3,506	72.2%
Cumberland County	192,528	215,789	243,135	265,612	23,261	27,346	22,477	12.1%	12.7%	9.2%	73,084	38.0%
State of Maine	992,048	1,124,660	1,227,928	1,274,923	132,612	103,268	46,995	13.4%	9.2%	3.8%	282,875	28.5%

Source: US Census Bureau

Note: Shading denotes Windham and its adjoining communities

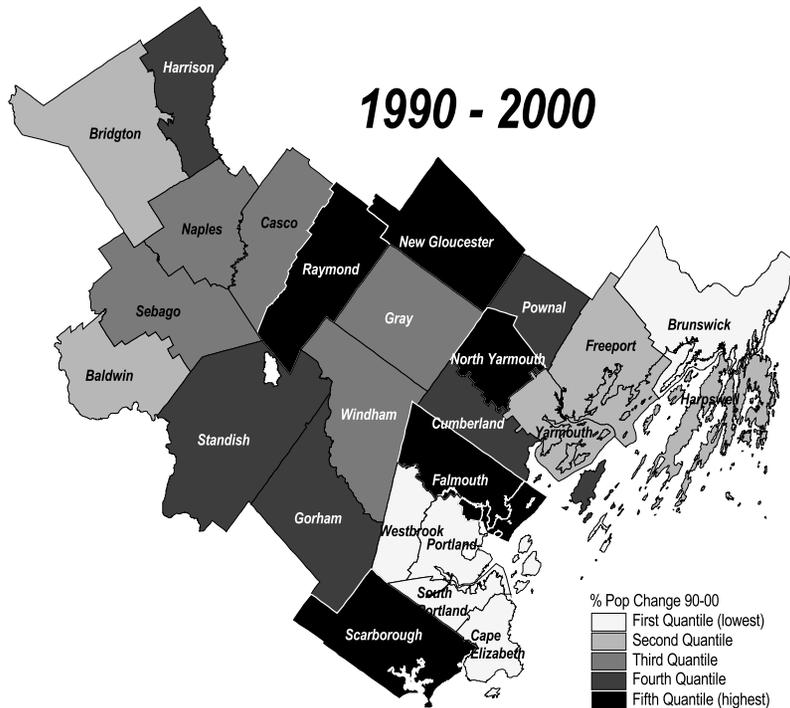
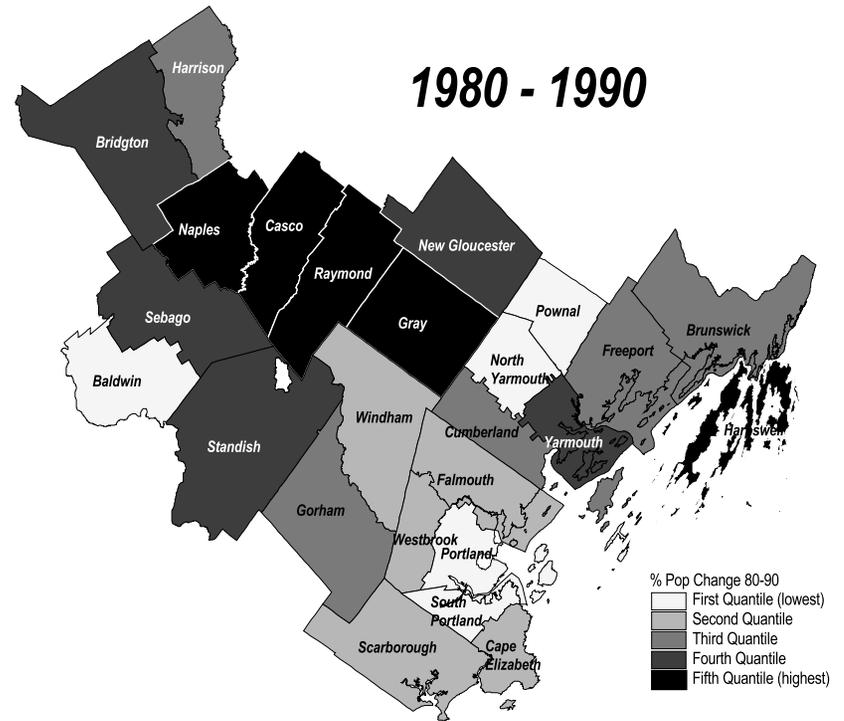
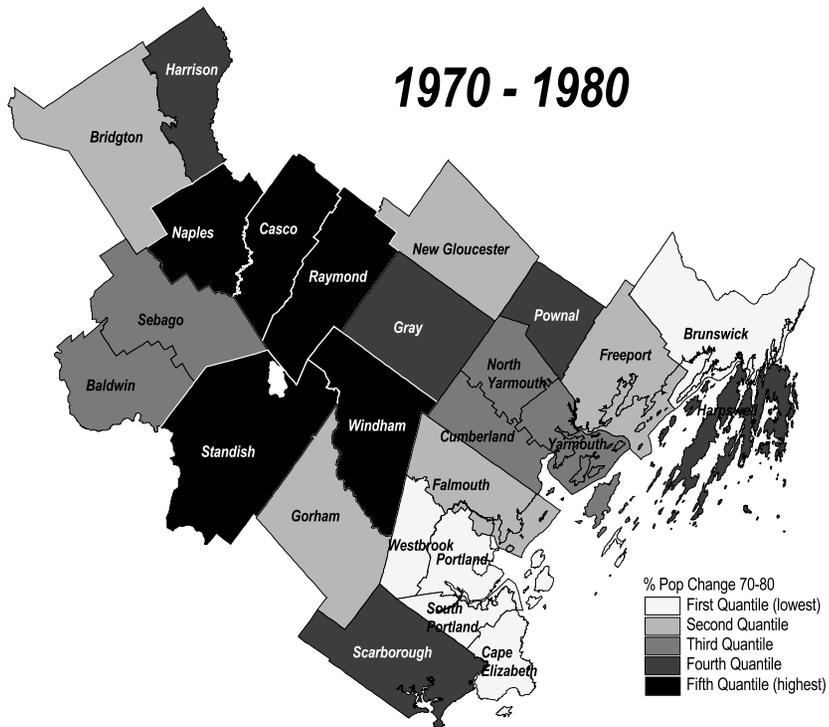


FIGURE 4-2
Comparison of Percentage Population Growth Rates
in Cumberland County Municipalities
for the Three Decades Between 1970 and 2000

NOTE: Quantiles are used to divide the total range of data into intervals that have approximately the same number of observations in each group. This method allows a comparison of percentage population growth between different time periods.

Prepared by RKG Associates Inc. - July 2002
Source: US Census Bureau

quantiles. Quantiles are created by taking the range of all the data and dividing it into an approximately equal number of observations for each of the five groupings. For example, the percentage change in growth for all towns between 1970 and 1980, which range from -6% to 92%, was divided so that there were approximately an equal number of communities in each of the five quantiles, the first quantile representing the lowest growth rates and the fifth representing the highest. This approach allows an observer to evaluate one community's relative growth rate in comparison to all other communities for each of the three time periods.

There are several observations revealed in the data presented in Table 4-1 and Figure 4-2. First is that Windham's rate of growth placed it in the top three quantiles during the decades of the 70s and 90s indicating that it is one of the municipalities that has consistently absorbed a higher percentage of population growth when compared to other County municipalities. Overall, the decade of the 70s exhibited a wide fluctuation in the rate of growth. While half a dozen municipalities lost population or experienced modest gains (less than 10%) an equal number of municipalities had population growth ranging from 50% to 90%. The faster growing towns tended to be rural, non-coastal communities which suggests an out-migration from the County's urban areas and was perhaps also indicative of a demand for lower cost land and housing.

A similar growth pattern was noted during the 80s with higher growth rates being especially focused in the northern reaches of the County in the towns surrounding Sebago Lake. The overall rate of growth slowed in all communities during this decade which is largely attributable to the fact that new growth was being added to a larger population base. In fact, the County added more people during the 80s (27,346) than during the 70s (23,261). No municipalities experienced a loss of population during the 80s.

Population counts for the 90s indicate that a slight shift has occurred in how the rates of population growth were distributed throughout the County. The data for this time period illustrates slightly higher growth rates for the municipalities in the central part of the County, which can also be characterized as part of the Greater Portland area, suggesting that the economic expansion that occurred in Portland and South Portland helped to drive population and housing growth in the adjoining municipalities. Overall, the County's percentage growth rate during the 90s was the lowest (9.2%) of the three decades, as was its total population gain of approximately 22,500 people.

Although percentage growth rates are a useful tool in comparing the relative growth among municipalities, it is equally important to examine the actual increase in population within a regional context. As noted previously, Windham's total population increased from 6,593 in 1970 to 14,904 in 2000. This represents an additional 8,311 residents added over the 30 year period which was the second largest actual increase of any municipality in Cumberland County during that time frame. The largest gain occurred in Scarborough which added 9,125 residents, 814 more than Windham.

4. Components of Population Change

Windham's population growth is comprised of two primary components; the natural increase (number of births less the number of deaths) and the net migration of people moving into or out of the town. Table 4-2 illustrates how these components of Windham's growth have changed over the past several decades. The data shows that the net migration of new residents into the town has declined as a percentage of the overall growth rate over the past two decades of 1980 to 2000. This trend is largely attributable to the town's substantial growth during the 70s, which established a population base that is now expanding at an approximately equal rate from natural increases and migration.

	Population Change	Natural Increase	Net Migration	Net Migration as % of Pop Change
1970-79	4,689	938	3,715	79.9%
1980-89	1,738	1,010	728	41.9%
1990-00	1,884	976	908	48.1%

Source: US Census Bureau and Maine Dept. of Human Services

Another component of the town's population that is affected by growth and time is the age distribution of residents. Windham is experiencing a trend that is occurring throughout the country which is a general aging of the population caused by the progression of the baby boomers into older age cohorts. It is expected that the "echo" of the baby boom generation (i.e. the children of the baby boomers) will also begin to become more apparent in the younger cohorts which will have implications for the town's school system, a fact noted in a recent report prepared for the Windham School District.¹

The data presented in Table 4-3 shows this general aging trend as exhibited by the increase in the median age of residents which grew from 28.2 in 1980 to 32.8 in 1990. According to the 2000 Census, the median age now exceeds 36 years of age for residents of the town.

Despite the increase in the median age of the community, the percentage of people in the younger cohorts, those 17 years of age or less, has remained fairly constant between 1990 and 2000, representing approximately 24% to 25% of the total population. However, there has been a dip in the number of residents in the 18-24 and 25-34 age groups, which declined from just over 29% to

¹A Review of Demographic, Economic and Residential Development, and School Enrollment Trends in Windham, Maine - 1999 Final Report, by Planning Decisions Inc., May 1999.

approximately 23% of the total population over the last decade. This is an indication that the town's young adults are leaving the community after high school and are not being replaced by the immigration of similarly aged persons from locations outside Windham.

Conversely, all age cohorts of 35 and over experienced an increase between 1990 and 2000. The largest gains were posted in the 35-44 and 45-54 age groups. These two cohorts experienced the largest combined gain increasing from 28% to almost 35% of the total population during that time period. Noteworthy growth also occurred in the 55-64 age group (a 37% increase), although its percentage of the total population did not grow at a commensurate rate (7.2% to 8.7%).

**Table 4-3
Population Age Distribution 1980-2000
Town of Windham**

	Total Persons			% of Total		
	1980	1990	2000	1980	1990	2000
Under 5	876	919	944	7.8%	7.1%	6.3%
5-17	2,598	2,345	2,678	23.0%	18.1%	18.0%
18-24	1,485	1,349	1,102	13.2%	10.4%	7.4%
25-34	2,156	2,472	2,287	19.1%	19.0%	15.3%
35-44	1,419	2,282	2,827	12.6%	17.6%	19.0%
45-54	900	1,406	2,302	8.0%	10.8%	15.4%
55-64	917	937	1,291	8.1%	7.2%	8.7%
65-74	579	760	811	5.1%	5.8%	5.4%
75+	352	550	662	3.1%	4.2%	4.4%
Total	11,282	13,020	14,904	100.0%	100.2%	100.0%
Median Age	28.2	32.8	36.5			

Source: US Census Bureau

In summary, Windham's population distribution can be described as having a fairly stable percentage of children and teenagers, an increasing percentage of "middle-aged and older" residents and a declining percentage of residents in the "younger" age groups. The general implications of these trends indicate that total number of school-aged children will remain fairly stable over the next five to ten years, a fact that is reflected in current and projected enrollment levels for the School Department, which are discussed in more detail in Chapter 9 (Municipal Services and Infrastructure) of this plan.

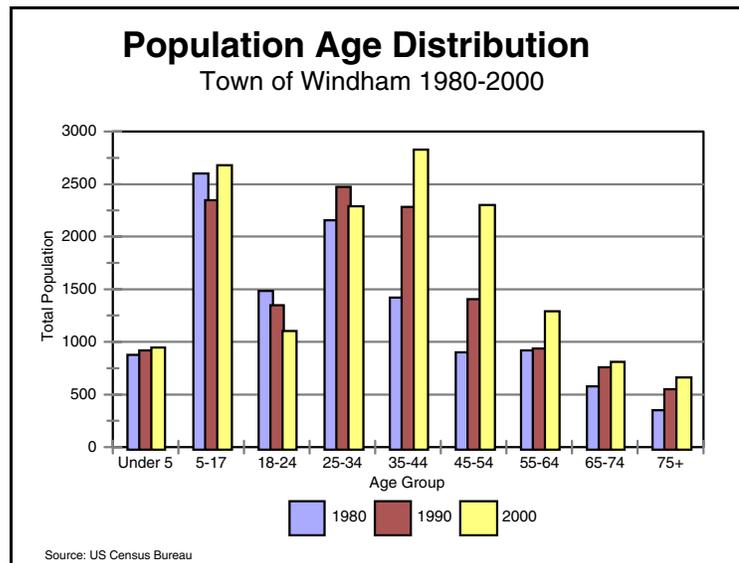


Figure 4-3

The expected decline in the early-cycle households represented by the 18-34 age groups suggests that

there may be less demand for starter housing, while the increases in the 35-54 and 55-64 cohorts may result in the demand for more trade-up housing as well as retirement housing options for those households in the empty-nester age groups.

5. Household Characteristics

The population growth and age distribution of Windham's residents has resulted in a corresponding impact on the rate of household growth and household size. The increase in the overall age of the town's population has resulted in a decrease in the average household size declining from 2.97 in 1980 to 2.58 in 2000, as illustrated in Table 4-4.

This decrease in household size, combined with sustained population growth, has also resulted in the formation of new households at a faster growth rate than that of the total population. For instance, total population increased by 15.4% between '80 and '90 while households increased by 26.4%. Although there was slightly less disparity during the 90s, household growth still exceeded total population growth at 22.1% and 14.5%, respectively, as of 2000.

**Table 4-4
Change in Household Characteristics 1980 - 2000
Windham, Cumberland County and the State of Maine**

Windham	1980	1990	2000	% Change	
				80-90	90-00
Total Population	11,282	13,020	14,904	15.4	14.5
Group Qtrs. Pop	651	682	656	4.8	-3.8
Total Households	3,578	4,521	5,522	26.4	22.1
Avg. Hsehd Size	2.97	2.73	2.58	-8.2	-5.5
Median HH Income					
Windham	\$17,256	\$37,382	\$46,526	116.6	24.5
County	\$15,360	\$32,318	\$44,048	110.4	36.3
State	\$13,826	\$27,896	\$37,240	101.8	33.5
Per Capita Income					
Windham	\$5,950	\$15,026	\$19,890	152.5	32.4
County	\$6,694	\$15,817	\$23,949	136.3	51.4
State	\$5,769	\$12,954	\$19,533	124.5	50.8

Source: US Census Bureau

Table 4-4 also presents the change in median household and per capita income between 1980 and 2000 for Windham, the County and the State. As the data shows, Windham's median household income consistently exceeded the County's and the State's for all time periods presented. However, between 1990 and 2000, Windham's rate of growth in household income (24.5%) was considerably less than both the County's and the State's. The fact that Windham's per capita income was less than the County's during all time periods is a reflection of the fact that the town's average household size has continued to remain higher than the County's thus, household income is being distributed among more people, which reduces the per capita average.

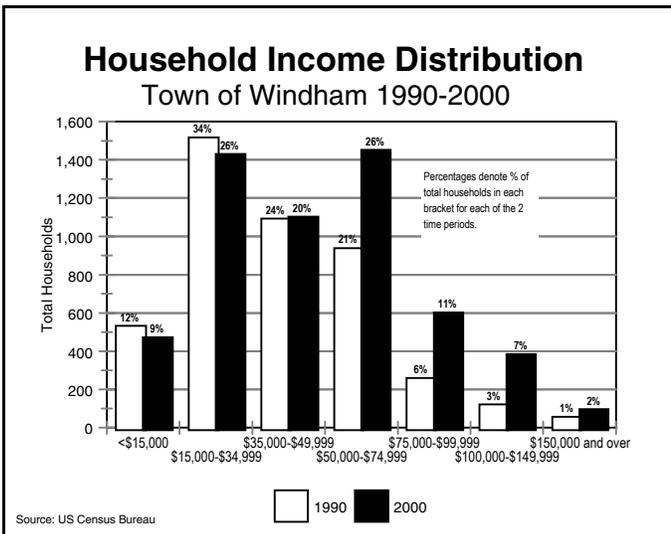


Figure 4-4

Figure 4-4 depicts the change in Windham's household income based on a number of income groupings. The graph illustrates a significant movement of households into the upper income brackets between 1990 and 2000, as determined by the Census Bureau. This is particularly evident in the \$75,000 to \$100,000 and \$100,000 to \$150,000 income brackets, where the number of households in each is estimated to have increased between 130% and 215% respectively during the 90s. Despite these gains, the total number of households with incomes below \$25,000, which represents approximately 50% of the median family income in Windham's housing market,² was approximately 1,100, or 21% of all households, as of 2000. This suggests that there is still a relative level of economic need within the community.

6. Seasonal Population Estimates

Due to its location in the Sebago Lake Region, Windham's total population is subject to a seasonal influx of residents and visitors associated with the area's tourism attractions and second home market. The number of seasonal or second homes in Windham, which is discussed in a latter part of this chapter, totals 429 based on the 2000 Census. Discussions with local realtors suggests that approximately 20% of these are rented out through commercial rental agencies with the remainder either rented privately by the owner or used by the owner for part or all of the summer season.

Based on a review of the town's assessment records, it was determined that approximately 20% of the seasonal units are owned by residents of Windham. Another 50% are owned by Maine residents, the majority of whom have a year-round home in Cumberland County. The remaining 30% of the units are owned by out-of-state residents according to assessment records. The fact that approximately 70% of these units are owned by town or other Maine residents, who are within easy commuting distance to Windham, suggests that the majority of these seasonal homes are weekend homes that are occupied for shorter, but more frequent periods during the summer season. Those owned by out-of-state residents are probably used for longer periods by the owners (one or more weeks) and possibly rented on a weekly or monthly basis.

Given the temporary and occasional nature of how these units are used, it is difficult to estimate a specific total population figure that could be added to the town's year-round population at any one point in time. Although there is no data available regarding the average number of people who might occupy these units when they are in use, a study that examined the impact of tourism on Maine's economy estimated that the average size of a guest party staying at either a cabin, cottage, or condominium rental unit was 3.68.³ The study further estimated that the average stay in these types

²In terms of determining income affordability thresholds Windham is considered part of the Portland Metropolitan Statistical Area (MSA) housing market which had a 2000 median family income of \$49,000 as determined by the U.S. Department of Housing and Urban Development.

³*The Economic Impact of Expenditures by Tourists in Maine, Calendar Year 1991*, prepared for the Maine Tourism Coalition by Davidson-Peterson Associates, Inc., 1992.

of accommodations was 5.19 nights. Therefore, using a conservatively high estimate of four persons per unit suggests that if all of Windham's seasonal units were occupied simultaneously, the town's population would increase by approximately 1,700 people.

7. Population Projections

The potential long-term population growth of a town such as Windham is subject to many external regional and national influences such as economic and income growth, the condition of the Stock Market, tax treatment of mortgages and second homes, interest rates, real estate cycles, etc. Projections of growth at the local level that do not consider these broader factors are typically less reliable since they tend to rely only upon historical patterns of development within the community. Therefore, the population projections for Windham that are presented in this section have been derived based on a model that was designed to project growth for the state and county geographic areas.

The regional projections were prepared by Professor Charles Colgan of the Center for Business and Economic Research (CBER) at the University of Southern Maine, in February 2000. The projections were derived through use of an economic model developed by Regional Economic Models Inc. (REMI), a private firm located in Amherst, Massachusetts, which is widely used throughout the country to conduct regional economic forecasting and analysis. This model uses statewide data for employment and economic growth as well as current population estimates prepared by the U.S. Census Bureau.

A major issue in these forecasts, as noted by Professor Colgan, is the rate of migration into Maine. In-migration to Maine was very slow in the 1990s and it is not at all clear how long this trend will continue. Preliminary Census estimates of net-migration indicate that only 700 people (this represents a net increase in population) moved into Maine in 1998, while over 4,000 did in 1999. The model uses estimates of migration in response to economic conditions that tend to over-estimate the rate of migration in Maine and most regions. Thus, assumptions have been used by CBER to manage the forecast of migration and the resulting total population estimates.

These forecasts assume that the more rapid in-migration, particularly to coastal regions, will continue at about the pace of the latter part of the 1990s through the decade 2000-2010. After that, in-migration to all regions is allowed to accelerate in order to provide some population growth to fuel economic expansion. This is particularly important given Maine's low birth rates, which is likely to continue. It is important to understand these assumptions since they directly affect population forecasts.

The method used to allocate the county level projections down to the local level was based on Windham's historical absorption of Cumberland County's total population. This approach was considered reasonable since the town has consistently represented between 5% and 6% of the County's total population over the last 20 years, as illustrated in Table 4-5. Although the town's absorption rate has been fairly consistent, it has increased by a small factor over the last 20 years. It is likely to assume, therefore, that this increase in absorption will continue at some level over the next 20 years. In order to reflect this possibility, three projection alternatives have been developed that consider slightly varying rates of increase in the town's absorption of county-wide growth. The highest level of growth is forecast based on the 10 year growth trend that reflects the town's change in population absorption between 1990 and 2000. The mid-level of growth is presented by the 20 year growth trend between 1980 and 2000 and the lowest projected growth rate assumes the town will continue to absorb future growth within the County at a flat rate based on 2000 levels. These alternatives are depicted in Figure 4-5.

**Table 4-5
Total Population Enumerations and Projections 1970 - 2020
Town of Windham and Cumberland County**

	Census Counts			
	1970	1980	1990	2000
Windham	6,593	11,282	13,020	14,904
Town as % of County Pop		5.23%	5.36%	5.61%
	3.42%	192,528	215,789	243,135
		265,612		
	Projections			
	2005	2010	2015	2020
Windham				
10 Year Trend (90-00)	15,826	16,913	17,981	19,053
20 Year Trend (80-00)	15,732	16,720	17,681	18,638
Current Year Trend (00)	15,470	16,172	16,826	17,456
State Planning Office	15,806	16,387	16,938	NA
Cumberland County	275,750	288,273	299,928	311,154

Source: US Census Bureau, Charles Colgan, USM, Maine State Planning Office and RKG Associates, Inc.

As can be seen by the "straight-line" nature of these long-term forecasts, they do not reflect changes in the business cycle and thus there is no recession foreseen in the forecast period, though recessions are

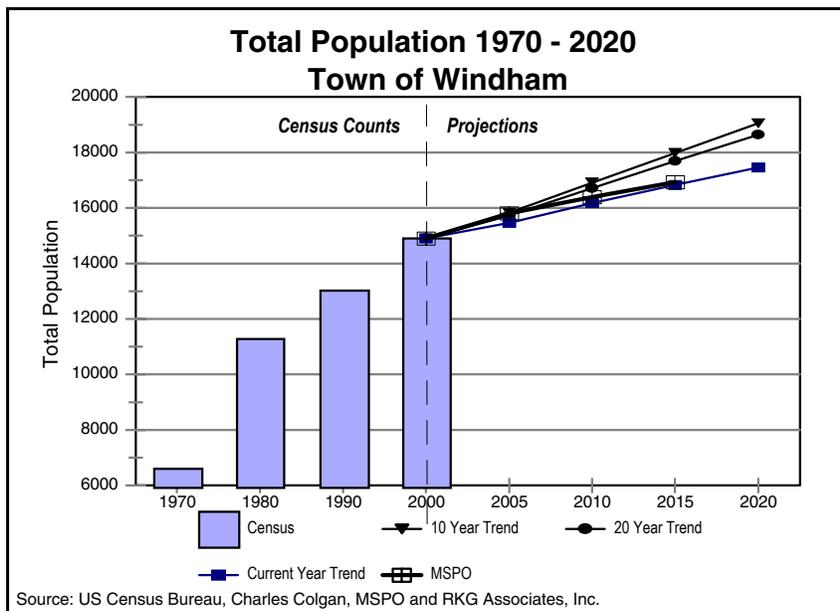


Figure 4-5

certain to appear at some point. Thus, some periods may show significantly slower or even negative growth, but these will be offset by periods of recovery. On average over the decade, the forecast should indicate long-term trends.

The Maine State Planning Office (SPO) also prepared a set of population projections through 2015 which were released in January 2002. The SPO's projections for Windham, which are illustrated in Table 4-5 and Figure 4-5, fall within the range of projected growth derived from the county-wide projections discussed above. The SPO's projections anticipate the largest growth in population, an increase of approximately 900, to occur between 2000 and 2005. After that the town's population growth is expected to increase at a reduced rate through 2015.

8. Windham's Housing Supply and Construction Trends

Windham's housing supply has undergone considerable expansion over the last 20 years. In response to population growth discussed in the preceding section, Windham's total housing supply increased approximately 16% between 1980 and 1990, and 17% between 1990 and 2000, according to the Census. Both of these growth rates exceeded the population growth rates for the same time period, which has contributed to a decline in Windham's average household size.

Between 1980 and 2000 approximately 2,300 building permits were issued for new dwelling units in Windham. Figure 4-6 illustrates the trends in residential building permit activity over this 20 year period. The graph's undulating pattern provides a representation of changes in economic conditions over that time period. The 1980s, which began during a recessionary period in the nation's economy, was followed by a boom during the mid-80s and a "bust" at the end of the decade which trailed into the early part of the 90s. Development activity began to rebound during the mid-90s and experienced a considerable surge in 1998 and 1999. However, as of 2000, the number of permits issued had returned to previous levels. Despite the wide fluctuations in total annual permits issued over these two decades, the average has remained fairly consistent with 106 units disbursed annually between 1980 and 1990, and 119 between 1990 and 2000.

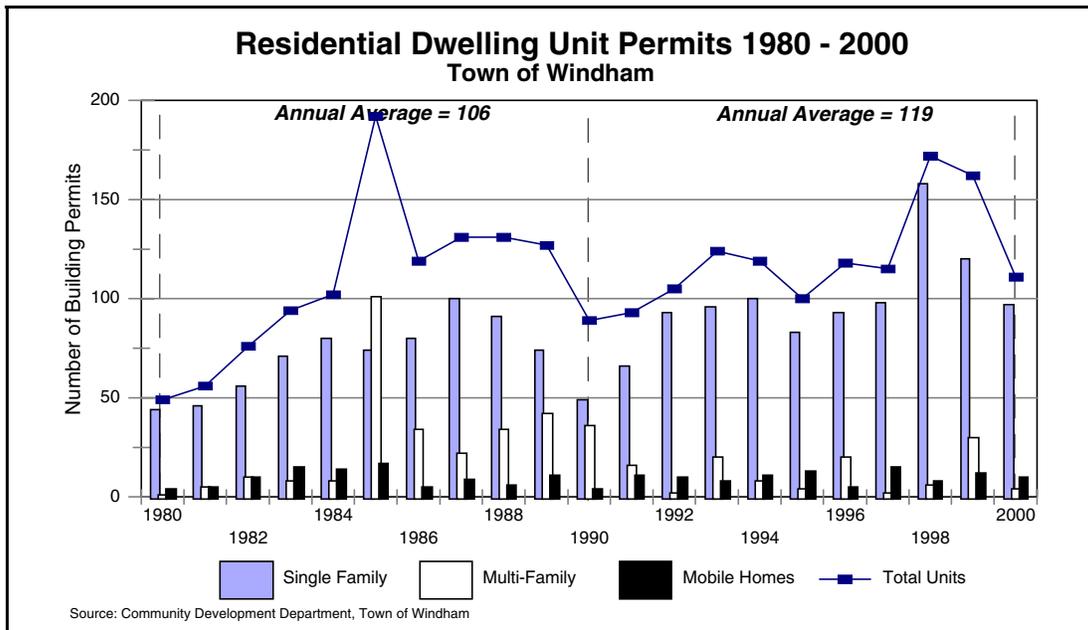


Figure 4-6

From a regional perspective, Windham issued one of the largest amounts of permits for new residential dwelling units over the last decade when compared to other communities in Cumberland County. As illustrated in Figure 4-7, Windham's average annual rate and total number of permits issued was second only to the town of Scarborough between 1990 and 1999. Interestingly, the 11 municipalities that issued the greatest number of total permits (which include South Portland to Scarborough on the chart), are the towns that form a first and second tier ring around the Portland urban area. The only exception was the town of Brunswick, which represents an urbanized area unto itself. This regional development pattern provides a solid indication of how the economic expansion that occurred in and around Portland over the past decade has stimulated the need for additional housing in towns that are within easy commuting distance.

The composition of Windham's housing stock has also undergone some changes due to the growth experienced over the last two decades. The data in

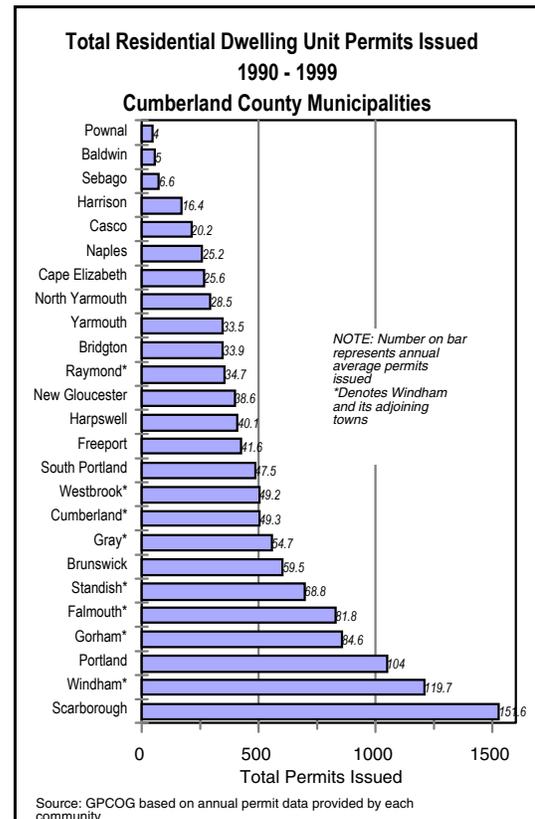


Figure 4-7

Table 4-6 illustrates types of units that were added to the town's housing mix between 1980 and 2000. It should be noted that a discrepancy exists for the total number of housing units in Windham, as of 2000, when Census counts are compared to the number of building permits issued by the town. Census data indicates that there were 6,088 housing units in Windham as of 2000. However, the town issued 1,214 building permits for new dwelling units between 1990 and April 2000. If this figure is added to the 1990 total housing unit count of 5,200 it would indicate that Windham currently had in excess of 6,400 housing units in 2000. It is not possible to determine the reason for this discrepancy based on available data, however, it may be partially attributable to an overestimation by the Census Bureau of the total units that existed in the town as of 1990. Analysis

**Table 4-6
Total Housing Units by Type 1980-2000
Town of Windham**

Year-Round and Seasonal Units

	Total Units			Change		% Change	
	1980	1990	2000	80-90	90-00	80-90	90-00
Single Family							
Detached	3,855	4,092	4,881	237	789	6.1%	19.3%
Attached	0	141	184	141	43	NA	30.5%
Multi-Family	508	683	769	175	86	34.4%	12.6%
Mobile Homes	106	284	254	178	(30)	167.9%	-10.6%
Total Year-Round and Seasonal Units	4,469	5,200	6,088	731	888*	16.4%	17.1%
Year-Round Units	3,707	4,696	5,659	989	963	26.7%	20.5%
Seasonal Units (1)	762	504	429	(258)	(75)		

Year-Round and Seasonal Units

	% of Total Housing			Change	
	1980	1990	2000*	80-90	90-00
Single Family					
Detached	86.3%	78.7%	80.2%	-7.6%	1.5%
Attached	0.0%	2.7%	3.0%	2.7%	0.3%
Multi-Family	11.4%	13.1%	12.6%	1.8%	-0.5%
Mobile Homes	2.4%	5.5%	4.2%	3.1%	-1.3%
Total Year-Round and Seasonal Units	100.0%	100.0%	100.0%		
Seasonal Units Only (1)	17.1%	9.7%	7.0%		

*The total 888 housing units added between 1990 and 2000 as determined by the Census Bureau is less than the 1,214 building permits issued by the town during the same time period. The reason for this discrepancy cannot be determined based on available data, but may be partially attributable to an erroneously high number of housing units identified for the 1990 Census count.

(1) The definition of seasonal housing changed between the 1980 and 1990 Census which accounts for some of the decrease in total seasonal units during that time period. The other factor affecting this decrease is the conversion of seasonal units to year-round use. Total seasonal units for all years are based on Census enumerations.

Source: US Census Bureau

conducted for the purposes of this comprehensive plan has relied upon the Census data for the count of total units while using building permit activity to compare regional trends in development.

Like most communities in the region that have a suburban/rural mix of housing densities, the majority of Windham's housing stock is classified as single family detached units. Single family units decreased as a percentage of total housing, from 86% to 80%, between 1980 and 2000. However, the number of single family units added during that time period, approximately 1,026 units, was the largest increase across all housing types.

Although single family housing is still the dominant housing type within the town, considerable expansion was also experienced within the other housing categories as well, particularly during the 80s. Between 1980 and 1990, the number of multi-family units increased by over 34% representing 175 additional units augmenting the inventory. The rate of multi-family construction slowed during the 90s, which may be attributable to an overbuilding during the 80s, as well as the economic slowdown that occurred in the late 80s and early 90s, and the lack of land zoned for multi-family development. However, Windham's multi-family housing still represents an estimated 12.6% of the total housing stock, which is one of the highest percentages of all non-urban municipalities in Cumberland County.

During the 80s the town also experienced the construction of its first single family attached units, also referred to as condominiums, with the creation of approximately 140 units. Condominium development was explosive during the 80s throughout much of New England due to the speculative nature of the housing market, which was fueled by inflated housing prices. These properties lost a considerable amount of their value during the recession of the late 80s and early 90s, although increased housing demand towards the end of the decade has helped to regain some of that value. The demand for additional construction of these types of units, however, has not yet emerged again.

The number of mobile homes in Windham has also increased considerably both in absolute terms, and as a percentage of the total housing stock. Between 1980 and 1990, there were 178 permits issued for additional mobile homes, which represented an increase of over 160%. According to the Census, the number of mobile homes in Windham decreased by 30 units between 1990 and 2000. In fact, the 2000 Census count of 254 mobile homes corresponds with the number of mobile homes registered in the town's assessment database. Overall, the number of mobile homes as a percent of total units increased from 2.4% to 4.2% over the 20 year time frame, although no new units were added over the last decade.

9. Seasonal Housing

In addition to the year-round housing discussed above, the town's housing stock has a second component, which is comprised of units that are used only on a seasonal basis. These seasonal units, which are located predominantly along the frontage of the town's lakes and ponds, are generally used on a limited basis during the non-winter seasons and, therefore, were often constructed to different

standards than those of conventional year-round dwellings.

Determining the exact count of seasonal dwellings can be a complicated task due to the fact that the Census definition of seasonal housing has changed over time, as well as the fact that property owners may convert a seasonal dwelling to year-round use without going through the appropriate permitting process. As illustrated in Table 4-6, the number of seasonal dwellings in Windham is shown to have declined significantly between 1980 and 1990 according to Census data. The reason for this reported decline cannot be completely explained, but is likely that some of this decline is attributable to the conversion of seasonal units to year-round use. Town records indicate that 64 units were converted to year round use between 1980 and 1990 and 34 units were converted between 1990 and 2000. The number of units converted is based on permits issued by the town for home conversions within the Shoreland Zoning District only. It is also possible that the large drop in seasonal units is at least partially attributable to an error that occurred during the census enumeration in 1980, which overestimated the total number of seasonal units in Windham. The 1990 Census count of 504 seasonal units is more in line with the figure of 429 seasonal units identified by the Census Bureau in 2000. This figure is also comparable to the 476 seasonal housing units identified in the town's assessment database.

10. Age of Housing Stock and Geographic Distribution

The age of Windham's housing stock, also characterized as *year-built* status, can provide an indication of potential deficiencies in the quality and safety of the dwelling units. Older units may have been constructed to lesser standards from the perspective of building codes and life safety requirements, which can be a particular concern with regard to multi-family and mobile home units. As shown in Table 4-7, a large portion of Windham's housing stock is relatively new, having been constructed within the last 30 to 40 years. Based on Census data it is estimated that 75% of the town's housing stock has been built since 1960. Approximately 14% was built between 1940 and 1960, and 11% was built before 1940. A review of municipal assessment records indicates that approximately 35% of the town's mobile homes were built prior to 1976, when national standards were developed for the construction of these units. The units built before this time tend to be smaller trailers, versus the single and double-wide units now being used, that lack insulation, are fire safety risks, and are often found to be in deteriorating condition.

Year Built	% Total
Pre-1940	11.5%
1940-59	13.9%
1960-69	12.9%
1970-79	23.0%
1980-89	20.0%
1990-00	18.6%
	100.0%

Source: US Census

Based on year built information obtained from town assessment records, the location of new home construction in Windham has been mapped, which illustrates how residential development patterns have evolved over time. This data is presented on Map 4-1. More emphasis has been placed on presenting development patterns for the three decades between 1970 and 2000 because the 70s

represented the beginning of an exceptionally rapid growth period for the town.

There are several rather notable patterns depicted on Map 4-1 regarding the town's development trends. Beginning in the 70s, a number of sizeable subdivisions were created in the area around Collins Pond and the southern end of Hunger Bay. These subdivisions were constructed at relatively higher densities than most of the town's pre-1970 development, excluding seasonal lakefront development areas. Other notable subdivisions were undertaken in the eastern portion of town at the intersection of River Road, Curtis Drive and Park Road, and in the northern section of town on Linnel Road along the shores of Sebago Lake. Remaining development during the 70s occurred primarily as new frontage lots were created along existing town roadways as well as on larger, oversized parcels scattered throughout the community.

Residential development patterns during the 1980s were very similar to those of the 70s. This is attributable to the fact that many of the subdivisions initiated during the 70s were not completely built-out until some time during the 80s.

The 90s saw a spate of new subdivisions, as well as the final build-out of some of the subdivisions begun in previous decades. The majority of subdivision activity during this decade is concentrated to a great extent in the central portion of the town. In the western half of Windham development occurred along the Pope, Ward and Windham Center Road corridors. In the eastern half of town the Albion, Falmouth, and Gray Road corridors were particularly active with the creation of new subdivisions. Additional scattered development along the frontage of existing roadways, either on existing or newly created lots, was also noted throughout the town.

11. Housing Values, For-Sale Market Trends and Rental Rates

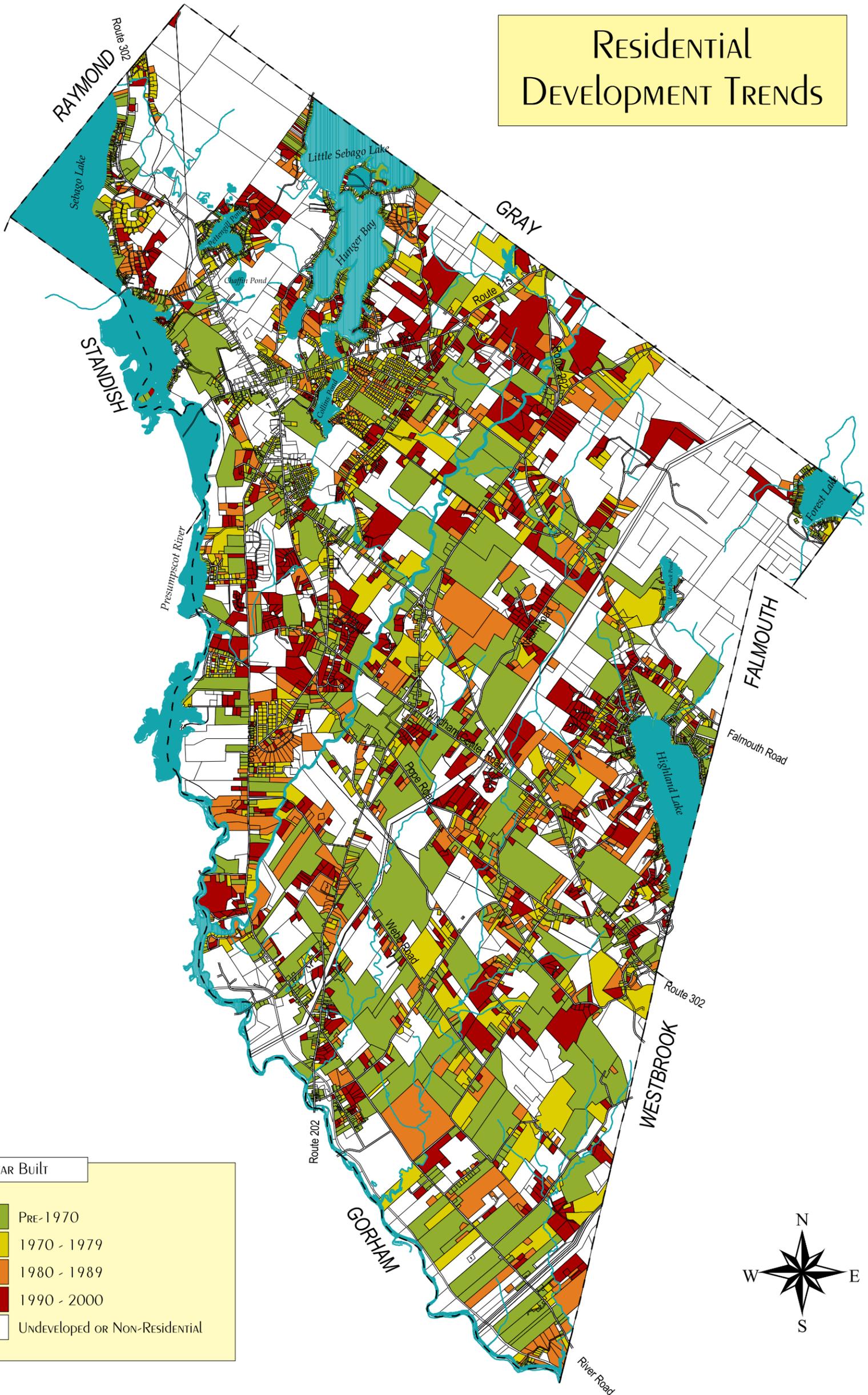
An analysis of housing values and housing sales provides an indication of the strength of a municipality's housing market with regard to tax base support, the growth in value over time, as well as how sales prices are trending. Sale prices will in turn, affect the affordability of homes within the community. The data presented here has been gleaned from the town's assessment records as of December 2000, and represents gross property values without any exemptions applied.

Table 4-8 presents a summary of total assessed value by type of housing in Windham. The data also segregates single family housing based on year-round versus seasonal occupancy, as well as waterfront versus non-waterfront properties. Given the fact that single family housing represents almost 80% of the town's total housing stock (refer to Table 4-6) it is not surprising that single family properties (year-round and seasonal combined) account for over 88% of the total value of all residential properties in Windham. Of that total, year-round units represent 81.6% (approximately

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

RESIDENTIAL DEVELOPMENT TRENDS



YEAR BUILT	
	PRE-1970
	1970 - 1979
	1980 - 1989
	1990 - 2000
	UNDEVELOPED OR NON-RESIDENTIAL

Sources: Base map from Casco Bay Estuary Study c. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall Composite Tax Map - April 1999
 Year built data from Town of Windham assessment records - March 2001
 Prepared by RKG Associates, Inc. - July 2002

**Table 4-8
Assessed Value of Residential Properties by Type of Property
Town of Windham - 2000**

Total Assessed Value						
	Land	Bldg	Total	% Subcategory	% Total Residential Value	
Year-Round Single Family						
Non-Waterfront	\$129,306,600	\$318,956,000	\$448,262,600	87.7%	71.6%	
Waterfront	\$31,577,400	\$31,508,400	\$63,085,800	12.3%	10.1%	
All Units	\$160,884,000	\$350,464,400	\$511,348,400	100.0%	81.6%	
Seasonal Single Family Units						
Non-Waterfront	\$5,960,400	\$4,186,700	\$10,147,100	24.1%	1.6%	
Waterfront	\$21,509,700	\$10,453,400	\$31,963,100	75.9%	5.1%	
All Units	\$27,470,100	\$14,640,100	\$42,110,200	100.0%	6.7%	
Condominiums	\$3,563,200	\$13,285,900	\$16,849,100	NA	2.7%	
Multi-Family Structures	\$7,827,000	\$23,105,700	\$30,932,700	NA	4.9%	
Mobile Homes	\$6,052,700	\$7,335,300	\$13,388,000	NA	2.1%	
Multiple Buildings(1)	\$4,378,000	\$7,309,900	\$11,687,900	NA	1.9%	
All Residential Properties	\$210,175,000	\$416,141,300	\$626,316,300	NA	100.0%	

(1) This housing category from the Assessor's database includes multiple buildings on one lot.
Source: Assessor's records, Town of Windham and RKG Associates, Inc.

\$511 million in total value) with seasonal dwellings accounting for the remaining 6.7% (approximately \$42 million in total value). The other major housing categories of condominium, multi-family, mobile homes, and multiple buildings account for a combined 11.6% of total assessed residential value with multi-family structures representing the single largest portion at 4.9%, or approximately \$30 million in total value. Although seasonal homes represent a relatively small percentage of the total residential tax base, they provide an important *net contribution* to town revenues since they do not increase the number of students in the school system and also have a reduced demand on other municipal services. The value of the town's waterfront properties is also clearly reflected in Table 4-9. Year-round single family homes with waterfront locations are valued, on average, approximately 30% higher

**Table 4-9
Average Assessed Values of Residential Dwellings
Town of Windham - 2000**

	Land	Bldg	Total	Avg. Value Per Acre
Year-Round Single Family				
All Units	\$36,498	\$79,506	\$116,004	\$12,233
Non-Waterfront	\$32,505	\$80,179	\$112,685	\$10,090
Waterfront	\$73,435	\$73,275	\$146,711	\$93,723
Seasonal Single Family Units				
All Units	\$57,710	\$30,756	\$88,466	\$111,269
Non-Waterfront	\$38,704	\$27,186	\$65,890	\$82,155
Waterfront	\$66,800	\$32,464	\$99,264	\$123,384
Condominiums	NA	NA	\$73,899	NA
Mobile Homes	NA	NA	\$52,708	NA

Source: Assessor's records, Town of Windham and RKG Associates, Inc.

than non-waterfront locations (\$146,711 versus \$112,685). This distinction is even more pronounced for seasonal housing, where according to municipal assessment records, the average waterfront home value was approximately 50% higher than a non-waterfront home (\$99,264 versus \$65,890).

It is interesting to note that the average assessed value of a seasonal single family home was approximately 25% less on average, than a year-round single family home (\$88,466 versus \$116,004). This is reflective of the fact that Windham's seasonal housing stock is comprised more of *camp style* dwellings as opposed to larger luxury style dwellings that are being constructed along the State's coastal waterfront areas. This is further exemplified by the fact that over 65% of the average value of a seasonal dwelling is represented in the land value versus the building value. As shown in Table 4-9, the average value per acre of land for a seasonal dwelling was \$111,269 which was almost 110% more than the value per acre of land associated with year-round dwellings (\$12,233), which illustrates the importance of this land-based resource with regard to the town's property tax base.

Along with the assessment data discussed above, an understanding of the housing market in Windham has been further refined by examining home sales over the past decade. The two sources of data consulted for this analysis included residential sales from the municipal assessment records, where all sales are tracked as part of the real estate transfer process, as well as the region's Multiple Listing Service, which primarily focuses on single family home sales.

Table 4-10 presents a summary of all residential sales in Windham between 1997 and 2000, which is the time period when the Assessor's Office first began recording this information in the town's computerized database. These sales present a reliable representation of current market conditions because they are characterized as "good sales" which do not include mortgage refinancing, foreclosures, or other types of transfers that are not considered arms-length transactions.

The data shows that Windham's housing market has been quite strong over the last several years as exhibited by the increase in total sales of single family homes from 130 in 1997 to 254 in 1999. Although total sales dropped somewhat in 2000, the overall demand for homes in Windham has pushed the average sale price for a single family home from approximately \$127,499 in 1997 to \$141,000 in 2000, which represents an 11.4% increase in sales prices within this relatively short time frame. Waterfront home sale prices increased at a slightly faster rate than non-waterfront homes between 1997 and 2000, with increases of 16.4% and 12.3%, respectively.

The other active portion of Windham's for-sale housing market over the last several years has been the condominium sector. Total sales have been fairly steady at around 30 per year and the average sale price has hovered in the \$70,000 to \$80,000 range with an increase of almost 14% between 1997 and 2000. Sales of these types of units have probably helped to fill part of the niche for more affordably priced homes as demand forced single family homes out of the price range of some households moving into the area or others seeking to leave the rental market.

Table 4-10
Average Annual Sales Price of Residential Housing Units 1997-2000
Town of Windham

Year-Round Housing Units	1997		1998		1999		2000		1997-2000	
	# Sales	Sale Price	Change	% Change						
Single Family										
Non-Waterfront	112	\$122,300	167	\$101,958	234	\$122,072	178	\$137,300	\$15,000	12.3%
Waterfront	18	\$161,372	20	\$168,887	20	\$163,250	16	\$187,775	\$26,403	16.4%
Total	130	\$127,499	187	\$109,117	254	\$125,315	194	\$141,999	\$14,500	11.4%
Duplex	2	\$122,500	5	\$110,450	6	\$120,550	4	\$126,939	\$4,439	3.6%
4 Family	1	\$177,000	1	\$122,000	2	\$235,000	2	\$126,000	(\$51,000)	-28.8%
5+ Family	0		1	\$190,000	0		1	\$470,000		
Condominium	17	\$72,737	31	\$68,825	29	\$81,572	30	\$82,664	\$9,927	13.6%
Mobile Home	2	\$69,500	5	\$58,480	9	\$44,900	7	\$75,128	\$5,628	8.1%
Seasonal Housing Units										
Single Family										
Non-Waterfront	1	\$100,000	2	\$36,500	2	\$78,885	2	\$170,500	\$70,500	70.5%
Waterfront	5	\$91,906	6	\$73,775	5	\$190,900	5	\$119,650	\$27,744	30.2%
Total	6	\$93,255	8	\$64,456	7	\$158,895	7	\$134,178	\$40,923	43.9%

Source: Assessor's Records, Town of Windham and RKG Associates, Inc.

More specific information regarding home sales in Windham is summarized in Table 4-11 which identifies total sales within five pricing ranges. The data shows that a sizeable portion of home sales were available at what may be considered a starter home sale price of less that \$75,000, as well as the next level of \$75,000 to \$100,000. Together, these price ranges had a total of 366 units which represents approximately 40% of all sales between 1997 and 2000.

The mid-price and trade-up sale price categories ranging from \$100,000 to \$175,000 had a slightly higher level of activity with total sales of 430 units, or 47% of all sales within the town. This data suggests that there may have been slightly more pent up demand for trade-up as well as higher end housing (>\$175,000) than within the

Table 4-11
Number of Sales by Price Range 1997 - 2000
Year-Round Housing Units
Town of Windham

Sale Price	Single Family Non-Waterfront	Single Family Waterfront	Condos	Mobile Home	Total	% Total
<\$75,000	94	3	67	17	181	20.1%
\$75,000 - 99,999	144	9	27	5	185	20.6%
\$100,000 - 124,999	201	20	3	1	225	25.0%
\$125,000 - 174,999	183	14	8	0	205	22.8%
>\$175,000	73	28	2	0	103	11.5%
Total	695	74	107	23	899	100%

Source: Assessor's Records, Town of Windham and RKG Associates, Inc.

entry level market. This conclusion is partially supported by the data presented in the population section that noted Windham was experiencing an increase in the number of households with older heads of household, who might be looking to move into this segment of the housing market. However, fewer sales of entry level housing could also be an indication that supply was insufficient to meet the total demand, a sentiment that was expressed by area real estate brokers.

Windham's for-sale land market had considerably less activity over the past four years in comparison to the housing market. Sales data from the Assessor's records identified a total of 46 arms-length land sales which involved the transfer of 260 acres for approximately \$1.98 million. The average value per acre of these transactions was \$7,660 and the average acreage per sale was only six acres. This relatively small amount of land sales suggest that new housing development is occurring on land that was purchased or owned prior to 1997, and may also be an indication that developers are beginning to be more cautious about speculating in the housing market given the unclear short-term prospects of the regional and national economies. Discussions with realtors revealed that a buildable lot in Windham (ranging between one and two acres) is currently selling in the \$35,000 to \$45,000 range.

In order to place Windham's housing market within a regional context, sales data from the Multiple Listing Service (MLS) was examined for the period between 1992 and 2000. As mentioned previously, this data is comprised primarily of single family home sales, but may also include some condominium and mobile home sales. Table 4-12 presents MLS sales for all municipalities in Cumberland County over most of the last decade. The data shows that the average price of recorded home sales in Windham increased by approximately 30% over this eight year period, however, the majority of municipalities in the County experienced an increase in sale prices that exceeded Windham's. In addition, Windham's average sale price of \$133,814 in 2000, ranked tenth lowest out of the 24 municipalities in the County. Both of these factors indicate that Windham's housing market is relatively affordable in comparison to other locations in Cumberland County.

Total sales activity in the County escalated from 1,102 to 2,973 between 1992 and 1999, an increase of almost 170%. County-wide sales declined from this 1999 peak to 2,054 sales in 2000. This general trend mirrors the findings for Windham's local market and supports the possibility that the housing market may have slipped into a period of slower growth.

Rental housing data gathered by the Census Bureau indicates that the median monthly rent in Windham was \$629 in 2000. This rental rate was roughly on par with Cumberland County and the Portland MSA which had a median rental rates of \$615 and \$621 respectively, in 2000. Table 4-13 presents a comparison of rental rates in Windham, the County and the MSA as of 2000.

Table 4-12
Average Sale Price of Residential Homes 1992-2000
based on Multiple Listing Service Sales
Cumberland County Municipalities

	1992	1996	1998	2000	YR 2000 Rank	Change 92-00	% Change 92-00
Naples	\$129,008	\$118,109	\$95,757	\$132,783	9	\$3,775	2.9%
Westbrook	\$104,909	\$92,383	\$95,461	\$114,204	1	\$9,296	8.9%
Bridgton	\$107,786	\$76,173	\$100,286	\$117,555	3	\$9,769	9.1%
Standish	\$105,335	\$96,125	\$127,298	\$127,900	5	\$22,565	21.4%
Harrison	\$98,250	\$116,236	\$107,812	\$124,758	4	\$26,508	27.0%
New Gloucester	\$90,353	\$85,588	\$105,299	\$115,707	2	\$25,355	28.1%
Windham	\$102,285	\$106,673	\$111,857	\$133,814	10	\$31,528	30.8%
Gray	\$98,432	\$97,880	\$114,930	\$130,717	8	\$32,286	32.8%
Brunswick	\$120,616	\$128,447	\$140,165	\$161,891	14	\$41,275	34.2%
South Portland	\$96,300	\$98,448	\$103,454	\$129,870	7	\$33,570	34.9%
North Yarmouth	\$132,447	\$132,389	\$163,475	\$180,283	15	\$47,835	36.1%
Yarmouth	\$170,121	\$174,604	\$204,341	\$235,819	20	\$65,699	38.6%
Casco	\$92,298	\$111,673	\$104,339	\$128,520	6	\$36,222	39.2%
Gorham	\$108,619	\$125,344	\$129,434	\$151,920	12	\$43,301	39.9%
Cumberland	\$196,246	\$204,390	\$215,809	\$274,643	22	\$78,397	39.9%
Portland	\$102,215	\$102,715	\$118,346	\$146,414	11	\$44,199	43.2%
Raymond	\$127,765	\$138,211	\$134,345	\$190,384	17	\$62,619	49.0%
Pownal	\$101,333	\$132,300	\$96,400	\$158,200	13	\$56,867	56.1%
Scarborough	\$131,616	\$138,423	\$164,503	\$206,837	18	\$75,221	57.2%
Falmouth	\$175,037	\$189,584	\$216,186	\$280,131	23	\$105,094	60.0%
Cape Elizabeth	\$163,679	\$200,576	\$212,133	\$271,655	21	\$107,975	66.0%
Harpswell	\$189,658	\$206,782	\$221,471	\$316,151	24	\$126,493	66.7%
Freeport	\$124,240	\$145,920	\$174,463	\$212,708	19	\$88,468	71.2%
Sebago	\$93,947	\$137,349	\$114,000	\$188,089	16	\$94,141	100.2%

Source: Maine State Housing Authority based on Multiple Listing Service data

Table 4-13
Gross Monthly Household Rent
for Windham, Cumberland County and Portland MSA - 2000

Monthly Rent	% of Total Households		
	Windham	County	MSA
Less than \$200	1.1	7.0	7.2
\$200 to \$299	1.5	4.7	4.8
\$300 to \$499	12.7	16.6	16.2
\$500 to \$749	55.0	40.4	41.1
\$750 to \$999	17.8	19.5	20.2
\$1,000 to \$1,499	6.0	5.6	5.6
\$1,500 or more	0	1.4	1.4
Median	\$629	\$615	\$621

Source: U.S. Census Bureau

12. Affordable Housing

The issue of providing affordable housing is a concern that has steadily increased over the last decade in many parts of the State of Maine. An increase in the need for more affordably priced housing is a typical response to the type of growth that has occurred in Windham and the Greater

Portland housing market. An economic expansion, like the one that has been occurring in many portions of the state, can often cause a tightening of the housing market that results in short-term housing shortages and a corresponding escalation in home sale prices and rental costs. However, housing markets are very dynamic entities in that there are many factors affecting supply and demand, especially within a regional or multi-regional area. Due to the mobility of the workforce and the willingness of people to commute considerable distances to their jobs, employment growth in the Cities of Portland or South Portland, for example, can create a demand/shortage of affordable housing for workers in those cities that can shift the need for these types of units to any one of a number of municipalities within the region. Therefore, determining the specific need at the local municipal level in terms of actual units required to support households below income levels considered to be *in need*, should consider both the existing need of residents within the community as well as the total need within the regional housing market.

The Maine State Housing Authority (MSHA) recently released a report titled *The State of Maine's Housing 1999* in which it detailed changes in the housing market over the last decade and a half, and the ensuing need of residents with regard to housing affordability among other issues. Based on MSHA's review of the changing demographics of the State as a whole, it was concluded that the following overall housing trends could be expected in the future.

- *Weak demand for small starter homes and apartments and mobile homes (due to fewer young people)*
- *Strong demand for larger homes, move-up homes, and renovations (due to more middle-aged people)*
- *Strong demand for home-based services that enable seniors to “age in place” (due to more old people)*
- *Strong demand for alternative forms of assisted living – at a variety of price points – for seniors (due to more very old people)*

The report also concluded that housing affordability had actually improved during the early to mid-90s due to the fact that inflation was down, interest rates had declined to their lowest levels in 25 years and housing prices were flat. However, these positive conditions were short-lived and ultimately unable to overcome the shortfall of affordable housing that was created in the 80s. In addition, the report concluded that increases in income levels in Maine over the last 13 years have not kept pace with increases in housing prices, thereby exacerbating the affordability issue.

Evaluating what level of housing costs are affordable is dependent upon household income levels in comparison to costs within a respective housing region. The three levels of household income that are typically evaluated as part of a needs assessment are: those at the median household income level; those at 80% of the median; and those at 50% of the median. The MSHA study used these thresholds to evaluate both rental rates and home ownership costs in the Portland housing market. Affordability for renter households would be those units with rents that do not exceed 30% of gross income. For households looking to purchase a home, affordability is defined as monthly mortgage

costs that do not exceed 28% of gross income.

From a rental perspective the findings suggest that households at the median, or 80% of the median income level, were able to afford the median price of a two bedroom apartment in the Portland region. However, those at 50% of the median could only afford rental housing at \$200 less than the median rent. The home ownership assessment presents a less favorable picture in that only those households at the median could afford the median purchase price of a home, while those at 80% and 50% of the median could only afford to pay approximately \$20,000 less and \$56,000 less respectively, than the median sales price in the region.

Although entry into the home market appears difficult in the Portland area, state-wide approximately three out of four households own their own homes. This is the highest percentage of all New England states and exceeds the national average as well. A second interesting finding is that more people are renting detached units – single family homes or mobile homes – than are living in multi-family apartments. However, most are paying 40% to 50% of their incomes and much of the housing is substandard.

In terms of total need, the findings of the MSHA study estimate that there are 1,880 seniors and 4,740 families in the Portland housing market that are in need of rental assistance. Senior households present a particular challenge because those that fall into the “very old” category of 75+ years of age and may often be in need of assisted living facilities versus just a standard rental unit. According to the Maine State Planning Office there are 19 privately developed retirement centers in Maine with 1,600 units of various types (from independent apartments to cottages to assisted living to long-term care beds to Alzheimer's beds), with another 600 units in the pipeline. Although this is a significant number of units, most projects have monthly fees in excess of \$1,500 and many have entrance fees of over \$100,000. The Housing Authority determined that these rates would allow only a small percentage of the State's elderly access to these market rate projects. The MSHA and the Department of Human Services have now begun to subsidize congregate services programs that bring assisted living-type care to lower income individuals.

13. Affordable Housing in Windham

A considerable amount of discussion was devoted to affordable housing in Windham's 1992 Comprehensive Plan update. As part of the planning efforts associated with that process, the Town Council established the Windham Affordable Housing Alliance, one of the first such task forces created in the state. The Housing Alliance completed a needs assessment⁴ for the community which was cited extensively in the comprehensive plan. With regard to housing affordability, the report concluded that families making at or below the median income level for the town were unable to afford the average priced home in Windham, which was quoted as \$107,000 in 1990. Conversely,

⁴*Windham Affordable Housing Needs*, prepared by the Windham Housing Alliance Data Subcommittee and Valerie Lamont of the Institute for Real Estate Research and Education, USM, c. 1992.

it was estimated that rental units were affordable in Windham for all but those households with incomes that were 50% or less of the median. The median monthly rent in 1990 was \$483 according to Census data.

The analysis conducted as part of this needs assessment resulted in a number of “implications” for the future that were used by the Housing Alliance to develop a series of recommendations (which are summarized in the adjacent text box) that were presented as an implementation strategy in the previous comprehensive plan. Although the Housing Alliance is no longer operating within the community, some of the recommendations initially proposed by that organization may still be appropriate for consideration.

1. Develop the necessary financial assets to facilitate [affordable] housing development.
2. Work with existing housing agencies and organizations.
3. Review and recommend that the Planning Board consider changes to the zoning ordinance such as:
 - a. Expand medium residential area
 - b. Require submittal of clustered and conventional subdivision plans
 - c. Revise road construction standards (22ft. pavement width with shoulders and sidewalks may not always be necessary)
 - d. Density bonuses
 - e. Zero lot line setbacks
 - f. Streamline the review process for minor subdivisions
4. Promote land trusts for affordable housing

Housing conditions, as discussed throughout this chapter, have changed considerably since the previous needs assessment was conducted in the early 90s. At the same time, some of the observations noted at that time are still true in 2000. Although housing prices have increased throughout the decade, increases in incomes, continuing lower interest rates, and an increase in the housing supply have helped to offset those prices to some degree.

Maine's state statutes related to planning and growth management indicate that a municipality shall seek to achieve a level of 10% of new housing development, based on five year average development trends, which is affordable to households that are considered to be below the low and moderate income level thresholds. As defined by MSHA and HUD, moderate income is 80% to 50% of the median and low income is 50% to 80% of the median, within the metropolitan statistical area (MSA) or county. Table 4-14 presents a comparison of income levels ranging from 150% to 50% of the median family income thresholds for the Portland MSA housing market as of 2000. It also identifies the maximum housing costs for home ownership and renter households based on 28% and 30% respectively, of the total gross income.

Table 4-14
Estimated Maximum Housing Costs
Based on Percentage of Median Income Levels
in the Portland Metropolitan Housing Market

Owner Occupied Units		
	Family Income	Max. Annual Housing Cost(1)
150% Mdn.	\$73,500	\$20,580
Median	\$49,000	\$13,720
80% Mdn.	\$39,200	\$10,976
50% Mdn.	\$24,500	\$6,860
Renter Occupied Units		
	Family Income	Max. Monthly Rent(2)
150% Mdn.	\$73,500	\$1,918
Median	\$49,000	\$1,305
80% Mdn.	\$39,200	\$1,060
50% Mdn.	\$24,500	\$693

(1) Based on 28% of gross income
 (2) Based on 30% of gross income
 Source: MSHA/HUD and RKG Associates, Inc.

Table 4-15 presents two scenarios related to the

annual housing costs required to purchase the median priced single family home in Windham in 2000. The first assumes a 6.5% interest rate with a 10% downpayment and the second, a slightly higher 7.5% interest rate with only 5% down. These examples also provide allowances for taxes, insurance, and utilities as part of the overall housing costs. What this example shows is that households within the Portland MSA that have incomes ranging from the median level to 150% of the median, would be able to buy the median priced home in Windham under either of these scenarios, based on sales prices in 2000. However, neither the households at 80% or 50% of the median could afford the median priced house in Windham under existing conditions.

Table 4-15
Estimated Annual Housing Cost Required to Purchase the Median Priced Single Family House in Windham - 2000

	10% Down 6.5% Interest	5% Down 7.5% Interest
Median Sale Price(1)	\$127,129	\$127,129
Down Payment	12,712	6,356
Mortgage Amount	114,417	120,773
Annual Mortg. Amt.	8,678	10,133
Real Estate Taxes(2)	2,032	2,032
Insurance(3)	400	400
Annual Housing Cost	\$11,110	\$12,565

(1) Based on housing sales in 2000, Windham Assessor's records
 (2) Assumes a tax rate of \$16.00/\$1,000 of assessed value
 (3) Factored at \$3.20/\$1,000
 Source: RKG Associates, Inc.

The conclusions of this analysis are very similar to those presented in the MSHA 1999 state-wide housing study in that owner occupied housing is still pretty affordable for those households at or above the median household income level. However, below the median, affordability drops off and any increases in interest rates could have considerable negative impacts on these conditions.

From a rental perspective, Table 4-14 illustrates that the median rental rate in the Portland MSA (which was \$621), as of 2000, would be considered affordable for Windham's households with incomes ranging between 80% and 150% of the median in the Portland MSA. However, those households at 50% of the median would not be able to afford the median rent in Windham without paying more than 30% of their gross incomes. The rental costs presented in Table 4-14 make allowances for monthly rental payments and utilities. In fact, the Census Bureau found that 32.8% of renter households in Windham paid more than 30% of their household income towards rent in 2000. In comparison, 36.3% of Cumberland County households and 36.1% of MSA households paid in excess of 30% of their income towards rental costs as of that year.

Table 4-16 provides an estimate of the number of households in Windham that were between 150% and 50% of the median family income as of 2000 based on MSHA's estimated median of \$49,000. For comparison purposes, a summary of the assessed values of single family homes in Windham was compiled to illustrate how affordable the town's

Table 4-16
Household Income in Windham Based on Percentage of MSA Median Family Income - 2000

Income Level	Total HH	% Total
less than 50% of Median	883	16.0%
between 50% & 80% of Median	663	12.0%
between 80% of Mdn. & Median	1,022	18.5%
between Median & 150% of Mdn.	1,518	27.5%
more than 150% of Median	1,436	26.0%
Total	5,522	100.0%

Source: Claritas, Inc. and RKG Associates, Inc.

housing stock is based on these median indicators. These assessed values are presented in Table 4-17. Since the town's current assessment ratio is approximately 95% of market value, the assessed values are considered to be a reasonable representation of sale prices in the community.

It is estimated that households with incomes at 150% of the median could afford to purchase a home that was priced up to \$225,000 (assuming a 5% downpayment). As illustrated in Table 4-17, this would include approximately 4,250 single family homes which represents almost 97% of all single family homes, in the town. Homes considered affordable to households with incomes at 80% of the median are those priced below \$125,000. In Windham, over 3,000 single family homes are assessed within this price range. At 50% of the median income, an affordably priced home would be those priced below \$75,000, which in Windham is approximately 560, or 12% of all single family homes.

By comparing the pool of homes in each assessed value category to the number of households in the town, it suggests that most households between 80% and 150% of the median income should be able to find suitable housing in Windham that falls within recommended affordability thresholds. However, those households with incomes below 50% of the median may have an insufficient supply of single family homes within the community that are considered affordable. It must be pointed out, however, that there is insufficient data available to determine the exact number of dwellings required to provide affordable housing to every resident in Windham or the broader region. Furthermore, this analysis only considered the potential for affordable owner-occupied housing and did not evaluate the town's rental market with regard to providing an additional supply of affordable housing. However, despite the somewhat generalized nature of this analysis, it is clear that Windham's housing stock currently provides an adequate supply of affordable single family homes for all households, except perhaps a portion of those households with incomes below 50% of the median.

Table 4-17
Assessed Value of Year-Round Single Family Homes in Windham - 2000

Total Properties	Assessed Value	% Total
560	<\$75,000	12.7%
2454	\$75-125,000	55.7%
958	\$125-175,000	21.7%
284	\$175-225,000	6.4%
152	>\$225,000	3.4%
4408	Total	100.0%

Source: Windham Assessor's Records and RKG Associates, Inc.

Another component of the town's housing supply which offers more affordable housing options is mobile homes. As of 2000, there were 254 mobile homes in Windham based according to the Census Bureau. All of these units are considered to be affordable for those households between 80% and 150% of the area median income level. However, Assessor's records indicate that approximately 85% of the units are assessed below \$75,000, which makes them affordably priced for those households at 50% of the median area income level as well. In conjunction with the affordably-priced market rate housing discussed above, there are also 153 subsidized housing units in Windham, as shown in Table 4-18. Eighty-four of these units are dedicated to elderly households and 69 to families. Although Windham does not have its own housing authority, the Westbrook Housing Authority has a service area that extends into Windham with regard to providing certain types of housing assistance. Until recently the agency had been administering 26 Section 8 Certificates for

households in Windham which are used to defray their total housing costs. This total, however, has increased to 51 due to a recent increase in total certificates allocated to the Housing Authority from the federal government. In addition, there is currently a proposal to construct 24 units for the elderly that would include a mixture of assisted care and full-care units. This project is being sponsored by the York-Cumberland

**Table 4-18
Assisted Housing Units by Type
Town of Windham - 2000**

Sponsor	Property Name/Location	Program	Number of Assisted Units		
			Elderly	Family	Total
FmHA	Marcus Woods	515	20	0	20
FmHA	Page Court	515	0	6	6
HUD/MSHA	Albion Road	Supp Hsg	0	2	2
HUD/MSHA	Forbes Lane	Supp Hsg	0	4	4
HUD/MSHA	Park Road	Supp Hsg	0	6	6
HUD/MSHA	Marblehead Manor	Multiple	60	0	60
HUD/MSHA/ Westbrook HA	Scattered Sites	Section 8 Cert	4	51	55
			84	69	153

Source: MSHA

Housing Development Corporation which is located in Gorham. Discussions with housing providers in the area indicate that the housing market is very tight in terms of available rental units. The shortage of units has reportedly caused an increase in rental rates that has resulted in the federal government increasing the amount of assistance available to income eligible households. According to local housing and human services providers, there is a particular need for larger, family-sized units, as well as smaller units that can accommodate single, divorced individuals and the growing elderly population. One indicator used by MSHA to identify the unmet need for additional affordable housing is the difference between the number of subsidized units available and the number of renter households below 50% of the median household income. As of 2001, it is estimated that there were 357 households in Windham, which includes 199 family and 25 elderly households, that had incomes below 50% of the town-wide median. In comparison, there were only 153 subsidized housing units available, as illustrated in Table 4-18, which suggests that there is an unmet need of 204 units for renter households with incomes at 50% of the median.

14. Implications for the Future

The population and housing trends discussed in this chapter have numerous implications with regard to how Windham will function as a community in the future. The amount of growth that has occurred in the town over the last 30 years gives a sense that Windham has crossed a threshold, both in terms of how municipal government operates and how residents interact with one another. Although Windham still maintains in many sections of the town its historic “rural character” from an appearance perspective, the levels of growth achieved thus far have created issues that are typically found in small cities. These issues encompass such factors as: the demand for land for housing construction versus other community needs; the provision of a variety of housing types at a range of different costs; sustaining a rate of growth that does not overwhelm municipal/school services; addressing the housing needs of all age groups within the community; and maintaining the

existing character of the town.

There are a number of implications associated with the changing characteristics of the town's population with regard to shifts in age groups, decreasing household size, and a growing number of elderly residents. Accommodating these changing household demographics may require a broadening or shifting of municipal services, as well as an evaluation of municipal land use regulations and policies to insure that these trends are addressed in the future. This will present a particular challenge for the community as it works to manage residential growth without exacerbating the existing need for the continued provision of affordable housing. Any attempts by the town to address affordable housing for the elderly should encourage the creation of this type of housing in locations that have convenient access to goods and services, such as within the town's village areas, which tend to have a mixture of higher density residential and commercial land uses.

One factor that will have long-term implications for the town's future development is how Windham's role within the region evolves over time. Historically, the town has grown from a rural farm community and seasonal tourist area to a community with suburban characteristics that supports economic development activities occurring within the greater Portland area. As discussed in this chapter, Windham is only one of a number of towns in the region that has begun to emerge as growth areas within the larger economic region that is centered in and around Portland.

Home sale trends in the Portland metropolitan area indicate that Windham has already transitioned from a "lower priced" housing market to a "more moderate priced" housing market. The distinction being that while housing is still relatively affordable from a regional perspective, the town is not the same low cost housing market that first began to attract the large influx of new residents during the 1970's. If current growth rates continue, the town will eventually reach a critical mass of development that functions not just as a support link for Portland, but as a secondary economic growth center within the region. At that point Windham will begin to attract commercial and industrial development of its own accord due to the availability of a suitable workforce and support services. In fact, the beginnings of this commercial hub are already in place due to Windham's role in providing support services within the Lake Region seasonal tourism economy. The housing data indicates that Windham's seasonal housing market is also becoming less important over time while the town's role in providing services and retail goods continues to expand.

Chapter 5 Natural Resources

1. Introduction

This chapter of the comprehensive plan examines the natural environment within Windham. Natural environment is a broad term which encompasses a variety of features including the town's topography, soils, wetlands, water resources, and fish and wildlife habitat. These resources are part of a natural system that provides the underlying environment on which all man-made development within the town occurs. Proper management of this system is therefore important for maintaining its ability to function effectively, as well as to support the quality of life that Windham's residents have come to appreciate.

The town's 1993 comprehensive plan presented a brief inventory of natural resources as well as an assessment of their existing conditions and potential threats. The plan also provided extensive policy guidance and implementation strategies for protecting and preserving these resources. These policies and implementation strategies are presented in the Appendix of this plan along with an assessment of what has been accomplished over the past decade. This comprehensive plan expands upon the previous natural resource inventory based on updated information that has been compiled by a variety of state and federal agencies as well the use of a geographical information system (GIS), which allowed for more detailed mapping to support the review process.

2. Major Findings and Conclusions

- Water resources represent a shared regional asset. It has become increasingly important for Windham to work with its neighboring communities to insure that land use activities do not have adverse impacts within watersheds that cross municipal boundaries.
- Windham lies partially within the Sebago Lake watershed which encompasses one of the

state's largest public drinking water supplies which is also the source of the town's public water system. There are many potential threats to the water quality of the lake that are posed by the commercial and industrial uses located in the North Windham area that will need to be continually monitored in order to protect this drinking water supply.

- Overall, the quality of Windham's surface waters is very good. However, there will be a need for greater caution and monitoring in more heavily developed watersheds, such as in the North Windham area, to prevent a degradation of water quality in the future.
- Updated mapping of Windham's high yield groundwater aquifers by the Maine Geological Service has determined that the size of these aquifers is considerably larger in area than previously estimated. The town will need to re-evaluate existing zoning regulations for these areas based on this new information.
- There are only a few large tracts of land in Windham that remain unfragmented by roads and other development.

3. Topography

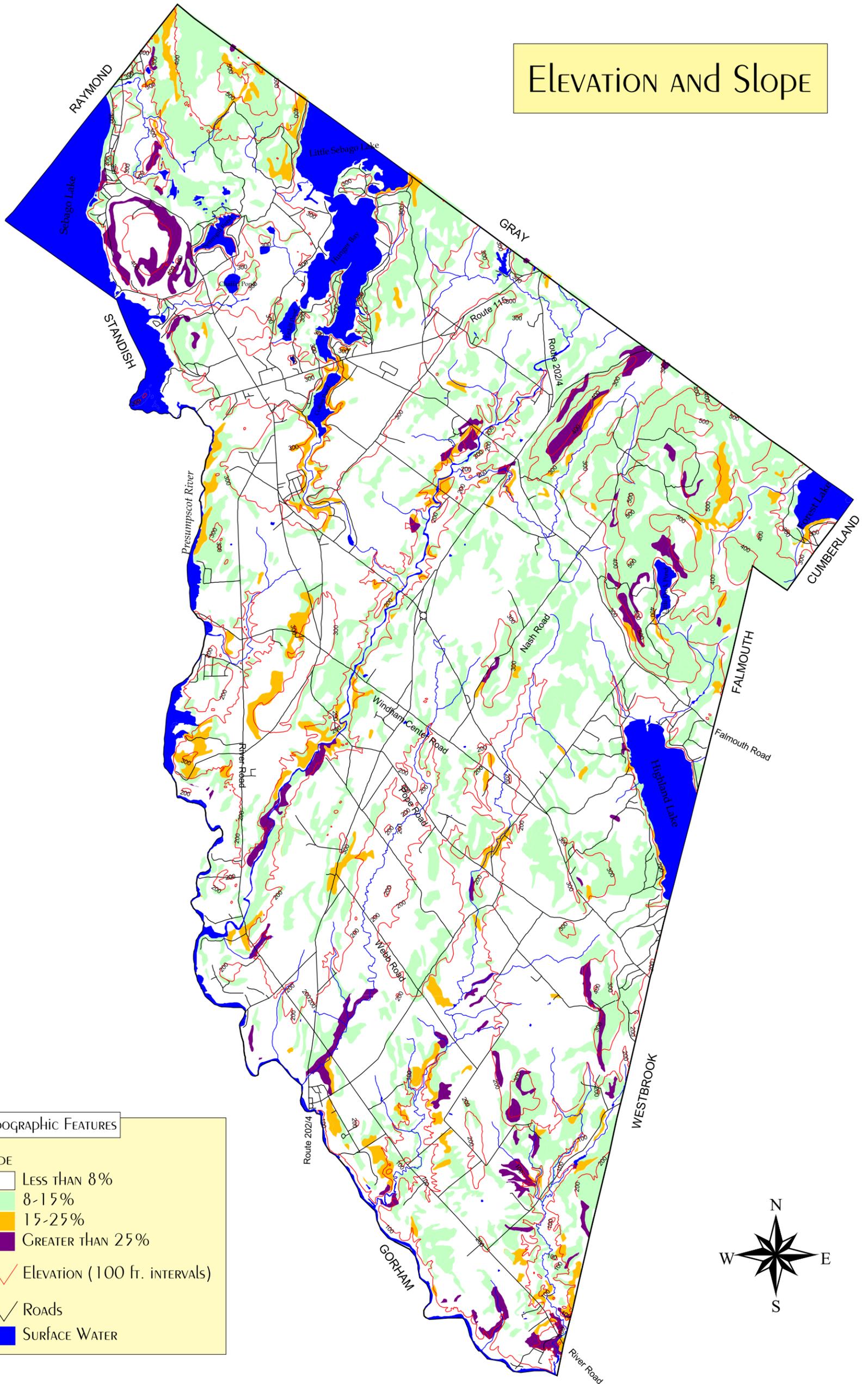
Topography is defined by the change in elevation of the land's surface above sea level and is reflected in the hills and valleys across the town's landscape. Windham's topography is illustrated on Map 5-1 entitled Elevation and Slope. The map illustrates only major changes in elevation in Windham which are depicted by contour lines showing 100 foot changes in elevation. The map also highlights the slope of the terrain throughout the town. Slope is an indication of the steepness of the land's surface, such as on a hillside, which is based on the change in elevation versus the change in horizontal distance (also referred to as rise over run and represented as a percent change on the map). The slope information is derived from county-wide soils mapping, prepared by the U.S.D.A. Soil Conservation Service, which assigns an average slope to each soil type. This generalized slope information is useful for town-wide planning purposes since it identifies areas that may be less suitable for various types of development due to the steepness of the terrain. Slopes in excess of 15% can place limitations on septic system installation and operation, add cost to the construction of buildings and roads, increase surface runoff, and can result in erosion from poorly managed construction sites.

Elevation changes in Windham have a general northeast to southwest trend. This characteristic is evident in the pockets of steeper slopes that create small ravines which flank the rivers and streams draining towards the Presumpscot River. The lowest elevations in town, which drop below 100 feet, are found along the Presumpscot River corridor near the southern tip of the town. The highest elevations, ranging from 500 to 600 feet, occur on Mount Hunger, to the west of Little Sebago Lake, and Atherton Hill, which is southwest of Forest Lake. Mount Hunger and Atherton Hill represent the edges of a wide drainage area that creates a "funnel" through which water from Little Sebago

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

ELEVATION AND Slope



TOPOGRAPHIC FEATURES

Slope

- LESS THAN 8%
- 8-15%
- 15-25%
- GREATER THAN 25%

ELEVATION (100 ft. INTERVALS)

ROADS

SURFACE WATER



Lake and the Pleasant River flow to its confluence with the Presumpscot River.

For the most part, Windham has only isolated pockets of very steep terrain with slopes in excess of 15%. However, slopes ranging between 8% and 15% can also be a concern where they are adjacent to lake shorefronts and river corridors, because they can contribute to the more rapid runoff of chemicals and eroded soil into these water bodies. This has historically been a concern around the town's lakes where high density seasonal housing, on-site septic systems, and gravel roads, can result in problems associated with sediment and nutrient runoff into the lake environment if not monitored carefully.

4. Water Resources

A. Surface Water

Windham's surface water resources are comprised of lakes and ponds, rivers and streams, and wetlands. Each of these water bodies is located within its own watershed area which are depicted on Map 5-2 entitled Watersheds and Wetlands. A watershed represents the dividing line where rainfall and other surface runoff drain to the streams, rivers, or ponds contained within that boundary line. Watershed boundaries are delineated based on the hills and valleys of the town's topography, as well as man-made features such as roads, which also affect surface drainage patterns.

Watersheds can be viewed at the regional and townwide levels of geography, as well as at the subwatershed level which considers smaller areas within the town. At the townwide level, all surface waters in Windham flow into the Presumpscot River, which in turn drains into the Casco Bay Basin and the Atlantic Ocean in the Portland area. Within the town there are numerous subwatersheds that collect drainage from smaller catchment areas around individual rivers, streams and ponds, prior to entering the Presumpscot River. Table 5-1 lists the town's water bodies based on the subwatershed in which they are located.

From a regional perspective, Windham lies partially within the Sebago Lake watershed, which is comprised all or parts of 23 towns and covers approximately 300,000 acres (450 square miles). The Lake is managed as a water supply for customers in 11 towns in the Greater Portland area, including Windham, by the Portland Water District (PWD). The PWD withdraws an average of approximately 24 million gallons a day from the Lake from an intake point which is located in the Lower Bay area, which is located "upstream" of Windham's portion of lake frontage. Water quality in the Lake is considered to be excellent and as such, requires only minimal treatment for use as a public drinking supply.¹

¹2001 Annual Water Quality Report, Portland Water District.

Table 5-1 Watershed Areas in Windham			
Watershed	Water Bodies	Watershed	Water Bodies
Sebago Lake/ Presumpscot River	Sebago Lake Basin North Windham Pond Dundee Pond Anderson Brook	Little Sebago Lake/ Pleasant River	Baker Brook Ditch Brook Mud Ponds Tarkill Pond Mill Pond Collins Pond Varney's Mill Pond
Highland Lake	Little Duck Pond McIntosh Brook	Forest Lake	Unnamed Tributaries
Black Brook	Unnamed Tributaries	Inkhorn Brook	Small Brook Milliken Brook Lincoln Weeks Brook
Colley Wright Brook	Unnamed Tributaries	Otter Brook	Unnamed Tributaries
Hyde Brook	Unnamed Tributaries	Outlet Brook	Pettengill Pond Chaffin Pond
Source: Maine Department of Inland Fisheries, U.S. Geological Survey, and the Federal Emergency Management Administration.			

Of the total 23 towns in the watershed seven have frontage on the Lake including the towns of Standish, Sebago, Naples, Casco, Raymond, Windham, and Frye Island. Due to their proximity, development of watershed properties in these towns has the greatest potential to impact Sebago Lake. The total Sebago Lake watershed land area in these seven towns is 86,440 acres, ranging from 862 acres in Frye Island to 20,452 acres in Naples. Given the regional nature of this resource and its importance as a drinking water supply it will require a cooperative effort on the part of all towns within the watershed to maintain the high water quality level that exists today.

Windham has approximately 1,900 acres of land within the Lake’s watershed. The subwatersheds in Windham that drain into the Lake include Hyde Brook, Outlet Brook, and two others with unnamed tributaries, as illustrated on Map 5-2. These watersheds include a portion of the town’s more urbanized development in North Windham as well as the Enterprise Zoning District, which is planned to be a non-residential growth area. The Maine Drinking Water Program (MDWP), a state agency within the Department of Human Services, is working with the PWD in accordance with the Source Water Assessment Program, to assess potential sources of contamination throughout the entire Sebago watershed. A report of this work effort is expected to be completed in 2003 and should be used by the town to update the comprehensive plan when it becomes available.

The Presumpscot River is the outlet for Sebago Lake. The River has been damned over the years at a number of locations along the Windham/Gorham town line for power generation purposes, which has created several impoundments including the Sebago Lake Basin, North Gorham Pond and Dundee Pond.

The largest of the town's subwatersheds is associated with the Pleasant River, which includes the outlet brook (Ditch Brook) from Little Sebago Lake. The Pleasant River subwatershed is the only drainage basin in Windham that receives contributing flow from significant land area outside the town. The Pleasant River's headwaters are located in the adjoining Town of Gray and Little Sebago Lake's drainage area also includes portions of Gray and Raymond. Little Sebago Lake itself is divided by the Windham/Gray town line with over two-thirds of the lake's approximate 1,300 acres located in Gray.

Highland Lake and Forest Lake are other Great Ponds (ponds larger than 10 acres) that Windham shares with adjoining communities. Forest Lake straddles the town lines of Gray and Cumberland. The headwaters of Highland Lake are located in Windham with the southern third of the lake in Falmouth. Further, the outlet stream of the lake, Mill Pond, is actually located in Westbrook, where it flows into the Presumpscot River. The lake is approximately 650 acres (one square mile) with a maximum depth of 67 feet and an average depth of 22 feet. The lake's watershed encompasses approximately 8.5 square miles within the three towns mentioned above.

The Highland Lake watershed has had periodic monitoring of the lake's water quality since the mid-1970s and annual monitoring throughout the 1990s. This monitoring has been conducted by volunteers of the Highland Lake Association (HLA) with assistance from the Cumberland County Soil and Water Conservation District (CCSWCD). In 1998/99, these groups prepared a lake survey assessment/implementation strategy and management plan for the watershed.² The assessment report noted that dissolved oxygen in the lake has been steadily declining since 1978 as has the clarity of the lake's water. According to the report, these conditions are attributable to increases in algae, phosphorus, and sedimentation associated with increased development in the watershed. In total, 104 sites were identified as potential sediment and phosphorus sources to the lake, all of which were associated with roadways and residential land uses.

The study also noted that there are over 700 homes in the watershed which all rely on septic systems to dispose of their wastewater. Many of these houses are situated on small lots adjacent to the lake's shore. A survey was also conducted by the Town of Windham in 1994 to assess conditions of septic systems within 250 feet of the lake. The study concluded that there were no problems with 98% of the 205 surveyed homes. However, 30% of the systems were over 16 years old with a typical life expectancy of 20-25 years indicating that a number of systems could require replacement in the near future.

The management plan presented a *Watershed Action Plan* which included the following goal and objectives for the watershed.

²*Highland Lake Watershed Survey and Implementation Plan* (June 1998) and *Highland Lake Watershed Management Plan* (January 1999), prepared by the Cumberland County Soil and Water Conservation District, Maine Department of Environmental Protection, and the Highland Lake Watershed Steering Committee.

Goal: Improve or maintain water quality, and reduce symptoms of eutrophication in the Highland Lake Watershed.

Objectives:

- Reduce the amount of phosphorus-loaded stormwater runoff from the watershed.
- Conduct systematic sampling of the water quality of the lake and its feeder streams.
- Build consensus on watershed management strategies and actions, and promote public stewardship and education about the watershed.

These objectives had 15 related action steps that were expected to take 10 to 15 years to fully implement. In addition, the management plan laid out a series of *best management practices* to be implemented with the goal of minimizing the non-point sources of pollution identified within the watershed.

The Maine Legislature, through the Department of Environmental Protection (DEP), has created a water quality classification system for all surface waters in Maine. Based on this classification system, the DEP has established “attainment goals”, which is the minimum desirable water quality, for all water bodies. The classification is intended to be more of a hierarchy of risk rather than one of use or quality. Under this approach risk rates the possibility of a breakdown in the ecosystem and loss of use due to either natural or human causes. Ecosystems that are more natural in their structure and function can be expected to be more resilient to stresses and recover more rapidly from those stresses. The DEP does periodic sampling of the state’s water bodies and produces a bi-annual report on attainment levels. The water quality category of the lakes and ponds in Windham are as follows.

- Chaffin Pond - sensitive
- Forest Lake - sensitive
- Highland Lake - sensitive
- Little Duck Pond - sensitive
- Little Sebago Lake - sensitive
- Pettingill Pond - sensitive
- Sebago Lake - outstanding

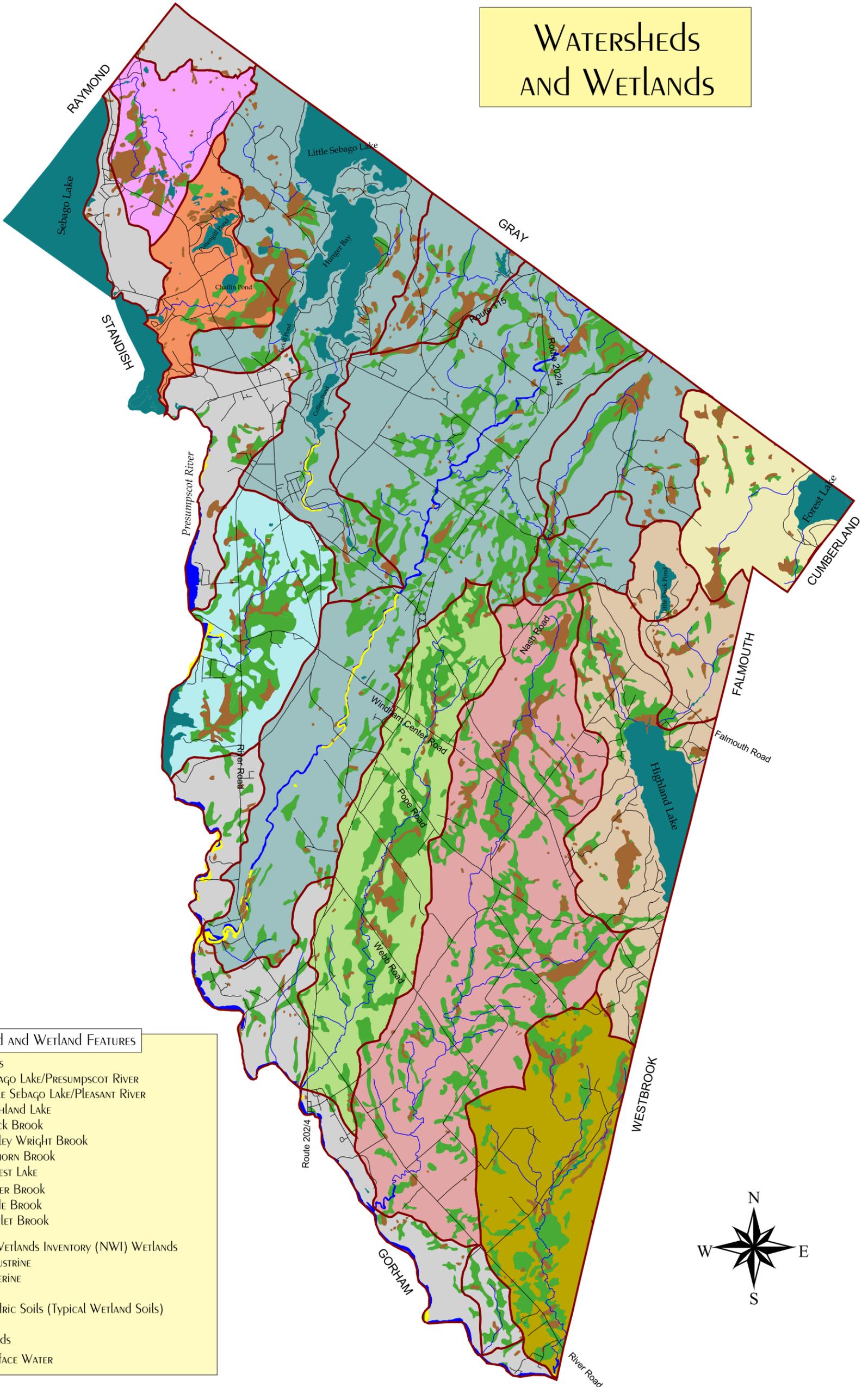
Until recently, Chaffin Pond was a water source for the Portland Water District which provides water services to the Greater Portland area. Sebago Lake is the Portland Water District’s source with the intake and treatment plant located in Standish. The quality of the Sebago Lake water is outstanding and only minimal treatment is required.

Windham is unique with regard to its topography and geology in that almost all of the town’s surface area is located within the direct watershed of either a great pond or river. Historically, the town managed development immediately adjacent to these water resources to a higher standard than properties more distant from these waterbodies. This was accomplished through the conventional application of Windham’s version of the State’s Shoreland Zoning Ordinance. The town has

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

WATERSHEDS AND WETLANDS



WATERSHED AND WETLAND FEATURES

WATERSHEDS

- SEBAGO LAKE/PRESUMPCOT RIVER
- LITTLE SEBAGO LAKE/PLEASANT RIVER
- HIGHLAND LAKE
- BLACK BROOK
- COLLEY WRIGHT BROOK
- INKHORN BROOK
- FOREST LAKE
- OTTER BROOK
- HYDE BROOK
- OUTLET BROOK

NATIONAL WETLANDS INVENTORY (NWI) WETLANDS

- PALUSTRINE
- RIVERINE

Hydric Soils (Typical Wetland Soils)

- Hydric Soils (Typical Wetland Soils)

Roads

- Roads

SURFACE WATER

- SURFACE WATER



Prepared by RKG Associates, Inc. - July 2002
 Sources: Maine Department of Inland Fisheries; U.S. Wildlife Service;
 USDA Soil Conservation Service; and Maine Office of GIS

demonstrated the value placed on the long-term health of their many and varied water resources through their advocacy for progressively more effective ordinances. The town has also provided evidence of their understanding of the relationship between development activities and the potential for erosion and sedimentation events, contamination from untreated stormwater and the potential for excessive nutrient loading associated with these activities. Additionally, the town has recognized the negative impacts these occurrences can have on water resources. Conversely, the town has also recognized the importance of employing proper erosion and sedimentation control planning, stormwater treatment and the proper management of nutrients in creating a compatible relationship between well-designed development and preservation of the quality of Windham's water resources.

One of the areas addressed in the original Shoreland Zoning Ordinance was Erosion and Sedimentation Control (E&S). However, few towns ever required E & S plans until Windham initiated such a program in 1998. These plans required property owners to seek professional assistance in identifying the potential for negative impacts associated with proposed projects, and to prescribe appropriate measures in order to minimize or eliminate the potential for the negative impacts associated with these types of projects during the construction phase and to assist in the development of a long-term stable situation. The town continued to raise the bar when they developed and adopted the Surface Water Protection Ordinance in 2002. This ordinance took the provisions found in the Shoreland Zoning Ordinance and applied them to entire watersheds, thereby applying these standards to almost all construction projects.

Most of the excess phosphorus found in our lakes comes from stormwater runoff associated with gravel camp roads. Pollution from stormwater runoff and soil erosion is one of the most significant problems contributing to the decline in water quality in many lakes, rivers and streams. **Soil erosion is the single largest pollutant (by volume) to our surface waters, and up to 85% of all erosion and sedimentation problems in lake watersheds originates from improper construction and maintenance of camp roads.** Proper camp road maintenance helps prevent this form of pollution and preserves our splendid water resources.³ Phosphorus is the prime nutrient, (pollutant), carried by these eroded sediments. Now that the source has been identified, it can be managed. Both public and private road construction, repair and maintenance projects are now being designed to minimize the potential for erosion and sedimentation during the construction phase of the project and also to contribute to a more stable permanent situation. Silt fences, stone check dams and erosion control blankets are now common sights at road construction projects. Ditches are revegetated to provide long-term stabilization and culverts have riprap aprons to prevent washouts and undermining. Gravel roads utilize ditch turnouts and level lip spreaders to disburse smaller quantities of concentrated stormwater and return it to sheet flow and promote its infiltration back into the soil of a stable vegetated buffer. Maine's version of the NPDS II stormwater management law is in its final phases of consideration before it is adopted and becomes law. This expanded program will require greater

³*Camp Road Maintenance Manual* produced jointly by the Kennebec County Soil and Water Conservation District with the Maine Department of Environmental Protection Bureau of Land and Water Quality in 1987 with updates and revisions in 1995, 1999 and in 2000.

treatment of not just the quantity of stormwater, but also the quality of the stormwater. These techniques will be applied to even smaller projects that are currently not covered under the original NPDS program now in effect. State and local road crews are now commonly sent to seminars where they learn of the potential negative consequences of their everyday activities and are provided with effective alternative methods to accomplish their projects utilizing appropriate environmentally responsible practices.

Individuals and businesses involved in the application of nutrients and pesticides are following similar paths as the road crews mentioned above. They are being made aware as to the potentially harmful short and long term implications their practices could have if left to a business-as-usual work pattern. They are being provided with the tools to manage the application of their products better, to select less harmful alternatives and to apply them in a more environmentally friendly manner. This group is also benefitting from attendance at State-sponsored seminars in concert with the availability of technical assistance programs to assist them in developing better plans and implementing those plans in a more effective manner.

Windham relies on septic systems to provide treatment for most of its residential and commercial wastewater generators. Properly designed, installed, utilized and maintained systems provide effective long-term treatment of nitrates, phosphorus, and pathogens found in these wastewater sources. While malfunctioning, abused and neglected systems do not provide adequate treatment and may become non-point sources of excess nutrients with the potential to have a negative impact on a nearby water resource. Threat levels associated with this potential non-point source are diminishing with time due to several factors. An increasing percentage of pre-1974 installed systems are being replaced with new systems that have been designed by State licensed professionals. Progressively better-qualified excavating contractors install all new systems based on these ever-evolving design standards. Most of these installing contractors have attended installation seminars to ensure their technical expertise to install these new systems as designed. A growing percentage of local contractors have enrolled in a voluntary certification program; this program will likely evolve to become a mandatory program. Additionally, the State has been aggressive in supporting their ongoing education efforts for the system inspectors, the town's Code Enforcement Officers. Windham has three full time Code Enforcement Officers and a reputation among contractors for making sure the systems are installed as designed. The State has recently added the requirement for another inspection point during the construction of the system to insure the installation follows the design. People who own septic systems have become more aware of what represents proper care and maintenance of their septic systems and have demonstrated a general desire to do their part in supporting proper care and maintenance of their systems.

In summary, additional development consistent with this plan will occur in Windham, but does not have to be threatening to our valued resources. The potential threats have been identified, assessed and strategies devised to minimize their potential for negative impact on our water resources. Windham must remain vigilant in our efforts to protect our water resources. This effort should include ongoing monitoring of water quality, continued encouragement for the application of the best

available design standards, persistence in the ongoing education of the contractors, designers, regulators and homeowners and continued application of the inspection and enforcement duties of our Code Enforcement Officers to ensure the integrity of the design is delivered during the construction phase of the project.

B. Groundwater

Groundwater is found below the surface of the ground in the soil and rock formations that make up Windham's surficial and bedrock geology. The amount of groundwater occurring at a given location depends on the characteristics of these soil and bedrock formations, such as the natural features ability to store water, a characteristic referred to as porosity. Groundwater is the source of water for many residential and non-residential wells in Windham, but is not presently the source of any municipal wells.

Groundwater occurring in sufficient quantities to yield useable amounts of water to a well is referred to as an aquifer. Although groundwater aquifers occur throughout Windham in various geologic formations, the amount of water available for public or private water supplies can vary considerably. While it may be possible to obtain a supply of water in most locations that is adequate to serve individual households or businesses, there are only a few areas in town where more significant quantities of water may be obtained from a properly installed well. These areas are illustrated on Map 5-3 entitled High Yield Aquifers. The mapping of these aquifers was completed by the Maine Geological Survey (MGS) in 1997. These significant aquifers are generally comprised of coarse grained sand and gravel material with the potential to yield 10 or more gallons-per-minute (gpm) to a well.

The map shows that the largest area of high yield aquifers is concentrated around Little Sebago Lake, extending toward Sebago Lake and the Presumpscot River. Other smaller areas have been delineated around Windham Center Road and River Road, as well as adjoining Forest Lake. Of these areas, only the aquifer adjacent to Little Sebago Lake has been identified as having the potential to yield more than 50 gallons per minute, according to the MGS. The update aquifer data prepared by MGS considerably expands this area of highest yield (>50gpm) as compared to previous aquifer maps. Windham's zoning ordinance currently includes an aquifer protection district that was based on these earlier mapping efforts. The ordinance presently regulates an area that is much smaller in size, which is primarily centered around Chaffin Pond and Pettengill Pond.

Until the mid-1990s, the Portland Water District operated two wells in the Chaffin Pond area that were used to supplement the district's primary drinking water supply in Sebago Lake. In 1998, a contamination problem was discovered from a leaking underground storage tank (UST) at a gasoline station in North Windham. This leak resulted in significant levels of MTBE (a gasoline derivative) and other contaminants being detected in area groundwater. This contamination reached both the monitoring and production wells operated by the PWD, which are approximately 500 to 1,000 feet from the gasoline station. Sebago Lake is approximately one mile from the site. Although

groundwater monitoring indicated that contamination levels in the area decreased relatively quickly the PWD discontinued use of these wells and a new water line was extended to the area from the district's primary supply, Sebago Lake. Clean-up of contaminated soil at the gas station has been completed and the Maine Department of Environmental Protection (DEP) required the property owner to comply with numerous requirements prior to resuming the sale of gasoline. One of the State's stipulations was that quarterly groundwater monitoring be conducted which have shown that concentrations of MTBE have remained below drinking water standards established by the Maine Department of Human Services.

In 1994, the town hired the consulting firm of Robert G. Gerber, Inc. to conduct an assessment of groundwater quality in Windham. The study area was confined primarily to the large sand and gravel aquifer in North Windham, which was in the process of being redefined by the USGS at the time, as discussed above. The objective of the study was to establish the impact of current development and project the impact of future development within the study area. The consultant presented the findings of this analysis in two reports in 1995 and 1997.⁴ According to these studies, recharge to the aquifer is primarily from precipitation falling directly on the aquifer and from runoff from adjacent uplands. Recharge to the aquifer also includes septic loading from septic systems in the area. The aquifer discharges to Sebago Lake and the Presumpscot River to the west and south and to Little Sebago Lake, Tarkill Pond, Mill Pond, Collins Pond, and Ditch Brook to the east and south. Contaminants introduced into the aquifer therefore have the potential to be transported with the groundwater into these surface water bodies.

The studies noted that there are many potential threats to groundwater quality in the study area. Since there is no municipal sewer system, commercial, industrial and residential development all employ on-site wastewater disposal methods. The increasing density of on-site septic systems in this area pose a potential threat to groundwater quality in the form of nitrogen compounds, bacteria, or viruses. Other compounds such as chlorinated solvents, volatile organics, and other industrial byproducts may be introduced to the groundwater through improper disposal into on-site wastewater disposal systems. Large impervious, paved areas for parking also provide the potential for substances such as oil, fuel, antifreeze, and road salt to enter the groundwater with runoff from precipitation. In addition, underground storage tanks for petroleum products in the study area, the locations of which are identified in the appendix of the studies, pose a potential risk to groundwater due to spills or leaks. Based on analysis conducted in the two-phase study the consultant presented the following conclusions.

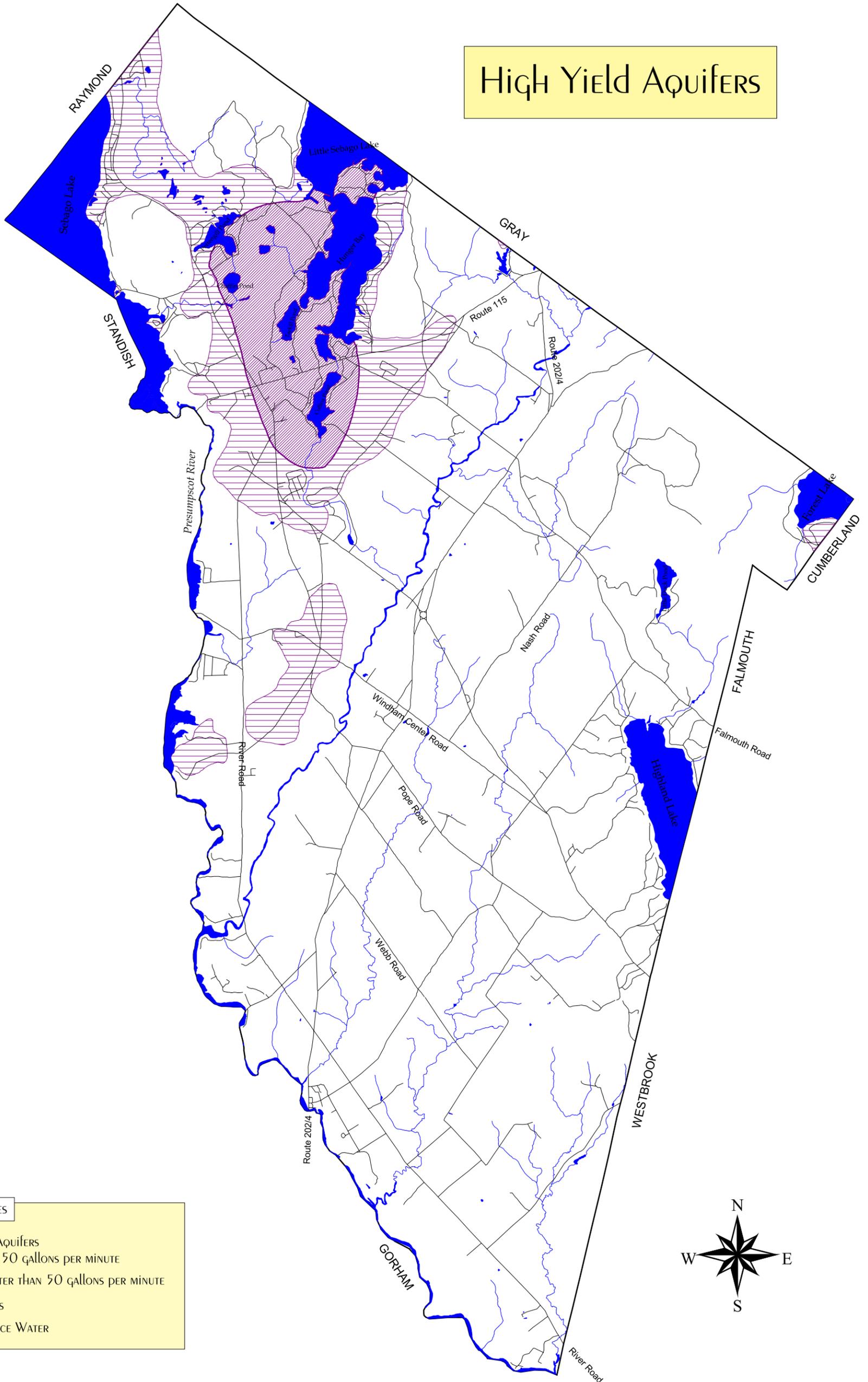
Based on the water chemistry data collected for this project from numerous test wells, the groundwater in the sand and gravel aquifer has good quality. Some of the test wells had nitrate concentrations greater than 6 milligrams per liter (mg/l) but these appear to represent water quality in small, localized areas and are probably due to adjacent septic systems. The Maximum

⁴*Town of Windham, Ground Water Resource Evaluation Phase 1 - February 1995 and Phase 2 - May 1997, prepared by Robert G. Gerber, Inc., Freeport, Maine.*

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

High Yield Aquifers



Aquifer Types

- High Yield Aquifers
- 10 - 50 gallons per minute
- GREATER THAN 50 gallons per minute
- Roads
- SURFACE WATER

Prepared by RKG Associates, Inc. - July 2002
 Sources: Maine Geological Survey; Maine Office of GIS

Contaminant Level (MCL) for nitrates, as specified by the State of Maine is 10 mg/l. Organic chemicals were not detected for the parameters analyzed within the study.

The build-out analysis based on the town's present zoning concluded that concentrations of nitrates in the aquifer would not be expected to exceed the MCL of 10 mg/l and had simulated average concentrations of 6 mg/l in the Commercial 1 and Medium Residential zoning districts that overly the sand and gravel aquifer. It was also noted that higher values may be expected for portions of the study area that are comprised of materials other than sand and gravel, as well as during periods of seasonal low water or for areas down gradient of large septic systems.

A summary of the report's recommendations are as follows.

- If the loading for a proposed development is greater than 300 gpd/acre or if the septic system is an engineered system (>2000 gpd), require a site specific analysis.
- Detailed surficial geology mapping should be performed to more accurately defined the extent and properties of the glacial till in the Commercial 2 zoning district. If the existing mapping is correct, future calculated concentrations of nitrates would be 11 mg/l in this area.
- Detailed surficial geology mapping should be performed to more accurately define the extent and properties of the clay-silt deposit located in the southern portion of the study area. Modeling indicated that potential nitrate concentrations could exceed 10 mg/l in this area based on build-out under existing zoning.
- Implement a program of on-going water quality monitoring for groundwater.
- Require that septic systems in the area be pumped out every five years, at a minimum.
- Implement a public education program concerning maintaining water quality.

C. Wetlands

Wetlands is a broad term that includes, but is not limited to, swamps, marshes, bogs, floodplains and other areas that may develop between upland areas and deep water habitats. Wetlands perform a myriad of functions that are of value to the community. From a water quality perspective these include the filtering of pollutants from the water, groundwater recharge and discharge, and nutrient cycling. Wetlands also provide socio-economic values by slowing the rate of flow during peak flood periods, which helps to protect property by reducing erosion and minimizing damage to shoreline areas. They also offer opportunities for recreation, education, and research, and can help to delineate open space areas within a community. The importance of wetlands to fish and wildlife includes providing a critical habitat component for many mammals, reptiles, waterfowl and other bird species; and augmenting productivity for aquatic species such as fish and shellfish.

Wetlands are defined based on a combination of plant species, soils types, and duration of flooding/saturation by water. For town-wide comprehensive planning purposes, one of the information sources used to identify wetlands is the National Wetlands Inventory (NWI). The NWI was produced during the mid-1980s by the U.S. Fish and Wildlife Service (USFWS) based on aerial photography from that time period. This method of identifying wetlands allowed the USFWS to map wetlands for the entire country, but also made some types of wetlands more difficult to identify if they were obscured by tree cover. Therefore, certain types of wetlands, such as forested wetlands, may be under-represented by the data.

Map 5-2 illustrates the NWI wetlands located in Windham which are categorized as either Riverine, Lacustrine, or Palustrine.

- Riverine – All wetlands and deep water habitats contained within a river or stream channel that are not dominated by trees, shrubs, or emergent vegetation. Only a few of these areas were noted by the NWI in Windham, although more are likely to exist.
- Lacustrine – Wetlands and deep water habitats that are situated in a topographic depression or dammed river channel and are lacking trees, shrubs, and persistent emergent vegetation. All of Windham's lakes and ponds fall into this category according to the NWI.
- Palustrine – All nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens.

Also illustrated on Map 5-2 are hydric soils. These soils are typically associated with wetlands⁵, although the NWI mapping did not identify the existence of wetland vegetation based on aerial photo interpretation. However, it is likely that at least a portion of these soils are supporting the type of vegetation required to be designated as a true wetland. This would suggest that the amount of wetlands existing in Windham is under-reported and may need additional consideration from a regulatory and conservation standpoint. Part of the reason that the NWI may have excluded these areas of poorly/very poorly drained soils is due to the amount of agricultural land in Windham. The use of these soils for agricultural purposes would prevent the growth of wetland vegetation, thus, they would not meet the definition of wetland from a regulatory perspective.

5. Soils

The soils in Windham have certain characteristics that have been shaped over a long period of time due to the region's topography, climate, and the effects of living organisms acting on the soil. These soil characteristics make them more or less suited for various types of development or conservation activities. Soils have been mapped for Windham by the U.S. Department of Agriculture's Natural

⁵Hydric soils delineated on Map 5-2 are those which have been identified by the USDA Natural Resources Conservation Service in *Soil Survey Data for Growth Management, Cumberland County*, March 2000.

Resources Conservation Service (NRCS). These maps are contained in the Soil Survey of Cumberland County which is on file at the Windham Town Offices. The level of detail and accuracy of maps contained in the Soil Survey is well suited for planning purposes at the town-wide level of analysis. However, these maps are not intended for site-specific analysis and should be supplemented with a high intensity soil survey in order to assess the development potential of individual parcels of land.

The County Soil Survey rates each soil type based on a variety of factors. These include the soils' ability to accommodate on-site septic systems, the suitability for the construction of buildings, roads, and other types of development, as well as the soils suitability for growing crops and other agricultural uses. In this comprehensive plan the County Soil Survey has been used to identify steep slopes (refer to Map 5-1) and hydric soils typically associated with wetland areas⁶ (refer to Map 5-2).

6. Wildlife Resources and Important Habitat Areas

The term "wildlife" encompasses reptiles and amphibians, insects, birds and fish as well as mammals. The major threat to wildlife today is the physical loss of suitable habitat and reduction in habitat quality. As the farms and forest areas are developed, habitat is lost or degraded. The five basic components of wildlife habitat are food, water, shelter, breeding areas and space. If any one of these is missing or of poor quality (such as polluted water), it will be impossible for the species of interest to survive, let alone thrive.

Map 5-4 presents important wildlife habitat areas that have been identified within the Town of Windham, by IF&W and the U.S. Fish and Wildlife Service (USFWS). Some of these habitat areas, such as streams, ponds, and wetlands, have been discussed to some degree previously in this chapter. However, this map illustrates how those resources are integrated within the town's larger ecosystem.

The information presented on the Map and in the following narrative has been compiled within the Maine Natural Areas Program (MNAP). This program inventories lands that support rare and endangered plants and animals, rare natural communities, and outstanding examples of representative natural communities. The program maintains a cross-referenced data management system that consists of automated and manual maps as well as information regarding natural features. The program also exchanges information on animals and their habitat needs with the Department of Inland Fisheries and Wildlife (MDIFW). MNAP and MDIFW use standard methodology in the management of information, and cooperate on a variety of conservation efforts.

Riparian Habitat - Highlighted on the map are the corridors abutting rivers and streams which are referred to as riparian areas. These buffers encompass 150 feet around streams (75 feet on either side) and 500 feet around the Presumpscot and Pleasant Rivers (250 feet on either side). These

⁶Ibid

setbacks are the minimum prescribed by Shoreland Zoning regulations although not all streams in Windham are currently protected by these regulations. This type of habitat is important for many species and the corridors formed by these buffers can also serve as travel corridors for animals and provide “linkages” between patches of habitat that are otherwise separated by development. However, the 150 foot buffer around streams is generally considered to be an insufficient width, by wildlife biologists, for use by larger mammals.

Waterfowl/Wading Bird Habitat - These areas, identified by IF&W, are comprised of freshwater wetlands and surface waters of small ponds. This habitat provides nesting/feeding/roosting areas for ducks, herons and other wading birds and song birds, as well as various aquatic species. The adjacent upland areas are also used by other species as well. Only several small isolated areas of this habitat have been noted in Windham, as illustrated on Map 5-4.

Priority Trust Species Habitat - As part of its program to protect and restore the Gulf of Maine watershed, the USFWS has mapped habitat which is important for 64 species of birds, mammals, fish, plants, invertebrates, and reptiles that regularly inhabit this region. These species must meet one of the following criteria: be federally threatened or endangered; be identified as threatened or endangered by two of the three states in the Gulf of Maine watershed; or be a species which has a significantly declining population nationwide. The important habitat for these species, as illustrated on the map, includes freshwater wetlands, forested wetlands and upland forest areas. It also includes areas identified as grasslands, which in Windham’s case, includes many of the areas cultivated for agricultural purposes.

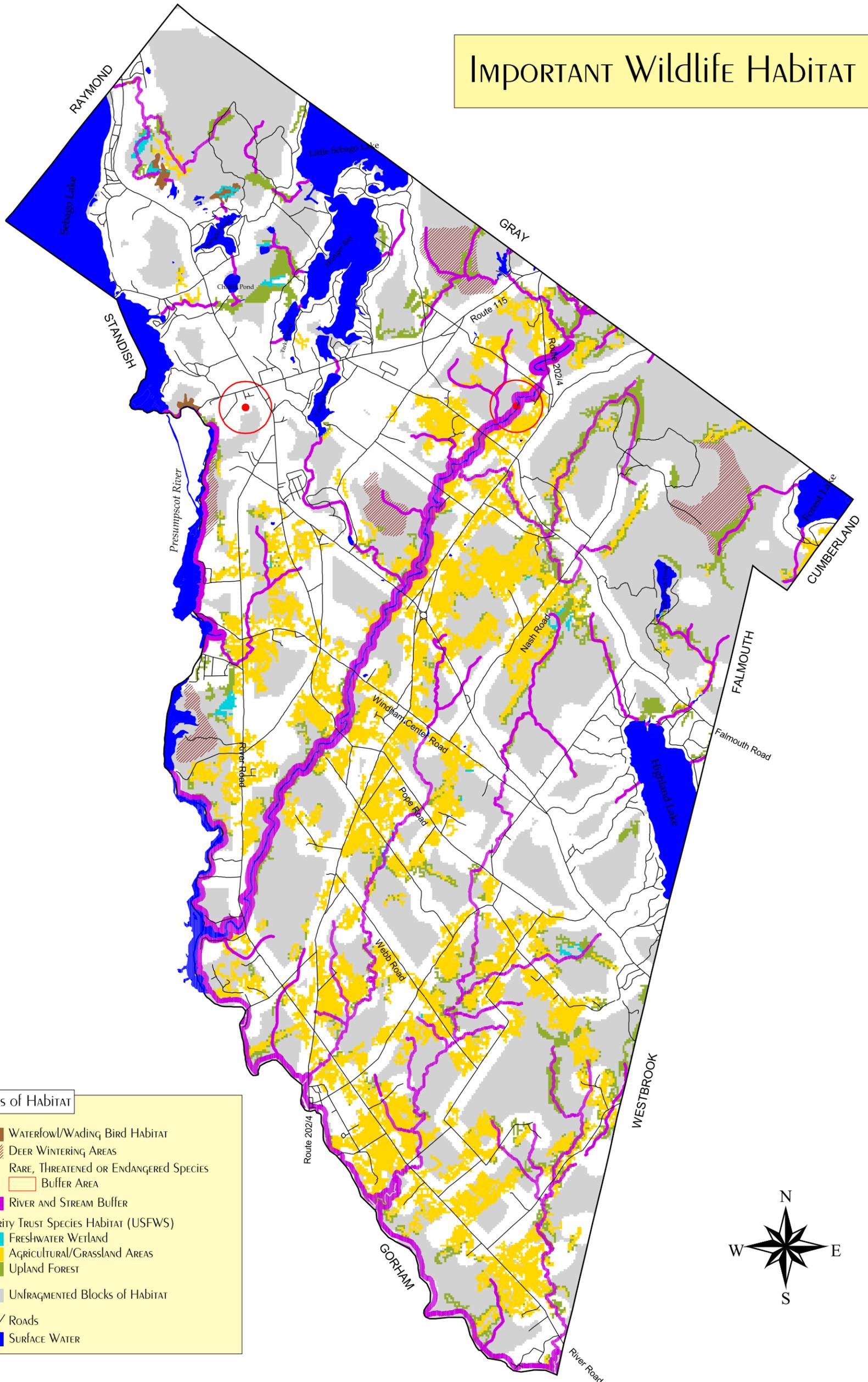
Deer Wintering Areas - As the name implies, deer wintering areas (DWA) are used by these animals as a protected refuge through the harsh winter months. A DWA is defined as a forested area used by deer when snow depth in the open/hardwoods exceeds 12 inches, when the deer are prone to sink in more than 8 inches, and the mean daily temperatures are below 32 degrees. As illustrated on Map 5-4, there are several small DWAs scattered throughout the town. The boundaries of these DWAs have not been recently verified by IF&W, but land use development patterns indicate that the forest cover in these areas appears to be still largely intact.

Rare, Threatened and Endangered Species - The MNAP IF&W also tracks the occurrence and status of animal and plant species that are rare, threatened, or endangered within the state as well as rare or exemplary natural communities. Two species have been observed in Windham which includes the Brook Floater and the Norther Black Racer. The map illustrates the approximate location where these species were observed along with a generalized buffer for habitat protection, which would need to be field verified. In addition to these two sites, Highland Lake has also been identified as containing Spotted Pondweed, an aquatic plant which is considered to be highly imperiled in Maine. The MNAP has not identified any rare or exemplary natural communities within Windham.

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

IMPORTANT Wildlife HABITAT



Types of Habitat

- WATERFOWL/WADING BIRD HABITAT
- DEER WINTERING AREAS
- RARE, THREATENED OR ENDANGERED SPECIES
- BUFFER AREA
- RIVER AND STREAM BUFFER

PRIORITY TRUST SPECIES HABITAT (USFWS)

- FRESHWATER WETLAND
- AGRICULTURAL/GRASSLAND AREAS
- UPLAND FOREST
- UNFRAGMENTED BLOCKS OF HABITAT

- ROADS
- SURFACE WATER



Prepared by RKG Associates, Inc. - July 2002
 Data Sources: Maine Department of Inland Fisheries;
 U.S. Fish and Wildlife Service; Maine Office of GIS

Unfragmented Habitat Blocks - This final category of important habitat addresses the concept discussed previously in this chapter which noted that the fragmentation of habitat into tracts of smaller sizes tends to diminish the potential for those areas to support viable wildlife populations. Map 5-4 illustrates larger tracts of land in Windham, as delineated by IF&W, that have not been bisected by improved roads or other types of development. A 1,000 foot buffer has been created around roadways (500 feet on either side) to delineate these unfragmented habitat blocks. *It should also be noted that in many instances the blocks located along the town's border extend into adjoining communities, making them bigger than they appear on this map.* The multi-town aspect of these blocks is a particularly important feature and one of the reasons that IF&W is promoting a regional approach to habitat management and protection.

Overlaying other important habitat areas onto these unfragmented blocks, as shown on the map, provides a useful perspective for identifying opportunities for future conservation efforts, as well as where important habitat is being encroached on by development. A review of these unfragmented blocks reveals that Windham has few remaining *large* tracts of land with the exception of the area around Atherton Hill, in the eastern corner of town. However, there are a number of smaller blocks that could potentially be "linked together" by stream and river corridors with suitable buffers.

7. Implications for the Future

All land use recommendations that are developed as part of this comprehensive plan have the potential to impact the features of the natural environment discussed in this chapter. Even if no changes are made to the town's land use regulations as a result of this comprehensive plan update, this lack of action will have an impact on the town's natural environment because the town will continue to grow in the future. The key then is to determine which areas are most appropriate for accepting future growth. This decision should not be based just on which portions of town are most suitable for development due to soil characteristics or highway access. It should also take into consideration the long-term safety of the town's water quality, maintaining a diversity of natural habitat and preserving a quality of life that is appropriate for the community.

Information presented in this chapter emphasizes the fact that the natural resources in Windham and its adjoining region function as an integrated system. The effects of land use activities in one portion of town have the potential to impact other parts of the town, as well as neighboring communities. Conversely, land use activities in neighboring towns can affect the quality of Windham's natural environment. Therefore, it will be important for Windham to coordinate its planning efforts related to natural resources with the towns of Gray, Raymond, Cumberland, Falmouth, Westbrook and Gorham. From a regional perspective, Windham will also need to work cooperatively with the Portland Water District and other towns located in the Sebago Lake watershed in order to protect this important public drinking water supply from the potential negative impacts of future development.

Although there is no evidence to suggest that water quality is an issue water quality in Windham at this time is still considered to be good, continued monitoring and education will be warranted as the

town grows in the future. The use of *best management practices* for agricultural, forestry, and other resource-based land use activities should also be implemented on all properties engaging in these activities. Watersheds with higher development densities, such as those around the North Windham/Little Sebago Lake area, need to be closely monitored in the future. These areas are the most densely developed portions of the town and are also the areas currently zoned for future commercial and industrial growth. Commercial and industrial land uses tend to have more impervious surfaces, such as larger buildings and parking areas, which can increase runoff into surface waters.

These same watersheds also overlay the town's high yield groundwater aquifer. Although no municipal wells are presently located in this aquifer, continued oversight and regulation will help to preserve water quality for potential use in the future. It will also serve to protect the public water supply in Sebago Lake which is hydraulically linked to the groundwater in that portion of Windham. The town will also need to consider revising its zoning regulations, with regard to the aquifer protection district, based on updated mapping of this resource. contained in this plan.

From a wildlife perspective the town still has good opportunities to preserve significant tracts of land for habitat and link these areas together along protected stream and river corridors. However, if the current low density residential development patterns continue to occur in the future it will encroach on these areas and fragment larger tracts of land into isolated islands of wildlife habitat. Windham still has a considerable amount of agricultural land as well as parcels that are being managed for timber products. Both of these resource based industries maintain land that is important for wildlife, which illustrates habitat preservation can both serve the needs of wildlife and also support the local and state economies.

Chapter 6

Economic Conditions

1. Introduction

Economic growth in a community typically occurs as a result of external forces, such as a general expansion of the national economy, that are usually beyond the control of the community. By contrast, economic development (e.g., the creation of new jobs, the attraction of private investment, and the expansion of existing businesses) is something that a community can influence. However, in order to encourage, and possibly direct future economic development, community officials and local residents need a clear understanding of regional and local economic trends and conditions. This chapter examines key economic conditions and trends in Windham and the region, primarily Cumberland County, in which the town is located. Changes in statewide economic factors are also briefly noted. Non-residential land development patterns in Windham are also examined, as well as existing employment related commuting patterns.

2. Major Findings and Conclusions

- Between 1992 and 1999, according to a U.S. Department of Commerce study, the United State economy grew at an annual rate of about four percent. In Maine, however, the annual growth rate was only 2.6 percent. Based on this data Maine was ranked 45th among all states in terms of economic performance.
- An increasing share of new businesses and employment in Maine, between 1977 and 1998, located in Cumberland and York Counties.
- The fast growing employment sectors in Maine are services and retail. About 35 percent of new employment in these sectors, between 1977 and 1997, located in Cumberland County.
- About 700 new jobs were created in Windham during the 1990s.

- Over 70 percent of the approximately 5,000 jobs in Windham are evenly distributed between the service and retail sectors.
- The total number of retail business firms in Windham declined slightly between 1995 and 2000.
- Approximately 940 acres of land in Windham is used for commercial and industrial purposes. This represents about 2.6% of the 55.6 square miles of land within the town.
- The vast majority of Windham residents, based on 1990 Census data, commute to other communities in Cumberland County to work. Almost 50 percent work in Portland, Westbrook and South Portland.
- The Windham workforce (people who work in Windham) was evenly divided between residents of Windham (43.1%) and other Cumberland County communities (44.9%)
- Windham residents, from a policy perspective, need to carefully consider what role the town should play in the region's economic future.

3. Key Employment and Business Trends

A report recently released by the U.S. Department of Commerce notes that the national economy grew by about four (4) percent annually between 1992 and 1999. In Maine, however, the annual growth rate was only 2.6 percent. Based on this data, Maine was ranked 45th among all states in terms of economic performance.

This data, as well as other studies, indicates that although Maine's economy is growing, there are limitations on the pace of economic change in the state. In addition, most new business activities primarily occur in the southern coastal portion of the state. This section examines how these economic changes have impacted Cumberland County and Windham.

A. Regional Changes in Employment and Business Patterns

Data collected by the U.S. Department of Commerce indicates that employment in the State of Maine increased, between 1977 and 1998, by roughly 174,600 jobs (from 282,000 to 456,700).¹ This increase represents an annual growth rate of 2.9% over this twenty-one year period. Most of this increase, however, occurred primarily in Cumberland County (See Figure 6-1).

¹See *County Business Patterns* prepared by U.S. Department of Commerce

For example, private employment in Cumberland County increased by 69,200 jobs during this same time period (from 71,500 jobs in 1977 to 140,700 jobs in 1998). This increase represents an average annual growth rate of 4.6%, almost 60 percent greater than the statewide rate of employment growth. In York County the average annual rate of private employment growth was 3.9%, but only 1.2% in Androscoggin County. Additionally, York County's employment base is only one-third the size of the employment base in Cumberland County. Clearly, Maine's largest employment growth, between 1977 and 1998, has been in Cumberland County since it captured almost 40 percent of statewide employment growth, although only about 31 percent of the state's employment base is located in the County. York County also captured a higher percentage of statewide growth (12.1%) in comparison to its portion of statewide employment (10.2%). In comparison, Androscoggin County experienced a lower percentage of job growth (4.7%) in relation to its share of statewide employment (8.7%).

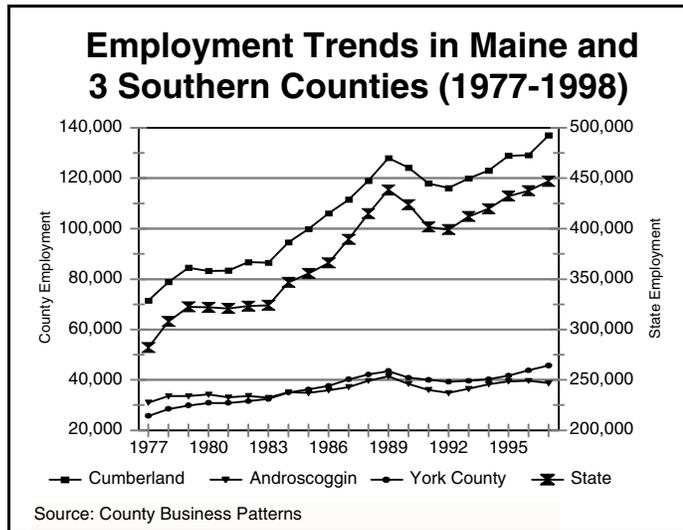


Figure 6-1

The growth of new businesses in Maine reflects the same trends exhibited by employment changes. The number of new business firms in Maine increased by more than 14,800 firms from 1977 (23,500 firms) to 1998 (38,300 firms) (see Figure 6-2). This represents an annual increase of about three percent during the twenty-one year period. However, new businesses in Cumberland County increased at a slightly faster rate of 4.2 percent annually, from 1977 (5,300 firms) to 1998 (9,900 firms). Businesses in York County increased at even a higher annual pace of 4.4 percent, while the annual average rate of increase in Androscoggin County was much lower at 1.7 percent. Cumberland County captured about 31 percent of the total of new business firms in Maine since 1977, exceeding its 26 percent share of the State's business base in 1998.

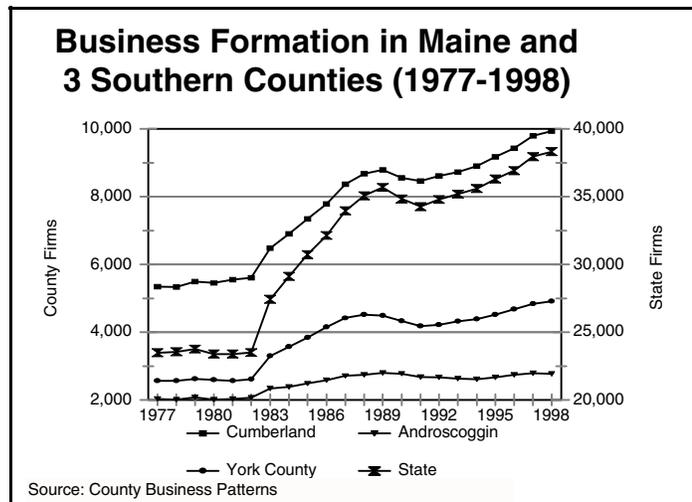


Figure 6-2

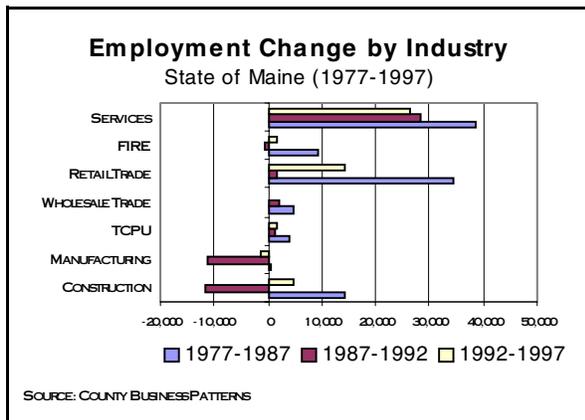


Figure 6-3

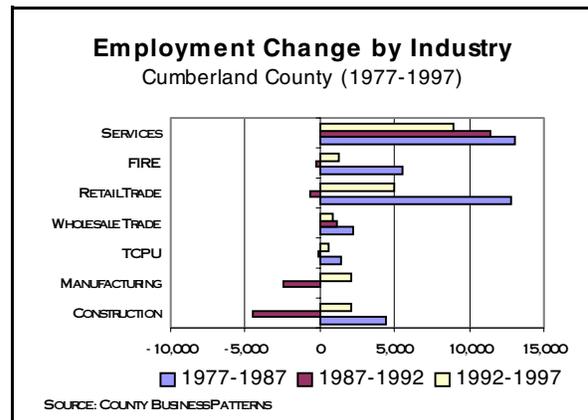


Figure 6-4

An examination of employment changes by industrial sector provides some insight about the types of jobs that are now being created in Maine. Figure 6-3 illustrates employment changes for five and ten year intervals between 1977 and 1997. As the data indicates, the fastest growing employment categories in Maine have been the services and retail sectors. Employment in manufacturing, except for one short period, has declined since 1977. Construction employment also declined during the recession of the early 1990s, but recovered significantly in the latter part of the decade.²

Similar employment increases in the retail and service sectors occurred in Cumberland County (see Figure 6-4). In fact, Cumberland County employment in these two sectors represents about 35 percent of statewide increase between 1977 and 1997. In addition, employment in the Finance, Insurance and Real Estate (FIRE) sector expanded drastically between 1992 and 1997, and manufacturing employment increased by about 2,000 jobs during the same time period.

Changes in the number of new businesses in Maine primarily reflects growth in statewide employment (see Figure 6-5). Between 1992 and 1997, new business in the state increased at a rate of about 1.8 percent annually, with firms in the manufacturing (2.1%), TCPU, and services (3.1%) experiencing annual

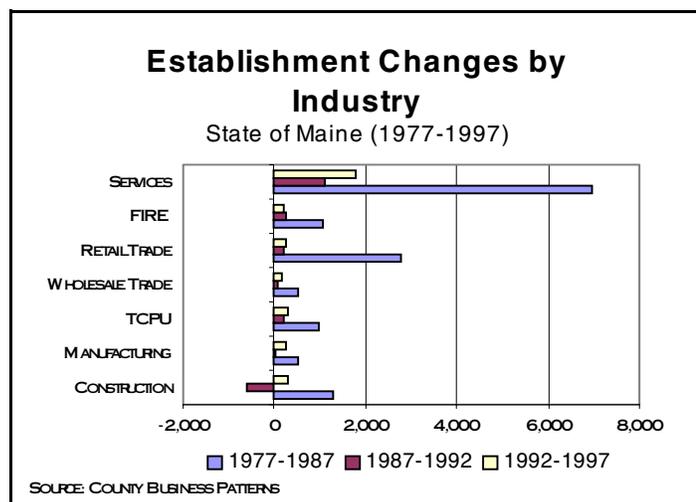


Figure 6-5

²The following acronyms are used in identifying employment sectors: FIRE - Finance, Insurance and Real Estate; TCPU - Transportation, Communications and Public Utilities. Most computer related employment is classified as services sector employment.

average growth rates higher than the average. It is also interesting to note that there was an increase in the number of manufacturing firms, despite a general decline in employment during each of the time periods evaluated. This may indicate a shift to smaller manufacturing firms, in terms of number of employees.

A similar examination (see Figure 6-6) of changes in the number of new business firms, by industrial sector in Cumberland County, indicates 4,500 new firms were created between 1977 and 1997, representing approximately 32 percent of new firms created statewide. Between 1992 and 1997, about 1,200 new business firms were created in Cumberland County. This represented about 37 percent of new business growth statewide. Key sectors that experienced significant growth during this period included manufacturing (3.4%), TCPU (4.1%) FIRE (3.5%) and services (4.0%). The overall growth in business firms during this period was approximately three (3) percent.

B. Changes in Employment and the Number of Businesses in Windham

As noted earlier, employment and the number of businesses in Maine and Cumberland County have increased significantly, especially during the 1990s. Windham has also benefitted from these changes. Total employment in Windham has grown from 4,360 in 1990 to 5,070 in 2000, an increase of over 700 positions (see Figure 6-7). Most of these employment increases, however, occurred after 1997. The number of businesses located in Windham has also increased.

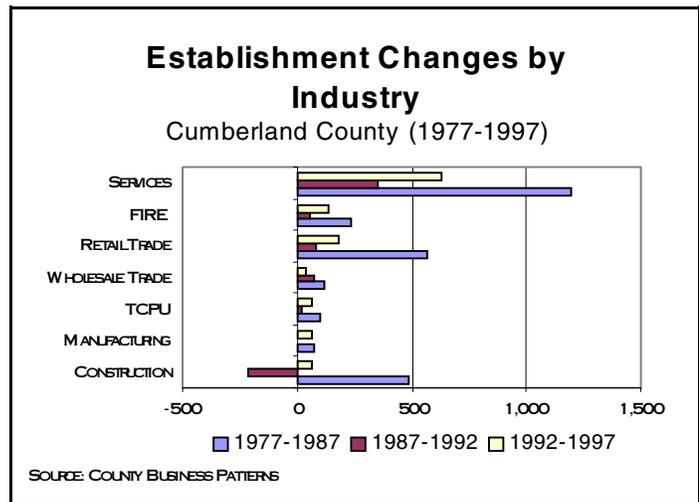


Figure 6-6

Between 1992 and 1997, about 1,200 new business firms were created in Cumberland County. This represented about 37 percent of new business growth statewide. Key sectors that experienced significant growth during this period included manufacturing (3.4%), TCPU (4.1%) FIRE (3.5%) and services (4.0%).

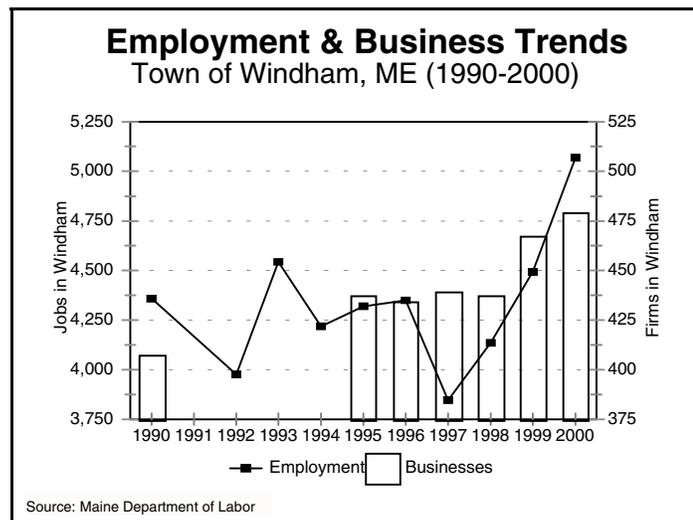


Figure 6-7

As illustrated in Figure 6-8, most of the employment in Windham, approximately 72 percent, is evenly distributed between the service and retail sectors. Another 20 percent of the employment base involves government, manufacturing and construction sectors. The smallest employment categories

include wholesale, agricultural, finance, insurance and real estate (FIRE) and transportation, communications, public utilities (TCPU).

The types of businesses located in Windham however are slightly more diverse. Services (32%) and retail (22%) account for about 54 percent of the town's business base, followed by construction firms (18%), wholesale trade (7%), manufacturing (6%), FIRE (5%) and agricultural (3%).

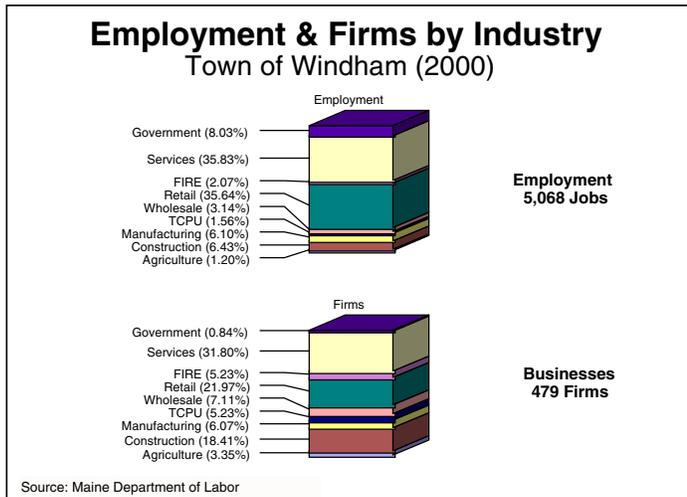


Figure 6-8

An examination of changes in Windham's employment patterns and number of firms (1995 to 2000) indicates that employment in retail and services experienced the largest gain, followed by employment in construction and manufacturing (see Figure 6-9). By comparison, employment in transportation, communications and public utilities (TCPU) declined and small increases were exhibited in wholesale trade and FIRE. A slightly different pattern was exhibited in the number of businesses, with total retail firms declining, and new business creation occurring mainly in services, construction, manufacturing and TCPU sectors.

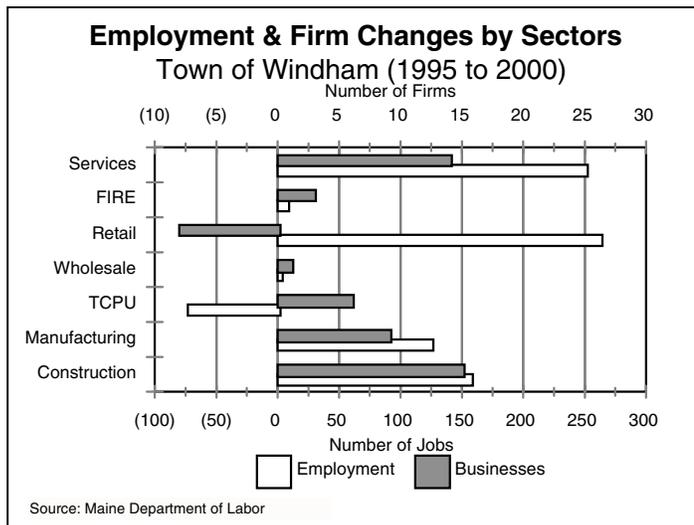


Figure 6-9

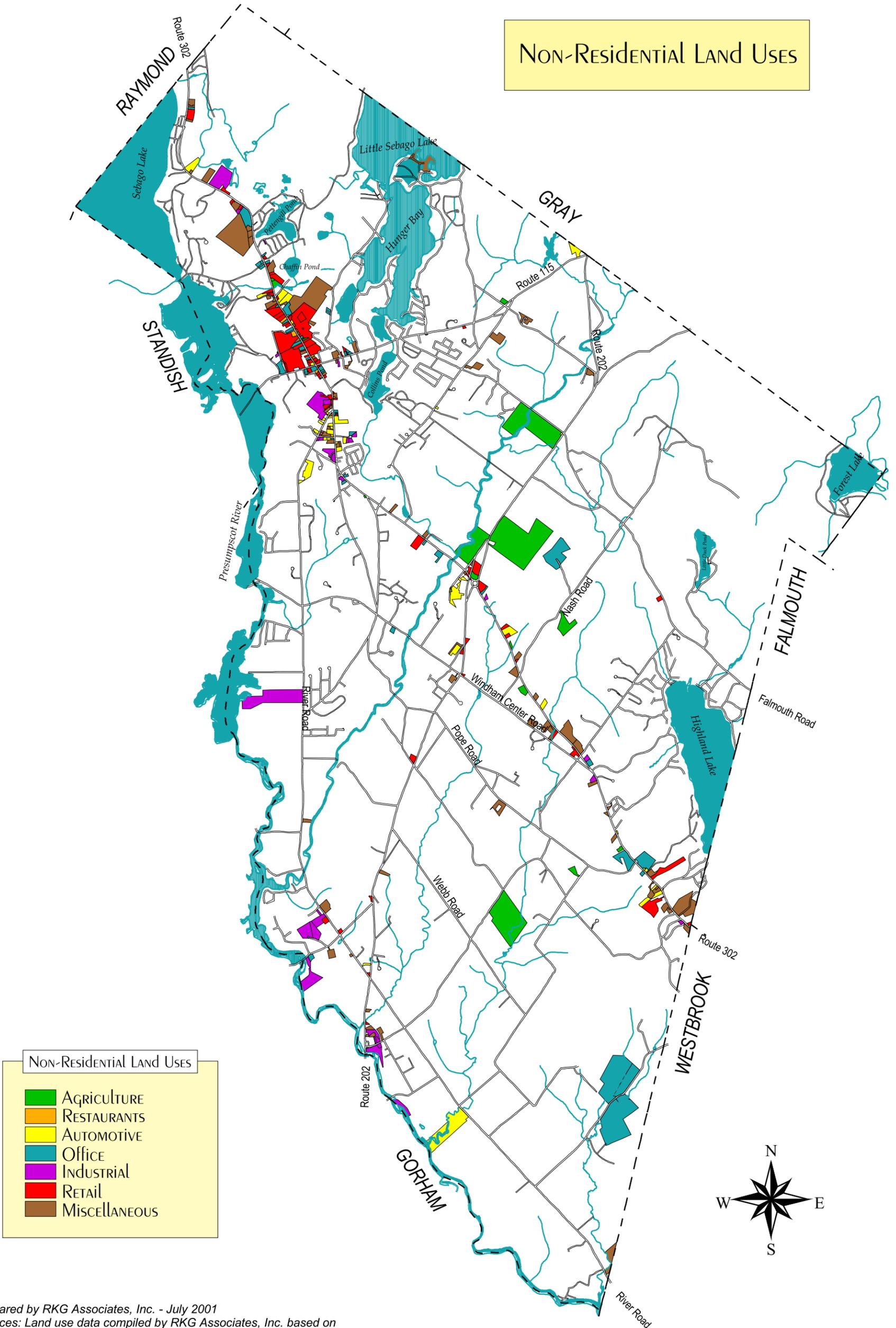
C. Location, Acreage and Building Size in Windham

The Town of Windham has approximately 940 acres of land currently occupied with commercial and industrial buildings (see Map 6-1). This acreage represents approximately 2.6% of the 55.6 square miles of land within the borders of Windham (see Figure 6-10). As the map indicates, most of these non-residential uses are located on Route 302 and include a variety of retail, restaurant, industrial, office and miscellaneous uses. A few industrial uses are found in South Windham Village and along the River Road corridor, and various commercial agricultural land uses are located on Route 202. All of these non-residential land uses are based on Windham's Property Assessment Data Base as outlined in Table 6-1.

COMPREHENSIVE MASTER PLAN

TOWN of WINDHAM, MAINE

NON-RESIDENTIAL LAND USES



NON-RESIDENTIAL LAND USES

- AGRICULTURE
- RESTAURANTS
- AUTOMOTIVE
- OFFICE
- INDUSTRIAL
- RETAIL
- MISCELLANEOUS



Prepared by RKG Associates, Inc. - July 2001
 Sources: Land use data compiled by RKG Associates, Inc. based on
 Windham Municipal Assessment Records - December 2000
 Map Sources: Base map from Casco Bay Estuary Study ca. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall tax map - April 2000

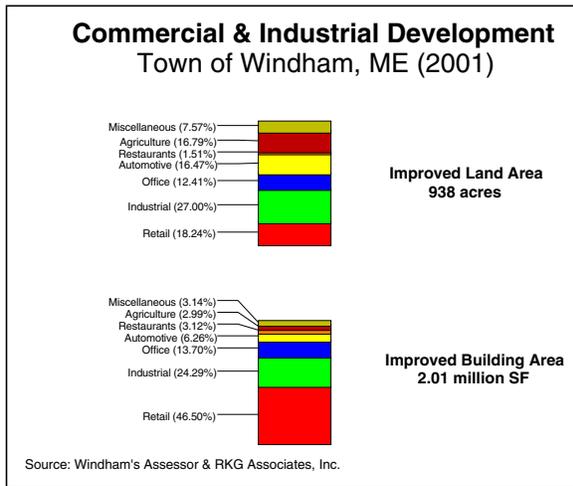


Figure 6-10

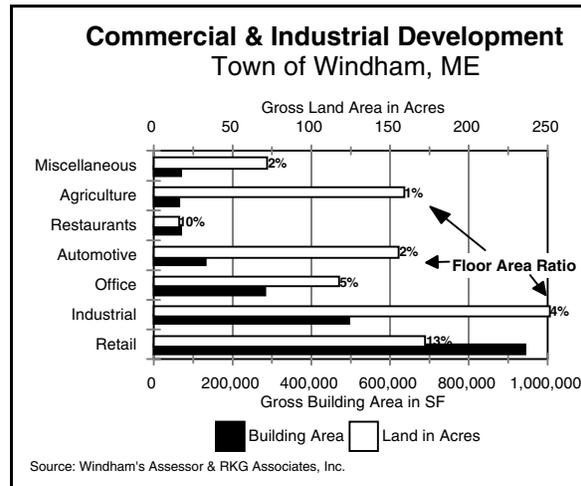


Figure 6-11

As illustrated in Figure 6-10, these non-residential uses contain about two million square feet of building area. It is interesting to note that while retail accounts for over 18 percent of the land identified as non-residential, retail contains over 46 percent of the building space. Industrial buildings account for 24 percent of the building area devoted to non-residential land uses and 27 percent of the land area, while office use represents about 14 percent of the building area and just over 12 percent of land area currently used for non-residential purposes.

As noted in Figure 6-11, retail buildings in Windham represent nearly one million square feet of built space, while industrial buildings contain about 500,000 square feet. The amount of land occupied by these types of uses is also substantially different. For example, current retail users are located on about 170 acres, while industrial users require about 250 acres. Agricultural and automotive represents about 150 acres each, although these uses have much lower building density.

Table 6-1 Non-Residential Land Use Categories	
Agricultural <ul style="list-style-type: none"> • Animal Care • Dairy Farms • Florist/Landscaping/Farm Stands 	Miscellaneous <ul style="list-style-type: none"> • Campgrounds • Funeral Home • Junkyards • Laundromats • Motels • Plumbing • Printing • Land Leases • Radio-TV-Newspapers
Industrial <ul style="list-style-type: none"> • Chemical • Business Parks • Heating/Air Conditioning/Energy • Manufacturing • Warehouse/Storage • Industrial/Assembly/Light Mfg. • Tool & Die • Wood Industry 	
Retail <ul style="list-style-type: none"> • Convenience Store • Retail Store • Shopping Center • Crafts 	Office <ul style="list-style-type: none"> • Banks • Doctors • Office Buildings/Condos • Research
Restaurant <ul style="list-style-type: none"> • Quick Food • Restaurant/Lounge 	Automotive <ul style="list-style-type: none"> • Auto Sales • Auto Service • Gas Stations
Source: Town of Windham Property Assessment Data Base, RKG Associates, Inc	

An evaluation of retail, office and industrial building size is illustrated in Figure 6-12. This data indicates that there are five retail structures in Windham that contain 50,000 square feet or more. These five buildings represent over 60 percent of retail space located in the town. There are seven buildings between 25,000 and 50,000 square feet. Three of these structures are used for retail purposes, while four are industrial style buildings. Three office buildings in Windham contain between 10,000 and 25,000 square feet. Five retail stores and ten industrial facilities also fall within this category. Although most of the office buildings contain between 1,000 and 10,000 square feet, there are 28 office properties (condominiums) at less than 1,000 square feet.

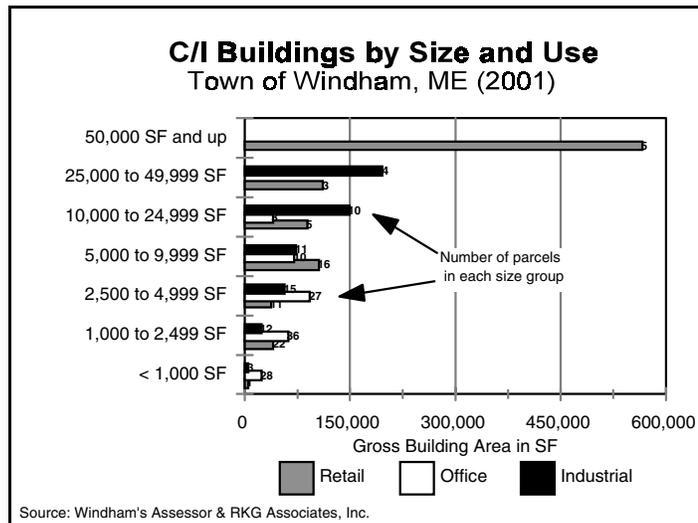


Figure 6-12

4. Commuting Patterns

Understanding where people live and work is a key factor in evaluating economic development alternatives. Although only 1990 Census data is currently available to describe employment commuting patterns in Windham, the data does provide a basis for comparing where people who work in Windham live, as well as key employment locations for Windham residents.³

As noted in Table 6-2 the vast majority of Windham residents, in 1990, worked in Cumberland County (64.3%). In fact, almost 50 percent worked in Portland, Westbrook and South Portland. However, approximately 30 percent of town residents also work in Windham. Only a small percent of Windham's residents work in other Maine counties (5%) or other states (1.4%).

Table 6-3 indicates that Windham's workforce (people who work Windham) in 1990, was almost equally divided between residents of Windham (43.1%) and other Cumberland County communities (44.9%). It is interesting to note that only a small portion of the town's workforce resides in the neighboring communities of Gorham, Gray, Raymond and Westbrook (16%). In fact most of Windham's workforce is dispersed across a wide range of communities in Cumberland County. In addition, about 11 percent of the town's workforce resides in other counties in Maine.

³As of December 2002, data about commuting patterns (often referred to as Journey to Work data) collected during the 2000 Census was not yet available from the U.S. Bureau of the Census. When this data is finally released this portion of the Comprehensive Master Plan should be revised.

Table 6-2 Windham Residents by Place of Work - 1990		
Work In	Number	Percent
Windham	1,913	29.3%
Cumberland County Portland (1,950) Westbrook (772) South Portland(509) Other (959)	4,190	64.3%
Other Maine Counties	329	5.0%
Other States	88	1.4%
Total	6,520	100.0%
Source: 1990 Census, U.S. Department of Commerce		

Table 6-3 Windham Workforce by Place of Residence - 1990		
Place of Residence	Number	Percent
Windham	1,913	43.1%
Cumberland County Standish (420) Raymond (248) Gray (214) Portland (171) Other (941)	1,194	44.9%
Other Maine Counties	501	11.2%
Other States	35	0.8%
Total	4,443	100.0%
Source: 1990 Census, U.S. Department of Commerce		

Although the commuting pattern data is over ten years old, the information does reveal some trends that are probably still relevant today. For example, in 1990 Windham was a net exporter of workers (approximately 2,000). This is most likely still true today, even though the number of jobs in Windham has increased by about 14 percent. Also, Cumberland County, especially Portland, is still the most likely work place destination for Windham residents. Finally, a major portion of Windham’s workforce probably still lives outside of the town.

5. Implications for the Future

During the past several decades Windham’s role in the regional economy has changed significantly. As the *Windham Comprehensive Plan for the 1990s* noted, “Windham is [now] firmly established as the retail center of the Lakes Region”. A subsequent study prepared for the Windham Economic Development Corporation suggested that “Windham is an employment center in its own right”.⁴ This study also noted that in addition to a significant expansion of retail activities, which enables Windham to serve as the retail center for surrounding Sebago Lake area communities, employment in service related businesses has increased as well.

Data presented in this chapter supports the conclusion that Windham, as part of the Cumberland County region, has experienced an increase in retail and service related jobs. However, certain changes in the local economy are beginning to occur. For example, there appears to be a movement toward fewer, but larger retail businesses. Also, although there has been an increase in the number of service related businesses and employment in Windham, the built space (individual buildings) devoted to office related uses appears to be relatively small. Finally, despite all the changes in

⁴Windham Economic Development Infrastructure System, Planning Decision, Inc. May 1998, page 6-1

Windham's economy during the past decade, the town was not listed as a regional service center by the Maine Task Force on Regional Service Center Communities.⁵

These subtle, but distinctive economic changes will require some careful consideration about what role Windham should play in the region's economic future. Some of the key policy issues that will need to be considered are outlined below:

- What are the primary goals for economic development in Windham; increasing the tax base; creation of new employment opportunities; diversification of employment opportunities; improving local wages?
- Windham is a major sub-regional retail center. However, should the Town also become a service center and encourage or facilitate the construction of buildings and related types of structures for office and assembly/manufacturing uses (e.g. flex-space)?
- Should additional areas of Windham be designated for non-residential land uses or should the density in existing areas be increased for these types of uses?
- Currently only about 2.6 percent of the land in Windham is used for non-residential development. Is this sufficient?
- Are there areas of Windham where non-residential development should not be permitted or the types of non-residential land uses restricted?
- What type of action or investment, if any, should the Town of Windham make to encourage future economic development?

⁵“Of Maine’s 497 municipalities , 69 were designated as service center: places where people go to work, shop, get services, and turn for help in time of need. They are the State’s economic engines, accounting for 71% of all jobs in the State, 74% of all service employment (medical, legal, business, social, etc.) and 77% of all retail sales.” *Reviving Service Centers - Volume 1*, Report of the Maine Task Force on Service Center Communities, August, 1998.

Chapter 7

Transportation

1. Introduction

Windham's transportation system has played a significant role in the growth and development of the town. Geographically Windham is located at the junction of several major highways. To the north and south access is available via U.S. Routes 302 and 202, while Maine Routes 115 and 35 provide access to the east and west.

Traffic issues in Windham can be divided into two major components. The first involves unique traffic problems relating to commercial establishments along the U.S. Route 302 corridor, especially in North Windham. The potential for future commercial/industrial development along this corridor will only intensify these problems. The remainder of the town is primarily single-family large lot and village types of residential developments. Traffic levels on Route 302, however, are now impacting traffic patterns in some of the more residential portions of the community.

Both the commercial and residential portions of the town have experienced growth in the past 20 years. Strip malls have been constructed along Route 302 in North Windham and residential development, that had primarily occurred along existing roadways, is now beginning to appear in backlot areas. Windham has also experienced a substantial increase in the year-round occupancy of lakefront property. As a result, many local roads have been added to the primary road network creating larger volumes of local traffic along the major arterial and collector roads. This change in local roadway usage, combined with increased regional through traffic, has created numerous problem areas in Windham's road network.

This chapter of the comprehensive plan examines the town's roadway characteristics and highway usage patterns. Existing road conditions, traffic volume data, and crash location data have also been analyzed in order to identify significant concerns about Windham's roadway system.

2. Major Findings and Conclusions

- Windham's highway network has contributed to the town's quality of life, but has also led to congestion and safety problems since growth has outpaced necessary highway improvements in many areas.
- Route 302 continues to be a major transportation issue confronting the town. Part of the problem with this highway is that it must serve the existing commercial district, as well as local and regional transportation needs.
- Conversion of seasonal properties along the lakes to year-round housing uses has increased traffic on the private roadway system which serves many of these areas. The issue of roadway standards and year-round maintenance of these private roads is also a major problem facing the town.
- Future improvements to existing local roads could foster the development of additional rural land areas for residential uses.

3. Inventory of Windham's Transportation System

The first step in evaluating a municipality's transportation system generally involves the preparation of an inventory of existing facilities. This section presents such an inventory, which includes an identification of existing roads, as well as a classification of roads and the functional uses of these roadways. Including an inventory of this type in the comprehensive plan provides a foundation for addressing future roadway needs and uses.

A. Identification of Streets

This inventory of roadways in Windham is based on a list of existing streets prepared by town officials in April 2001. This data was then augmented with property parcel maps for Windham and additional information obtained from the Maine Office of Geographic Information Systems. The results of this inventory are illustrated on Map 7-1, entitled the Transportation Network.

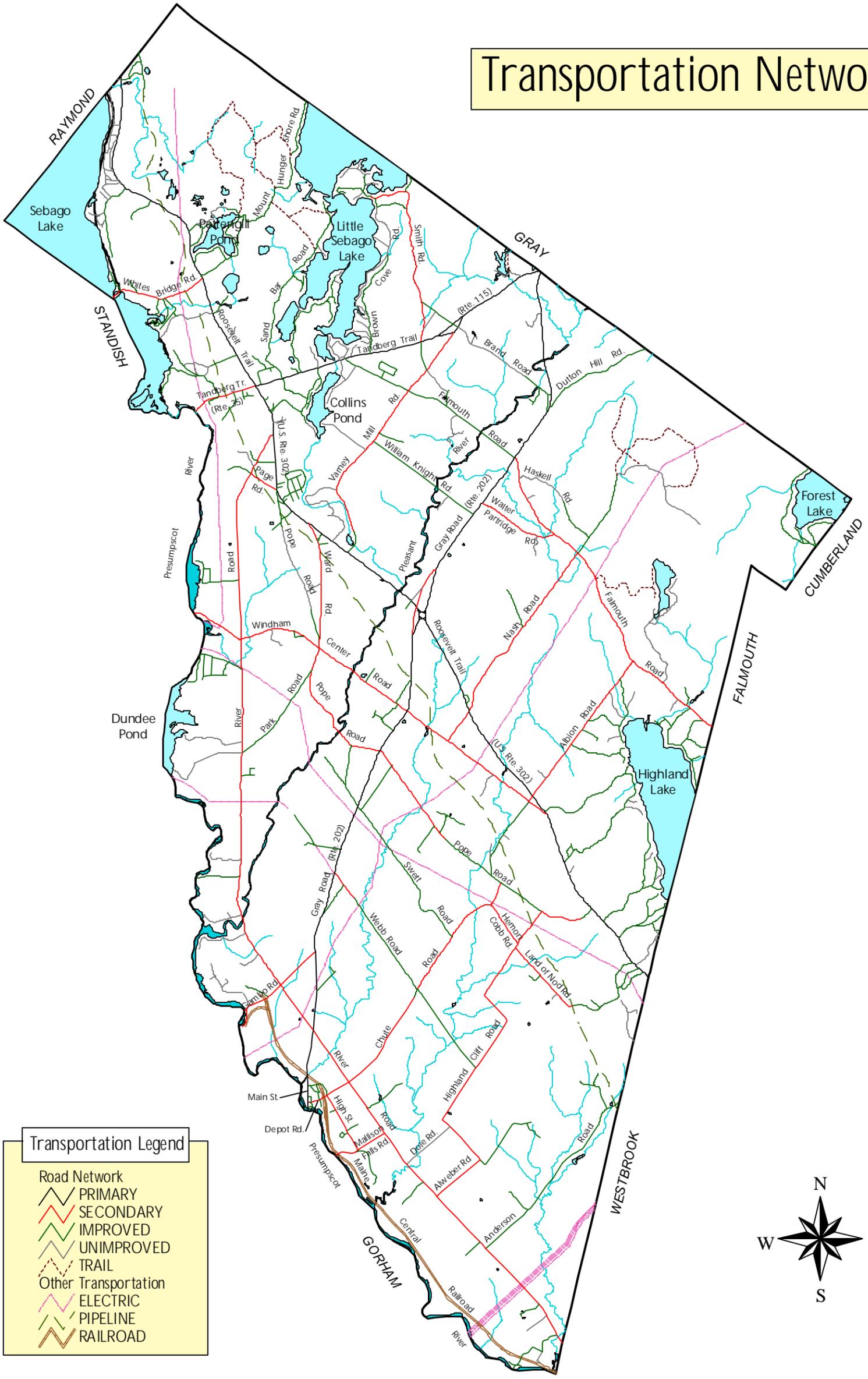
B. Bridges

An inventory prepared by the Maine Department of Transportation (MDOT) identifies 24 bridges in Windham. A list of bridges that identifies those that are owned and maintained by MDOT and the ones owned and maintained by the Town of Windham is located in Table 7-1. The Brand Bridge (#0254) is jointly owned by the town and the State of Maine, but is maintained by the town.

Comprehensive Master Plan

Town of Windham

Transportation Network



Transportation Legend

- Road Network
 - PRIMARY
 - SECONDARY
 - IMPROVED
 - UNIMPROVED
 - TRAIL
- Other Transportation
 - ELECTRIC
 - PIPELINE
 - RAILROAD

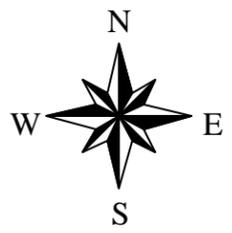


Table 7-1 Bridges in Windham			
Bridge Name	Identification #	Bridge Name	Identification #
Bridges Owned and Maintained by the MDOT			
Varney's Bridge	#0257	Narrows	#2998
White's	#2939	Glantz	#2315
White's	#3857	Great Falls #2	#1529
Pleasant River	#2676	Lokhorn	#3059
Popeville Bridge	#5742	Carroll Lamb	#5879
South Windham	#2787	Doles	#5061
Loveitt	#3018	Eel Weir	#2264
Mallison Falls	#5821	Babbs	#1009
Montgomery Road	#0233	Black Brook Bridge	#6243
Bridges Owned and Maintained by the Town of Windham			
Varney Mill	#0256	Source: Town of Windham and Maine DOT	
Pope Road	#6386		
Jones	#0234		
Chute Road	#0300		
Black Brook Br.	#0302		

C. Traffic Statistics

1) Traffic Counts

Traffic count data is a key component in evaluating traffic characteristics throughout a community. This information is also a vital part of the process for establishing priorities for future roadway improvements. The design standards of roadway construction include the anticipated average daily traffic volumes and design speeds, as well as many other physical characteristics. If a road is determined to be overloaded and contributing to safety problems, then measures should be taken to either upgrade the road or to redirect traffic in order to reduce traffic volumes.

Traffic count data was obtained from the 1999 Maine Transportation Count Book. Annual Average Daily Traffic (AADT) for 1995, 1996, 1997, and 1998 are presented in Map 7-2.

The Route 302 corridor experienced an increase in AADT of approximately 20% from 1995 to 1998. Route 302 had an AADT of about 12,000 south of the Route 115/35 intersection and 22,940 through the North Windham area. River Road had an AADT ranging from 6,000 to 8,000.

2) Accident Data

Safety is one of the major issues considered in evaluating the efficiency and reliability of a roadway network. It is also one of three critical items that is often used to determine the sufficiency of a roadway, and is useful in identifying problem areas.

MDOT Traffic Engineering maintains records of crash locations for a three year period. Records are maintained for roadway links (section of roadways) and for nodes (intersection). For the three year period from 1997 through 1999, MDOT identified six (6) links and twelve (12) nodes with Critical Rate Factors (CRF) greater than 1.00. (See Map 7-3) Accident rates are evaluated using the Critical Rate Factor method in which a ratio of the accident rates at a specific location are compared to the statewide average accident rate for a similar type of facility. A CRF greater than 1.00 indicates a higher than expected accident rate for a given section of roadway or an intersection.

The Route 302 corridor experienced the highest accident levels of all roadway links in Windham during the period from 1997 through 1999. This information reinforces the fact that Route 302 is a dangerous roadway and that future plans for development along the corridor deserve careful evaluation.

Route 202 intersections at Falmouth Road, Route 302, and Windham Center Road also had high accident counts which deserve consideration when evaluating development initiatives which might increase traffic volumes at these intersections.

Other roadways in Windham with relatively high accident rates include: Route 115, River Road, and Windham Center Road. It should be pointed out that accidents on these roadways have occurred at various locations and intersections along these corridors and not necessarily at one point as may be inferred by reviewing the Accident Data Map (Map 7-3).

D. Classification of Streets

There are two methods of classification commonly used to identify roadways. The first identifies administrative maintenance responsibilities. The second denotes the intended function of the roadway. Both systems are described in the following sections.

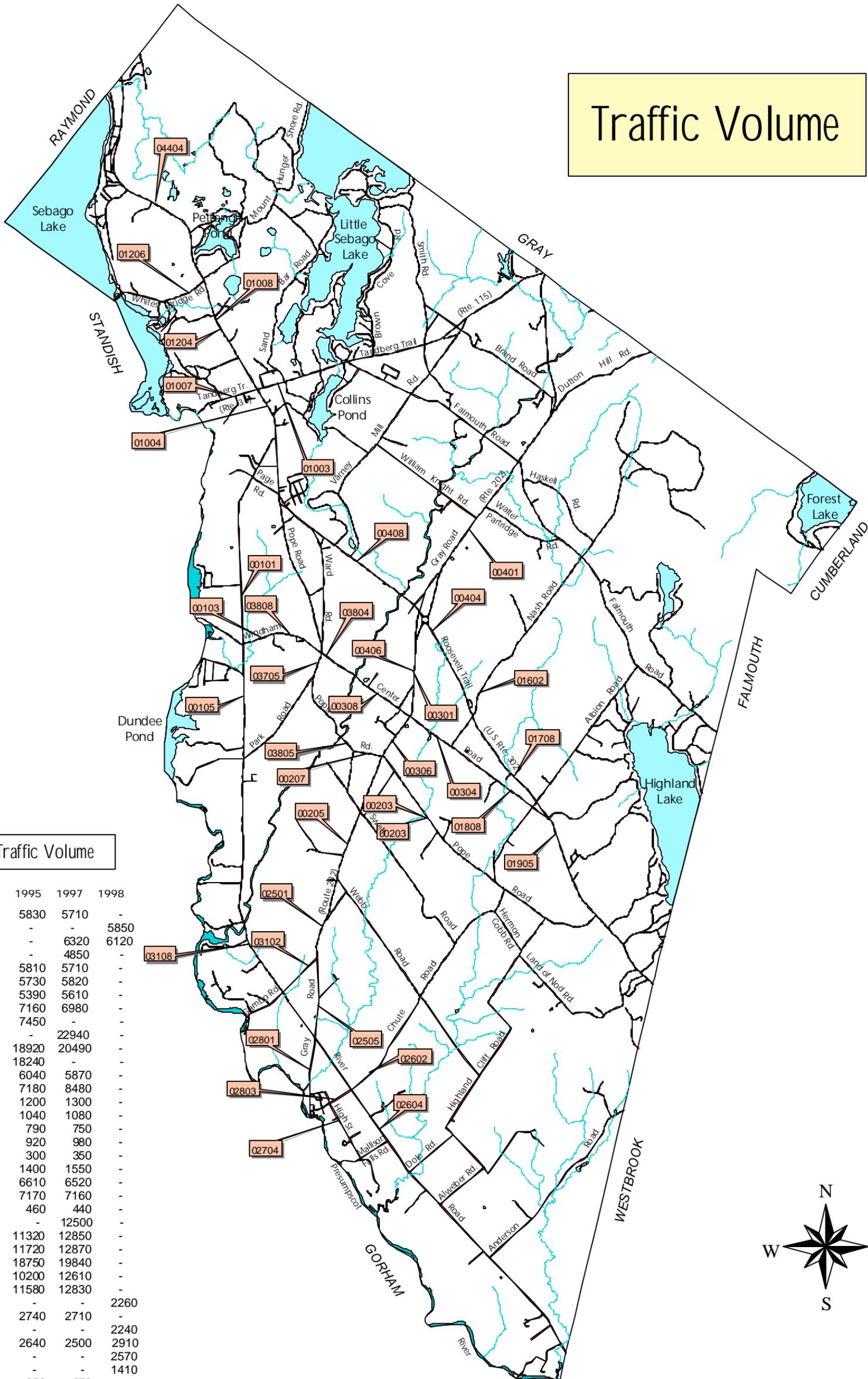
1) Administrative Classification

Roads within Windham are administratively classified based on summer maintenance responsibilities. Roads are also classified as either State, Town, Public Easement, or Private. There are five (5) state roadways with the town responsible for maintaining 16.64 miles of these roadways. There are also 151 town roads totaling 67.11 miles of paved roadways and approximately 6.08 miles

Comprehensive Master Plan

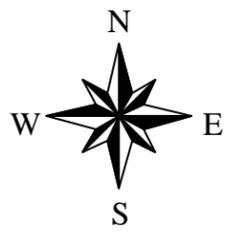
Town of Windham

Traffic Volume



Traffic Volume

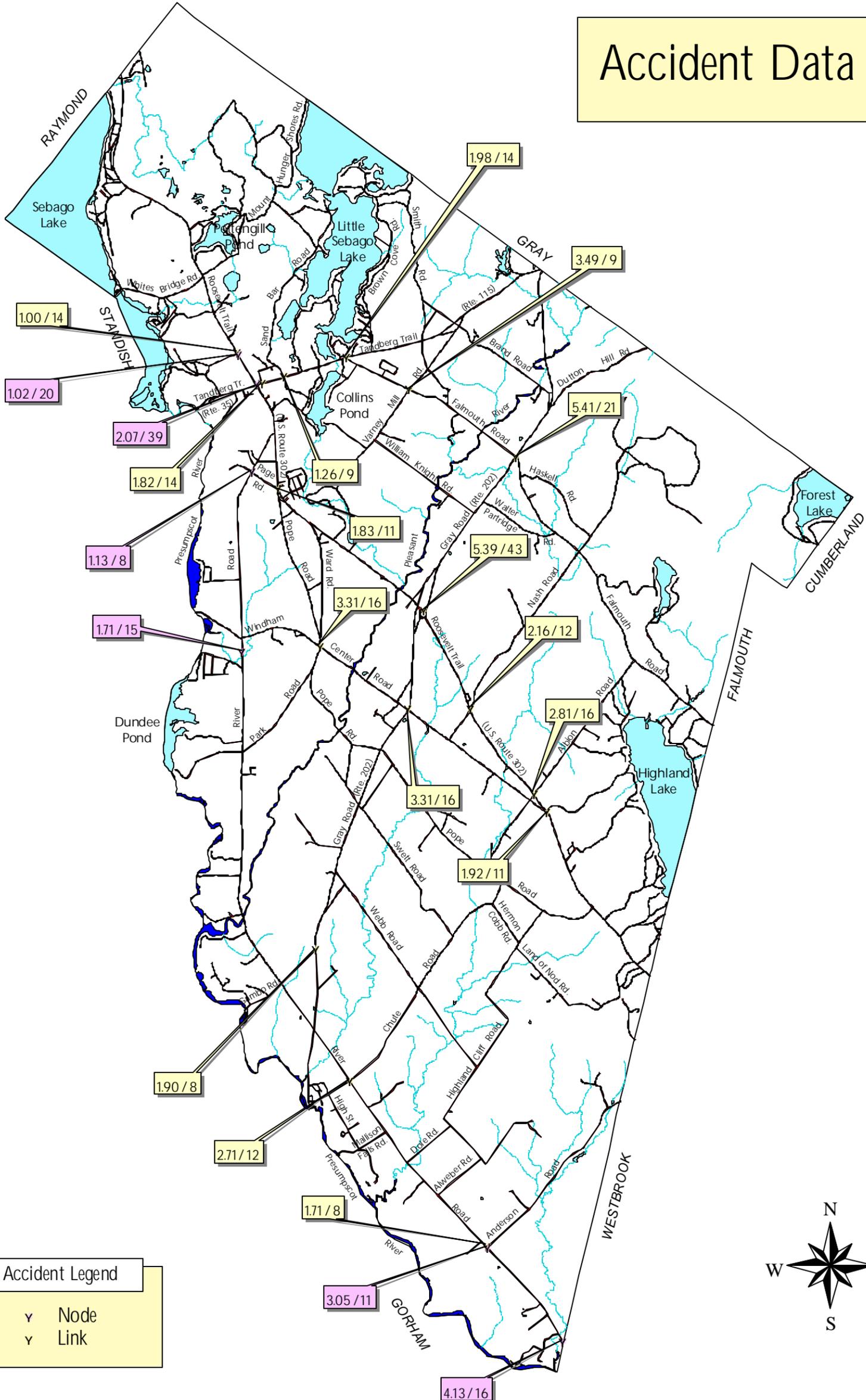
STATION	1995	1997	1998
00205	5830	5710	-
00301	-	-	5850
00306	-	6320	6120
00401	-	4850	-
00406	5810	5710	-
02501	5730	5820	-
02505	5390	5610	-
02801	7160	6980	-
01007	7450	-	-
01008	-	22940	-
01204	18920	20490	-
04404	18240	-	-
00101	6040	5870	-
02604	7180	8480	-
00103	1200	1300	-
00203	1040	1080	-
02602	790	750	-
02803	920	980	-
02704	300	350	-
01808	1400	1550	-
00105	6610	6520	-
03108	7170	7160	-
01602	460	440	-
01003	-	12500	-
00404	11320	12850	-
00408	11720	12870	-
01004	18750	19840	-
01708	10200	12610	-
01905	11580	12830	-
03705	-	-	2260
01206	2740	2710	-
00304	-	-	2240
00308	2640	2500	2910
03804	-	-	2570
03808	-	-	1410
00207	650	670	-
03805	-	-	1430
03102	510	480	-
01003	-	12500	-



Comprehensive Master Plan

Town of Windham

Accident Data

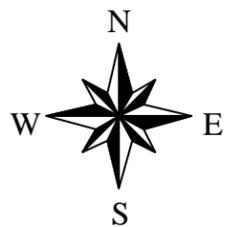


Accident Legend

- ∨ Node
- ∨ Link

NUMBER DESIGNATION REPRESENTS
CRITICAL RATE FACTOR PER ACCIDENT

Prepared by OEST Associates, Inc. - April 2001
Sources - Maine Office of GIS; Town of Windham



of gravel roadways. In addition, there are 65 public easement roads, totaling 28.39 miles, for which the town has no summer maintenance responsibilities. Finally, there are 297 private roads in town of an undetermined number of miles (See Map 7-4). The following is a listing of the various roads, as of July 2002, by classification:

State Roads

Falmouth Road	Roosevelt Trail (Route 302)
Gray Road (Route 202)	Tandberg Trail (Route 35 & Route 115)
River Road	

Town Roads

Abby Road	Emerson Drive	Lucmick Avenue	Sprucewood Drive
Acorn Lane	Eric Road	Main Street	Stagecoach Lane
Albion Road	Evergreen Lane	Mallison Falls Road	Starlit Way
Alweber Road	Falmouth Road	Manchester Drive	Stevens Road
Anderson Road	Fieldcrest Road	Maplewood Avenue	Stonebrook Road
Androscoggin Street	Finley Road	Meadow View Road	Summit Road
Arcadia Drive	Firwood Drive	Mechanic Street	Swett Road
Azalea Lane	Forbes Lane	Mill Pond Drive	Sylvan Avenue
Barnes Road	Fox Run	Mineral Spring Road	Tamarack Lane
Basin Road	Franklin Drive	Misty Drive	Tandberg Trail
Baxter Woods Trail	Freeman Court	Montgomery Road	Tate Lane
Belanger Avenue	Frye Road	Moses Little Drive	Timberhill Road
Birchwood Avenue	Gambo Road	Nash Road	Town Farm Road
Brand Road	Garden Lane	Neighorly Way	Underwood Way
Briarwood Lane	Gate Way	Newhall Road	Upland Road
Brookhaven Drive	Gillman Drive	Northwood Drive	Vance Drive
Canada Hill Road	Gray Road	Oak Lane	Varney Mill Road
Carriage Hill Drive	Great Falls Road	Old County Road	Walter Partridge Road
Cartland Road	Greenwood Terrace	Page Road	Ward Road
Cedar Lane	Gromble Way	Park Road	Webb Road
Chestnut Avenue	Hall Road	Peavey Avenue	Welsh Road
Chipmunk Drive	Haskell Road	Percy Hawkes Road	West View Road
Chute Road	Haven Road	Pine Drive	Whipporwill Road
Claman Drive	Hawthorne Drive	Pipeline Road	Whites Bridge Road
Colby Drive	Hemon Cobb Road	Plummer Road	Whitmore Drive
Colonial Park Drive	Heritage Lane	Pope Road	Wild Flower Lane
Collinwood Circle	High Street	Presumpscot Road	William Knight Road
Cook Road	Highland Cliff Road	Read Road	Windham Center Road
Cottage Road	Hillcrest Road	Reba Lane	
Covered Bridge Road	Hunts Drive	Ridge Road	
Craig Road	Johnson Road	River Road	
Curtis Drive	Jones Hill Road	Rolfe Road	
Dale Lane	Karen Avenue	Roosevelt Trail	
Depot Street	Keene Road	Running Brook Road	
Dirigo Lane	Kelli Lane	Sabatus Lane	
Dunridge Circle	Knox Road	School Road	
Dutton Hill Road	Land of Nod Road	Sebago Woods Trail	
Easter Avenue	Landing Road	Shady Lane	
Edgerly Lane	Lantern Lane	Silver Ridge	
Elizabeth Drive	Lotts Drive	Smith Road	
Elmwood Drive	Lucinda Lane	Southside Drive	

Public Easements

Aimhi Woods Road	Four Seasons Lane	Morgan Lane	Sandbar Road
Allen Drive	Hackett Road	Mourning Dove Lane	Sandy Toes Lane
Anglers Road	Harrison Road	Mt. Hunger Shore Road	Shore Road
Basin Road	Haven Road	Mt. View Street	Sokokis Point Road
Beach Road	Hemlock Drive	Orchard Road	Spodedo Road
Brass Lane	Highland Shore Road	Outlet Cove Road	Swann Road
Brentwood Road	Indian Cove Road	Overlook Road	Terrace Drive
Brown Cove	Intervale Road	Percy Hawkes Road	Trails End Road
Buckfield Drive	Island Drive	Pettingill Road	Upper Basin Road
Candlewyck Road	Johnson Road	Phil Hunt Road	Vacation Lane
Collins Pond Road	Keeps Way	Pilgrim Lane	Vanessa Drive
Crescent Avenue	Kennard Road	Pipeline Road	Vista Drive
Davidson Drive	Koorbano Lane	Pride Lane	Wintergreen Circle
Deer Lane	Laskey Road	Prosperity Lane	Woodland Road
Emerson Drive	Many Oaks Lane	Richards Road	
Fern Avenue	Mineral Spring Road	Riverside Ridge	
Forest Avenue	Moores Drive	Sabbady Point Road	

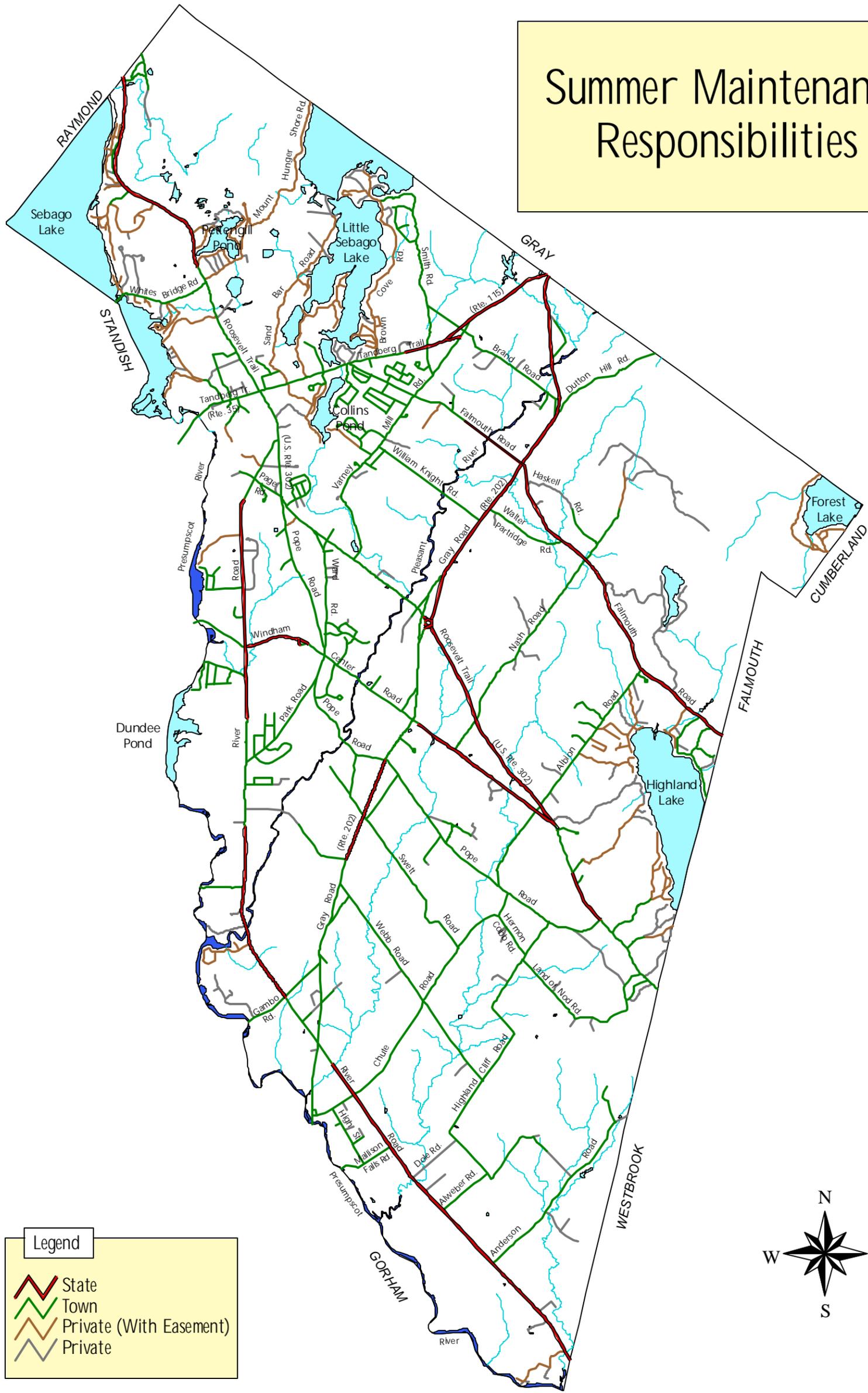
Private Roads

Aaron Drive	Brevdon Lane	Coyote Court	Farm View Drive
Abbadaba Road	Brick Hill Road	Crabapple Road	Fearon Lane
Adam Roberts Drive	Brigg Island Cove	Crest Haven Road	Fertile Valley Lane
Aerie Drive	Bumpa Lane	Critter Drive	Firefly Lane
Aldaron Road	Burdean Road	Crockett Road	Fraser Road
Allagash Way	Cajun Court	Crystal Lane	Geary Way
Amber Lane	Calla Way	Cumberland Road	Gem Way
Amherst Road	Cameron Lane	Cutting Corners Lane	Getaway Road
Andrew's Field Road	Camp Drive	Cyprus Hill Drive	Gin Mill Lane
Anthoine Road	Canyon Way	Dakota Drive	Glacial Hill Road
Apple Blossom Lane	Cardinal Lane	Dalten Pines Road	Glendale Road
Arbor Field Road	Carigan Drive	Davis Avenue	Goodwin Road
Architectural Drive	Carol Drive	Devon Rose Drive	Goshen Road
Arlene Lane	Carpenters Way	Ditch Brook Crossing	Grace's Way
Aroostook Drive	Cattle Drive	Dominon Road	Grampa's Village
Ash Street	Center Brook Drive	Donna Road	Grandview Point Road
Athens Drive	Chelsea Lane	Doris Avenue	Granite Ridge Road
Autumn View Drive	Cherry Lane	Dow Lane	Grassington Road
Bailey Drive	Chickadee Lane	Down Home Road	Gravel Hill Road
Baker Mt. Drive	Chimera Hill Road	Dundee Road	Griffin Drive
Balsam Lane	Christmas Tree Way	Dyer Place	Hague Road
Batchelder Road	Clairmont Road	Dyke Lane	Half Moon Cove Road
Bates Lane	Clay Hill Drive	Dylan Way	Hancock Drive
Bear Lane	Cloutier Lane	Eagle Drive	Happy Lane
Beckwith Drive	Clover Lane	Easy Way	Harding Drive
Belanger Avenue	Cold Bear Drive	Edith Jeffords Road	Harriett Avenue
Billabong Way	Colley Brook Drive	Elliott Drive	Hawkes Farm Road
Birdsong Lane	Commons Avenue	Elm Road	Heather Lane
Bishop Drive	Cooper Ridge	Evans Ridge Road	Hearthwood Drive
Black Brook Terrace	Cornerbrook Circle	Everett Drive	Henderson Court
Blueberry Lane	Cosmic Way	Fairway Drive	
Bob's Way	Cotton Drive	Falcon Road	
Boody Road	County Lane	Fall Ridge Road	
Brackett Farm Lane	Cove Road	Family Circle	

Comprehensive Master Plan

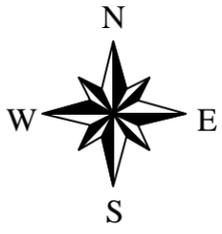
Town of Windham

Summer Maintenance Responsibilities



Legend

- State
- Town
- Private (With Easement)
- Private



Private Roads (Continued)

Hereford Lane	Mayberry Road	Rousseau Road	Wolf Creek Drive
Hideaway Lane	Maynard Road	Rural Hill	Wright Road
Holly Lane	McGoldrick Woods Road	Rustic Way	Young's Farm Road
Homestead Lane	McLellan Knoll	Sabatino Drive	
Honey Little Lane	Meagans Way	Sasha Lane	
Horizon Way	Mercedyle Drive	Sawyer Hill Road	
Howard Avenue	Meyers Farm Road	Scotland Road	
Hoyt Street	Midnight Way	Secret Cove Road	
Hummingbird Lane	Miles Road	Serenity Lane	
Hutchins Road	Millett Drive	Settlers Court	
Ice House Road	Moe Road	Shamrock Lane	
Impala Way	Moonlit Drive	Shelby Drive	
Independence Drive	Moose Point Road	Sheldrake Point Road	
Inkhorn Brook Road	Moss Road	Simeon Drive	
Inland Farm Road	Mr E Drive	Sky Drive	
Irish Springs	Mud Pond Road	Sleepy Hollow Road	
Jacques Lane	Narrows Landing	Sloan Drive	
James Way	Natalie Lane	Snowy Ridge Road	
Jeffery Woods Road	Neal Road	Spear Avenue	
Jesse's Acres	Nelson Lane	Spring Water Drive	
Joes Road	Nicholas Drive	Studio Drive	
John Deere Road	Old County Road	Sturgis Road	
Juniper Drive	Orion Way	Sunnyside Drive	
Justines Way	Otter Drive	Summer Avenue	
Kardia Lane	Owl's Head	Sunset Lane	
Kimbertown Lane	Oxford Road	Swampscott Lane	
King's Lane	Pamela Drive	Tammy Lane	
Kirkwood Drive	Passby Point Road	Tanglewood Lane	
Kristine Drive	Pasture View Road	Tanguay Lane	
Ladyslipper Drive	Peaceful Way	Taylor Lane	
Lamplighter Road	Pebblestone Lane	Theodore Lane	
Leighton Road	Pemberly Drive	Thompson Lane	
Leisure Lane	Pendelton-Ash Way	Tower Road	
Libby Hill Road	Perennial Way	Tracy Way	
Liberty Lane	Perks Peak Road	Tradition Drive	
Lilac Drive	Petronella Drive	Trestle Way	
Linda Lane	Pheasant Ridge Drive	Trig's Way	
Lindsay Island	Phoenix Lane	Tucker Drive	
Linnel Road	Pilgrim Lane	Turtle Ridge Road	
Livrite Way	Plainview Road	Twin Oaks Drive	
Long Lane Road	Pleasant Point Road	Valley View Road	
Lookout Lane	Pond Villa	Van Tassel Drive	
Loon Lane	Poplar Ridge Lane	Village Road	
Lorn Drive	Pottersville Road	Wallace Way	
Lyden Way	Proposed Street	Walnut Drive	
Mabel Jean Drive	Quail Drive	Washout Way	
Macintosh Lane	Rangeley Road	Waterside Lane	
Madison Road	Red Hawk Drive	Watson Farm Road	
Majestic Heights	Riley Drive	Wellhouse Way	
Malcolms Way	Roberts Drive	Whitney Way	
Malibu Lane	Robin Lane	Wild Irish Road	
Marc Lane	Rocklinn Drive	Willow Drive	
Marshall Valley Road	Rogers Drive	Winslow Drive	
Marston Road	Rosewood Avenue	Woldbrook Drive	

2) Functional Classification

The functional classification of Windham’s roadways is based on records obtained from the Maine Office of Geographic Information Systems. Roadways in Windham are classified as primary, secondary, improved, unimproved, and trail. The following is a listing of primary and secondary roadways. All other roadways in Windham are local streets and are classified as improved.

Primary Roadways

1. Roosevelt Trail (Route 302)
2. Tandberg Trail (Route 115)
3. Gray Road (Route 202)

Secondary Roadways

- | | |
|------------------------------|-------------------------|
| 1. Whites Bridge Road | 10. Falmouth Road |
| 2. Tandberg Trail (Route 35) | 11. Nash Road |
| 3. Smith Road | 12. Albion Road |
| 4. Varney Mill Road | 13. Chute Road |
| 5. River Road | 14. Highland Cliff Road |
| 6. Page Road | 15. Hemon Cobb Road |
| 7. Pope Road | 16. Land of Nod Road |
| 8. Windham Center Road | 17. Alweber Road |
| 9. Walter Partridge Road | |

A primary roadway provides intercity and interstate traffic service. Traffic speeds typically are relatively high and there is a minimal amount of interference to through traffic. A secondary roadway connects the primary roadways with local streets.

Both the administrative and functional classification systems are useful for municipal planning purposes. The administrative system is needed in determining the maintenance program for the town’s roads by identifying the governmental agency responsible for the upkeep of each road. Functional system information can be used to better understand the primary role of each road in the community’s roadway network.

4. Alternative Modes of Transportation

This section outlines existing facilities designed to support alternative modes of transportation in Windham.

A. Pedestrian Facilities

Sidewalks are primarily limited to the South Windham and North Windham areas. In South Windham sidewalks connect to similar facilities in Gorham, as well as provide access to commercial businesses in that community. The North Windham sidewalks extend along Route 302 from River Road to White's Bridge Road. While access is provided between commercial establishments in North Windham, roadway crossings in many instances do not promote comfortable pedestrian movement.

There are plans to provide sidewalks on Windham Center Road and Route 202 adjacent to the school complex. This will improve pedestrian access to the convenience store and other locations at the intersection of Route 202 and Windham Center Road.

Route 202, between the skate park and the school complex, has substantial pedestrian traffic, but no sidewalk. The paved highway shoulder, however, is often utilized for pedestrian movement.

B. Bike Access

There are no designated bike lanes in Windham. Routes 302 and 202 appear to be the most popular corridors for bike travel with the paved shoulders used as bike lanes.

Improved shoulders/bike lanes on Windham Center Road, Falmouth Road, and River Road would allow easier and safer access to the school complex and other recreational areas.

The MDOT recently initiated construction of a bike trail along the Mountain Line railroad bed. The trail is intended to link to existing trail facilities in other communities and provide opportunities for both hikers and mountain bikers.

C. Commuter Bus Service

Currently there is no commuter bus service or intermodal facility in Windham. In January of 2001, the Greater Portland Council of Governments published the results of a Windham to Portland Commuter Bus Study. The study looked at the feasibility of (1) providing bus service from North Windham to Pride's Corner to "feed" the Metro fixed route bus system, or (2) extending Metro's route from Pride's Corner to North Windham. Metro is the common name for the Greater Portland Transit District, which provides fixed-route bus service for Portland and Westbrook.

Key findings and recommendations of the study included:

- Implementation of the Windham to Portland commuter bus service is warranted.

- Projected continued population growth in the Lakes Region and employment growth in the urban core of Portland, South Portland and Westbrook will increase the feasibility of public transit between Windham and the rest of the Lakes Region and Portland.
- The viability of the proposed commuter bus service may be improved by beginning service 30 minutes earlier in the morning and 30 minutes earlier in the evening.
- Survey respondents seem to be sensitive to the pricing of the service. Further study of the pricing structural needs to be undertaken in order to maximize ridership and revenues.
- The possibility of providing future express commuter service between Windham and Portland should be considered.

Ridership was estimated at 119 passengers per day. The revenue-to-cost ratio, based on this ridership and a monthly fare of \$30, is 0.25 which is equal to the collective revenue-to-cost ratio for Metro's routes between 1990 and 1996.

D. Other Facilities

At one time the Windham Mall, in North Windham, had an area designated as a Park and Ride Facility. This area is no longer designated for this type of use.

5. Transportation System Issues

Previous sections of this chapter provided an inventory of Windham's existing transportation system. This section identifies the major problems and issues associated with the community's transportation system. Actions that are already being taken to address these problem areas are also noted.

A. Roosevelt Trail (Route 302)

The Route 302 corridor is at the forefront of Windham's transportation planning efforts. The 1992 *Westbrook/Windham Route 302 Corridor Study* prepared for the Portland Area Comprehensive Transportation Committee (PACTS) by Vanasse Hangen Brustlin, Inc., recommended improvements from the Westbrook/Windham town line to Foster's Corner. The Maine Department of Transportation (MDOT) has just recently initiated the design process for improvements within this area. The MDOT is also scheduled to initiate a study of the Route 302 corridor from Foster's Corner to Naples.

The town is currently studying the Route 302 corridor particularly the North Windham area. Although the potential for a by-pass of North Windham was investigated, it does not appear that a by-pass is feasible at this time.

The town is encouraging the interconnection of developments adjacent to Route 302 in order to form parallel corridors along Route 302. This would permit drivers to move from development to development without utilizing Route 302. Links have been established on the westerly side of Route 302 connecting the Shaw's Plaza with the Wal-Mart complex, with a connection also to Route 35.

B. Tandberg Trail (Route 115)

Route 115 connects the Lakes Region with the Maine Turnpike. The section of roadway, east of Route 302, is currently scheduled for reconstruction. The design has been completed and is pending construction funding. These improvements should help to minimize accidents in this area.

C. River Road

River Road provides a vital link from North Windham to Westbrook and an overlay of asphalt was completed in 2000. The roadway however, is narrow with horizontal and vertical segments in need of adjustments. Presently there are no improvement projects in the planning stages for this roadway.

D. Gray Road

Route 202 between Windham Center Road and Pope Road is expected to be reconfigured as part of the recently approved High School expansion project. The scope of the reconfiguration is unknown at this time other than the addition of turning lanes into the High School. No other improvements are presently planned for this roadway.

E. Local Roads

In the summer/fall of 1992 the Windham Public Works Department performed an inventory and condition survey of all town and state roads within the community. This work was completed as a part of an overall computerized road surface management program, referred to as the Road Surface Management System (RSMS), in order to assess overall roadway conditions and define a maintenance program for the roads. This approach offers a low cost planning method for analyzing and establishing priorities for local road surface maintenance and repair needs.

The types of current roadway conditions for the paved roads that were reported as needing maintenance included:

- Reconstruction 6.05 miles
- Recycle 18.14 miles
- Rehabilitation 12.98 miles
- Preventive 4.22 miles
- Routine 20.18 miles
- None Required 5.55 miles

Gravel roads were reported as needing the following types of maintenance:

- Rebuild 0.35 miles
- Regrade 3.75 miles
- Reshape 1.98 miles
- Routine Yearly 6.08 miles

This analysis did not include public easements or private roads. In 2002 the budget for road maintenance in Windham was approximately \$500,000.

F. Public Easements

Windham has a substantial volume of roadways classified as public easements. These types of easements were established along private roads for which the town had agreed to provide winter maintenance. These are generally seasonal roads which provide access to ponds and lakes in the town. They are typically narrow and have a gravel surface. Summer maintenance is the responsibility of the abutters, typically through a road association.

As seasonal property has been converted to year-round residential usage, the town has faced additional demands for the maintenance of these types of roadways. Residents along these roadways have also taken some steps to improve these roads. These improvements, however, could result in additional land becoming available for future development, thus increasing traffic usage of public easements and private roads.

6. Recent State Actions

The 119th Maine Legislature approved an Act to Ensure Cost Effective and Safe Highways in Maine. The purpose of this legislation is to enhance the safety of the traveling public and protect highways against the negative impacts associated with unmanaged drainage. The law is intended to ensure safety, manage highway capacity, conserve state highway investments, promote economic productivity related to transportation, and conserve air, water and land resources. The program also requires the preparation of access management rules and corridor planning and preservation efforts.

The Act specifically directs MDOT and authorized municipalities to promulgate rules to assure safety and proper drainage on all state and state-aid highways with a goal of maintaining posted speeds on arterial highways outside urban compact areas. The law also requires that the rules include standards for the avoidance, minimization, and mitigation of safety hazards along the portions of rural arterials where the 1999 statewide average for driveway related crash rates is exceeded. Those rural arterials are referral to in the recently adopted rules as “Retrograde Arterials.” Retrograde arterials designated for Windham include those portions of Route 302 and 202 which are outside the urban compact areas.

The corridor planning preservation initiative under this Act involves the establishment of priorities for Mobility Arterial corridors most at risk of declines in capacity and safety due to increasing development and commuter and visitor pressures. Mobility arterial corridors most at risk are highways where:

- Congestion is already being experienced.
- Driveway related crash rates exceed the 1999 statewide average.
- Municipalities have designated growth areas.
- Water and sewer infrastructure exists.
- Natural resources are threatened.
- MDOT highway reconstruction projects are planned.
- Areas experiencing rapid uncontrolled growth.

The corridor planning and preservation program is designed to include corridors where MDOT works with municipalities, property owners, corridor committees, and other stakeholders along a mobility arterial to develop and maintain access management standards. Mobility corridors identified for Windham include Routes 302 and 202.

In addition to this new legislative initiative the State of Maine has also recently identified new highway projects for Windham. The draft Six-Year Transportation Improvement Plan (Fiscal Year 2004-2009) included the following projects:

- Route 4/202 – Mechanic Street to River Road, 0.5 miles.
- Route 35 (Tandberg Trail) – Route 25 to Route 302, 1.5 miles.
- River Road – Westbrook town line to the end, 8.3 miles.
- South Windham bridge replacement.

In addition the Biennial Transportation Improvement Program (BTIP) for Fiscal Year 2002-2003 included the following projects:

- Preconstruction engineering for the South Windham bridge replacement.
- Black Brook bridge on River Road bridge replacement.
- Route 115 (Tandberg Trail) reconstruction.
- Windham to Bridgton, Route 302 Corridor Study.
- Route 302 highway resurfacing from Foster's Corner to Route 35.

7. Implications for the Future

A. Route 302 Corridor

The magnitude of the Route 302 issue in Windham is not one that will be addressed through a single simple solution. It will require joint cooperation between the town, adjacent communities and the state. The town needs to take an active role in the MDOT's Route 302 corridor study which is just

starting. The information and knowledge gained during the North Windham by-pass studies should be conveyed to MDOT during this analysis.

B. Local Roads

The town is expecting to update RSMS roadway data in the near future. The results of this effort should include a list of priorities for repairs that can be used by the Windham's Public Works Department to establish a program for systematically upgrading the town's roadways.

C. Public Easements

The town needs to establish minimum standards for road condition and maintenance of public easements and private roads in order to ensure access is available to emergency vehicles. Different and stricter standards, however, may also be required if the town continues to provide winter maintenance on public easement roads.

Chapter 8

Recreation and Open Space

1. Introduction

Windham's rapid growth over the past three decades has substantially increased demand for recreational facilities in the town. The popularity of team sports such as soccer, Little League baseball, and youth football has created a growing need for fields that is extremely difficult to satisfy. As a result the town's recreation department and school administration have worked closely with a wide variety of organizations to accommodate program schedules and increased participation by both youth and adult organizations.

In addition to the increasing demand for organized recreational activities, there has also been a growing desire among Windham residents to protect and maintain open space land for a number of different purposes. For example, open undeveloped land provides opportunities for a variety of outdoor activities such as hiking, hunting, fishing, snowmobiling and cross-country skiing to name just a few. In some instances these types of activities can be undertaken in more formal park like settings. In other instances larger land areas, such as preserves or wildlife sanctuaries, are required in order to provide the continuity and ambiance necessary for these types of outdoor activities that are commonly associated with rural areas. Finally, it must be understood that open space cannot exist in rural settings as isolated islands. Large undeveloped land areas should be connected in order to provide opportunities for wildlife movement and the protection of native plant life.

Administrative operations of the Parks and Recreation Department, the primary organization responsible for recreation activities, are located at Town Hall on School Road. The day to day operations and long range planning for the Department are overseen by the Director.

During the summer the Parks and Recreation Department (P&RD) offers a variety of programs to residents of the town. Summer activities include: a seven week day camp for kids ages 5 through 14; soccer, basketball, tennis, field hockey, wrestling, cheering and baseball camps in conjunction with

the school athletics department; summer track program; trips to various sporting events; and senior citizen trips. P&RD also manages the skate park and Dundee Park facilities.

During the fall and winter the P&RD offers a variety of programs including: open gym time; travel basketball teams; snowmobile and ATV safety courses; Red Cross babysitting; indoor track; gymnastics; skiing; and day trips to various activities.

In contrast to the Parks and Recreation Department, the ownership and management of land areas in Windham regarded as open space are the responsibility of several different public and private organizations. In some instances oversight of open space is even a cooperative effort among different organizations.

2. Major Finding and Conclusions

- Windham’s recreation facilities are in high demand and the current availability of public recreation facilities has not kept pace with the growth of the community.
- Outdoor facilities available at the existing preserves, nature parks and sanctuaries are minimal.
- Access to water bodies for swimming, fishing and boating is limited in spite of the amount and types of water bodies located within Windham.
- Areas suitable for hunting are being reduced by the construction of new houses in Windham.
- Windham needs to identify priorities for the acquisition and maintenance of open space and recreation lands. If possible, land acquired for open space uses should serve multiple purposes and various sites should be connected by trails and/or wildlife corridors.
- The Town needs to examine various opportunities for financing the acquisition of open space land, such as the involvement of public land trusts and funding provided by governmental organizations such as the Land for Maine’s Future Program.

3. Existing Recreation Facilities and Open Space Locations

Existing municipal recreation and open space in Windham involve three major types of facilities and land areas:

- Nature Parks, Preserves, and Sanctuaries
- Public Access to Water Bodies
- Sports Fields, Facilities, and Playgrounds

Nature Parks, Preserves, and Sanctuaries total approximately 590 acres. Many of these locations have hiking trails in various stages of development. In most instances the trails and observation platforms have been constructed by volunteers, such as the Boy Scouts. All the facilities are available to the public at no charge, except for Dundee Park.

Dundee Park provides the only public access for swimming at a water body within Windham. Along with swimming, the Park provides a beach area, picnic site with grills, and volleyball and basketball courts. A season's pass allows all persons in the pass holder's vehicle to enter the Park on an unlimited basis between Memorial Day and Labor Day. The Park is open to non-residents, as well as residents of Windham. A resident's season pass is \$30, while seniors (over 65) are only charged \$20.

Public access to the various water bodies within Windham for swimming, boating, and fishing has been an issue for a number of years. As more land is developed along lake and river fronts, opportunities for public access have been eliminated. As noted earlier, public access for swimming is primarily limited to Dundee Park.

Boat access in Windham is limited to two locations. The first is a public boat landing on Little Sebago Lake, which is owned by the State Department of Inland Fisheries and Wildlife, and has a parking area for 12 vehicles and trailers. The other is a three (3) acre parcel leased from Florida Power and Light (FPL), at Great Falls, on the Presumpscot River. The FPL site is for carry-on boats only and has parking for just six (6) vehicles.

Access to the streams and rivers for fishing is limited to roadway crossings. Parking at these carry-on crossings is inadequate too virtually non-existent.

The sports fields, facilities, and playgrounds are primarily concentrated at the High School and Manchester School complexes. The one major non-school facility is the Gambo Road complex which has six soccer fields. This land area is currently leased from the Portland Water District. The Lowell Preserve has one Little League field. The High School, Middle School, and Primary School complex accommodates Little League, softball, tennis, track, soccer, football, field hockey, baseball and basketball, along with one playground. The demand for the use of these facilities continues to increase as youth and adult activities expand. For example, the Little League has over 700 participants in baseball and softball, Windham Youth Football has 190 participants in grades 3 through 12, and Youth Soccer has 750 participants. The facilities are used seven days a week from spring through fall. The recent approval (2002) for the expansion and rehabilitation of the High School, however, will also involve the development of new ballfields that will be available for the use of town residents.

Existing open space areas and recreation facilities are outlined in Table 8-1 and illustrated on the Open Space, Recreation and Key Natural Resources Map (Map 8-1) at the end of this chapter.

**Table 8-1
OPEN SPACE AND RECREATION FACILITIES
TOWN OF WINDHAM**

(All facilities are town-owned unless otherwise note)

Nature Parks, Preserves and Sanctuaries

LOWELL PRESERVE - 312 acres

- 4 acres are occupied by the East Windham Fire Station and Little League Field
- 308 acres Nature Preserve

Hiking Trails (4-5 miles)	Cross-Country Skiing
Fishing	Streams
Hunting	

DEER HOLLOW SANCTUARY - 20 acres

Nature Trail	Wildlife
Mud Pond	Fishing
Observation Platform	

CLAMAN SANCTUARY - 14 acres

Nature Trails	Wildlife
Wild Blueberries	

OTTER BROOK SANCTUARY - 41 acres

- Common area around subdivision
- Facilities

Nature Trails	Cross-Country Skiing
Observation Platform	Hiking Trails

DUNDEE PARK - 21 acres

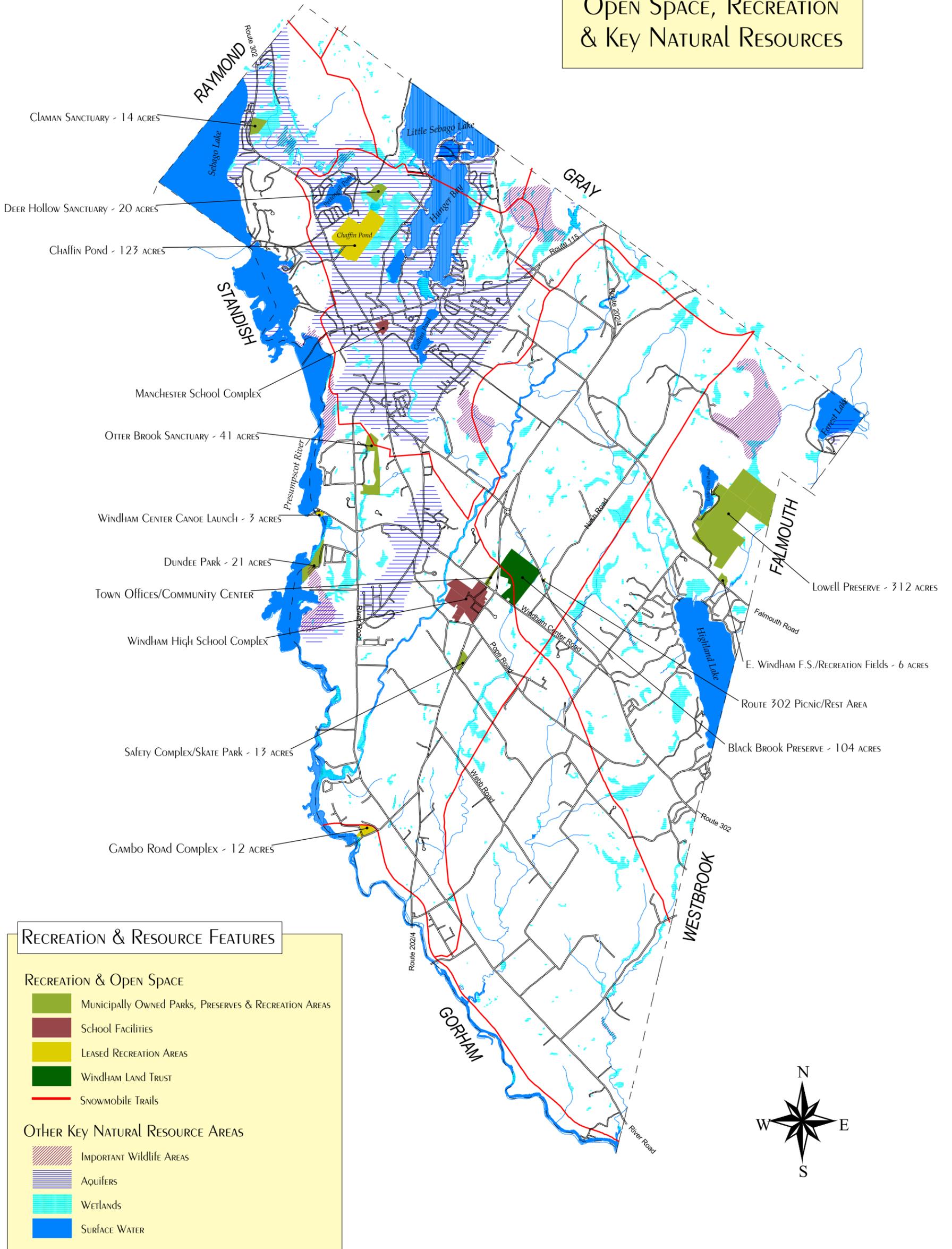
- Entrance Fee
- Facilities

Swimming Area and Beach	Volleyball Court
Picnic Area with Grills	Basketball Court
Restrooms	

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

OPEN SPACE, RECREATION & KEY NATURAL RESOURCES



Prepared by RKG Associates, Inc. - July 2002
 Data Sources: Parcel information compiled based on
 Windham Municipal Assessment Records - December 2000. Natural Resource Information
 compiled by Oest Associates, Inc. from Maine Office of Geographic Information Data Catalogue
 Map Sources: Base map from Casco Bay Estuary Study ca. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall tax map - April 2000

Table 8-1 (continued)

CHAFFIN POND - 78 acres (leased land from the Portland Water District)

- No facilities at this time or planning efforts to determine the feasibility of using the site.

BLACK BROOK PRESERVE - 104 acres

- Site recently acquired by the Windham Land Trust, with financial assistance provided by the Town of Windham and the Land for Maine's Future program
- Will include a trail system

Sports Fields, Facilities and Playgrounds

SOUTH WINDHAM GAMBO ROAD COMPLEX

- 7 Soccer Fields (leased land from the Portland Water District)

EAST WINDHAM FIRE STATION (LOWELL PRESERVE)

- 1 Little League/Softball Field
- Full Playground with slide and swings

WINDHAM HIGH SCHOOL/MIDDLE SCHOOL COMPLEX; NORTH WINDHAM MANCHESTER SCHOOL COMPLEX; PRIMARY SCHOOL PLAYGROUND

- Outdoor Running Track
- 3 Tennis Courts
- 1 Lighted Soccer Field
- 1 Soccer/Football Field
- 1 Field Hockey Field
- 4 Little League Fields/Softball Fields
- 2 Softball Fields
- 2 Regulation Baseball Fields
- 4 Gymnasiums
- Outdoor Basketball Court
- Tire Play Structures
- Small Play Objects
- Ice Skating Rink
- Full Playground with Slide and Swings

WINDHAM SKATE PARK

- Skateboarding Facilities (Fully Supervised)

Table 8-1 (continued)

WINDHAM COMMUNITY CENTER

- Gymnasium
- Fenced in Playground with slide and swings
- Picnic Tables

ROUTE 302 PICNIC AREA (Owned by the Maine Department of Transportation)

- Picnic Tables with Grills (town owned property abuts this site)

The Parks & Recreation Department offers a wide variety of activities during the summer and winter months including the following during 2001:

Summer Activities		Winter Activities	
<u>Activity</u>	<u>Participants</u>	<u>Activity</u>	<u>Participants</u>
Outdoor Track	65	Skiing on Fridays	110
Sports Clinics	166	Skiing on Saturdays	37
Men's Basketball League	80	Skiing on Wednesdays	125
Day Camp	380	Gymnastics	44
Tennis	15	Swim Team	20
Cheering	25	Karate	41
Dundee Park (Passes Sold)	402	Swing Dance	15
Skate Park (Sign-Ins)	8,300	Ballet	8
		Wrestling	30
		Baton Twirling	14
		Indoor Track	30
		Girls/Boys Basketball	260
		Men's Basketball League	80

The Parks and Recreation Department also indicates that during the year 2001, over 24,000 visitors used facilities at Dundee Park, especially the waterfront area. In total, almost 48,000 individuals participated in or were customers of various parks and recreation programs.¹

¹Some individuals may have participated in more than one program or activity.

Locations for bike riding in Windham are very limited. Some people use utility corridors and wood roads for mountain biking. Also, even though there are no designated bike routes in Windham, Route 202 does have paved shoulders from the Gorham line to the Gray line, which are used as bike lanes. However, the section between Webb Road and Pope Road only has gravel shoulders. Route 302, which has paved shoulders from Foster's Corner to Raymond, is also used for bike riding.

The Parks and Recreation Department has noted that bike lanes should probably be added to Route 35, Route 115, Falmouth Road, Albion Road from Falmouth Road to Windham Center Road, and Windham Center Road. The routes would provide access to recreation facilities at Lowell Preserve, Manchester School, and the High School complex.

4. Non-Municipal Facilities

Windham's position as a tourism center adds another facet to recreation demand within the town. Although the municipal recreation program primarily services year-round residents, a number of other facilities have been established by the private sector to support the influx of tourists, as well as year-round residents.

Private facilities available within the town offer the following types of activities:

- Health clubs
- Martial arts training
- Miniature golf and golf driving range

There are also several utility corridors which are used for biking, hiking, hunting, and all terrain vehicle (ATV) trails. Use of these corridors, in some cases, is occurring without proper authorization. The town is continuing to work with utility companies and property owners to formalize access to these areas. In addition there are numerous snowmobile trails in Windham which are illustrated on Map 8-1.

5. Recreation Facilities Standards and Guidelines

In order to provide a well-rounded community recreation program that can service all segments of the population, it is usually necessary to provide a variety of recreation facilities. Typical classification of recreation areas include both a physical description and broad functional categorization. In essence, a recreation facility should be designed and programmed to serve the particular needs of a defined segment of the population. These segments may be identified by age, special interests, or a combination of both factors.

A generic classification system of open space and parks can also be used to assess the adequacy of Windham's recreation areas from a community-wide perspective. The following provides a brief description of different classification categories in relationship to existing facilities in Windham.

Neighborhood Park/Playground - This type of facility provides areas for intense recreation activities such as field games, court games, crafts, playground equipment, skating, picnicking, etc. The desirable size is 15 acres. The Park should be easily accessible, and geographically centered. It should have safe walking and bike access, and could be developed as part of a school/park facility.

Community Park - Community parks are described as areas of diverse environmental quality. They may include areas suited for intense recreational facilities, such as athletic complexes or large swimming pools. They may also be an area of natural quality for outdoor recreation, such as walking, viewing, sitting, or picnicking, or any combination of the above, depending on community needs. A community park is usually intended to service several neighborhoods with a desirable minimum size of 25 acres.

Regional Park Preserve - The park preserve is an area of natural quality for nature-oriented outdoor recreation, such as viewing and studying nature, wildlife habitat, conservation activities, hiking, fishing, boating, and trail uses. It may also include active play areas. Generally 80 percent of the land is reserved for passive recreation, conservation and natural resource management, with less than 20 percent developed for active recreation uses.

Linear/Greenbelt Park - The greenbelt park is a concept that has received widespread recognition and use. It is an area developed for one or more modes of recreational travel, such as hiking, biking, snowmobiling, horseback riding, or cross-country skiing. It may include active play areas which function as nodes along the length of the park. These types of parks are either built or serve as existing natural corridors, such as utility right-of-way, bluff lines, stream channels, scenic roads, or vegetation patterns. It is desirable to have them structured so that they link other components of the recreation system or community facility areas.

Table 8-2 defines Windham's existing recreation facilities in terms of the park classification described above.

Another type of standard used to evaluate the adequacy of recreation facilities is based on a per capita comparison. These standards are typically expressed as the number of facilities available per 1,000 persons and are based on national averages and the practical experience of people administering municipal recreation programs. This approach is also intended to act as a guide when determining what additional facilities may be required in order to round out a community's recreation programs.

Table 8-2		
CLASSIFICATION OF WINDHAM'S RECREATION FACILITIES		
Neighborhood Park/Playground		
	Manchester School Complex East Windham	Gambo Road Complex
Community Park		
	Dundee Park High School Complex	Skatepark
Regional Park		
	Lowell Preserve Deer Hollow Sanctuary Claman Sanctuary	Otter Brook Sanctuary Chaffin Pond Black Brook Preserve
Linear/Greenbelt Park		
	Snowmobile Trails Mountain Division Railroad	Powerline Pipeline

Windham utilizes the *Recreation and Open Space Planning Workbook* prepared by the Bureau of Parks and Lands, Maine Department of Conservation as its guidelines. These standards, along with Windham's current facilities, are illustrated in Table 8-3. The State Bureau of Parks and Lands is currently in the process of updating the *State Comprehensive Outdoor Recreation Plan (SCORP)* which may provide some revised standards for determining recreation facilities demand and therefore, should be reviewed by the town when it becomes available.

The figures suggest that there is an immediate need for a skating supervisor, playground supervision, community music group, an arts and crafts program, organized dance group, Little League/softball fields, outdoor basketball courts, tennis courts, multi-purpose fields, beach and swimming area, playgrounds, and additional funding. The recommended items are based on a population of 15,000. These standards indicate that the town needs to consider expanding its existing recreation areas as well as the potential for creating other parks and playgrounds to service portions of the community that do not have convenient access to existing neighborhood or community parks.

Table 8-3
Comparison of Windham's Existing Recreation Program
to Recommended State Guidelines

	2001	
	RECOMMENDED	ACTUAL
I. ADMINISTRATION		
A. Recreation & Park Board		U
B. Recreation & Park Department	U	U
C. Community Education/Recreation Combined School/Town Rec Dept	U	U
II. LEADERSHIP		
A. Summer Program		
1. Swimming Instructors	U	U
2. Summer Recreation Director	U	U
B. Winter Program		
1. 1 Skating Rink Supervisor/Each	U	
2. 1 General Program Supervision (Part Time)	U	
C. Year Round Program		
1. Full Time Recreation Director	U	U
2. 1 Full Time Staff	U	U
3. Part Time or Contractual Program Specialists	U	U
III. PROGRAM		
A. Swimming Instruction Program	U	U
B. Supervised Playground Program	U	
C. Senior Citizen Club	U	U
D. Teen Program	U	
E. Skiing Instruction Program	U	U
F. Ice Skating	U	U
G. Community-Wide Special Events	U	U
H. Organized Community Music Group	U	
I. Arts & Crafts Programs	U	

		2001	
		RECOMMENDED	ACTUAL
J.	Evening Adult Education Recreation Program	U	U
K.	Organized Dance Group	U	
L.	Day Camp Program (Existing Program in Windham for children 5 to 15 - facilities are at capacity)	U	U
IV. FACILITIES (includes school areas)			
A.	Outdoor Facilities		
1.	Neighborhood Playground, 2-10 acres, playground, basketball court, playfield	U	U
2.	Community Recreation Area, 2-25 acres, ballfields, tennis courts, swimming, ice skating, etc.	U	U
3.	Community Park, 100+ acres, undeveloped for walking, cross-country skiing, nature study, etc.	U	U
4.	Special Facilities		
a.	Baseball diamond (0.16/1000 pop.)	2	2
b.	Softball and/or Little League diamond (0.75/1000 pop.)	11	7
c.	Basketball court (0.50/1000 pop.)	7	3
d.	Tennis court (0.67/1000 pop.)	10	3
e.	Multi-purpose field - football, soccer, field hockey (0.50/1000 pop)	8	8
f.	Swimming facility to serve 3% to 5% of Town population		
	Pool - 27 sq ft/user	22,500 SF	0
	Beach - 50 sq ft of water/user, 50 sq ft of beach/user	22,500 SF	11,000 SF
g.	Ice skating (5000 sq ft/1000 pop.)	75,000 SF	17,000 SF
h.	Playgrounds (0.50/1000 pop.)	7	4
i.	Day Camping Area	U	U
j.	Horseshoe Courts	U	U
k.	Shuffleboard Courts	U	
l.	Picnic Area with tables and grills (2 tables/1000 pop.)	30	30
m.	Outdoor Education Area or Nature Center	U	U

	2001	
	RECOMMENDED	ACTUAL
B. Indoor Facilities		
1. Recreation Center Building	U	
2. School Facilities Available for Public Use	U	Weekends & some weeknights
3. Gymnasium or Large Multi-Purpose Room (0.20/1000 pop.)	3	4
4. Auditorium or Assembly Hall	U	U
5. Arts and Crafts Shop	U	
6. Teen Center	U	
7. Senior Citizen Center	U	U
8. Game Rooms	U	
9. Public Library	U	U
10. Sheltered Multi-Purpose Facility	U	

V. FINANCE

(Funds spent for operation and maintenance – does not include capital expenditures.)

A. Minimum \$6 per capita for part-time program	\$90,000	N/A
B. Minimum \$12 per capita for full-time program	\$180,000	\$154,360

Source: Windham Parks and Recreation Department and *Recreation Open Space Planning Workbook* prepared by the Bureau of Parks and Lands, Maine Department of Conservation

6. Implications for the Future

Existing and future needs for open space and recreation facilities in Windham fall into three broad categories: (1) maintain existing facilities at their current or improved levels; (2) expand the uses of the existing facilities to maximize the potential of each location; and (3) provide additional facilities and areas of open space to round out the town’s programs and service future population expansion.

Windham has done an excellent job in providing recreation facilities with limited resources. By working with the schools and various volunteer groups, funds, materials, and labor have been donated for the development of much of the existing resources. The town, however, needs to consider maintenance and replacement costs of existing recreational facilities in future budgets. As various groups continue to add teams, increased demand is beginning to stress the capabilities of existing facilities.

Another important need in Windham involves the identification and acquisition of key parcels of land that can be designated for open space and conservation purposes. As indicated on Map 8-1, and discussed earlier in this chapter, several land parcels in Windham have been designated for recreation and park use, as well as nature preserves. Some of these parcels are owned by the town, while others are under lease agreements. Recently the Windham Land Trust was created to acquire and manage important conservation land in the community. Their first acquisition, as noted on Map 8-1, was the Black Brook Preserve (containing approximately 104 acres) in Windham Center. This property, which was acquired with financial participation by the town and the Land for Maine's Future, will be managed as a nature preserve and include hiking trails. This parcel offers some unique opportunities since it is located in Windham Center, which has been identified as a growth area (see Map 8-1) in the Comprehensive Plan for Windham (2002). As development, especially residential, occurs in this portion of Windham, a nature preserve will be within walking or bike riding distance for a number of present and future residents.

In order to address the need for future open space and recreation lands within the community, Windham should identify key land parcels for possible acquisition. In certain parts of the community efforts should focus on land that serves multiple purposes such as public access to water for swimming, boating and fishing, as well as provide opportunities for creating new athletic fields. In other portions of Windham natural areas of the town should be conserved to protect wildlife, woodlands, plant species and open farmland. If possible areas for hunting should be permitted on these types of properties. Finally, possibilities for connecting these various sites through a trail system and/or wildlife corridors should be explored.

This type of effort will require significant financial support. The Windham Land Trust, as noted earlier, has already demonstrated that local fund raising and municipal financial support can be obtained. Other sources of funding, however, will be required in the future. The town needs to investigate the possibility of acquiring funds to match local efforts from governmental and private organizations. One state governmental source would be the Land for Maine's Future. Other organizations and regional trusts should also be contacted.

Chapter 9 Municipal Services and Infrastructure

1. Introduction

Population and housing growth often result in a corresponding increase in the demand for the provision of municipal services and improvements to infrastructure systems. Planning for this growth from a municipal services standpoint is important in order to spread large capital expenditures over a longer period of time and ensure that an adequate level of service is maintained for residents and businesses.

This chapter examines Windham's municipal services from the perspective of capital facilities and equipment needs. The facilities included in this evaluation involved the town offices/community center, police and fire services, library, public works, and schools. In addition, the capacity and condition of municipal and public infrastructure systems are examined. These included water, sewer, electric, natural gas, and telecommunications systems.

The focus of the analysis is on building and equipment needs of the various departments to support existing and projected demand. However, staffing levels are also discussed for the various town departments. Much of the information presented in this chapter was obtained through interviews with town department heads. The *Facilities Assessment and Space Needs Analysis* study prepared for the town by Mooney Engineers, in 1998, also provided information that is cited in this chapter.

2. Major Findings and Conclusions

- Many of Windham's municipal departments are experiencing a significant shortage of building space within existing facilities.
- The town offices/community center building has inadequate office and storage space to support the services located there and the building does not provide a suitable facility for public gatherings and community events.

- The public safety complex and three of the town's four fire stations presently have insufficient space to support the current needs of the Police and Fire Departments.
- The town has reached a level of growth and development which may warrant the consideration of switching from a primarily volunteer fire department to a more expanded level of full-time fire fighting and emergency services. Any consideration regarding this issue should also evaluate the present locations of the station houses in terms of optimum placement to deliver existing and future services to the community.
- Completion of the School Department's facilities improvements and proposed expansion plans should provide adequate classroom capacity throughout the remainder of this decade.
- The town will need to acquire additional parcels of land in order to be prepared for future facilities expansion that may be necessitated by projected growth levels.

3. Town Offices/Community Center

Existing Services - The town offices/community center building is located on School Road in proximity to the library and School Department administrative offices. The facility houses all of the town's administrative departments as well as Town Council chambers, meeting rooms, and a gymnasium. The building is situated on a long, narrow lot of approximately six acres, which also contains the School Department's administrative building. Parking adjacent to the building has marked spaces for 61 vehicles, some of which are used by the School Department.

The building, which historically served as a high school, consists of a central section of two stories with two adjoining single story wings. The structure contains approximately 19,000 square feet of space. The central portion of the building is the original wood frame structure that was built approximately 90 years ago, according to the 1998 facilities assessment study. This section houses all town administrative offices in the two upper floors and building mechanicals and storage in the basement level. The services provided within this section of the building include offices for the following: Town Manager/Finance; Economic Development; Assessor; Parks and Recreation; Community Development (including Code Enforcement and Planning); Town Clerk; Tax Collector; cable television/communications services; computer network support services; and the Town Council chambers.

The left (facing) wing of the building, referred to as the annex, was added in the 1950s. This single story, flat-roofed, concrete block addition contains six rooms that were formerly used as classrooms, as well as a kitchen area. Three of the rooms function as a senior center for the community and, in conjunction with the kitchen facility, are used for the Meals-on-Wheels program. The three remaining rooms are leased from the town by the People's Regional Opportunity Program (PROP) for use by the Head Start program. When not in use by senior groups or PROP, these rooms are also

used by various other community groups for daytime and evening meetings, seven days a week. The building's right wing contains the town's gymnasium, elevated stage, kitchen, storage, bathrooms, balcony area (which is used exclusively by the local theater group), and an office used by the Buildings and Grounds division of the Public Works Department. This portion of the building was added in the 1920s and is composed of concrete blocks with a flat membrane roof.



Town Offices (Annex view)



Town Offices (Gymnasium view)

Needs Assessment - According to the facilities assessment study, the building is in good condition and structurally sound. A new boiler and heating system were installed in the annex within the last five years and the building is in basic compliance with ADA (Americans with Disabilities Act) requirements. Additional recommendations included: improve the gymnasium roof and drainage system, replace gymnasium floor and ventilation system, install interior flooring on both floors of the central office section of the building, and upgrade the electrical entrance panel for the annex.

From an overall perspective, however, the study also concluded that there is a significant shortage of office and storage space within the building and its layout does not facilitate the most efficient delivery of services by the various town departments. In addition, the town is in need of additional meeting/conference space, a new gymnasium, and community theater. The report concluded that an additional 50% more office space and 100% more storage space was required to meet current departmental needs. It also indicated that an additional 57% more space would be required in the future to service projected population growth within the community.

Continued use of these facilities will also warrant the creation of additional parking. Presently, if all of the facilities are in use by the various departments and community programs, there is insufficient parking available resulting in the overflow of vehicles into areas that are not designated for parking. This situation will be exacerbated if additional square footage is added to the building.

Several options were offered in the study to address the current and longer-term space needs of this facility. Short-term options included adding a 3,300 square foot addition to the central portion of the building to support current departmental needs. Two other options called for adding a second level, containing 6,000 square feet, to the building's annex. The total building space would then be

reallocated between administrative functions and community service functions (i.e. parks and recreation, theater, gymnasium, seniors/PROP).

Longer-term recommendations presented in the study called for adding 9,000 square feet to the facility. This space would be divided between a 4,500 square foot addition to the central portion of the building and a 4,500 square foot addition to the gymnasium. Total building space would again be reallocated between administrative and community services and the addition to the gym would allow for upgrading that facility and creating a community theater.

An alternative long-term recommendation called for the creation of a new 20,000 square foot building that would be located at a site within the town center area. This new facility would house the town's administrative functions and the existing building would be completely turned over to Parks and Recreation and other community services. This option would also involve the 4,500 square foot expansion of the gymnasium to provide suitable recreation and community theater/gathering space for the town. One potential location that has been considered by the town for a new facility is the parcel adjacent to the public safety complex on Route 202. This site is considered to be a good location because of its proximity to Windham Center and the fact that the land is already owned by the town.

The provision of an adequate community gathering facility to accommodate the town's many social and cultural groups is a need that has been identified as part of this comprehensive plan's public input process. It is also a need that was identified in other public forums prior to the inception of this plan update. In May 1999, the Town Council appointed a Community Center Steering Committee that was charged with developing a conceptual plan for the creation of a community center. After holding numerous workshops and meetings, the steering committee recommended the following components be included in the proposed community center.

Indoor Functions:

- Multi-purpose area including a stage with audiovisual capabilities for theater, public forums and recreation functions.
- Teen wing area including a kitchen/diner area, computer lab, lounge area that includes billiards, other table games, music room and rest rooms.
- Senior wing area including a kitchen/diner area, lounge area, computer lab, billiards room and rest rooms.
- Indoor suspended walking track.
- Indoor swimming pool that would include a lap pool and separate (90 degree) therapy pool for seniors and young children.
- Adequate locker rooms for all age groups.

Outdoor Facilities:

- Walking Paths
- Community Gardens

- Arboretum
- Ice Skating Rink
- Skate Park
- Basketball/Tennis Courts

The location of this facility should take into account the potential for access by any existing or proposed transit systems operating in the area. Because this facility will be serving seniors and teens, two groups for which transportation can be a limiting factor, suitable sites for a future community center should be examined in the context of providing access by means of any prospective regional transit corridors.



Public Safety Complex

Two of the components identified by the steering committee will be addressed as part of the approved plans for upgrading the town's high school (refer to the *School Department* section of this chapter). As of March 2002, the State approved plans for renovating and expanding the high school that includes the creation of an 800 seat auditorium/theater and an auxiliary gymnasium. Both of these facilities will be available for community use, therefore, any proposed design plans for a new or upgraded community center should reflect this fact. The town voted to fund its share of the proposed renovation project in June 2002.

4. Police Department

Existing Services - Windham's police services are administered from the public safety complex which is located on Route 202. The building, which was constructed in 1988, is a two-story structure that is primarily wood-framed construction with a brick veneer combined with some masonry and steel construction. The building is a combination facility that houses both the Police and Fire/Rescue Departments. The structure contains approximately 11,000 square feet, 8,000 of which are occupied by the Police Department's operations, according to the 1998 facilities assessment study.

Police operations located on the first floor include the dispatch area, records storage area, patrol office, shift commander's office, small interview room, lunch room, and equipment issue room. The north side of the building has three garage bays used by the Police. One bay is the sallyport that has adjoining detention cells allowing for a secure means of bringing prisoners into the building for intake/interview and short-term detention. There are three holding cells in the facility. The two remaining bays are used for storage, washing vehicles, and impounding evidence.

Second floor building space allocated to the Police includes several offices that are used by the Chief, Lieutenant, Detectives, and shift supervisor. In addition, there is a crime lab, photo lab,

evidence area, weight room, evidence lockup area, and a joint training/conference room which is shared with the Fire Department. The third level of the building is currently used only for HVAC equipment and records storage, but does have expansion potential for other uses according to the Chief.

Full-time staffing for the department includes the Chief, one Lieutenant, four Sergeants, two Detectives, 15 Patrol Officers (one of which is a Community Services Officer), one Animal Control Officer, and one administrative assistant. The Police Department also oversees dispatch operations which has six full-time personnel. The department also has two part-time clerks who assist with data entry and call taking. The dispatch operations serve the Police, Fire and Rescue Departments as well as all other town-wide calls when the town offices are closed.

The Department's primary capital needs are associated with vehicle replacement. The inventory currently includes seven marked cruisers, three semi-marked cars which are used by the Chief and Detectives, one motorcycle, and two trucks used for the department's animal control and community services functions.

Needs Assessment - Overall, the public safety building is in good condition. However, the increase in departmental personnel associated with the town's growth over the past decade has resulted in a space shortage within the building. As a consequence there has been a doubling up of personnel in various offices, a lack of work space for carrying out administrative functions, and insufficient storage for equipment, records, and evidence. The Chief feels that there is an immediate need to address this issue, a conclusion that is supported in the 1998 facilities assessment study. The study examined several options for addressing this issue in both a near-term and long-term time frame, based on the Police and Fire Departments' projected growth. In the short-term, the study proposed adding approximately 2,200 square feet to the building and redistributing building space allocation between the two departments. Within the next five years it is anticipated that an additional 4,600 square feet will be required to accommodate future growth. Both options would warrant the creation of additional on-site parking for department personnel.

From a personnel standpoint the Chief feels that the department is adequately staffed to support the town's year-round population. The department attempts to maintain a ratio of 1.5 sworn officers per 1,000 in population. Windham's police force presently has 22 sworn officers for a population of approximately 14,900 which achieves that ratio. Based on this staffing formula Windham would require about 25 to 26 sworn police officers by 2012 in order to serve a projected population of 16,500 to 17,500 residents. It should be noted that departmental resources are stretched thin during the summer months, according to the Chief, due to the influx of seasonal residents and tourists to the area. Due to the training required for officers, it is not practical to hire people on a temporary basis. Therefore the increase in seasonal population must be serviced with the same year-round staffing levels.

Another service demand issue is related to the town's commercial area in North Windham.

According to the Chief, a large percentage of the department’s calls are related to the commercial establishments and associated vehicular traffic in this area. He believes that a small substation situated in this area would allow for the provision of more efficient and cost effective services. A substation would provide office space for the patrol division operations in that area and create more of a departmental “presence” in this densely developed portion of town.

From an equipment standpoint, the Chief feels that the department’s entire capital budget is under funded. Current vehicle usage necessitates replacing 3 to 4 cruisers on an annual basis. However, due to funding shortfalls, this replacement schedule cannot be implemented. Although the capital budget for this purpose has recently been increased, it is not keeping pace with the increased demands of the department. This situation will only be exacerbated due to future growth within the community resulting in increased vehicle mileage for the department’s fleet. There is also a need to replace the 1984 Suburban which is used by the community services officer.

The Chief also recommends that the telephone system, which is 12 years old, be replaced. In addition, he recommends that new software be purchased to support dispatch and records storage needs, the dispatch console be upgraded, and that video cameras be installed in the cruisers as well as laptop computers. The computers would allow patrol officers to do records checks during traffic stops, a function that must now be routed through dispatch.

5. Fire and Emergency Services

The Windham Fire Department administers fire protection and emergency rescue services from four station houses (which are referred to as Districts 1 through 4) that are dispersed throughout the town. The department’s headquarters are located at the public safety complex on Route 202.

Department personnel includes a combination of full-time and call (volunteer) firefighters, as well as additional support staff. The full-time personnel include the Chief, a Deputy Chief and four full-time Emergency-Paramedic/Fire Fighters. Part-time personnel include a Secretary and data entry person. The department’s roster of call firefighters currently ranges between 55 and 80 personnel.

The department has 11 major pieces of apparatus that are distributed among the four station houses. These vehicles are listed in Table 9-1. The town’s current capital budget calls for acquisition of a new engine to replace Engine 1. Squad Truck 1 is also in need of replacement and is presently included in the capital budget. In addition, a town the size of Windham should have a second aerial (ladder) truck, based on National

Model Year	Description	Cost
1975	Squad 1	\$200K - \$225K
1976	Engine 6	NA
1982	Engine 1	\$89,000
1983	Ladder 1	\$700K - \$800K
1989	Engine 7	\$181,000
1991	Unit 8 (Pickup)	NA
1995	Engine 4	\$151,000
1996	Chief's Car	NA
2000	Engine 5	\$227,000
2001	Rescue 1	\$139,000
2001	Rescue 1	\$139,000

Fire Prevention Association (NFPA) standards, according to the Chief. There are no current plans to acquire this piece of apparatus.

Existing Services

District 1 - The District 1 station is located in South Windham, on Route 202, at the Gorham town line. The building is a single story, steel framed masonry structure that was built in 1964. There is approximately 3,200 square feet of building space which includes four bays for vehicles, an office, a bunkroom (which was created from one of the bays), and a tower (used for drying hoses). The facility is located on a 0.4 acre site that abuts the Presumpscot River to the rear.



District 2 Station

The building is owned by Windham but is operated as a joint use facility with the Town of Gorham which stores one fire engine there. The station responds to calls in both towns and the cost of each response is paid by the community requiring service. The station is currently manned on the overnight shift (10 pm to 7 am) by two students who are studying fire sciences. Other than these two part-time personnel, the station is supported by 10 to 15 call fire fighters at this time.

Vehicles presently located at this station include two engines (one from Windham and one from Gorham), a four-wheel drive pickup (used for forestry calls), and a Cumberland County Haz-Mat vehicle. There is parking for approximately 8 to 10 vehicles on-site in the paved parking area.

District 2 - This station house is situated in North Windham near the intersection of Route 302 and River Road. It is a one story structure containing approximately 7,000 square feet and a mezzanine level, overlooking the vehicle bays, that contains approximately 1,500 square feet. The building is a quonset-style structure made of corrugated steel that was erected in 1973. The station contains four vehicle bays, a training room, and an office (which is used as a day room for personnel) on the lower level. The second level contains an office and storage area. The training room is used by the department as well as other community groups and public agencies for various meetings. There is adequate on-site parking to support these other uses. The station is located on approximately one-half acre of the Arlington Cemetery property.



District 1 Station

The department houses two engines, a squad truck, and other equipment, including a boat, pickup

truck, and smoke trailer, at this station. The vehicle bays are 60 feet deep and 20 feet high which allows them to easily accommodate the vehicles stored there.

Given its location in the town's commercial district, this station is the busiest of all the department's facilities, according to the Chief. As a result, the department mans this facility with two per diem personnel (7:30 am to 5:00 pm) who are supported by 22 to 28 call fire fighters.



District 4 Station (Public Safety Complex)

District 3 - The District 3 fire station is located on Falmouth Road in East Windham, near the Falmouth town line. The building is a one story, wood frame structure containing approximately 4,900 square feet. The station was constructed in 1993.

The facility contains an office, training room, a bunk room for eight personnel, hose room, storage area, and four vehicle bays. The department presently stores two pieces of apparatus at this location, one first-line engine and one second-line engine (backup vehicle). This station is supported by 8 to 12 call fire fighters

The facility is situated on a ten acre parcel that also contains a ballfield and playground. The facility's training room is used by various community groups and adequate on-site parking is available to accommodate current uses of the facility.

District 4 - The department's Central Station is located at the public safety complex on Route 202. This two story facility is jointly used by the town's Police and Fire Departments, as discussed under the *Police Department* section of this chapter. The Fire Department occupies approximately 3,000 square feet of the building's 11,000 square feet. First floor space includes: an office, which is shared by the Chief, Deputy Chief, Secretary, and data entry person; a day room, which is also used for office work; a kitchen; two small storage closets; and apparatus bays for five vehicles.



District 3 Station

Second floor space allocated to the department includes: a Captain's office which is shared with the Rescue officers; a bunk room for four personnel; and a training room which is shared with the Police Department.

Department apparatus housed at this station includes one engine, one pumper/tanker, an aerial ladder, and two rescue vehicles. The station is manned by the Chief, a full-time, live-in paramedic for the Rescue Squad, two per diem fire fighters, a part-time secretary and data entry person. This district is supported by 15 to 25 call firefighters.

Needs Assessment

District 1 - This station house, located in South Windham, is the department's oldest facility. As such, its ability to support current demand for service is becoming increasingly marginal. The facility has no office or training space, lacks storage for seasonal equipment and has no HVAC system. The existing bunk space has been created from one of the bays, which results in problems from vehicle fumes. In addition, the bays are small resulting in cramped conditions for maneuvering vehicles and storing equipment.

The site on which the building is situated is also cramped with the bay doors too close to Route 202. Vehicles parked on the street and winter snow banks make access into and out of the bays difficult and creates safety concerns. Furthermore, there is limited expansion potential to the rear of the building due to its proximity to the Presumpscot River.

Although South Windham in general is a good location for a fire station, the Chief feels that a new location in the village area should be considered in any long-range facilities planning. A more modern station would allow the town to store an aerial truck there, the cost of which could be shared with Gorham. Presently Windham has only one aerial where a town of its size should have two, based on national standards. This results in higher insurance rates for residents and businesses, according to the Chief.

District 2 - The North Windham station also has a number of issues related to building design and location. There is inadequate space to accommodate office, training and storage needs of this district. In addition, because the bays are not adequately enclosed, fumes are an issue in the mezzanine area which limits the potential use of that space.

In the short-term, the Chief feels that the structure's usefulness could be enhanced if the mezzanine area was sealed off from the vehicle bays. This would allow the creation of a larger training room on the upper level to support growing demand for this type of facility. It would also allow the first floor classroom to be converted into a bunk room and the current office/day room to be used as a supervisor's office. As part of these alterations the ceiling height of the bays should be lowered to reduce heat loss. The septic system at this station, which is located under the parking lot, is also an issue due to periodic freezing.

From a longer-term perspective, the Chief feels that a new location to the north of North Windham might be more advantageous for delivering services in that part of town. Access onto Route 302, which is becoming increasingly difficult due to traffic congestion, might also be easier at another

location. In addition, a change in location could improve mutual aid support with the Town of Raymond.

District 3 - The East Windham Station house is in good condition and functions very well, according to the Chief. There is adequate space for staff and apparatus and the building is well sited with regard to the roadway and adjoining land uses. This station should be considered as a good model for other stations within the community in the future.

District 4 - The department's Central Station, at the public safety complex on Route 302, has a severe space shortage for both the Fire and Police Departments, as indicated in the facilities assessment study. There is an immediate need for more office space, storage space, training room, and upgraded living quarters for full-time staff. There is no hose tower, which means that hoses must be taken to another station for drying. In addition, the fact that the facility is used jointly by Fire and Police creates security concerns since the Police Department needs to operate in a more secure environment than the Fire Department. This provides limitations regarding the potential for sharing various portions of the building between departments.

As discussed under the *Police Department* section, the addition of approximately 2,200 square feet is currently required to service existing departmental needs. A subsequent addition of approximately 4,600 square feet is also expected to be needed to accommodate future growth. As proposed in the facilities assessment study, these two additions would be constructed on the rear of the building which would allow both departments to expand and redistribute the allocation of floor space within the existing building.

Comprehensive Department Needs - Overall the Chief feels that the town has good coverage, with respect to response times, from existing fire stations. Although the poor condition of many private roads within the community does result in reduced access time, in some locations access is not possible with certain types of emergency vehicles. This raises concerns for the provision of safety services to those homes. Another access issue is created by many dead-end streets being created as part of new subdivisions and the failure to link these roadways where such potential exists.

The town's continued and projected growth is also a concern for the department from a staffing and equipment perspective, according to the Chief. It has become increasingly difficult to maintain an adequate supply of call firefighters from new residents moving into the community. The town has reached a level of development that warrants the preparation of a long-term plan for providing professional staff, both firefighters and support staff, to allow for an appropriate level of service from the department. In addition, the Chief would like to see the town establish and maintain a capital budget plan to replace vehicles on a more consistent basis than current policies permit.

The availability of a suitable water supply is also a continuing concern for the department. Presently, approximately 50% to 60% of the town is serviced by municipal water. The portions of town not served by municipal water include the southern area which is generally bounded by River Road,

Route 202, Route 302, Albion Road, and the Westbrook town line. The other area not served by municipal water includes Route 202 east of the rotary and several of this highway's feeder roads (See Map 9-1, Water Service Infrastructure Map at the end of this chapter). The Chief would like to see a comprehensive program initiated in these areas for the installation of dry hydrants over the short-term while developing a capital plan for extending municipal water lines over the long-term.

The only portion of town currently served by municipal water where pressure is a concern is East Windham. The central and northern portions of town have good to excellent water pressure. However, the Chief feels that the town's existing policy requiring the extension of municipal water lines for new development is being administered inconsistently. This needs to be changed in order to provide a comprehensive fire protection system throughout the town as it continues to grow.

Adoption of a broader sprinkler ordinance is another approach the Chief feels the town should consider implementing in order to provide improved fire protection. This ordinance would require all new commercial and residential structures located a certain distance from municipal water lines to install a sprinkler system for fire suppression.

6. Library

Existing Services - The town's public library is located on Windham Center Road and is part of the campus-style setting that is formed by the town offices/community center and the School Department's facilities. Library services are delivered from a two-story, wood and steel-framed building that was constructed in 1971. An addition to the facility was constructed in 1993, which increased the square footage from approximately 5,200 to 10,600 square feet. A new entryway/vestibule was added in 2000 to increase the building's energy efficiency and create more convenient access from the parking area. The building is handicap accessible and recognized as being ADA compliant in the facilities assessment study.

The library building is situated on a large parcel of land (Assessor's lot 12-25) which also includes the high school, middle school, and other school facilities. There is an on-site paved parking lot which can accommodate 38 vehicles, including four handicapped parking spaces. A wooden footbridge leads from the rear of the parking area over a drainage area to the adjoining school facilities. This footbridge, which provides convenient access between the schools and the library, was constructed in 1999 as an educational project by a fourth grade class.

The first floor of the building contains the children's library area, meeting/conference room, restrooms, and entry vestibule. The children's library includes shelving for the children's book collection, an enclosed reading room, circulation desk, two public access computer terminals, and a staff workroom. The children's library has access to a small outdoor patio area which although not

used for any library programs, does provide a gathering place for students after school.

The conference room, which can accommodate approximately 75 people, is used for children's library programs during the day and various community (non-library) meetings in the evenings. Current usage of the meeting room averages approximately 27 meetings per month.



Public Library

The library's second floor contains the adult library facilities. These include shelving for the library's main book/tape/compact disk collection, the circulation desk, four public access computers, a young adult reading room (ages 12-16), a "living room" style reading area with a couch and arm chairs, a staff workroom, lunchroom, the Library Director's office and a second staff office.

The library's collection (adult and juvenile) currently contains approximately 37,800 print volumes and 3,700 non-print items such as audio, video, and computer-related media. According to the Library Director, the collection generally increases by approximately 1,500 to 2,000 items annually.

Computers are becoming a larger part of the services provided by the library and a more integral part of the overall operations. The library is linked to the Internet via a T-1, high speed access, telecommunications line. According to the Library Director, usage of the facility's public access terminals continues to grow steadily as more information becomes available on-line. This has begun to create more demand on staff time to assist with related technical questions. From an operations standpoint, the library's card catalogue is now completely computerized and accessed via three terminals dedicated to this function. In addition, the library is participating in a statewide program which will make the card catalogue available via the Internet. Initiation of this system, which will be set up by the State, would allow certain library services to be provided on-line and will also expand the interlibrary loan service, which is currently handled manually.

The library staff is presently comprised of five full-time personnel which includes the Library Director's position. There are four additional part-time personnel whose total work hours represent one full-time equivalent (FTE) staff person. Seven volunteers provide additional support for approximately 22 total hours per week. According to the Director, these staffing levels have remained relatively constant for most of the past decade. The library is open for 51 hours per week, Monday through Saturday.

Needs Assessment - Overall the physical condition of library facilities is very good and in need of

no immediate change, according to the Library Director. However, as usage of the facility continues to increase with future population growth (particularly the school population), the need for a quiet reading room and more table work space will become increasingly important. In the short-term the Director feels that the young adult room on the upper floor could be converted for this purpose. However, this is a relatively confined space that should only be considered as an interim solution. Within the next five to ten years, the town may need to consider a small addition to the building that would create a dedicated reading room that can accommodate this service on a permanent basis. There appears to be sufficient area on the site to construct such an addition on the south (left facing) side of the structure which adjoins a small sitting park area. The addition might be designed in an “atrium” style to take advantage of the view of the park.

Another existing issue is the provision of adequate shelf space for the adult library’s continually growing collection of books, tapes, and electronic media. The ability exists to place a second level of shelving on the single level stacks currently being used,

which will increase storage capacity by an estimated 40% to 50%. The Director feels that this expansion is needed within the next one to two years and would address this issue for the foreseeable future. However, growth within the community continues to create demand for more materials that cover a greater diversity of topics and interest. In the long-term, more of the floor space in the main library will most likely need to be converted to shelving which will further necessitate the addition of a reading room for the building.

A final need of the library is related to the growing demand for access to technological advances associated with computers and the Internet. Although the number of public access terminals is sufficient for current usage, demand has grown steadily over the last few years, according to the Director. Provision of these services by the library may require additional space be dedicated to accommodate future demand. The existing usage has already begun to place demand on staff time to answer computer and Internet related questions. The Director feels that more reference staff expertise will be needed to provide these services to the community in the future and the town should consider additional dedicated staffing for this purpose.

7. Public Works

Existing Services - The Public Works Department oversees a number of functions within the



Public Works Garage

community which include: road maintenance (summer and winter); drainage system maintenance; grounds maintenance of public buildings (not including schools); spring cleanup of park facilities; cemetery maintenance; and maintenance of all municipal vehicles except for Fire/Rescue and School Department. In addition, the department is responsible for the oversight of contracts related to the town’s water and sewer systems, street lights, solid waste disposal, and various construction projects that are not performed by the department.

The public works garage is located on Windham Center Road, on a site containing approximately 30 acres, which abuts the rear of the school department’s campus. The building was constructed in 1978, with additions in 1980 and 1985, according to the facilities assessment study. The building is a steel and masonry structure containing approximately 8,300 square feet. The site’s grade change allowed for the construction of a two-level building layout. The upper level of the building contains office facilities and the lower level is comprised of eight garage bays. Six of the bays are used by the DPW for vehicle maintenance and storage - and two bays are used by the School Department for maintenance of its bus fleet. The bus fleet is parked in the yard when not in service.

The upper level of the site also contains a sand and salt storage building that was constructed in 2000. The facility holds approximately 7,000 yards of material which typically includes 5,000 yards of sand and 2,000 yards of salt.

Staffing for the Public Works Department consists of the following full-time personnel: the Director, Deputy Director, eight highway staff (including one foreman); three vehicle maintenance staff (two mechanics, one foreman), five buildings and grounds (B&G) staff; and one secretary. Office space for the B&G staff is located at the town offices. The B&G division adds five to six part-time personnel during summer months to assist with maintenance responsibilities.

The DPW has a number of major pieces of equipment that are used for its various maintenance responsibilities. This equipment is listed in Table 9-2. The department’s major equipment is

Model Year	Description	Cost
1975	350C Dozer	NA
1981	Dump Truck - 5/7 yard	NA
1988	444E Loader	NA
1989	624E Loader	NA
1989	Sweeper	\$80,000
1990	436 Backhoe	NA
1994	Dump Truck - 5/7 yard	NA
1994	Dump Truck - 5/7 yard	NA
1995	Dump Truck - 5/7 yard	\$72,000
1997	Dump Truck - 5/7 yard	\$78,000
2000	Dump Truck - 5/7 yard	\$82,000
2000	Dump Truck - 14 yard	\$117,000
2000	Dump Truck - 5/7 yard	\$82,000
2000	Dump Truck 4x4 2 ton	\$55,000
2000	772CH	\$167,000
2001	938G Loader	\$133,000
2001	783 Skid Steer	\$28,000
NA	Mower	\$76,000



Salt/Sand Storage Facility

replaced on a rotating basis as part of the town's capital budget program.

The town's solid waste disposal services are provided on a contract basis with Pine Tree Waste, a private firm. The town has a three-year contract with this company to provide curbside pickup of trash and recyclables. Trash is disposed of at Regional Waste Systems' (RWS) trash to energy facility in Portland.

In 2001, the town began its curbside recycling program, which removes glass, plastic, cans and paper board from the waste stream. With the institution of curbside recycling, the amount of material recycled increased from 11% to 41%.

The department oversees the maintenance of 26 cemetery properties which are under the town's jurisdiction. These properties include a combination of sites that are owned by the town as well as private (family/veterans) cemeteries that the town has assumed maintenance responsibilities for over time. According to the B&G Supervisor, the Arlington Cemetery in North Windham is currently the only facility with unsold plots. There are 856 graves available at this facility. There are also 140 cremation burial sites available at the recently created Cremation Gardens portion of this cemetery. In addition the town also owns an adjoining 30 acre parcel that would allow for future expansion at this location. However, use of this additional acreage may be limited by the existence of wetlands.

There are plans to expand the Mayberry Cemetery by approximately 30,000 square feet, as well as a smaller expansion of the Smith-Anderson Cemetery, according to the B&G Supervisor. The expansion of these two locations could add an estimated 150 grave sites to the available inventory. In addition, other cemeteries have available capacity although there may not be any plots remaining for sale. The B&G Supervisor estimates that the town has sold approximately 60 grave sites annually over the last few years.

Needs Assessment - The Director feels that the public works garage facility has exceeded its useful life and is inadequate to support the current needs of running the department in an efficient manner. There is insufficient office space, as well as ancillary space (i.e. meeting/conference/break area and records storage), on the upper level of the existing building to accommodate staff needs.

The vehicle maintenance and storage bays on the lower level are in need of upgrading from an operational standpoint and are also insufficient in number to store all of the department's vehicles. Inside, heated storage is important for use during bad weather and winter months and also helps to extend the useful life of the vehicles. Given the age and condition of the facility it would not be considered economically practical to make the necessary upgrades to the existing building. This determination is supported by the town administration which proposed construction of a new facility that would contain approximately 23,000 square feet and include 10 bays. Two of the bays would be used by the School Department for bus maintenance and storage. The bond issue for the proposed facility, which would have cost an estimated \$3.3 million, was presented to town meeting in 2001, but was defeated by voters.

From a staffing standpoint, the Director feels that existing staff levels are sufficient to meet the community’s needs for the foreseeable future. However, he believes it is important to have the Building and Grounds staff, which is currently located in the town offices, located within the public works facility to ensure adequate supervision. This cannot be accomplished within the building’s existing office space.

The Director believes that the existing vehicle replacement schedule currently supported by the town’s capital budget plan is serving the needs of the Department, based on the present workload. The vehicle most in need of replacement at this time is the 1981 dump truck.

School Year	K-3	4-5	6-8	9-12
2001-02	794	442	636	770
2002-03	816	431	649	753
2003-04	786	432	658	785
2004-05	807	424	648	798
2005-06	809	399	673	783
2006-07	798	432	629	815
2007-08	808	425	640	792
2008-09	808	413	630	815

Source: Planning Decisions, Inc. - May 1999

8. School Department

Existing Services - The School Department provides educational services for Windham students in grades kindergarten through twelfth, as well as a special education program that includes children from regional towns. The department administers these services from six school buildings that are situated at various locations within the town. The department’s educational facilities include the Primary School, Manchester School, Middle School, High School, John Andrews School and the Field Allen School. Table 9-3 provides a listing of these facilities along with their most recent enrollment levels and design capacity. The remaining school facility is the building that houses the department’s administrative functions, which includes the Superintendent of Schools’ office.

Needs Assessment - The School Department has been in the process of conducting a facilities assessment and development strategy for much of the last decade. Following a 1997 system-

Facility	Grades/Use	Enrollment ⁽¹⁾	Capacity
Primary School	K-3	800	1,000
Manchester Elementary	4-5	450	500
Middle School	6-8	672 ⁽²⁾	575
High School	9-12	875 ⁽³⁾	500
John Andrews School	Alt. HS Program	25	42
Field Allen School	Special Ed.	12	139

(1)Enrollment levels as of June, 2001
 (2)Includes use of 5 classrooms in the Field Allen School
 (3)Using portable classrooms to support current enrollment levels

wide facility study¹, the department began to implement a number of actions to address existing deficiencies and has just begun work on a renovation and expansion project for upgrading the High School. The department also completed a study² in 1999 that evaluated projected enrollment levels over a ten-year time period. These projections are presented in Table 9-4. The following section presents an overview of current facilities needs, recent upgrades, and proposed improvements.

Primary School - The Primary School contains grades K through 3. It is located at the rear of the town's school district campus which is situated in Windham Center between Route 202 and Windham Center Road. The facility was constructed in 1986 and according to the Superintendent, is in good condition. An upgrade of the ventilation system, which is required to correct an overheating problem on the second level, will be completed in August of 2002.

From a facilities capacity standpoint, the Primary School appears to be in good shape. As of the 2000/01 school year the facility was at approximately 80% capacity in terms of total enrollment. Projections indicate that the facility should remain within its design capacity through year 2008/09.

Manchester School - The Manchester School contains grades 4 and 5 of the Windham School Department. It is located on Route 302 near the intersection with Route 115 in North Windham. The facility was constructed in 1972 and underwent a renovation and expansion that was completed in the Fall of 1999. The expansion involved the addition of 11 classrooms and created the potential to add eight more. During renovation a new gymnasium was added and the facility's mechanicals were upgraded to support the increased building size.

The facility upgrade allowed the department to consolidate all of the 4th and 5th grade classes, some of which had previously been housed in the Arlington School, into the Manchester School. Enrollment levels at the Manchester School are presently at 90% and expected to remain within the existing design capacity through the 2008/09 school year, based on projected growth levels.

Existing issues remaining at this facility are associated with the adjoining site. The town has three playing fields on the property adjoining the school which are used by the school and the Parks & Recreation Department. The school's leach field is located on this parcel which precludes the creation of additional playing fields. To resolve this issue, the town purchased an adjoining 10 acre parcel (known as the Bennett Property), which will be used to create two new playing fields, as part of the High School expansion project. The department also plans to build a walking path on the school property at some point in the future, which will be available for use by the community.

There is also a need to improve traffic flow patterns on the school property, as well as at the proposed Bennett Property recreation facilities. In order to address this safety issue, the creation of

¹*System-Wide Facility Study with Future Development Options, Town of Windham, PDT Architects and Neill & Gunter, Inc., July 1997.*

²*A Review of Demographic, Economic, Residential Development, & School Enrollment Trends in Windham, Maine, 1999 Final Report, Planning Decisions, Inc., May 1999.*

a connector road, that would cross both the school and Bennett Properties and link Route 302 to Route 115, will be constructed as part of the athletic field expansion project.

Middle School - This facility, which includes grades 6 through 8, is located on the department's school campus in Windham Center. The Middle School was constructed in 1977 and is presently at 117% of capacity necessitating the use of two portable classrooms and five rooms in the nearby Field Allen School.

Proposed facility plans call for the addition of ten classrooms which is anticipated to occur in three to four years, and the installation of a new heating plant in the Spring of 2003. Currently, the Middle School and High School have a joint heating plant that operates inefficiently in serving both buildings. The proposed expansion of the Middle School would result in a design capacity of 825 students which would be able to accommodate projected enrollment levels for the foreseeable future.

High School - The High School was constructed in 1964 and was expanded in 1984. The facility is currently operating at approximately 175% of capacity with a maze of 37 portable classrooms adjoining the main structure. The building's mechanical systems are also in need of substantial upgrading, according to the Superintendent. In addition, there is an on-site waster water treatment plant that must be upgraded to the State's current design standards as part of the project.

A recently approved renovation/expansion will increase the building from approximately 80,000 square feet to 220,000 square feet. The upgraded facility would be able to accommodate 1,150 students and would have available core space for an additional 150 students. All mechanicals, as well as the waste water system, will be included with the upgrade. The project will also include the addition of a turning lane on Route 202 and the installation of sidewalks along the frontage of the school property in that area.

Aside from additional classroom capacity, the new facility is also proposed to include a double gymnasium, an auxiliary gym, and an 800 seat auditorium/theater. These facilities would be accessible for general community use as well as school use. Facilities would also be created to house adult education programs for the town. Windham received final design and funding approval from the State in March of 2002 and town approved in June 2002. Construction began in July of 2002.

Another aspect of the campus-wide improvements that would accompany the High School upgrade is the creation of additional outdoor recreation facilities. The department, and the town in general, are experiencing a shortage of playing fields, as indicated in the Recreation Chapter of this plan (see Chapter 8). The proposed facility improvements plan includes the creation of tennis courts, a softball field, and two all-purpose fields. These fields are proposed to be created on two parcels of land (the Gordon and Strout properties), which abut existing school property, and were purchased to facilitate such an expansion. In addition, an all-purpose field and a utility field are proposed to be created on the abutting parcel that contains the public works garage.

Field Allen School - This facility is located on the School Department's central campus near the Windham Center Road entrance to the site. The facility was constructed in the 1950s and contains nine general classroom spaces. The building presently houses a regional special education program which leases classroom and office space from the School Department. In addition, five of the facilities classrooms are temporarily being used to support the capacity shortage at the Middle School.

This facility is in need of a major upgrade which would include a new roof, windows, and mechanicals, according to the Superintendent. In addition, the building cannot support a general school program due to the lack of core facilities such as a gym, library, and other specialized spaces. The department has not developed any plans to address this facility at this time.

John Andrews School - This facility is used by the School Department to offer an alternative high school curriculum to local and regional students. The building is a wood frame structure that is approximately 70 years old. The facility can accommodate up to 42 students and currently houses 25 students.

According to the Superintendent, the building is only marginally useful as a school facility given its age, design, and condition. A new heating system was installed recently and a renovation of the roof is planned. However, the building's design creates life-safety concerns for use by the public that will have to be addressed in the near future. It may be possible to relocate students from this building to the Field Allen School once the Middle School improvements are implemented.

Administration Building - The School Department's administrative functions are contained in a "historic" house, located on Windham Center Road, on property that abuts the town offices. This building contains the offices of the Superintendent of Schools, the business office, special education office, and facilities manager office.

The building is undersized in meeting current space demands and has warranted the addition of two portable classrooms as an interim solution to this problem. In addition, the building's mechanicals are in need of upgrade, flooding occurs in the basement, the structure is not ADA compliant, and the layout is inefficient to support the needs of the department, according to the Superintendent.

One alternative proposed to address this need, as well as the need to expand the town offices, was the creation of a new 20,000 square foot structure in the Windham Center area. If implemented, this new facility would include both the town and school department administrative offices and eliminate the need to upgrade the existing school offices on Windham Center Road.

General Department Needs - Although the department has enough land to address the building expansion plans at the central campus location there is still a need to acquire additional land for short-term and long-term growth demands. In the short-term the district needs to create three additional playing fields to support current activities. Over the long-term the department would like

to acquire an additional 50 acres in a suitable location that would allow for future expansion to accommodate anticipated growth beyond the current ten-year planning period. The State Planning Office has indicated that it would not support the expansion of the town's school facilities outside of the Windham Center area. Therefore, future land acquisitions would need to be located in this general vicinity.

9. Water Distribution

The water distribution system in Windham is shown on Map 9-1 along with the hydrant locations. The water distribution system is primarily located along major road corridors as well as some of the adjacent side roads that intersect these roadways. The major corridors serviced by the water system include Route 302, Route 35, Route 115, River Road, Route 202, Windham Center Road, Pope Road, and Albion Road. The public water system mainly serves the area west of Route 202 with only a limited area east of Route 202 being serviced at this time. Firefighting capabilities are limited in the area east of Route 202 due to the absence of hydrants. Residents of the remaining parts of Windham get their drinking water from private wells.

10. Sanitary Sewer

Windham's sanitary sewer system is limited to the South Windham area and serves only a few parcels. Parcels served are located on Route 202, Depot Road, Mechanic Street and Androscoggin Street as depicted on the Sewer Locations Map (see Map 9-2). The system is operated by the Portland Water District and discharges to a treatment facility in Gorham. All other areas of Windham are served by on-site septic systems.

11. Electrical Power

Central Maine Power provides the distribution of power in Windham. They maintain a substation on Route 35. Three phase power is available along Route 302, parts of Route 202, Route 35, Route 115, Windham Center Road, and Pope Road. Christopher Bond from Central Maine Power is developing a map depicting the area served by three phase power.

12. Telephone

Pine Tree Telephone and Telegraph Company can provide broadband Internet service to customers within a 2-1/2 mile radius of the Verizon switching facility on Route 202. This technology utilizes copper lines and is limited to a 2-1/2 mile distance.

Verizon offers a variety of services and feels it can meet the needs of any customer. They offer digital subscriber line (DSL) technology within a 2-1/2 mile radius of their facility on Route 202 using copper lines. They also offer broadband technology over a fiber optic line. Extensions of their infrastructure within the right-of-way is at no cost to the customer.

13. Natural Gas

Natural gas service was only recently made available in Windham. Maine Natural Gas maintains a take station on Route 35 which taps the Portland Natural Gas Transmission System (PNGTS). The service area is currently limited to Route 35, Route 115, Route 302, and a limited amount of side roads. The service areas are shown on the Natural Gas & High Speed Internet Service Map (see Map 9-3).

14. Cable Television

Cable television is available throughout Windham. Service is provided by Adelphia. At this time they do not offer any broadband services. Those services are not expected to be available in Windham for another two years.

15. Fiscal Capacity

An important factor in evaluating municipal infrastructure needs is the fiscal capacity of a community to finance identified improvements. This section briefly examines trends in municipal expenditures and revenues for the Town of Windham. Changes in local property valuations are also discussed. Data used in this analysis is based on audited financial statements prepared for the Town of Windham. It should be noted that financial data for Windham is reported on a Fiscal Year (FY) basis that begins on July 1st and ends on June 30th.

As illustrated in Tables 9-5 and 9-6 total municipal expenditures in Windham (between FY 1997 and FY 2001) grew from \$5,783,863 to \$8,855,172. Yearly increases (Table 9-6) ranged from 3.6% to 21.4%. Education appropriations (FY 1997 to FY 2000) increased from 1.7% to 8.5% during the fiscal years examined and were generally greater than municipal expenditures.

In terms of municipal expenditures Public Works, Administration, and Public Safety represented the major portion of expenditures during the fiscal years (55.6% in FY 1997; 59.7% in FY 1998; 55.6% in FY 1999; 53.2% in FY 2000, and 56.6% in FY 2001). Debt service (excluding education) and capital outlays, on an annual basis, ranged from a high of 20.2% (FY 2000) to a low of 8.7% (FY 1998) of total municipal expenditures. It is interesting to note, however, that debt service, as a percentage of total municipal expenditures, has declined each fiscal year examined (see Table 9-6).

<p align="center">Table 9-5 Actual Municipal Expenditures Fiscal Years 1997-2001 Town of Windham</p>										
Expenditure Categories	FY 2001	% of Total	FY 2000	% of Total	FY 1999	% of Total	FY 1998	% of Total	FY 1997	% of Total
Administration	\$1,773,021	20.0%	\$1,602,482	19.3%	\$1,506,555	20.7%	\$1,237,543	20.6%	\$1,189,076	20.6%
Public Safety	1,309,776	14.8%	1,258,033	15.2%	1,082,409	14.9%	1,077,450	18.0%	1,036,579	17.9%
Fire/Rescue Services	875,574	9.9%	684,542	8.3%	621,064	8.5%	558,757	9.3%	495,176	8.6%
Public Works	1,934,552	21.8%	1,547,691	18.7%	1,456,051	20.0%	1,268,499	21.1%	990,947	17.1%
Recreation	165,482	1.9%	130,835	1.6%	111,938	1.5%	85,315	1.4%	90,894	1.6%
County Tax	570,019	6.4%	531,236	6.4%	570,302	7.8%	575,569	9.6%	560,940	9.7%
Other	885,567	10.0%	850,152	10.3%	831,845	11.4%	675,967	11.3%	694,912	12.0%
Debt Service (excluding education)	297,105	3.4%	308,630	3.7%	319,898	4.4%	339,390	5.7%	377,463	6.5%
Capita Outlays	\$1,044,076	11.8%	\$1,370,165	16.5%	\$ 778,832	10.7%	\$ 177,718	3.0%	\$ 347,876	6.0%
Total Municipal Expenditure	\$8,855,172	100%	\$8,283,766	100%	\$7,278,894	100%	\$5,996,208	100%	\$5,783,863	100%
School Appropriations	—	—	\$8,924,796	—	\$8,228,965	—	\$7,700,325	—	\$7,572,354	—

Source: Based on the "Independent Auditor's Reports"

An examination of municipal revenues, as illustrated in Tables 9-7 and 9-8, indicates that the largest portion of town funds, ranging from 77% to 70%, were obtained from Property Taxes. The next largest source of funds was Intergovernmental Revenues. In essence, Total Taxes, which includes Property Taxes, and Intergovernmental Revenues represent 92% (FY 2000) to 95% (FY 1997) of all municipal revenues. While the other sources of municipal revenues are small in terms of total revenues collected, Charges for Services have increased significantly during the fiscal years examined.

Expenditure Categories	FY 1997 to FY 1998	FY 1998 to FY 1999	FY 1999 to FY 2000	FY 2000 to FY 2001
Administration	4.1%	21.7%	6.4%	10.6%
Public Safety	3.9%	0.5%	16.2%	4.1%
Fire/Rescue Services	12.8%	11.2%	10.2%	27.9%
Public Works	28.0%	14.8%	6.3%	20.0%
Recreation	-8.1%	31.2%	16.9%	26.5%
County Tax	2.6%	-0.9%	-7.0%	7.3%
Other	-2.7%	25.7%	2.2%	4.2%
Debt Service (excluding education)	-10.1%	-5.9%	-3.5%	-3.7%
Capital Outlays	-4.9%	338.2%	75.9%	-23.8%
Total Municipal Expenditures	3.6%	21.4%	13.8%	6.8%
School Appropriation	1.7%	6.9%	8.5%	—
Source: Based on the "Independent Auditor's Reports"				

Revenue Categories	2001	% of Total	2000	% of Total	1999	% of Total	1998	% of Total	1997	% of Total
Property Taxes	\$ —	—	\$11,920,691	70.1%	\$11,211,953	70.2%	\$11,061,523	73.8%	\$10,820,557	77.5%
Total Taxes	15,582,248	82.7%	13,891,444	81.7%	13,201,209	82.7%	12,824,712	85.6%	12,375,510	88.6%
Licenses & Permits	266,352	1.4%	272,017	1.6%	295,691	1.6%	243,916	1.6%	184,108	1.3%
Intergovernmental Revenues	1,821,427	9.7%	1,780,573	10.5%	1,528,097	9.6%	1,087,516	7.3%	946,582	6.8%
Charges for Service	451,840	2.4%	323,594	1.9%	318,229	2.0%	272,135	1.8%	16,019	0.1%
Interest Earned	359,394	1.9%	370,927	2.2%	301,488	1.9%	337,463	2.3%	299,125	2.1%
Other Revenue	370,900	2.0%	359,660	2.1%	324,671	2.1%	213,317	1.4%	155,570	1.1%
Total Revenue	\$18,798,156	100%	\$16,998,215	100%	\$15,969,385	100%	\$14,979,341	100%	\$13,966,914	100%
Source: Based on the "Independent Auditor's Reports"										

As noted in Table 9-9 local property valuations have increased between 2.7% to 5.7% yearly. In 2001 it was estimated that local property valuations represented about 95% of true market value. This ratio of local assessment (\$785,436,000) to market value, equated to a market value of approximately \$826,774,736 in FY 2001.

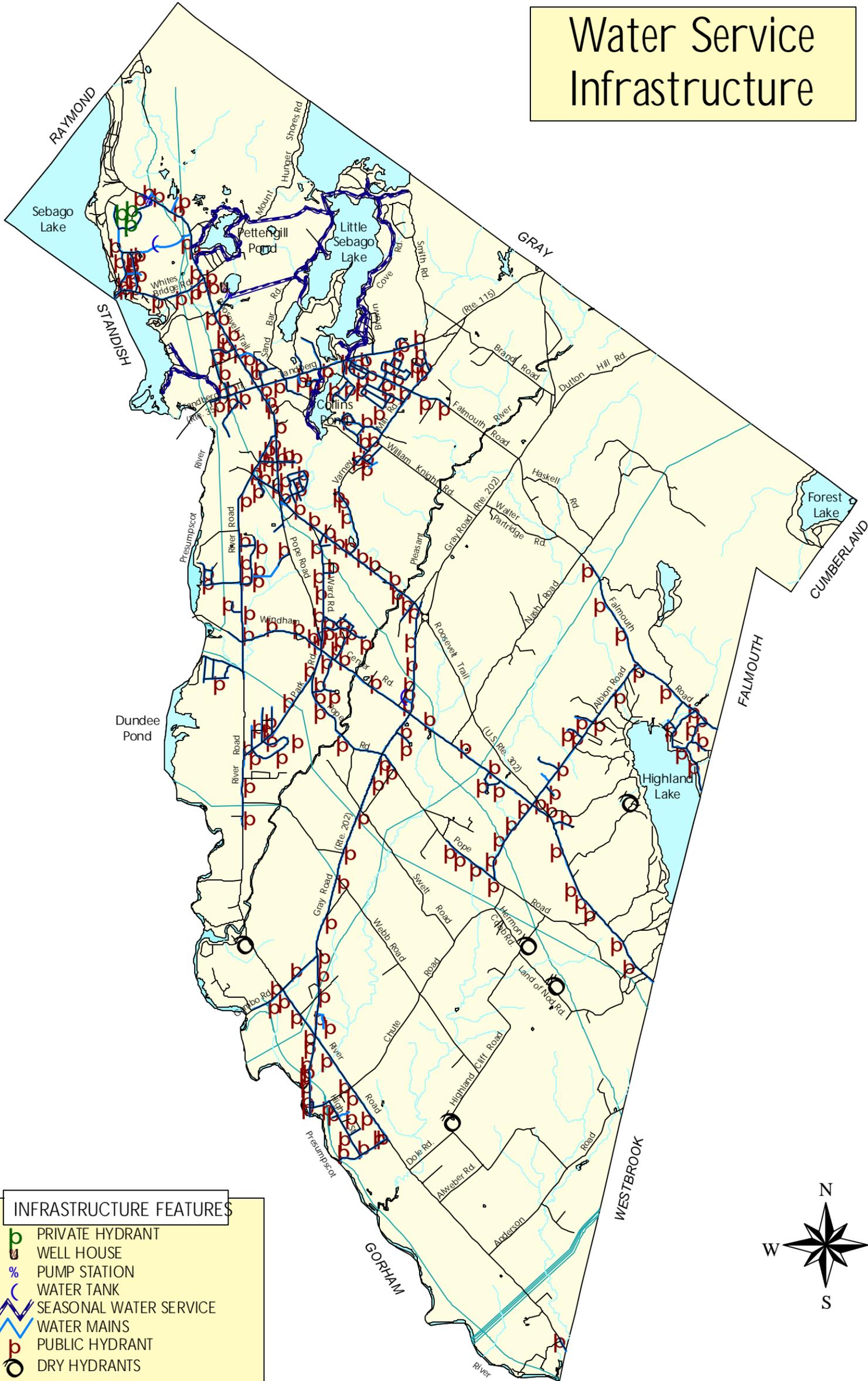
Table 9-8 Percent Revenue Change by Year Fiscal Years 1997-2001 Town of Windham				
Revenue Categories	FY 1997 to FY 1998	FY 1998 to FY 1999	FY 1999 to FY 2000	FY 2000 to FY 2001
Property Taxes	2.2%	1.4%	6.3%	—
Total Taxes	3.6%	2.9%	5.2%	12.2%
Licenses & Permits	32.4%	25.9%	-8.0%	-2.1%
Intergovernmental Revenues	14.9%	40.5%	16.5%	2.3%
Charges for Services	1,598.8%	16.9%	1.7%	39.6%
Interest Earned	12.8%	10.7%	23.0%	3.1%
Other Revenues	47.1%	52.2%	10.8%	3.1%
Total Revenues	7.2%	6.6%	6.4%	10.6%
Source: Based on the "Independent Auditor's Reports"				

Table 9-9 Property Valuation and Tax Rates Fiscal Years 1998 to 2001 Town of Windham					
Fiscal Year	Taxable Valuation of Land & Buildings	Percent Change	Tax Rate Per \$1,000 of Valuation	Percent Change	Assessment Ratio
1998	\$696,932,300	—	\$15.85	—	100%
1999	\$736,788,100	5.7%	\$16.00	1.0%	95%
2000	\$765,011,000	3.8%	\$17.70	10.6%	95%
2001	\$785,436,000	2.7%	\$18.26	3.2%	95%
Source: Town of Windham Annual Reports					

Comprehensive Master Plan

Town of Windham

Water Service Infrastructure



INFRASTRUCTURE FEATURES

- PRIVATE HYDRANT
- WELL HOUSE
- PUMP STATION
- WATER TANK
- SEASONAL WATER SERVICE
- WATER MAINS
- PUBLIC HYDRANT
- DRY HYDRANTS

Comprehensive Master Plan

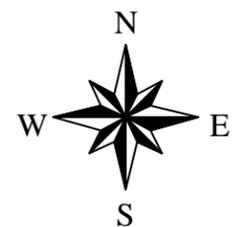
Town of Windham

Sewer Locations



Sewer Features

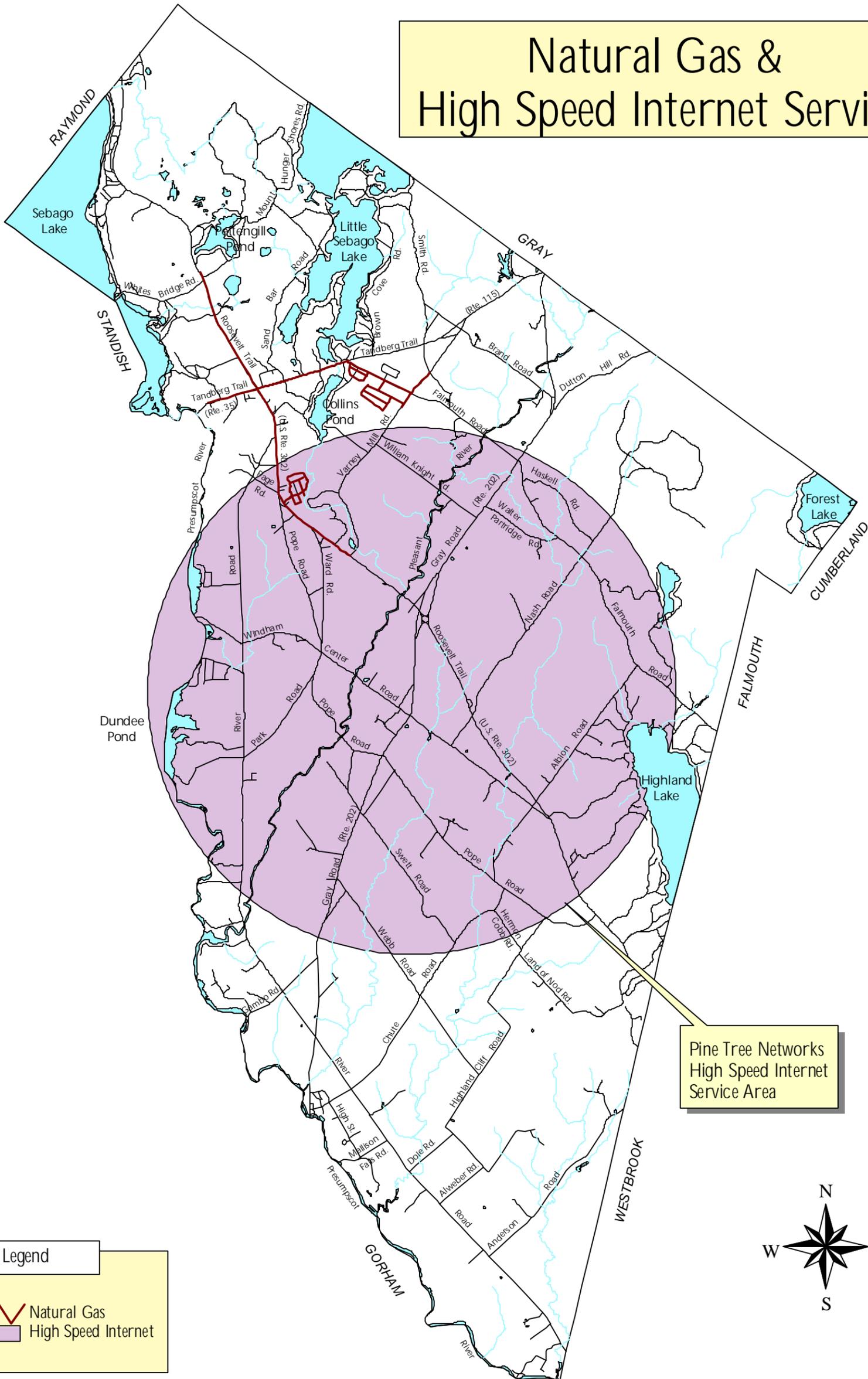
- % Pump Station
- # Sewer Manhole
- Force Main
- Sewer



Comprehensive Master Plan

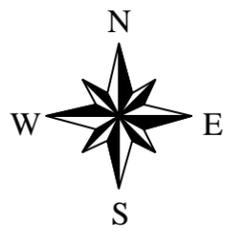
Town of Windham

Natural Gas & High Speed Internet Service



Legend

-  Natural Gas
-  High Speed Internet



Chapter 10 Historical and Archeological Resources

1. Introduction

This chapter of the plan examines historical and archeological resources located in Windham. These resources are valuable for a number of reasons and play an integral role in supporting the quality of life that Windham's residents have come to enjoy. State enabling legislation related to the preparation of comprehensive plans directs communities to "ensure that the value of historical and archeological resources is recognized and that protection is afforded to those resources that merit it." These resources, which include buildings, structures and sites, are important because they provide a visual link to the community's past and create part of its heritage. These resources are particularly important for Windham because it has such a long history as a settlement and many of the town's historic landmarks are still visible on the landscape.

The first portion of this chapter provides an overview of the town's history and describes some of the major settlement areas and sites that are significant to the community's past. Much of this summary is excerpted from the 1993 Comprehensive Plan which was drafted by members of the Windham Historical Society. The second section discusses the current status of efforts to protect the community's historic and archeological resources. It also offers some suggestions for further actions that might be considered by the town to protect these resources.

2. Major Findings and Conclusions

- Windham has a rich history which is still evident in the remaining historic structures and sites that exist throughout the community.
- There are five village/settlement areas within the town that appear to have a significant enough concentration of historic structures or sites so as to warrant consideration for

protection from future development.

- The town has three properties listed on the National Register of Historic Properties which is administered by the U.S. National Park Service.
- The previous comprehensive plan identified a number of actions for protecting the town's historical and archeological resources, but few of these measures have been successfully implemented.

3. Overview of Windham's Historical Resources

Windham was settled in 1737 and, as of 1762, became one of the earliest towns to be incorporated within the State. Prior to its incorporation it was part of the Province of Massachusetts. The town's settlement pattern and remaining historic resources are a reflection of its colonial, agrarian, and industrial periods of development.

There are five areas within the town that were identified in the previous comprehensive plan as being particularly important because of their role in the town's development and by virtue of the fact that many historic buildings and sites still exist. These five areas are listed below, followed by a brief description of each. In addition, the general location of these areas is illustrated on Map 10-1.

- The First Settlement Area on River Road
- South Windham Village
- Windham Center
- Great Falls
- Popeville

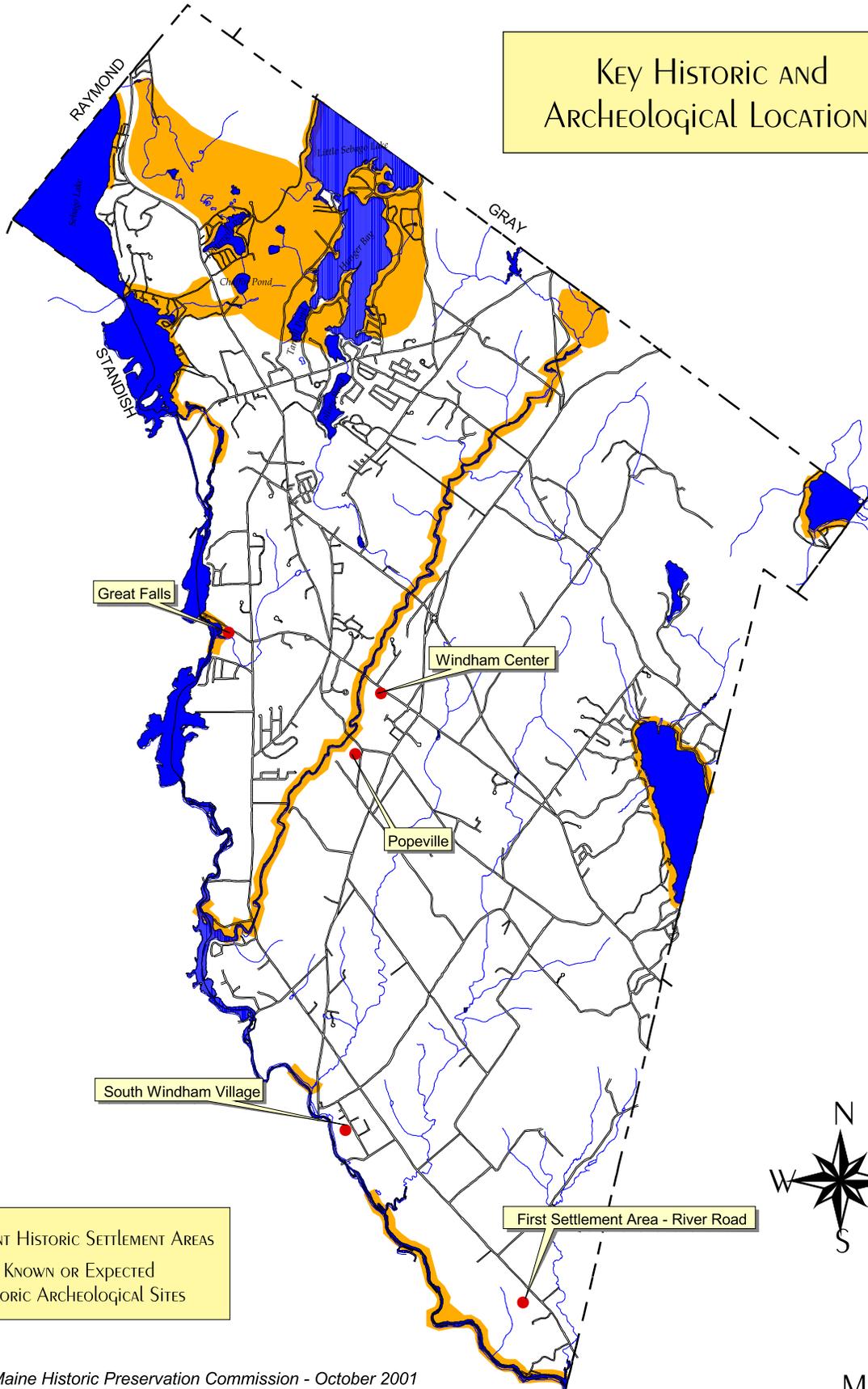
Area 1. The First Settlement Area

The first settled area in Windham is located on River Road at the Westbrook town line. It was in this area that some of the town's first settlers established homesteads near a fort for protection from Indians. Historical accounts describe the fact that the town's first surveyor, Roland Houghton, lost his inkhorn in a brook (now named Inkhorn Brook), and the inkhorn has since become a symbol on the town's seal. Some of the more prominent resources included in this area are as follows:

- The Parson Smith House (National Register Property)
- The Honorable John Anderson House (first town legislator sent to Washington)
- Lot # 1 stone from which all other lots in Windham were laid out
- Cellar hole of Thomas Chute, the town's first settler

COMPREHENSIVE MASTER PLAN TOWN OF WINDHAM, MAINE

Key HISTORIC AND ARCHEOLOGICAL LOCATIONS



- IMPORTANT HISTORIC SETTLEMENT AREAS
- AREAS OF KNOWN OR EXPECTED PRE-HISTORIC ARCHEOLOGICAL SITES



Source: State of Maine Historic Preservation Commission - October 2001
Prepared by RKG Associates, Inc. - July 2002

A development site associated with the first settlement area is the Quaker District. The Quaker District, which was prominent during the 1770s, represents a concentration of activity and buildings in an area bordered by Swett Road, Route 202, and Pope Road. The Quakers came to Windham to escape religious persecution and went on to participate in town government and industry. Some of the historical resources located in this area include the following structures, sites, and districts:

- The site of the first Meeting House
- The second Meeting House (1849)
- The site of the Friends Academy and first school called “Friends”
- The Allen House (c. 1797) on Swett Road
- The Popeville site (industrial center)
- Many old homes on Pope Road
- First Quaker Cemetery
- Second Friends Cemetery

Area 2. South Windham Village

The South Windham Village area, originally referred to as Little Falls, was the site of the town’s first mills which provided lumber, flour, grain and other products for the early settlers of the region. The area is generally bordered by River Road, Depot Street, Main Street and Mallison Street. Some of the important resources located in this area include the following:

- Sites of the first mills from the 1700s
- The old tavern building (1832)
- The second post office
- The third post office
- Mill Houses on High Street
- The site of the second school
- Tenement houses on Main Street built by millworkers
- The second oldest church in Windham (c. 1841)
- Birthplace home of John A. Andrew (1818), governor of Massachusetts during the Civil War

Area 3. Windham Center

The Windham Center area includes Windham Center Road from Nash Road to River Road. Up to the 1840s, Windham Center Road was the primary road corridor linking Portland with all destinations northwest of the city as far as New Hampshire, and was originally referred to as the Portland Road. This area is also important to Windham because of the large concentration of historic houses that still exist there. It is noteworthy, in part, because it includes the following structures:

- Oldest church in Windham (1834)
- The first town hall (1833)
- The first high school (1910) which now houses the current town offices
- The first public library (1971)
- Windham Circulating Library (early 1880s)
- Crossroads Garden Club (early 1800s)
- Tavern at Windham Center
- William Gould House (c. 1800, a National Register Property)

Area 4. Great Falls

The Great Falls area on Windham Center Road was noted in the previous comprehensive plan because of its early settlement period, its importance as an industrial area, and the representative architectural styles that still exist in the area's houses.

Area 5. Popeville

Popeville is a smaller settlement area within the previously discussed Quaker District. The area is significant because of the role it played as an industrial center within the community and because of the structures and sites that are still evident at this location. The early success of this area is largely attributable to the Pope family which constructed mills for the processing of wool, cotton, lumber and grains and the manufacture of clothing and other associated products.

4. National Register Properties

There are three properties in Windham that are listed on the National Register of Historic Properties. Structures, sites, and historic districts can be nominated to, and listed on the National Register which is administered by the U.S. National Park Service. Properties that are listed on the Register must be architecturally distinguished or be associated with a famous person or event. Such a listing provides protection to the property relating to federally approved or licensed actions, such as a highway construction project. Listed properties that might be impacted by such a project would have to be evaluated as part of an environmental impact statement. However, listing on the National Register provides no protection against alteration or demolition by a private owner.

As of the previous comprehensive plan Windham had three properties that were listed on the National Register. These included the following:

- Parson Smith House (1764) and property on River Road
- Maplewood Farm, cemetery and property on River Road
- William Gould House, cemetery and property on Windham Center Road

According to the Windham Historical Society, no other properties have been nominated or listed on

the National Register since the previous comprehensive plan was completed. In fact, there is some concern for the future of the Parson Smith house which was previously owned by the Society for the Preservation of New England Antiquities (SPNEA). However, when the town determined that SPNEA should not be considered a tax-exempt organization, the group sold the building to a private owner thereby diminishing the property's potential to be protected from alterations or demolition.

5. Archeological Resources

Windham's landscape also includes archeological resources that are remnants of pre-historic sites pre-dating the town's original settlement by Europeans. The Maine Historic Preservation Commission (MHPC) has compiled an inventory of sites that are either known to contain evidence of habitation by indigenous peoples, or are considered likely to contain archeological sites, based upon a predictive model of site locations.

Map 10-1 illustrates the areas of potential archeological importance in Windham. The specific locations and contents of these sites are presented in a generalized manner on the map so as to deter disturbance of the areas and protect landowner privacy. The MHPC's records indicate that there are 23 known pre-historic sites in Windham. These are located primarily along the shores of Sebago Lake and the Presumpscot River, which have been surveyed as part of the hydroelectric relicensing process for dams in the area.

Other areas in Windham that may potentially contain pre-historic sites are located around Little Sebago Lake, Highland Lake, Forest Lake, and the Pleasant River. However, further inventory and analysis is needed to determine the actual extent of archeological resources in these areas.

6. Implications for the Future

Windham is fortunate to have so much of its past readily evident in the many remaining historic structures and sites that are still visible throughout the community. When Windham's previous comprehensive plan was completed in 1993, it appeared as though the town was on the verge of taking a major step to protect its important historic resources from the potential impact of significant alteration or encroachment by future development. The town, in 1989, was one of the first in the state to adopt a Historic Preservation Ordinance which established the basis for protection of these resources.

The ordinance calls for the establishment of a Historic Preservation Commission by the town, as authorized under state statute, to regulate development that could affect its historic resources. A five member Commission was appointed in 1991 by the Town Council. The Commission, in association with the Historical Society, identified five areas, which were described earlier in this chapter, that had the potential to be designated as historic districts. However, the boundaries of these areas were never formerly adopted by the Town Council as an overlay zoning district and therefore, the ordinance could not be enforced.

Another aspect of the ordinance that reduced its effectiveness is the provision that the regulations were to be applied on a voluntary basis to existing structures. Therefore, any property that was proposed for inclusion in the historic district had to be accompanied by written consent of the property owner before it could be subjected to review by the Historic Commission. No property owners ever filed such a consent form, which essentially negated the effectiveness of the ordinance.

According to the previous comprehensive plan, a set of maps was produced that identified the boundaries of the five proposed historic districts. Reportedly, these maps were produced only as hard copy (versus a digital computerized format), and copies can no longer be located in the town offices.

The town's Historic Preservation Zoning Ordinance makes no provision for the protection of archeological resources within the community. However, the Site Plan Review and Subdivision Regulations do contain language regarding both archeological and historical resources that may be encountered during the development process. Both regulations contain the following provision.

Historic and Archeological Resources - If any portion of the site has been identified as containing historic or archeological resources, the development shall include appropriate measures for protecting these resources, including but not limited to: modification of the proposed design of the site; timing of construction; and limiting the extent of excavation.

This provision affords the town the legal support to require developers to preserve historic and archeological resources located on the site or the ability to initiate further investigation if warranted. It is important for town officials reviewing development proposals to invoke this portion of the town's regulations particularly in areas that are known to contain high concentrations of archeological remains, such as in the North Windham area.

These are the current circumstances relating to the status of efforts to protect the town's historical and archeological resources. Although the Historic Preservation Commission still technically exists as a board within the town's regulations, its membership has waned due to the fact that it never received the necessary authority to carry out its responsibilities. The Historical Society has continued its inventory of historic properties and has compiled a considerable amount of information regarding the town's resources. These records are stored at the Society's offices on Windham Center Road. The Society's efforts with regard to documenting the characteristics of these structures might be referred to as "non-intensive" survey efforts due to the fact that the group's members are volunteers and may not have the time or expertise to thoroughly investigate each property. However, this group has done an excellent job in providing the basis for a more rigorous investigation by professionals in the field of historic preservation.

Given these factors, there are a number of actions that the town should consider if it wants to re-initiate efforts to preserve its historical and archeological resources, which are as follows.

- Confirm the viability of the Historic Preservation Commission by having the Town Council appoint a full slate of five members as called for in the ordinance
- Continue the process currently being carried on by the Historical Society to document the town's historic resources. Although many properties have been surveyed by the Society, there are still many remaining to be documented.
- Re-evaluate the previously proposed historic district boundaries to insure that they are appropriately delineated. Perhaps the districts should be adopted in an incremental fashion as opposed to all five districts at once. Priorities for such a process might be based on which portions of town are considered most threatened by future development. Conduct more intensive property surveys to determine which properties should be included in these districts.
- Develop suitable mapping and an associated database of the town's historic resources that will support designation of historic districts within the town. One approach would be to include this information in the on-going creation of a municipal geographic information system (GIS) which would allow development projects to be quickly evaluated for potential impact to historic properties. Information being compiled by the Historical Society needs to be integrated into the town's administrative records and procedures in order to make it a useful resource with regard to evaluating the potential impacts of future development.
- Provide staff resources and professional assistance to the Historic Commission to complete these tasks and provide an adequate level of documentation to support the proposed zoning designation.
- Become a Certified Local Government which will allow the town to apply for funding from the Maine Historic Preservation Commission to conduct intensive surveys of historic resources within the community.

APPENDIX

Appendix A - Compliance with Local Growth Management Program (Maine Revised Statutes 30A, Section 4326)

Appendix B - Recommended Actions Identified for Specific Goals and Objectives

Appendix C - Summary of 1993 Windham Comprehensive Plan Policies and Implementation Strategies (September 2001)

Note: The following items were prepared for distribution to the public at various meetings during the preparation of the comprehensive plan. These documents are not regarded as components of the Windham Comprehensive Plan, but are included to illustrate the types of information used to encourage public discussions and comments during the planning process. Maps, which were originally produced in color, are reproduced only in black and white for inclusion in this Appendix.

Appendix D - Shaping a Vision of Windham's Future: Summary of Key Elements that Define an Ideal Community (May 21, 2001)

Appendix E - A Vision for Windham's Future: Conceptual Land Use Alternatives (October 2001)

Appendix F - Windham's Comprehensive Master Plan: Inventory and Analysis Part I - Draft Chapters (October 29, 2001)

Appendix G - Windham's Comprehensive Master Plan Inventory and Analysis Part II - Draft Chapters (December 3, 2001)

Appendix A

Compliance with Maine Growth Management Program

This Appendix highlights the various chapters of the Windham Comprehensive Master Plan that addresses the requirements contained under Maine Revised Statutes 30A, Section 4326, referred to as the *Local Growth Management Program*.

1. Inventory and Analysis

- A. Economic and Demographic Data - Chapter 6 (Economic Conditions) and Chapter 4 (Population and Housing)
- B. Water Resources - Chapter 5 (Natural Resources)
- C. Critical Natural Resources - Chapter 5 (Natural Resources)
- D. Marine Related Resources - Not applicable to Windham
- E. Commercial Forestry and Agricultural Land - Chapter 3 (Existing Land Use) and Chapter 5 (Natural Resources)
- F. Existing Recreation, Park and Open Space - Chapter 8 (Recreation and Open Space)
- G. Existing Transportation - Chapter 7 (Transportation)
- H. Residential Housing Stock - Chapter 4 (Population and Housing)
- I. Historical and Archeological - Chapter 10 (Historical and Archeological Resources)
- J. Land Use Information - Chapter 3 (Existing Land Use)
- K. Capital Facilities and Municipal Services - Chapter 9 (Municipal Services and Infrastructure)

2. Policy Development - Chapter 1 (A Vision for Windham)

3. Implementation Strategy - Chapter 2 (Implementation Strategy)

- A. Identification of Growth Areas and Rural Areas - Chapter 2 (Implementation Strategy, Chapter 1 (A Vision for Windham) and Map 1-1 (Designated Growth Areas)
- B. Capital Investment Plan - To be completed
- C. Protect Water Quality - Chapter 2 (Implementation Strategy)
- D. Consistent Land Use Policies - Chapter 2 (Implementation Strategy) and Chapter 1 (A Vision for Windham)
- E. Access to Coastal Waters - Not applicable to Windham

- F. Ensure Protection of Agricultural and Forest Resources - Chapter 1 (A Vision for Windham) and Chapter 2 (Implementation Strategy)
 - G. Affordable Housing - Chapter 1 (A Vision for Windham), Chapter 2 (Implementation Strategy) and Chapter 4 (Population and Housing)
 - H. Historic and Archeological - Chapter 10 (Historical and Archeological Resources)
 - I. Access to Outdoor Recreation - Chapter 1 (A Vision for Windham), Chapter 2 (Implementation Strategy), Chapter 5 (Natural Resources) and Chapter 8 (Recreation and Open Space).
 - J. Management Goals for Great Pond - Chapter 1 (A Vision for Windham), Chapter 2 (Implementation Strategy) and Chapter 5 (Natural Resources)
4. Regional Coordination Program - Chapter 1 (A Vision for Windham) and Chapter 2 (Implementation Strategy)
5. Implementation Program - To be completed

Appendix B

Recommended Actions Identified for Specific Goals and Objectives

In Chapter 2 (Implementation Strategy), specific Goals and Objectives discussed in Chapter 1 (A Vision for Windham) are cited for each Recommended Action. Outlined below is a numerical cross reference that identifies the Recommended Action that relates to each specific Goal and Objective. More detailed descriptions of all Goals and Objectives, as well as Recommended Action, are located in the respective chapters.

Goals and Objectives

Recommended Actions

A. Economic Development Goal

A-1
A-2
A-3
A-4

A-1
A-2, A-8, B-3, C-1, H-1
A-1, A-2, A-4, A-7, B-1, B-2, C-4
A-4, H-1

B. Infrastructure Goal

B-1
B-2
B-3

B-1, C-3, E-7, H-4, H-9
B-1, B-2, E-7, H-4, H-9
B-1, C-4, H-9

C. Roadways and Transportation Goal

C-1
C-2
C-3
C-4
C-5
C-6

C-1, C-3, H-9
C-2, C-3, H-1, H-5, H-6, H-9
C-1
C-1, J-1
C-1, C-2
J-1

D. Sense of Community

D-1
D-2
D-3
D-4
D-5
D-6
D-7

D-2, D-3, I-1
D-1
J-1
E-1, E-2, E-3, E-4, E-7, G-1, G-2, H-4
D-1
D-2, I-1
D-4, E-1

Goals and ObjectivesRecommended Actions

E. Recreation Goal

E-1

B-2, E-3, H-4, H-8

E-2

G-2

E-3

E-1, E-2, E-4, E-5, E-6, E-7, F-1, F-2, F-8,
H-4, H-8

F. Environmental Goal

F-1

E-1, E-2, E-4, E-5, E-6, F-1, F-2, F-3, F-7,
F-8, H-7, H-8

F-2

A-4, E-1, E-4, F-1, F-2, F-3, F-5, F-9, F-10,
F-11, H-1, H-3, H-8

F-3

E-2, F-2, H-2

F-4

F-1, F-2, F-3, F-4, F-7, F-8, F-9, F-10, H-2

F-5

E-4, E-6, F-1, F-2, F-7, F-8, F-10, H-2

F-6

F-1, H-1

G. Education Goal

G-1

B-1

G-2

G-1, G-2

G-3

G-1, G-2, G-3

G-4

G-3

H. Land Use Goal

H-1

D-1, E-1, F-2, F-3, F-7, F-9, F-10, H-1,
H-2, H-3, H-7, I-1

H-2

A-4, A-7, F-7, H-1, H-3

H-3

H-1

H-4

H-1, H-4, H-8

H-5

H-1

H-6

H-1

H-7

H-1

H-8

H-1

H-9

H-1, H-3, H-4, H-7, H-8

H-10

F-9, H-1, H-3, H-7

H-11

E-1, F-3, F-5, F-6, F-9, F-10, F-11, H-1,
H-7

H-13

C-4, F-2, F-9, F-10, F-11, H-1, H-5, H-6
I-1

Goals and Objectives

Recommended Actions

I. Regional Cooperation Goal

I-1

C-1, J-1

I-2

A-6, A-8

I-3

F-1, F-2, F-4, F-7, F-8, J-1, J-2

I-4

D-1, J-1

I-5

J-3

I-6

D-4

APPENDIX C

Summary of 1993 Windham Comprehensive Plan Policies and Implementation Strategies

Compiled by RKG Associates, Inc.
with assistance from
Roger Timmons, Community Development Director

September 2001

Policy		Implementation Strategy	Status
Orderly Growth and Development			
1	The rural character of Windham should be protected	The Planning Board will continue to recognize Farm and Farm Residential zones as rural areas. The Planning board should amend the Land Use Ordinance to require two submissions of preliminary plans; one a conventional plan, the other a clustered plan. Transfer of Development Rights should be encouraged where appropriate. (Intermediate - Planning Board.)	NO ACTION
2	Promote a more compact development pattern which is capable of being served by existing and planned public facilities.	The Planning Board will encourage clustered development in FARM & FR Zones where appropriate. The Planning Board will be sure proposed development can be served by present or planned infrastructure. The Capital Improvement Plan will assist in many of these decisions. (Intermediate)	COMPLETED
		The Planning Board will continue to recognize commercial, industrial, business park and medium-residential zones as growth areas while ensuring appropriate development through its land use regulations.	COMPLETED ON-GOING
3	The quality of surface, groundwater and aquifer resources must be protected.	The Planning Board will continue to require thorough environmental analysis for all development proposals including soils reports, hydrogeologic studies, and a review by a licensed soil engineer. The Aquifer Protection ordinance is adequately protecting the Town's major aquifers as evidenced in the Planning Board's recent review of two proposed commercial developments. Town officials, with private consultants, continue to determine areas which may need public sewers at some time in the future. Windham's commercial area is of particular concern. (Short)	COMPLETED
4	Preserve ample open space for recreational activities.	Support the Conservation Commission to protect natural resources with potential for passive recreation. (Short - Council) Implementation Recreational Department Study (see Summary in Recreation Section)	COMPLETED
5	Promote and encourage regional cooperation on planning goals including interconnection of traffic systems.	Town officials and committee members should continue to coordinate their efforts with Greater Portland Council of Governments (GPCOG) and with Portland Area Comprehensive Transportation Study (PACTS). (Intermediate - Long) Work with Windham Commuter Routing Study Committee for Planning and Implementation of traffic projects (see Transportation Section.)	COMPLETED
6	The quality of all natural resources such as deer wintering areas, fisheries and wetlands must be protected.	The Planning Board will utilize the Maine Department of Inland Fisheries and Wildlife map to protect natural resources.	COMPLETED
Public Facilities			
7	Explore expansion of Community Center (including utilization of adjoining kindergarten complex).	Inventory and study departmental needs of all municipal offices. (Short - Town Manager, Town Council, Department Heads)	COMPLETED
8	Replace East Windham fire station	Develop cost estimates for acquisition of land for new East Windham fire station. Explore feasibility of sharing station with Falmouth. (Short-Council, Fire Department)	COMPLETED
9	Explore expansion or replacement of Windham Public Library	Develop needs and cost estimates for expanded library. (Short - Town Council, Library Staff)	COMPLETED

Policy		Implementation Strategy	Status
10	Correct problems at South and North Windham fire stations	Determine costs for correcting problems at North and South Windham fire stations. (Short to Intermediate - Town Council, Fire Department)	COMPLETED
11	Determine necessity for closing transfer station and explore other options.	Analyze option of utilizing present facility. (Short - Town Council, Public Works)	COMPLETED
12	Set schedule for closure of landfill and determine final costs.	Work with DEP to resolve this issue so town will know exactly what must be done and how much it will cost. (Short - Town Council, Public Works)	COMPLETED
13	Set costs, schedule and site for mandated salt storage facility.	Work with state and DEP to finalize this issue. (Short Town Council, Public Works)	ON-GOING
14	Conduct feasibility study to determine need for expansion of Public Works facility.	Assess present and future needs of Public Works Department. (Intermediate - Town Council, Public Works)	COMPLETED
15	Upgrade Town's computer systems.	Inventory and assess departmental computer needs. (Short to Intermediate - Town Council, Department heads)	COMPLETED
16	Determine if "911" system is feasible.	Study needs of community and citizenry in relationship to overall costs of implementing system. (Intermediate - Town Council, Public Safety Departments)	COMPLETED
17	Determine most costs effective ways to use available school facilities.	Work with school department and public facilities committee to determine best usage. (Short to Long - Town Council, School Department, Public Facilities Committee)	UNKNOWN
Economic Development			
18	The Town should encourage appropriate commercial and industrial development while supporting existing uses.	The Windham Municipal Development Committee has been formed by the Council and charged with this goal. The Committee has recommended and created a private, non-profit development corporation to facilitate negotiations with developers. More frequent contact with existing businesses is needed. The Town Council should consider annually providing seed money to support the efforts of the Windham Economic Development Corporation (WEDC).	ON-GOING
19	The Town must work with local and regional service organizations to improve the image of Windham's Commercial District.	The Town is working with the Chamber of Commerce to sponsor a beautification program which will award participants who improve their commercial property. The Planning Board continues to work on ordinances to improve the aesthetics of the commercial district. An overlay zone with performance standards relating to frontage, sign & distances, setbacks, signage, visual impact and other factors should be considered. (Intermediate)	PARTIALLY IMPLEMENTED
20	The Town must work with local businesses to improve traffic circulation thus protecting the viability of the commercial district.	The Planning Board has recommended and the Council has enacted an ordinance to limit curbcuts for new commercial uses. An engineering firm has been hired and has completed a plan to close and consolidate curbcuts where appropriate. (Short)	COMPLETED
21	Construction of the alternative access road parallel to Route 302 should be encouraged.	The NWCDSC proposed and the Windham Economic Development Corporation continues to plan for the access road. The Town Council has made the policy decision to rely on new development to pay for the access road. The Town Planner and Planning Board are working with prospective developers to construct the road. The necessary right-of-way is being protected to permit construction of the road. (Short)	PARTIALLY IMPLEMENTED

Policy		Implementation Strategy	Status
22	The Town must improve its existing infrastructure to accommodate the seasonal influx of tourists.	Windham was one of the five Maine communities to enact an Impact Fee ordinance. Fees collected are used to improve its existing infrastructure. Further, most infrastructure needs for the next 5-10 years are addressed in Windham's Capital Improvement Plan. (Short)	COMPLETED
23	Pedestrian access must be encouraged and developed while motor vehicle access must be better controlled.	The Planning Board has recommended and the Council recently enacted ordinances to achieve this policy. A consultant has also completed a master plan. (Short)	COMPLETED
24	Local employment opportunities need to be expanded with less reliance on retail positions.	The Windham Economic Development Corporation is working with prospective industrial developers who will create several construction jobs and many additional permanent positions (Short)	ON-GOING
25	The Town should investigate the need for additional overnight facilities to accommodate tourists.	The Windham Economic Development Corporation should be charged to evaluate this need. (Intermediate)	ON-GOING
26	The Town should work with other towns in the region to discuss the possibility of a shared industrial park.	Town officials and members of the Windham Economic Development Corporation should initiate meetings with officials of neighboring towns to discuss shared parks. (Intermediate)	ON-GOING
27	The municipal costs related to commercial development should be determined.	The analysis is being done by town officials and members of the Windham Economic Development Corporation. (Intermediate)	PARTIALLY IMPLEMENTED
28	The Town Council may want to support a regional optional sales tax or similar tax which takes advantage of Windham's significant retail sales.	Town officials should continue to track pertinent legislation and other developments regarding a regional optional sales tax. (Intermediate)	NO-ACTION
29	Light office use should be encouraged at the outer edges of the existing commercial zones where it is difficult to maintain residential uses.	The Town Planner and Planning Board should review the C-1, C-2, and C-3 zones to determine how to encourage light office uses which will not generate significant traffic. (Intermediate)	WRITTEN WRONG NO ACTION
30	The Town must keep apprised of the areas of greatest need.	The alliance is working with the Cumberland County Affordable Housing Venture (CCAHV), PROP and the Institute of Real Estate Research to assess Windham's housing needs. The Alliance will update the data as often as necessary. (Short)	ON-GOING
31	The Town must "take care of its own."	The Planning Board will review and revise existing ordinances to encourage "in-law" apartments for the care of elderly parents. (Short-Intermediate)	DONE BY CEO PERMIT PROCESS

Policy		Implementation Strategy	Status
32	The Town will develop a level of high quality affordable housing which exceeds the state target of 10 percent. "Affordable" shall be defined as a home which can be owned or rented by a family making 50-100 percent of the Town's median income.	The Alliance will meet this goal by the following measures:) 1. Develop the necessary financial assets within the Alliance to facilitate housing development. 2. Work with existing housing agencies and organizations. 3. Review and recommend the Planning Board consider changes to the zoning ordinance such as: A. Expand medium residential area B. Require submittal of clustered and conventional subdivision plans C. Revise road construction standards;11' pavement width with shoulders and sidewalks may not always be necessary D. Density bonuses E. Zero lot line setbacks F. Streamline the review process for "minor" subdivisions 4. Promote land trusts for affordable housing. 5. Identify town-owned land, or, other lands available for affordable housing. 6. Continue its single family home building project and enlarge the concept to provide a minimum of ten affordable housing starts a year. (Short - Intermediate)	1. NO ACTION 2. ON-GOING 3. TRIED, FAILED A. NO ACTION B. COMPLETED C. NO ACTION D. NO ACTION E. COMPLETED 4. PART. IMPL. 5. COMPLETED 6. UNKNOWN
33	The town must ensure maintenance of affordable housing units and ensure long term affordability.	The Alliance will work with other housing organizations to ensure recipients of new housing units will receive the necessary counseling and training to be competent home owners. Land leases, trusts and flexible second mortgages are tools which can ensure long term affordability. (Intermediate - Long)	NO ACTION
34	The Town must provide necessary support services to the residents when necessary, particularly for the elderly.	Human services staff will work with the Alliance and PROP to ensure the delivery of necessary services. (Intermediate - Long) Continue to pursue development of congregate care facilities for the elderly.	ON-GOING
35	The Town must foster regional cooperation to provide affordable housing	The Windham's Affordable Housing Alliance will continue to coordinate its efforts with the Department of Economic and Community Development (DECD), Greater Portland Council of Governments (GPCOG), the Cumberland County Affordable Housing Venture (CCAHV) and other applicable agencies.	UNKNOWN
Water Resources			
36	Support a "no degradation" approach to all aspects of water quality. Protect Windham's quality and quantity of water resources, both surface and subsurface.	The Town Council has appointed a Water Quality Commission based on the recommendation of this plan (see Appendix for recommended Commission goals and Town Council charge). Promote public education regarding water quality related issues. Invite local community civic organizations to conduct programs that help the community to achieve policy.	ON-GOING

Policy		Implementation Strategy	Status
		Standardize minimum water quality reporting requirements for studies being submitted to the Town for project review. Set criteria for what types of standards may or shall be used to review the study. The Town presently requires a hydrogeologic study and Cumberland County Soil and Water Conservation District review. Seek alternative financing for all water quality related municipal projects and lend assistance to the private sector if cooperation would be mutually beneficial, and feasible.	UNKNOWN
		Provide adequate staffing for the Code Enforcement Office to allow effective field inspection with administrative support required.	ON-GOING
		Formally adopt the Federal Manual for identifying and Delineating "Jurisdictional Wetlands" as amended as the definition of "Wetlands" in all the Town's rules, regulations and ordinances.	NO ACTION
		Explore Maine's Department of Inland fisheries and Game recommendations for management of the Town's lakes and ponds to support the best game and fish population possible; especially at Highland Lake. (Short)	UNKNOWN
37	Promote regional cooperation between neighboring communities regarding common water resource issues.	The Town should seek representation on the State Land and Water Resources Council and all other related groups.	UNKNOWN
		Find a way to most economically contribute to the benefit from local and regional GIS data storage and usage. Promote participation in the "Best Management Practices" assistance program to help farmers address water quality issues. (Short)	WORKING ON THIS NO ACTION
38	Assist the farming and timber harvesting community to improve productivity while minimizing environmental impact.	Promote participation in the "Best management Practices" assistance program to help farmers and timber harvesters address water quality issues as currently sponsored by the University of Maine Cooperative Extension Service and the Cumberland County Soil and Water Conservation District. (Short)	NO ACTION
39	Protect private wells from pollution.	Consider establishing a permit or registration policy for the installation of a private water supply, i.e., drilled wells, dug wells, driven points, and lake draws, etc. Consider making CEO inspection a part of the permit or registration process.	NO ACTION
		Encourage training for water supply installers and establish a certification process for individuals who have met minimum criteria.	STATE REQUIRED
		Encourage training for subsurface wastewater disposal area installers and establish a certification process for individuals who have met the minimum criteria. Accelerate plans to safely contain sand and salt storage. (Short)	NO ACTION
40	Manage phosphorous export in watersheds.	Incorporate DEP standards for phosphorous control in Land Use Ordinances (reference Whitman & Howard study Phosphorous Allocation Plan for the District Watershed of Sebago Lake, December, 1990.)	NO ACTION
		Develop a townwide watershed development management plan consistent with Town's watershed maps (see Appendix). (Short)	NO ACTION

Policy		Implementation Strategy	Status
41	Protect wetland areas.	Formally adopt Federal Manual for Identifying and Delineating wetlands as sole wetlands definition. (Short)	NO ACTION
42	Minimize erosion, sedimentation, and unplanned storm water discharge.	Establish shoreline and streambank stabilization programs to help individual land owners convert existing problems and reduce likelihood of recurrence. The Town should inventory existing stormwater systems and continue to restrict discharge into municipal systems when on-site solutions are possible. (Short)	ON GOING
43	Protect the active and passive recreation value of water resources.	Explore the feasibility of establishing a marine warden service as a means of enforcing waterbody and shoreland rules and regulation. Take an active role to assist agencies in first restocking programs. (Intermediate)	NO ACTION
44	Preserve, enhance and improve wildlife habitats connected with water resources.	Use Essential or Significant Wildlife and Fisheries Habitat maps provided by the Maine Department of Inland Fisheries and Wildlife to regulate development at the Planning Board and Code Enforcement level. (Short)	COMPLETED
45	Provide public access to Town's water resources in a minimum impact manner.	Provide education through the Commission and proper supervision through the Town's Recreation Department for responsible use of public access points.	ON-GOING
		Explore limitations of type, size and horsepower of crafts on certain waterways to help minimize the harmful effects these crafts can have on water quality and shoreline stability. (Intermediate)	NO ACTION
Critical Natural Resources			
46	The Town should continue to update ordinances as the State changes legislation concerning critical natural resource protection.	The Town should adopt as expeditiously as possible changes in ordinances that will protect and enhance the environment. (Short to Intermediate - Council)	ON-GOING
47	The town should encourage Inland Fisheries to complete classification of fisheries, deer and other wildlife habitats located within the Town.	The Town should work closely with elected State Officials and Inland Fisheries to ensure that any new and existing critical natural resources are classified as to habitat values expeditiously. (Short to Intermediate - Council)	ON GOING
48	The Town should designate new or currently undesignated natural habitats and encourage Inland Fisheries to classify those habitat values.	The Town should adopt policy for designating appropriate areas as critical natural resources. (Short to Intermediate - Council)	ON-GOING
49	The Town should continue to discourage development on floodplains.	The Town should continuously monitor and update ordinances to ensure protection of human life and property in floodplains. (Short to Intermediate - Planning Board, Council)	COMPLETED/ON-GOING
50	The Town should ensure that threats to environmental integrity of natural resources are investigated fully and that corrective action be taken quickly.	Land use problems should be investigated immediately with proper corrective actions taken as readily as possible. (Short to Immediate - Council)	ON-GOING

Policy		Implementation Strategy	Status
51	The Town should ensure that a sound policy of environmental management is followed at all levels of local government.	The Town policy should be developed to ensure that all decisions made that will affect the quality of the environment will take into consideration ecology, economics and ethics, as well as other pertinent conditions (Intermediate - Council)	COMPLETED
		The Planning Board will continue to require stringent environmental safeguards such as hydrogeologic studies and review of soil erosion control plans by a licensed soil's engineer.	ON-GOING
		The Town Council will continue to support the Windham Conservation Commission's efforts to preserve significant natural areas in the Town.	ON-GOING
		The Town will continue its regional approach to conservation of wildlife areas and critical natural resources by continued cooperation with Presumpscot Riverwatch, Trout Unlimited, and similar groups.	ON-GOING
Agricultural and Forest Resources			
52	Preserve agricultural, forest and wetland areas by including it in the Farm zone.	Revise zoning districts to preserve farmland and activity. (Short to Long - Planning Board Council)	PART IMPLEMENTED
		Encourage continued protection of forest resources through "tree growth" tax status.	COMPLETED
		Require Maine Forest Service Best Management Practices (BMP) for timber harvesting operations.	NO ACTION
53	Regulate development of agricultural, forest and wetlands areas.	Strongly regulate development in Farm zones to preserve rural character, open space, farmland, forests and wetlands. In most instances, Windham's existing land use ordinances allow for strong regulation of these resources by requiring hydrogeologic studies, net residential density calculations, and soil and erosion control measures approved by the Cumberland County Soil and Water Conservation District: (Short to Long - Planning Board, Council)	COMPLETED ON-GOING
		The Planning Board will rely on Inland fish & Wildlife maps of designated wetland and wildlife areas. When site walks indicate such conditions exist in unmapped location, the Board will require high intensity soil surveys and other stringent environmental review.	PART IMPLEMENTED
54	Preserve viability of agricultural, forest and wetland areas.	Protect agricultural viability by ordinance or charter by restricting development rights where necessary. (Short to Long - Council, Planning Board, Charter Commission)	NO ACTION
55	Preserve the Town's rural character.	Enact lower density zoning in agricultural areas and discourage development of open space through cluster development. (Short to Long - Planning Board, Council).	COMPLETED
56	Prevent conflict between farming and suburban development.	Encourage mutual understanding between farmers and business people through facilitated meetings. (Short to Long)	ON-GOING
57	Avoid permanent development of farmland.	Consider other options of utilizing farmland beyond the traditional approach of subdividing for residential purposes. (Short to Long-Planning Board, Council)	NO ACTION
58	Explore the possibility of a farmer's market.	Assess needs of community and area. Tailor produce offered to meet market demand. (Short - Planning Board, Council, Farmers)	COMPLETED

Policy		Implementation Strategy	Status
59	Encourage agricultural education in the classroom.	Work with school department to implement. (Short to Intermediate - School Administrators, Council, Farmers)	UNKNOWN

Historic and Archaeological Resources

60	Windham should actively participate in, and encourage preservation of, its rich history which represents a microcosm of the history of the country, by accepting the districts as presented by the Commission and placing an overlay on them. It is important to note inclusion in a historic district is by written permission of the property owner only and is to be recorded in the Cumberland County Registry of Deeds. Historic, prehistoric and archaeological resources should be protected. The major threat to the historic, prehistoric and archaeological resources in Windham is the lack of interest, knowledge and understanding of all the archaeological and architectural sites. This information is available in a slide presentation and needs to be reviewed by the Council and town appointed Boards. Informed decisions must be made about prioritizing and protecting properties in approved historic districts.	Council has appointed an Historic Preservation Commission as of September 1991 which has approved and presented five historic districts with maps to the Town Planner's office. The maps should accompany the outlines in the Comprehensive Plan. As time allows more areas will be presented. (Short)	NO ACTION
61	Some sites have been marked during the Maine Street '90 Celebration. Others, including the archaeological site off Albion Road, have not been marked to protect them from would-be archaeologists destroying evidence noted by the new England Antiquities Research Association (NEARA).	The Commission is continuing an ongoing examination of Windham's historical resources in an effort to become a Certified Local Government and thereby qualified for State funding of archaeologists. (Short)	UNKNOWN
62	The Commission should also seek funding from the Community for surveys to locate archaeological sites of historic and prehistoric periods.	Commission should explore all feasible funding mechanisms. (Short)	UNKNOWN

Policy		Implementation Strategy	Status
63	Windham's past should continue to be presented to the students and adults of today with teachers expanding on what has been presented by one member of the Commission over the past 15 years to grades 2,3,6,8,10 and 11 periodically as requested and to organizations as well.	The Historic Preservation Commission should work with Windham's schools to ensure that the Town's history be made a part of the curriculum. (Short - Intermediate)	UNKNOWN

Recreation

64	The Town should take immediate steps to acquire land for recreation and conservation:	<ul style="list-style-type: none"> - Outright purchase of land through bonding, impact fees, annual budget allocation or surplus funds - Encouragement of land acquisition by land trusts - Acquisition of conservation easements. - Promotion of open space/recreation land acquisition through appropriate zoning and negotiations with developers. - Development and promotion of a mechanism to accept donation of lands and funding for recreational facilities. - Utilization of proceeds from the sale of tax-acquired properties. - Exploration of involvement in federal/state/regional land acquisition and funding programs. - Acquisition of approved access to existing timberland for minimal impact usage. <p>The Windham Conservation Commission is exploring these numerous options. (Short)</p>	ON-GOING
65	The Town should become actively involved in the development of various recreational facilities.	The Town must work with school, Recreation department and local groups to improve and expand Windham's recreational facilities. (Short - Intermediate)	ON-GOING
66	A long-range recreation master plan should be developed.	Conservation Commission, School and Recreation departments, should develop a flexible plan which could be constructed in phases over a period of years as monies become available. (Short-Intermediate)	NO ACTION
67	Public open space, access to lakes and rivers, and active and passive recreational facilities should be available to all Town residents.	The Town must work with all interested parties to provide these resources. (Short)	ON-GOING
68	Investment in the expansion of recreational facilities should be made a component of the Town's Capital Improvement Program.	This expansion should be based on the recommendations of the various town departments and citizens' committees. (Short - Intermediate)	ON-GOING

Policy		Implementation Strategy	Status
69	Bikeways should be developed and the Town's sidewalk network expanded.	The Town should work with the Public Works Department and Maine Department of Transportation toward development of bikeways. Safe pedestrian access in the North Windham Commercial District, as well as along other roads, should be expanded. Maintenance and snow removal should be a regular function of the Public Works Department. (Short - Immediate)	NO ACTION PART IMPLEMENTED
70	Use of Dundee Park should be encouraged and possible expansion of facilities explored.	The Town should work with Dundee Park Committee to ensure full utilization of the park. Stricter user controls should be studied. (Short - Intermediate)	ON-GOING
71	A Greenbelt area along the Presumpscot and Pleasant Rivers, and/or along the banks of the Town's many lakes and ponds should be developed. The classifications of the Presumpscot and Pleasant Rivers as class B with resource and recreation values of state wide significance must be preserved.	Areas should be developed for mixed usage including nature trails, cross country and snowmobile trails. (Intermediate)	NO ACTION
		The Town will continue to work with the Presumpscot River Watch and similar groups to achieve these goals.	UNKNOWN
72	The Town Planning Department is working with the Cumberland County Soil and Water Conservation District to inventory the properties along Pleasant River.	Access to large tracts of land for passive recreation uses such as picnicking, hiking and nature appreciation should be sought.	ON-GOING
		The Town must work closely with its residents and Public Works Department to ensure that appropriate improvements to adjacent roadways (parking areas and/or turnoffs) be made. (Short - Intermediate)	UNKNOWN
73	A guide to existing and future historic sites and buildings in the Town should be made available to its residents and tourists.	The guide could be researched, developed and printed by town's numerous service organizations working with the Windham Historical Society. Dundee Park Committee, Conservation Commission and other interested Town groups. (Intermediate)	NO ACTION
74	The Town should consider expansion or updating Windham Public Library.	Utilizing recent library user and needs studies and input from library personnel, the Town should prepare a detailed needs and cost analysis. (Short)	UNKNOWN
75	A community effort to obtain property, and to then develop it into additional ball fields, basketball and tennis courts, parks, and neighborhood playgrounds should be explored	Community-wide participation should be encouraged to make it successful. (Short - Intermediate)	ON-GOING
76	The Town should continue to provide a strong Adult Education and Recreation program for its residents.	Town, Adult Education, Recreation, and School departments should work together to ensure this. (Short - Intermediate)	ON-GOING
77	A recreation center with athletic and game room facilities and meeting rooms should be considered. Facilities should include a swimming pool, exercise equipment and aerobics.	Possibilities of a joint public/private venture should be explored. Such a joint venture might include participation with YM/YMCA. (Intermediate)	NO ACTION
78	The Town should encourage placement of nature conservation lands into a land trust.	Tax incentives and land use ordinances should be considered. (Short - Intermediate) Redraft	ON-GOING

Policy		Implementation Strategy	Status
79	Windham's forests should be preserved.	The Town should continue to protect its 4,517 acres of designated tree growth. The Planning Board will continue to require developers to reserve forested land as public open space where applicable. The Recreation Department will coordinate educational opportunities and public access to forests. (Intermediate)	ON-GOING
Transportation			
80	The Town should study the impact of roadway and bridge related costs on a 5-10 year Capital Improvement Plan.	A Capital Improvement Plan for 1991-1997 is complete and is submitted with this Comprehensive Plan. The CIP will be updated each year. (Short)	ON-GOING
81	The Town should consider financing alternatives for improvements to Route 302, River Road and for developing an alternative access road parallel to Route 302.	The Town will continue to monitor the funding status of state projects. Impact Fees and Tax Increment Financing are two alternatives for funding improvements. (Short)	ON-GOING
82	The Town should study and develop consistent design standards for the commercial center in North Windham to create regulated traffic flow.	The Planning Board has revised the Land Use Ordinance to limit and control curb cuts The Town should implement the recommendations of an access control plan for a large portion of Route 302 recently completed by the engineering firm of T.Y. Lin. (Short)	COMPLETED ON-GOING
83	The Town should determine the status of all roadways The town should continue to study ways to reduce the number of private ways.	The Public Works Department will work with the Planning Department to determine roadway status The Town will consider accepting private ways as they are brought up to current town specifications. (Intermediate)	ON-GOING
84	Data on accidents should be recorded and used to plan for improvements to unsafe roadways and intersections.	The comprehensive Plan Committee has collected data on accidents from the police department and MDOT. (See Appendix). The data will continue to be used by the Public Works Department to plan necessary improvements and the Planning Board will use the information in reviewing plans for new subdivisions and site plans. (Intermediate)	ON-GOING
85	The town should determine the best use for the Mountain Rail Line.	The owner of the rail line has applied to the State for official abandonment of the rail line. Town officials will continue to monitor the progress of the application and will urge the state or the present owners to revitalize the line for train travel if possible. (Short)	NO ACTION
86	The Town should continue to promote public transportation.	Town officials and various Town committees have worked to assess the need for public transportation. The Regional Transportation Program, Inc. (RTP), offers limited service to area residents. Taxi service has recently been introduced to the area. Subsidy of taxi service for the elderly should be compared to the cost of expanding RTP. (Short - Intermediate)	ON-GOING
87	Windham should study the feasibility and necessity to connect itself to the Interstate highway system.	Town officials should meet with MDOT to discuss the likelihood of making such a connection. (Short)	ON-GOING

Shaping a Vision of Windham's Future

Summary of Key Elements that Define An Ideal Community

Windham is currently in the process of preparing an update of the Comprehensive Plan, a process that has been conducted periodically over the past 30 to 40 years. Oversight for this planning process has been assigned to the Comprehensive Plan Steering Committee which is charged with receiving input from the public in order to shape the recommendations of the plan that will be used to guide the town's growth in the coming years.

As part of this public involvement process the Committee conducted an Issues Identification Forum, on May 7, 2001, that was attended by approximately 100 local residents. Participants at this forum were divided into seven groups, each of which was facilitated by a member of the Committee, who asked their respective groups to collaborate on an exercise wherein the three following concepts were defined.

1. What should an ideal community look like?
2. How is Windham like an ideal community?
3. How is Windham different from an ideal community?

In response, group members listed a variety of factors that they felt were important components of an ideal community and how Windham measures up to these ideals. The lists from all seven groups have been combined and summarized into 18 key elements that comprise an ideal community which are illustrated in the matrix on the following page. The key elements

identified as characteristics of an ideal community include:

- Open Space/Rural Character
- A Balance of Residential and Economic Development
- Good School System
- Environmental Protection
- Aesthetically Pleasing
- Good Planning and Implementation
- Good Municipal Services and Infrastructure
- Historic Preservation
- Public Access to Natural Resources
- Adequate Recreation and Cultural Facilities
- Personal Safety
- Affordability
- Good Traffic Management, Access and Pedestrian Friendly
- Appropriate and Attractive Businesses
- Sense of Community
- Public Transportation
- Town Center/Downtown
- Youth Activities

Participants at the forum also provided some guidance as to how important each of the key elements are in their vision of an ideal community which is summarized in the *Priority Scale* column in the matrix. The last two columns of the matrix provide a general indication of how well Windham is doing in achieving these ideals and where there is room for improvement.

The key element of an ideal community that received the highest priority ranking was maintaining open space and rural character. It is interesting to note that participants felt Windham has done very well in achieving this goal but that more still needs to be done. The

Matrix of Elements That Characterize an Ideal Community
(Issues Identification Forum, May 7, 2001, Windham, ME)

Key Elements That Define An Ideal Community		How Windham Is Like An Ideal Community	How Windham Is Different From An Ideal Community
Key Elements	Priority Scale	Success Rating	Needs Rating
Open Space/Rural Character	36	55	32
A Balance of Residential and Economic Development	31	15	60
Good School System	24	20	6
Environmental Protection	21	23	19
Aesthetically Pleasing	16	0	12
Good Planning and Implementation	15	6	92
Good Municipal Services and Infrastructure	12	10	26
Historic Preservation	11	5	0
Public Access to Natural Resources	9	3	9
Adequate Recreation and Cultural Facilities	9	0	10
Personal Safety	8	15	0
Affordability	8	0	0
Good Traffic Management, Access and Pedestrian Friendly	8	7	30
Appropriate and Attractive Businesses	6	6	21
Sense of Community	6	14	2
Public Transportation	5	0	1
Town Center/Downtown	1	0	0
Youth Activities	1	2	1
Total	227	181	321

basic sentiment expressed by participants seems to be that Windham still has a reasonable amount of open space, farms, natural resources, and scenic views that make it very attractive, but not enough has been done to permanently protect these resources from development.

Closely following the desire to protect open space was a recognition by residents that there needs to be a *balance of residential and economic development* with regard to the community's land use development pattern. Participants indicated that the ideal community needs to have a tax base which is diversified between residential, commercial, and industrial land uses, and which offers quality jobs, is stable, has good access to employment centers, and is non-polluting. As illustrated in the matrix, only 15 people felt that the town has been successful in achieving this balance while 60 participants indicated that more needs to be done to achieve this goal. Those in the latter category cited issues such as: lack of planning for business locations; not enough good paying jobs; need to enhance technology infrastructure; not enough business tax base; and, a need to invest in businesses with high skills.

In a subject related to a balanced land use pattern, participants indicated that *appropriate and attractive businesses* were also a key element of an ideal community. Although this item ranked relatively low on the priority scale (6), a significant number of residents (21) felt that Windham was not doing well in achieving this goal, as indicated in the matrix. The primary concern in this area relates to the perceived lack of aesthetics associated with certain types of commercial buildings and their related sites.

Providing a *good school system* was third on the list of priority elements that contribute to an

ideal community. With regard to this issue, the general sentiment of participants suggests that Windham is doing well in providing a satisfactory level of educational services. Windham's school system received a success rating of 20 from participants, and garnered comments to the effect that people were satisfied with the school system overall, the teachers, the campus atmosphere, and the fact that the town has supported the building of schools. Only 6 people felt the school system fell short of the ideal community level.

Residents indicated that providing a high level of *environmental protection* was another important key element of an ideal community. Participants seemed to feel that the town provides a reasonable level of regulatory protection and the environment is still considered "clean". However, more needs to be done with regard to educating people about the value of natural resources, recognizing the carrying capacity of these resources, and giving them more consideration as part of the land development process.

Good planning and implementation was also ranked relatively high (15) as a key element of an ideal community. However, what is striking regarding this issue is the fact that 92 participants felt that Windham has not done well in achieving this goal. Specific issues cited include: the overall rapid rate of growth; lack of planning for residential development; development is builder driven vs. local control; the lack of clear ordinances; and the need for the designation of growth areas vs. non-growth areas.

Good municipal services and infrastructure were cited as important key elements of an ideal community and while some people (10) felt Windham was doing well in this area, 26 participants felt there was still room for

improvement. People seemed to be generally satisfied with the responsiveness of public safety services such as police, fire, and rescue. However, considerable need was noted with regard to improving the town's roadways and upgrading other utilities such as the water and sewer systems.

Good traffic management, access and a pedestrian friendly environment was ranked only moderately high as a key element of an ideal community, however, strong sentiment was expressed by participants that Windham was not doing enough to provide these elements. The most notable comments were related to the lack of safe facilities for walking, biking, skiing, snowmobiling, etc., and the high traffic volumes and poor circulation patterns in a number of locations throughout the town, and particularly in the North Windham area.

Methodology for Ranking Key Elements

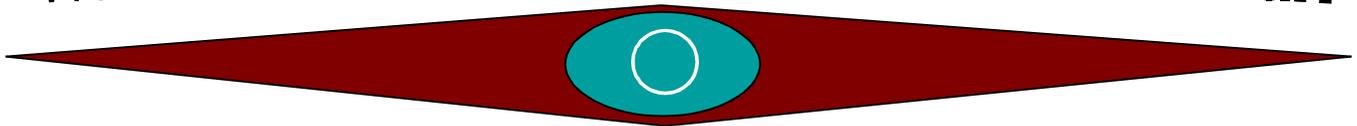
As mentioned at the beginning of this summary, participants in the public forum were asked to answer three questions that identified the important factors for defining an ideal community and Windham's status in achieving

these ideals. After developing the list of components that answered each of the three questions participants were then asked to go back and evaluate which of these elements were the most important or had the highest ranking. The results of this evaluation process are reflected by the numbers listed in the *priority scale* column within the matrix. Following this step, participants were asked to indicate whether or not Windham was *like the ideal community* or *different from the ideal community* for each of the key elements. The sentiment expressed by people participating in this exercise is reflected in the *success and needs rating* columns of the matrix.

It should be noted that the totals for each column in the matrix exceeds the number of people who participated in the forum and are not equal to each other. This is due to the fact that each participant was allowed to vote for several high priority factors and the process was conducted in a very informal manner. Therefore, the rankings presented here are not intended as specific endorsements of these components but rather, as a general gauge of sentiments regarding important issues within the community.

Additional comments may be submitted to:
Windham Comprehensive Plan Steering Committee
c/o Community Development
Attn: Mabel Darby
8 School Street
Windham, ME 04062
(207) 892-1901
web site: www.town.windham.me.us
e-mail: mjdarby@town.windham.me.us

Windham's Comprehensive Master Plan



Inventory and Analysis: Part 1 - Draft Chapters

Windham, Maine

October 29, 2001

Under existing Maine statutes a town's comprehensive plan must include an inventory and analysis of a variety of natural and man-made features within the community. This hand-out provides a summary of draft chapters that examine existing land uses, population/housing changes, transportation issues and economic conditions in Windham.

Existing Land Uses

- Based on information in the town's property assessment database, combined with guidance provided by local officials, a computerized existing land use map was created for Windham (See the map located on pages 4 and 5 in the center of this hand-out).
- For planning purposes it is estimated that Windham contains about 28,810 acres of developed and undeveloped land. The inclusion of roadways and water bodies increases the total amount of land in the town to about 35,200 acres.
- It is estimated that almost 9,780 acres in Windham (approximately 34% of the land area) is undeveloped. About 3,900 acres of undeveloped land (14% of the land area in the town) is included in the Tree Growth Management and Tax Reduction Program.
- Approximately 4,500 acres, or 16% of the land area in town, is classified as some type of agriculturally oriented use.
- About 40% of the town's land area (over 11,570 acres) is categorized as parcels used for residential purposes. Many of these

properties represent single residences on large lots that could possibly be subdivided in the future.

- Approximately 3% of the land in the town (about 900 acres), is classified as currently developed for commercial and industrial uses.

Total Acres by Land Use Type - 2000 Town of Windham		
Land Use	Total Acres	% Total Acres
Residential	11,572	40.2
Commercial	849	2.9
Industrial	59	0.2
Utilities	457	1.6
Gravel Pits	455	1.6
Municipal/School	287	1.0
Institutional	310	1.1
Recreation/Conservation	538	1.9
Agriculture	4,506	15.6
Undeveloped (Total)	9,779	33.9
Tree Growth	3,899	13.5
Other	5,880	20.4
Total	28,812*	100.0

* This figure does not represent the total acreage of the town since it does not include roadways and water bodies. Windham's 1993 Comprehensive Plan reported the total town acreage as 35,200. Source: Windham's Assessment Records, December 2000, and RKG Associates, Inc.

- A build-out analysis, based on present zoning regulations, indicates that 3,000 to 4,000 single-family homes could be constructed on existing undeveloped land and potentially another 3,000 to 4,000 single-family homes could be developed on larger parcels of land that already contain an existing dwelling unit.
- It is estimated that an additional 2.7 million square feet of commercial and industrial buildings could be constructed on undeveloped land zoned for non-residential types of land uses.

- Although Windham’s population continued to grow at a considerable rate during the 1980s (15%) and 1990s (14%), it was at a rate substantially slower than the 1970s. In fact, at least half of the communities in Cumberland County grew at a faster rate than Windham during the ’80s and ’90s.
- During the 1970s almost 80% of Windham’s growth was due to the migration of new residents to the town. However, over the last two decades almost 50% of the town’s growth has been the result of natural increases from residential births.

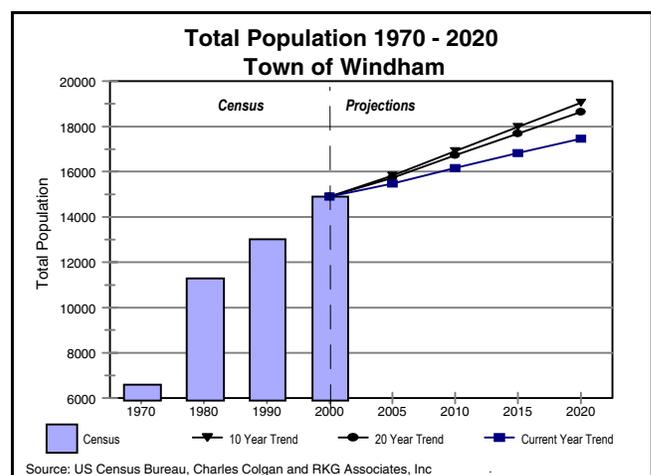
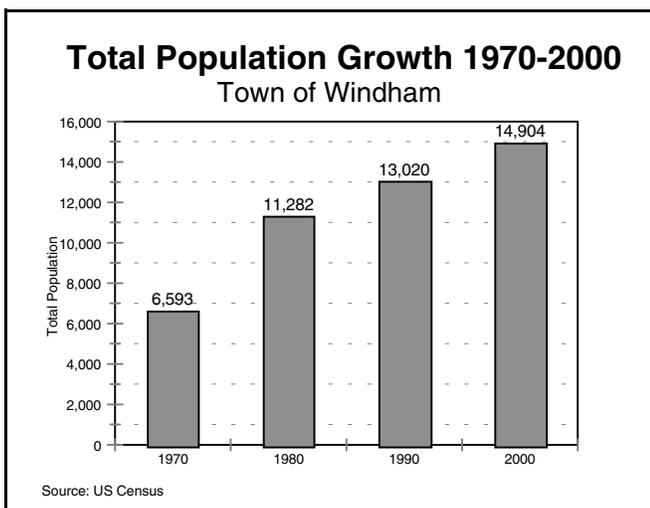
Population and Housing Trends

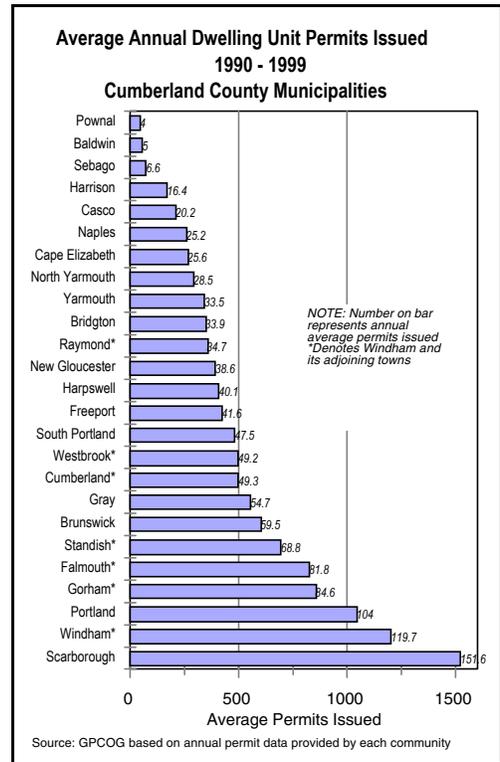
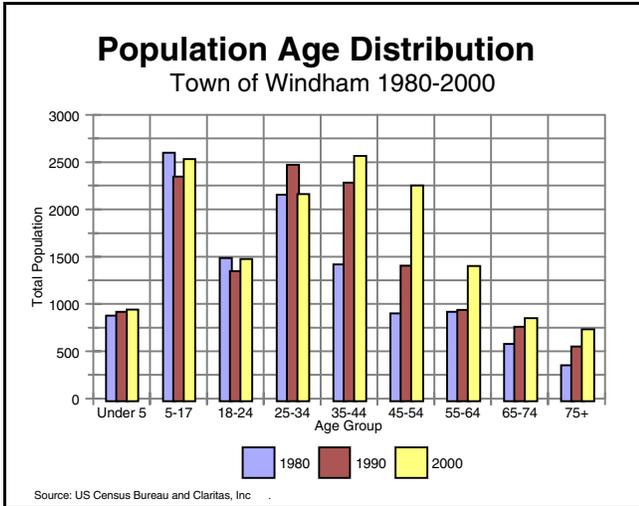
- The U.S. Census Bureau determined that Windham had a population of 14,904 in the year 2000. This represents an addition of over 8,300 residents since 1970, or an increase of about 126%.
- The period between 1970 and 1980 was the decade when Windham experienced its largest population surge, both in terms of actual (4,689) and percentage (71%) growth. This represents the second largest increase, in terms of net growth, of all municipalities in Cumberland County.

Components of Population Change 1970 - 2000 Town of Windham				
	Population Change	Natural Increase	Net Migration	Net Migration as % of Pop Change
1970-79	4,689	938	3,715	79.9%
1980-89	1,738	1,010	728	41.9%
1990-00	1,884	976	908	48.1%

Source: US Census Bureau and Maine Dept. of Human Services

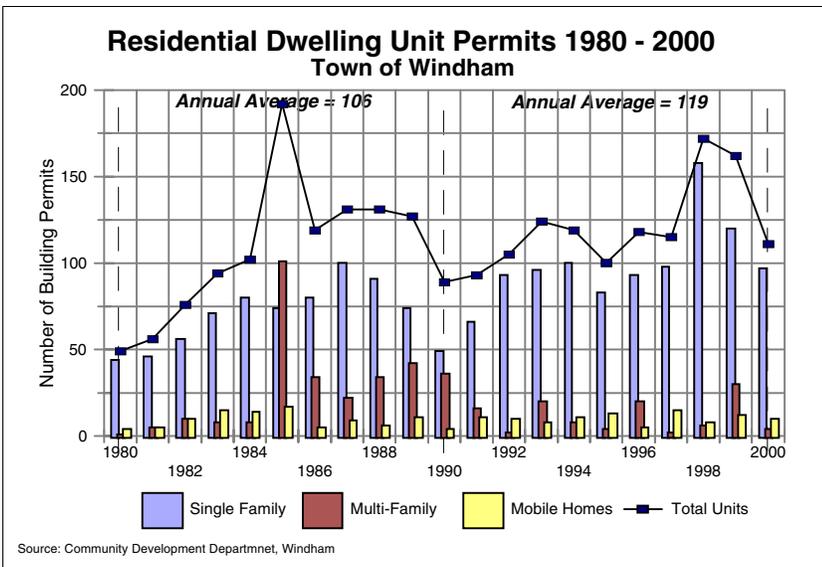
- It is estimated that Windham’s population will increase to between 16,200 and 16,900 by 2010. This would represent an average annual increase of between 0.9% and 1.3%.





- During the past several decades (1980 to 2000) Windham has had a stable population of “children and teenagers” (17 and younger), an increasing percentage of middle age residents (35 to 54) and a declining percentage of younger residents (18 to 34).
- Between 1980 and 2000, approximately 2,300 building permits were issued for new dwelling units in Windham. Despite a wide fluctuation in total annual permits issued during the past two decades the average has remained fairly consistent with 106 units permitted annually between 1980 and 1990, and 119 between 1990 and 2000.

- Between 1980 and 2000 approximately 1,600 dwelling units were added to the town’s housing supply, according to the U.S. Census Bureau. Although the majority of these units were single-family homes a significant number were multi-family units and mobile homes. In fact, Windham has one of the highest percentage of multi-family housing of all non-urban municipalities in Cumberland County.

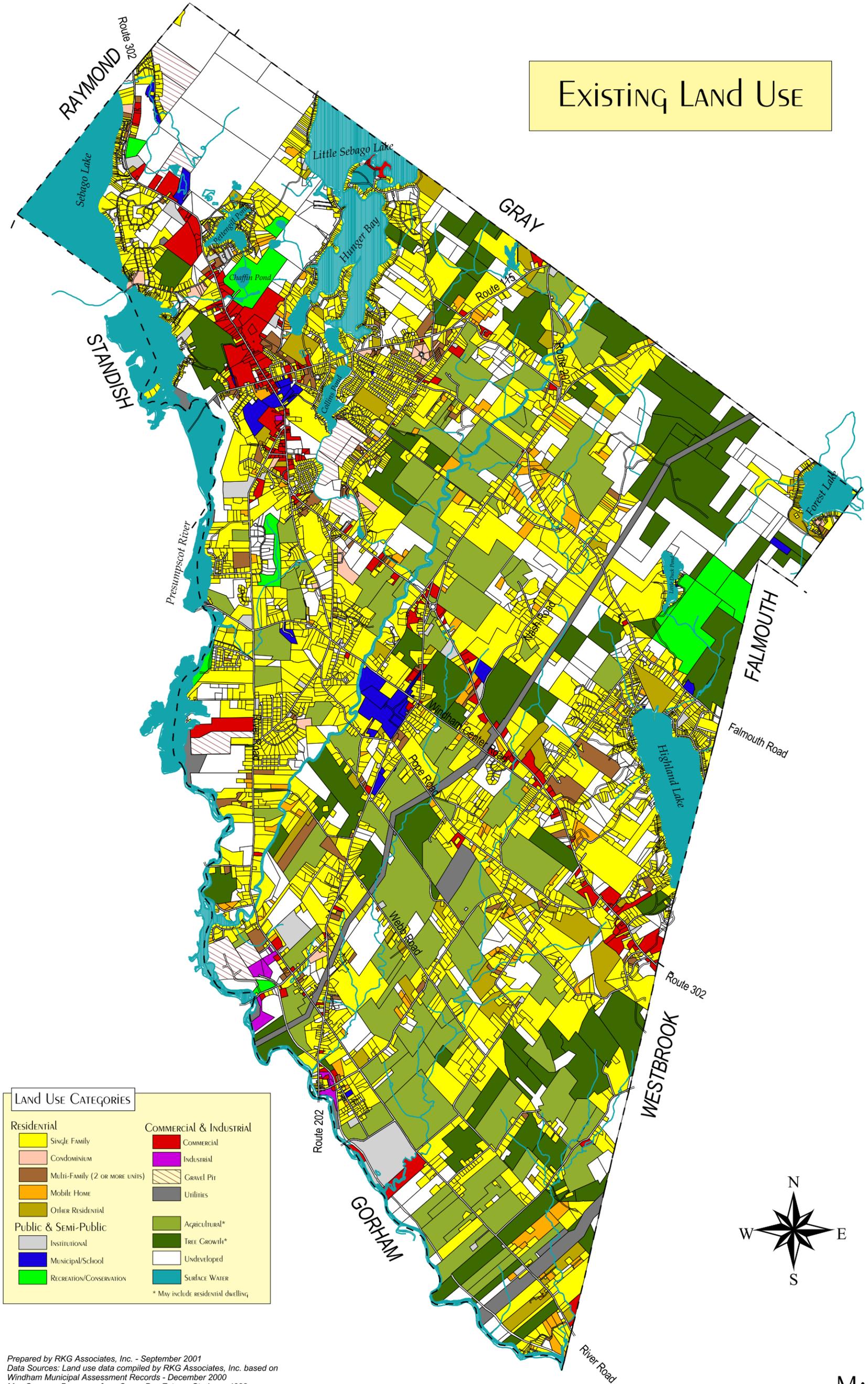


- Data from the U. S. Census Bureau indicates that seasonal housing units in Windham have declined significantly since 1980. Part of this decline is due to changes in definitions over time, as well as the conversion of some seasonal housing to year round use. In 2000 the Census Bureau identified 429 seasonal dwelling units in Windham. Approximately 70% of the seasonal units are owned by Maine residents that primarily reside in Cumberland County.

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

EXISTING LAND USE



LAND USE CATEGORIES	
RESIDENTIAL	COMMERCIAL & INDUSTRIAL
Single Family	Commercial
Condominium	Industrial
Multi-Family (2 OR MORE UNITS)	Gravel Pit
Mobile Home	Utilities
Other Residential	Agricultural*
PUBLIC & SEMI-PUBLIC	Tree Growth*
Institutional	Undeveloped
Municipal/School	Surface Water
Recreation/Conservation	
* May include residential dwelling	



Prepared by RKG Associates, Inc. - September 2001
 Data Sources: Land use data compiled by RKG Associates, Inc. based on Windham Municipal Assessment Records - December 2000
 Map Sources: Base map from Casco Bay Estuary Study ca. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall tax map - April 2000

- The size of the average household in Windham has declined from 2.97 in 1980 to 2.58 in 2000. This decline in household size, combined with sustained population growth, has resulted in a rapid increase in the formation of new households. For instance, total population increased by 15% between 1980 and 1990, while the number of households increased by 26%. Between 1990 and 2000, households increased by 22%, while population grew by 14%.
- The average sale price of a single-family home in Windham was approximately \$141,000 in 2000. This represents an increase of about 28% since 1997. Despite this increase over 40% of the total housing units sold in Windham during the late 1990s had a sale price of less than \$100,000.
- A comparison of the assessed housing values in Windham to household income levels of residents, indicates that affordable housing is available for most households in Windham with incomes above 80% of the median income level. However, there are probably an insufficient number of housing units, at an acceptable price level, for households with incomes below 50% of the median.
- Based on census data and building permit records it is estimated that 75% of the town's housing stock has been built since 1960. Municipal assessment records also indicate that about 35% of mobile homes in the town were built prior to 1976.

Year Built	% Total
Pre-1940	12.9%
1940-49	5.0%
1950-59	7.3%
1960-69	12.1%
1970-79	22.7%
1980-89	20.5%
1990-00	19.5%
	100.0%

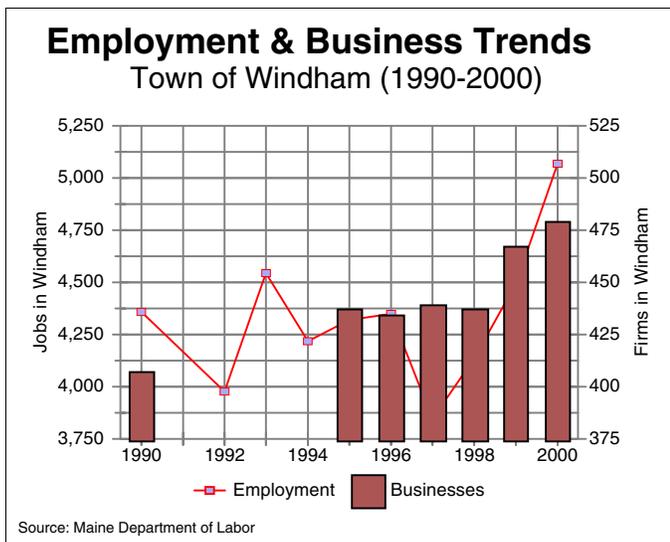
Source: US Census and Town Building Permit Records

Transportation/Roadways

- The town can be divided into two major roadway groupings: the Route 302 commercial/industrial corridor, especially in North Windham, and rural residential roads.
- Between 1995 and 1998, Route 302 experienced an increase in traffic of about 20%.
- The Maine Department of Transportation (MDOT) is in the process of examining possible improvements for Route 302.
- The Route 302 corridor has the highest number of accidents in Windham, followed by Route 202 intersections at Falmouth Road, Route 302 and Windham Center Road. Other roadways with high accident rates include, at various locations, Route 115, River Road and Windham Center Road.
- Roads, based on summer maintenance responsibilities, are classified in Windham as State, Town, Public Easement or Private. A significant amount of roadways in the town are classified as Public Easement and Private.
- Key roadway issues:
 - Improvements in the Route 302 corridor, especially in North Windham
 - River Road will likely require improvements
 - Gray Road (Route 202) will likely require some improvements as part of any school expansion project
 - Need for development standards and identification of maintenance responsibility for roads classified as Public Easements

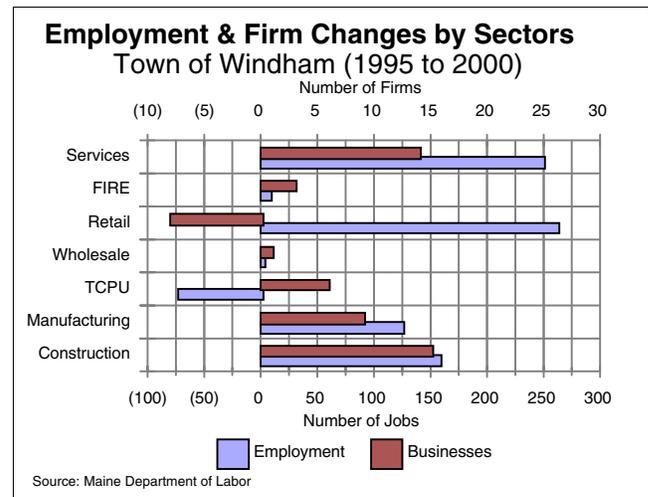
Economic Conditions

- Between 1992 and 1999, according to a U.S. Department of Commerce study, the United States economy grew at an annual rate of about 4%. In Maine, however, the annual growth rate was only 2.6%. Based on this data Maine was ranked 45th among all states in terms of economic performance.
- An increasing share of new business and employment in Maine, between 1977 and 1997, located in Cumberland and York Counties.



- The fastest growing employment sectors in Maine are services and retail. About 35% of new Maine employment in these sectors, between 1977 and 1997, located in Cumberland County.
- About 700 new jobs were created in Windham in the 1990s.
- Over 70% of the approximately 5,000 jobs in Windham are evenly distributed between services and retail sectors.
- The total number of retail business firms in Windham declined slightly between 1995 and 2000.

- The vast majority of Windham residents, based on 1990 census data, commute to other communities in Cumberland County to work. Almost 50% of these individuals work in Portland, Westbrook and South Portland.
- The Windham workforce (people who work in Windham) are almost evenly divided between residents of Windham (43.1%) and other Cumberland County communities.



Implications for the Future

- A substantial portion of Windham's land base remains largely undeveloped.
- Protection of open space and natural resources will likely become an increasingly important issue.
- Although many parts of Windham still maintain their historic "rural character" from an appearance perspective, the levels of growth achieved thus far has created issues that are typically found in small cities.
- Shifts in age groups, changes in household size, and a growing number of elderly residents will likely create a need for additional affordable housing.

- Data suggest that Windham’s seasonal housing market is becoming less important, while the town’s regional role in providing services and retail goods continues to expand.
- Windham has become a secondary economic growth center in the Portland region.
- Should additional land, beyond the newly created Enterprise District, be designated for future commercial and industrial development?
- Should goals for economic development activities be identified in the Comprehensive Master Plan for Windham? Possibilities include: increasing the local property tax base; the creation of new employment alternatives; diversification of job opportunities; improving local wages.
- Windham is a significant sub-regional retail center. Should the town also become a service center by encouraging the construction of office and assembly space?
- Are there areas of the town where non-residential development should be discouraged or restricted?
- What type of investment, if any, should the town make to encourage future economic development?

Major Components of Windham’s Comprehensive Master Plan

Inventory and Analysis

- Population and Housing
- Economic Conditions
- Natural Resources
- Historic and Archeological Features
- Transportation
- Recreation and Open Space
- Municipal Services and Infrastructure
- Existing Land Uses

Policy Development

- Goals and Policies
- Future Land Use Plan

Implementation Strategy

- Identify growth areas and rural areas

Based on M.R.S.A., Chapter 30A, Section 4326

Complete text and maps for all of the draft Comprehensive Master Plan chapters, as well as other public information documents, can be viewed on the town’s web site at:

www.town.windham.me.us

Additional comments may be submitted to:

Windham Comprehensive Plan Steering Committee
c/o Community Development
Attn: Mabel Darby
8 School Street, Windham, ME 04062
(207) 892-1901

web site: www.town.windham.me.us
E-mail: mjdarby@town.windham.me.us
Prepared by RKG Associates, Inc.

Windham's Comprehensive Master Plan

Inventory and Analysis: Part 2 - Draft Chapters

Windham, Maine

December 3, 2001

Under existing Maine statutes a town's comprehensive plan must include an inventory and analysis of a variety of natural and man-made features within the community. This, the second of two hand-outs, provides a summary of draft chapters that examine existing recreation, natural and environmental features, historic resources and municipal facilities in Windham. A map of Key Natural Resources and Recreation Facilities is located on pages 4 and 5 in the center of this handout.

Recreation

- Windham's rapid growth over the past three decades has created a substantial demand on existing recreational facilities.
- Recreational facilities in Windham primarily consist of three major groupings:
 - Nature Parks, Preserves and Sanctuaries
 - Public Access to Water Bodies
 - Sports Fields/Playgrounds
- Nature parks, preserves and sanctuaries contain about 531 acres. Key components include:
 - Claman Sanctuary - 14 acres
 - Chaffin Pond - 123 acres (leased land)
 - Deer Hollow Sanctuary - 20 acres
 - Dundee Park - 21 acres
 - Lowell Preserve - 312 acres
 - Otter Brook Sanctuary - 41 acres

Dundee Park



- Public access to water bodies is limited to the following three locations:

Windham Center Canoe Launch



- Dundee Park - swimming area and beach
- Windham Center Canoe Launch - 3 acres (leased)
- Little Sebago Boat Launch - State owned

- Sport fields, facilities and playgrounds are primarily located at existing schools and include the following:
 - Windham High/Middle/Primary Schools
 - Outdoor track
 - Tennis and Basketball Courts
 - Soccer, football, baseball, softball, and field hockey fields
 - Playground
 - Gymnasium
 - Manchester School Complex
 - Little League/Softball Fields
 - Ice Skating Rink
 - Gymnasium

- Gambo Road Complex - 7 soccer fields (leased land)

Gambo Road Complex



- East Windham Fire Station
 - Little League/Softball Field
 - Playground
- Windham Community Center
 - Gymnasium
 - Playground
 - Picnic Tables
- Route 302 Picnic Area - State Owned
- Windham Skate Park - Supervised

Windham Skate Park



- There is a relatively good network of snowmobile trails within the town. However, bike lanes/trails are limited and there are no designated bike routes.
- A number of private recreation facilities and groups are located in Windham including fitness clubs, water park, and snowmobile organizations.
- Major recreation issues
 - Maintain existing facilities at current or improved level
 - Expand use of existing facilities
 - Provide additional facilities

Natural Resources

- A significant portion of Windham has soils with characteristics that are limiting to development.
- Windham contains a number of widely dispersed wetlands.
- The town contains several significant sand and gravel deposits that function as key aquifers. The largest one is located in North Windham (see map - pages 4 and 5).
- Groundwater is the major source of drinking water for most of Windham's residents.
- Water quality of Sebago Lake is rated as outstanding. The following lakes and ponds are rated as sensitive in terms of water quality.
 - Chaffin Pond
 - Highland Lake
 - Little Sebago Lake
 - Forest Lake
 - Little Duck Pond
 - Pettingill Pond
- Windham can be divided into three primary drainage basins, all of which eventually empty into the Presumpscot River.

Presumpscot River



- The State of Maine has identified several important habitat locations for waterfowl and wading birds, deer wintering areas, and two locations of rare wildlife species.
- Future development could impact the quality of existing rivers and lakes if not suitably regulated.

Historical & Archeological Resources

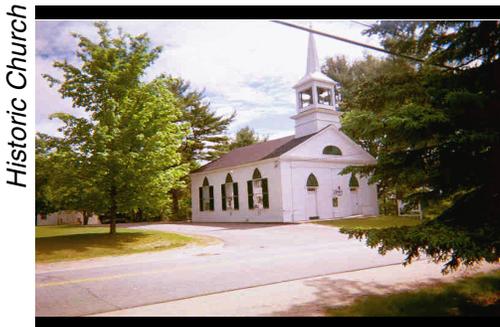
- Windham has a long history as a community. It was first settled in 1737 and became one of the first incorporated towns in Maine in 1762.
- Much of the town's history can still be seen in the historic houses, mill buildings, historic sites and landscapes that remain largely unchanged after 200 years of development.



Covered Bridge



Historic Homestead



Historic Church

- Based on information compiled by the Windham Historical Society there are five areas within the town that are particularly important because of the remaining structures and sites. These include the following:
 - The first settlement area on River Road south
 - South Windham Village
 - Windham Center
 - Great Falls
 - Popeville
- Archeological evidence of pre-European sites and activities also exists in Windham. A number of these sites, which are associated with the native peoples that inhabited the area, are located along the Presumpscot River.

- Three properties in town are listed on the National Register of Historic Places. These include the Parson Smith House, Maplewood Farm, and the William Goold House.
- Many of the town's historic structures and sites have been documented by the Windham Historical Society. However, there are still many buildings that have not been thoroughly surveyed for their historic significance.
- The town attempted to establish historic districts in the early 1990s, as part of zoning regulations, in order to protect historic resources from development pressures. However, compliance with the regulations was voluntary and this approach did not achieve the desired outcome.

Municipal Services & Infrastructure

- Many of Windham's municipal departments are experiencing a significant shortage of building space within existing facilities.
- The Town offices/community center building is in good condition and structurally sound, according to a recent facilities assessment study. However, the building has inadequate office and storage space to support the services located there and the building does not provide a suitable facility for public gatherings and community events.

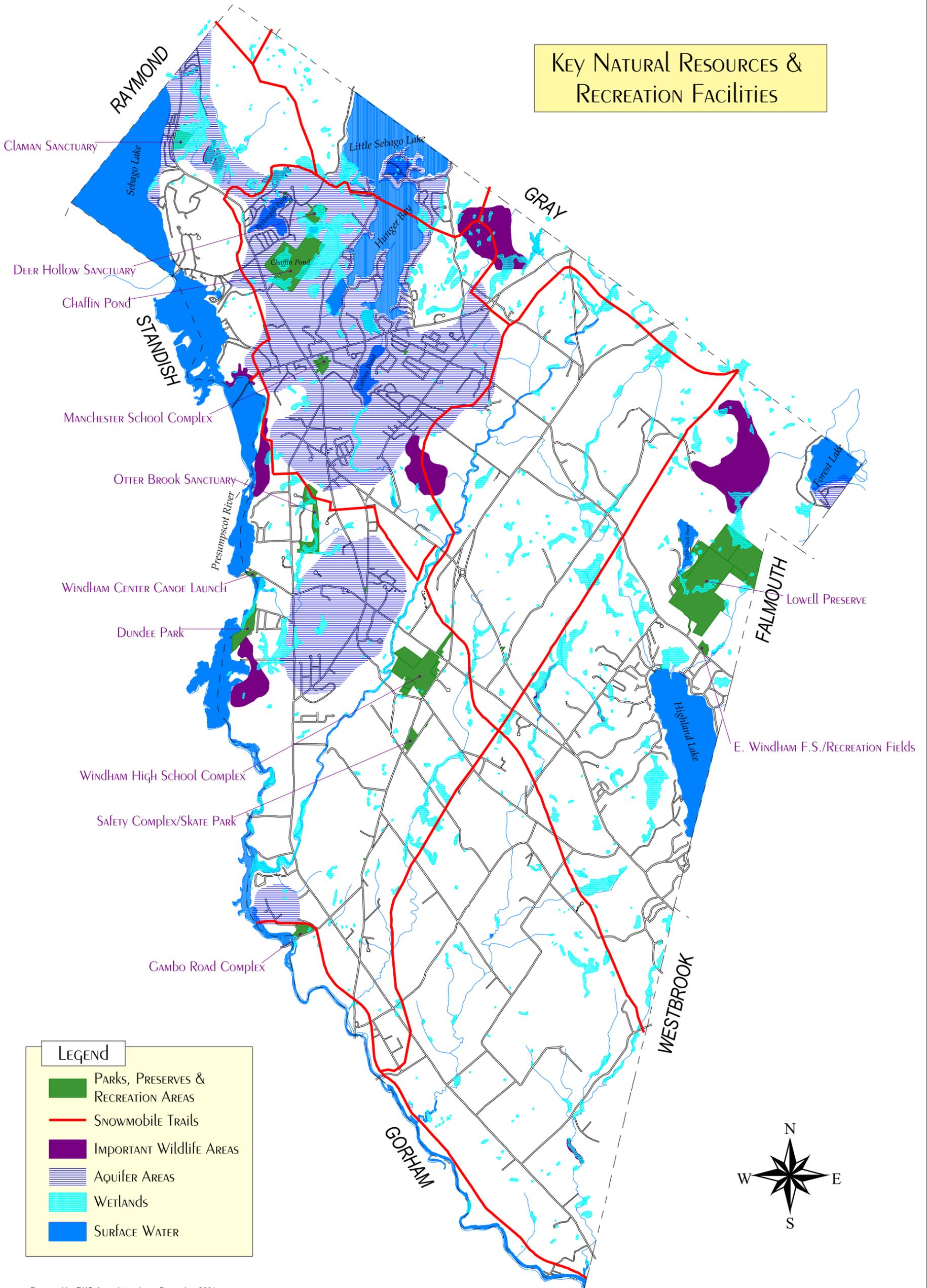


Town Offices/Community Center

COMPREHENSIVE MASTER PLAN

TOWN OF WINDHAM, MAINE

KEY NATURAL RESOURCES & RECREATION FACILITIES



LEGEND

- PARKS, PRESERVES & RECREATION AREAS
- SNOWMOBILE TRAILS
- IMPORTANT WILDLIFE AREAS
- AQUIFER AREAS
- WETLANDS
- SURFACE WATER



Prepared by RKG Associates, Inc. - December 2001
 Data Sources: Parcel information compiled based on Windham Municipal Assessment Records - December 2000. Natural Resource Information compiled by Oest Associates, Inc. from Maine Office of Geographic Information Data Catalogue
 Map Sources: Base map from Casco Bay Estuary Study ca. 1993
 Updated by RKG Associates, Inc. based on James W. Sewall tax map - April 2000

Major Municipal and School Buildings - Windham

Building	Size/Capacity	Status ⁽¹⁾
Town Offices/Community Center	19,000 sq. ft.	Fair Condition/Insufficient Space for Departments and Community Meeting Space
Public Safety Complex Police Fire District 4 (Dept. Headquarters)	11,000 sq. ft. (total) 8,000 sq. ft. 3,000 sq. ft.	Good Condition/Insufficient Space/Dual Use Design Issues
<u>Fire Stations</u> South Windham (District 1) North Windham (District 2) East Windham (District 4)	3,200 sq. ft. 7,000 sq. ft. 4,900 sq. ft.	Insufficient Space/Site Issues/Mechanical Upgrades Insufficient Space/Septic Problems/Re-evaluate Location Good Condition/No Issues
Library	10,600 sq. ft.	Good Condition/Long-term Space Considerations
Public Works Garage	8,300 sq. ft.	Poor Condition/Insufficient Space/Outdated Design
<u>School Buildings/Grades</u> Primary School (K-3) Manchester Elementary (4-5) Middle School (6-8) High School (9-12) John Andrews School (Alt. HS Program) Field Allen School (Special Ed)	<u>Enrollment/Capacity</u> 800/1,000 450/500 672/575* 875/500** 25/42 12/139	Good Condition Good Condition Over Capacity/Needs Upgraded Mechanicals Over Capacity/Needs Upgraded Mechanicals Poor Design for Public Building/Upgrades Needed Poor Condition/Needs Major Upgrade
(1) Status based on 1998 Facilities Assessment Study and Department Head Evaluations * Currently using 5 classrooms in Field Allen School ** Using portable classrooms to support current enrollment		

- The Public Safety Complex, constructed in 1988, houses the Police Department and the Fire Department. Approximately three-quarters of the space is used by the police and one-quarter by fire department officials. Overall the facility is in good condition, but there is insufficient space to support the current needs of both departments.
- Fire protection and emergency rescue services are provided from four station houses,

including the Public Safety Complex noted above. Most of the stations have space and storage problems. In some instances new sites for the possible relocation of an existing fire station may need to be considered.

- Replacement schedules for police and fire vehicles is currently an issue in both departments. Existing road conditions and availability of water for fire suppression are also issues for the Fire Department.



- Currently, the majority of firefighters supporting operation of the department are volunteers. As Windham grows there may be

a need for additional full-time fire fighters and emergency personnel.

- The town library, constructed in 1971, underwent significant expansion and upgrading in 1993 and 2000. The facility is



considered to be in very good condition. Key issues for the future include the need for a reading room, additional shelf storage space, and dedicated areas for increased computer usage by local residents.

- The Public Works Department operates out of the Public Works Garage that contains about 8,300 square feet. A sand and salt shed was constructed in 2000. The facility is considered to be outdated and undersized making it inadequate to support existing demand for services provided by the department.



- Recent construction and renovations have been completed on the Primary School (new construction - 1986) and Manchester School (renovation - 1999). Plans for renovations to the Middle and High School are currently under consideration.
- Public water distribution in Windham is primarily limited to major transportation corridors.



- Sanitary sewer service is limited to a few parcels in South Windham.
- Electrical power is provided by Central Maine Power. Three phase power is primarily limited to major roadway corridors.
- Telephone service is provided by Verizon. However, Broadband service, provided by the Pine Tree Telephone and Telegraph Company, and digital subscriber line (DSL) technology service, is limited to only specific locations in the town.
- Natural gas was recently introduced in Windham. The service area is primarily limited to a few roadway corridors.

Implications for the Future

- There will be an increasing need to provide a wider variety of recreation opportunities for all age groups.
- Since future demand for recreational areas and facilities is often associated with new residential construction, should the town consider requiring dedication of land and/or fees as part of the development approval process?
- Public access to water bodies for boating, fishing, and swimming is severely limited in

Windham. Due to increased private demand for waterfront property and projected population increases for the future, should additional waterfront land be acquired for public uses?

- Given the existing and future demand for recreational alternatives should the town's priority be the construction of new recreation facilities or improvements and expansion at existing sites?
- What types of initiatives should the town undertake to address the protection of open space and environmentally sensitive areas?
- Due to the widely scattered presence of wetlands throughout the town will new regulatory methods be required to maintain the quality of this sensitive resource?
- How should the town address groundwater protection in North Windham which is also the site of major commercial development?

- Will increased development require new site plan regulations in order to protect the water quality of lakes and ponds?
- Should habitat protection be a key policy goal for Windham?
- Is a more pro-active approach by local government appropriate for preserving Windham's historic resources?
- Growth in Windham will likely require an upgrading and expansion of existing municipal buildings and facilities.
- Will expanded municipal water and sewer service be required in Windham in order to accommodate future growth and development? If so, should this expansion be restricted to certain areas of the community?

Major Components of Windham's Comprehensive Master Plan

Inventory and Analysis

- Population and Housing
- Economic Conditions
- Natural Resources
- Historical and Archeological Features
- Transportation
- Recreation and Open Space
- Municipal Services and Infrastructure
- Existing Land Uses

Policy Development

- Goals and Policies
- Future Land Use Plan

Implementation Strategy

- Identify growth areas and rural areas

Based on M.R.S.A., Chapter 30A, Section 4326

Complete text and maps for all of the draft Comprehensive Master Plan chapters, as well as other public information documents, can be viewed on the town's web site at:

www.town.windham.me.us

Additional comments may be submitted to:
 Windham Comprehensive Plan Steering Committee
 c/o Community Development
 Attn: Mabel Darby
 8 School Street, Windham, ME 04062
 (207) 892-1901
 web site: www.town.windham.me.us
 E-mail: mjdarby@town.windham.me.us
 Prepared by RKG Associates, Inc.

A Vision for Windham's Future

Conceptual Land Use Alternatives

Windham Comprehensive Master Plan - DRAFT

September 2001

Overview

This handout is the second document prepared for the visioning process which is part of the town's efforts to update its comprehensive plan. The purpose of the vision process is to define an ideal image for the town that can then be implemented through recommendations in the comprehensive plan.

Much of the information presented in this summary was gathered from the first vision session that was held with town residents on June 4, 2001. Comments and observations that evolved from that discussion, as well as other public meetings, indicate that there are strong ties and feelings about specific *geographic areas* within the community. For example, a great deal of concern was expressed for maintaining and enhancing Windham's historic village areas in Windham Center and South Windham. North Windham was also frequently recognized as the most appropriate location for centralized commercial and industrial activities within the town. People also noted that Windham is more than just a collection of distinct village areas. The town also contains lakefront neighborhoods, rural areas with prominent agricultural land uses, a long and scenic river corridor, and large tracts of undeveloped landscapes.

Given these factors, the conceptual vision for Windham's future has been illustrated in terms of ten specific areas within the town. These

Conceptual Land Use Alternatives are depicted on the map in the center of this handout. The ten areas include:

- North Windham Commercial/Industrial Area
- South Windham Village
- The Route 302 Corridor
- Windham Center
- North Farm District
- South Farm District
- Highland Lake
- Presumpscot River Corridor
- Little Sebago Lake/Mt. Hunger
- Forest Lake/Mt. Atherton

Each of these areas are defined by distinct vision statements. These vision statements are accompanied by key components as well as unique issues and opportunities associated with realizing that vision.

A number of the conceptual land use areas are influenced by historic development patterns within the town. This highlights the fact that many residents would like to preserve the familiar images and elements of the community. However, the visions for specific areas also reflect the need to recognize and accommodate future growth in the town in a manner that reflects realistic land use planning. This concept is also reflected in State planning statutes. These statutes require a community to designate future growth areas suitable for the level of growth forecast over the next ten years.

North Windham Commercial/Industrial Area

Vision: Enhanced Commercial-Office-Industrial Development/Regional Center

Key Components:

- Attractive commercial development
- Comfortable and safe environment for pedestrians
- Safe and efficient traffic circulation network
- Better integration between commercial development and adjoining residential neighborhoods
- Utility systems that support future economic development in the Enterprise District
- High quality businesses and industries
- Improved highway link/access (via Route 302) to regional Interstate highway system
- Access to a broader range of regional services

Issues:

- Commercial properties lack aesthetics
- Traffic congestion/safety
- Not pedestrian friendly
- No sewer, single phase electric, limited telecommunications
- Constricted highway access to Interstate
- Seasonal influx of tourists
- Overlies aquifer area
- Adequate provision of safety services

Opportunities:

- Solid base of commercial and service establishments
- Adjoining high density residential neighborhoods
- Located at crossroads of two state highways
- Access to public water system
- Near scenic lake areas
- Rezoning of 700+ acres in Enterprise District for office/industry use
- Provision of municipal sewer would allow higher density of development in Enterprise District



Forest Lake/Atherton Hill

Vision: Low Density Residential/Resource Protection/Recreation-Conservation

Key Components:

- Low density residential housing suitable for hillside development
- Resource management planning for forest land and watershed area
- Expanded conservation and recreation efforts with links/trails between areas

Issues:

- Steeper slopes in this area create concerns for suitable methods of land development to minimize erosion and runoff
- The distance to municipal services and limited road access suggest that residential development in this area would be difficult to provide municipal services
- The hillside terrain of this area creates the potential for development to be visible from other areas of town impacting views

Opportunities:

- Much of the land in this area is still undeveloped offering an opportunity to revise development standards to better suit the natural constraints/resources
- This area contains a large parcel of municipally owned conservation/recreation land (Lowell Preserve - 312 acres)
- A significant amount of land is currently held in the Tree Growth tax reduction program
- This watershed contributes to Highland Lake drainage area

Route 302 Corridor

Vision: Expanded Vehicular Capacity/Improved Visual Aesthetics/Serving Local and Regional Transportation Needs

Key Components:

- Highway design that creates appropriate visual image for the community
- Highway design that does not create a barrier through the community
- Suitable transportation link to the larger economic markets
- Safe movement of local and regional traffic
- Commercial nodes - not commercial strip development
- Attractive commercial development
- Land use regulations that provide opportunities for long-term commercial and industrial growth

<p>Issues:</p> <ul style="list-style-type: none"> • Highway functions as a regional transportation corridor, a commercial access road in North Windham, and local arterial roadway for town residents • Existing highway zoning districts encourages the expansion of strip development • More commercial development along this roadway will add to traffic congestion and dangerous turning movements • Roadway is the primary transportation link between the town's commercial/industrial area and the Interstate/Portland metro area • Poor appearance of some existing commercial development between Route 202 and Westbrook town line creates unattractive "gateway" into community • Widening the roadway to accommodate existing and projected growth may create a "barrier" through the community • The North Windham section needs improved vehicular circulation, upgraded streetscaping and pedestrian facilities 	<p>Opportunities:</p> <ul style="list-style-type: none"> • The corridor is not yet developed to the point where a potential upgrade of the roadway would be overly constrained by adjoining land uses • Upgrading the roadway in the near term will allow the town to control important design aspects such as intersection signalization, pedestrian/bike access, lane widths, median strip/landscaping, etc. • Town has a good system of secondary collector roads (River Road, Windham Center Road, Falmouth Road) • Potential exists to reconfigure the existing commercial zones or rezone from strip commercial to other more appropriate zoning classifications • Create a parallel service road for existing commercial development between rotary and Westbrook town line • Improving the aesthetics of the roadway entry points from Westbrook and Raymond could provide attractive gateways and statement of community image
--	---

Windham Center

Vision: Community-Civic Center/Historic Village Neighborhood/High Density Residential

Key Components:

- Location where residents gather for civic and social activities
- Preserve historic resources that represent part of the town's image
- Concentration of civic and government facilities with appropriate architectural design
- High density residential development in a traditional New England village setting
- Provision of suitable green space/recreation areas
- Enhancement and protection of the Pleasant River corridor for wildlife and recreation uses

<p>Issues:</p> <ul style="list-style-type: none"> • Town Offices/Community Center in need of upgrade/expansion • School facilities require expansion/upgrade and additional playing fields • Existing/expanded school facilities may warrant improved traffic/pedestrian access and circulation • Public Works garage in need of upgrade/expansion • Public Works facility may be inappropriate use for this area • Public Safety Complex in need of upgrade/expansion • Historic structures/settlement area threatened by inappropriate development • Windham Center Road and River Road are important transportation corridors as well as historic/scenic roads 	<p>Opportunities:</p> <ul style="list-style-type: none"> • Concentration of municipal and school facilities forms the basis for a town center • Historic houses and historic sites are a valuable resource for the community • Existing higher density housing creates a village settlement pattern that is close to public services and commercial shopping area • The Pleasant River offers a natural corridor for recreation/wildlife in a residential area • Relocation of Public Works garage would make land available for future school and recreation facilities
---	---

North and South Farm Districts

Vision: Working Agriculture/Farm Views/Alternative-Design Residential Development

Key Components:

- Sustainable agricultural operations that represent key elements of the town's image
- Residential development integrated with agricultural areas
- Permanently protected views of farms and other pastoral images
- Enhancement and protection of the Pleasant River corridor for wildlife and recreation uses

<p>Issues:</p> <ul style="list-style-type: none"> • Existing large lot zoning (2 acre minimum) may encourage residential development that "uses up" undeveloped land at a faster rate • Portions of these areas are not serviced by the municipal water system which is an issue for fire protection • Development in these portions of town could result in the loss of important views of agricultural land that contribute to the town's rural character • Escalating land values will continue to place pressure on the development of agricultural lands • Falmouth Road and River Road are important transportation corridors as well as scenic roads 	<p>Opportunities:</p> <ul style="list-style-type: none"> • There is still a considerable amount of actively used agricultural land in these areas that contributes to the town's rural character • The Pleasant River offers a natural corridor for recreation and wildlife • These areas have a number of large land parcels that offer the potential to initiate some alternative land development regulations for preserving open space/ag land • These areas have a considerable concentration of larger wetland areas that have not yet been developed • Two locations within the eastern area have been identified as deer wintering areas and there is one documented location of a rare wildlife species
--	---



Highland Lake

Vision: Resource Protection/Low Density Residential Development/ Enhanced Recreation

Key Components:

- A lake environment with high water quality
- A watershed approach to environmental protection
- Residential development created in harmony with the natural habitat
- Enhanced and well-managed recreational use of the lake environment
- Roadway and utility systems that accommodate development and protect natural resources

<p>Issues:</p> <ul style="list-style-type: none"> • High density housing/no municipal sewer • Conversion of seasonal housing to year-round dwellings • Maintaining high level of water quality • Private roads not constructed to town standards and maintenance levels • Provision of adequate level of services (confusing and haphazard road network) • Limited public access to water body • Lake crosses municipal boundary 	<p>Opportunities:</p> <ul style="list-style-type: none"> • Scenic qualities of the natural resources • Water-related recreation uses • Enhance wildlife habitat • Joint protection/use program with Falmouth & Westbrook • Watershed plan/analysis completed
---	---

Presumpscot River Corridor

Vision: Resource Protection/Enhanced Recreation/ Low-Density Residential

Key Components:

- More protected open space that is accessible to the public
- A management plan for the entire river corridor
- Linkages between open space, wildlife habitat, and recreation areas
- Enhanced use/recognition of the resource in South Windham Village
- Upscale, low density residential development that does not fragment the corridor

Issues:

- Maintaining water quality levels
- Restricted public access to individual "spots" versus corridor-wide access
- Future disposition of S.D. Warren Company land holdings (hydro-related)
- Existing development "fragments" the land within the river corridor
- Use of the resource is influenced by the town of Gorham

Opportunities:

- Town's primary recreation facility (Dundee Park) is situated along the river providing a basis for expanded access to the corridor
- Railroad line (Mountain Division) in south Windham provides basis for corridor-wide trail network
- There is still a reasonable amount of undeveloped land along the corridor



Little Sebago Lake/Mount Hunger

Vision: Resource Protection/High Density Residential/Expanded Recreation

Key Components:

- A lake environment of high resource quality
- High density residential housing developed in appropriate fashion for area natural resources
- Expanded recreation-conservation areas with linkages
- Well integrated commercial and residential uses in order to avoid sprawl-related growth

Issues:

- High density residential development in waterfront areas without municipal sewer
- Private roads not constructed to town standards
- Conflicts between residential areas and abutting commercial development
- Important, high volume transportation corridors traversing residential neighborhoods
- Area overlays aquifer
- Limited public access to lakes in Windham

Opportunities:

- High density residential neighborhoods adjoining commercial area supports commerce and reduces sprawl
- Chaffin Pond recreation parcel and Deer Hollow Sanctuary provide the basis for expanding recreation and conservation activities in this area
- Existing snowmobile trails provide basis for linking recreation and conservation parcels
- A number of larger parcels still remain undeveloped
- Significant wetland areas are well-suited to conservation efforts

South Windham Village

Vision: Historic Village Neighborhood/High Density Residential/Commercial Development

Key Components:

- Traditional New England village appearance
- Mixture of residential and commercial uses
- Pedestrian-oriented environment
- Expanded high density residential development
- Public access to Presumpscot River

Issues:

- Unable to attract significant investment for new development or rehabilitation of existing structures
- Lack of critical mass of nearby residential development
- Vacant/underutilized mill
- Marginally useful Industrial zoning district along Presumpscot River
- Questionable sewer capacity and condition of system
- Major highway (Route 202) through village raises safety concerns
- Sidewalks in poor condition or non-existent/lack of streetscaping (lights, trees, etc.)
- Limited commercial parking
- Fire station requires upgrade/relocation
- Commercial competition in North Windham
- Historic road network serving modern traffic demands
- Limited recreation facilities/public access to river

Opportunities:

- Historic settlement pattern/style creates “neighborhood feel”
- Access to state highway/significant traffic volumes
- Proximity to Presumpscot River (scenic/recreational amenity)
- Historic structures provide link to town’s past
- Potential to expand existing high density residential development pattern (reduce sprawl type development)
- Access to public water and sewer systems
- Reuse of S.D. Warren hydroelectric facility property along the river
- Access to decommissioned rail line right-of-way for trail linkage



Additional comments may be submitted to:
Windham Comprehensive Plan Steering Committee
c/o Community Development
Attn: Mabel Darby
8 School Street, Windham, ME 04062
(207) 892-1901
web site: www.town.windham.me.us
E-mail: mjdarby@town.windham.me.us

Assistance provided by

RKG Associates, Inc.
Durham, New Hampshire

and

OEST Associates, Inc.
South Portland, Maine