

Master Plan
of the
Town of Goshen
2002

Prepared by the Goshen Planning Board

Adoption of Master Plan

Goshen, New Hampshire

The Planning Board of the Town of Goshen, New Hampshire, in accordance with the provisions and procedures of RSA Chapter 675:6, including conducting a public hearing on October 16, October 23, and October 30, 2001, does hereby adopt the Town of Goshen Master Plan of 2002. The goals and policies contained in this Plan are designed to serve as a planning guideline for the Planning Board and other town boards and departments in the performance of their respective duties.

Date Adopted: _____

Goshen Planning Board:

John C. Wirkkala, Chairman

Richard Bennett

Sherri Moen

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Judith Filkins

Foreword

Goshen's Planning Board has the responsibility of regularly updating the town's Master Plan. Drawing its overall direction from its citizens, this document projects policies and regulations that best advance the future well being of the community. Effective, responsible zoning ordinances and subdivision regulations must be designed to comply with the overall direction of the Master Plan.

In like manner, an effective and responsible Master Plan must be derived from the will of its citizens. This 2002 update is based upon direction received from a citizen survey designed and conducted by our past Planning Board Chairman, Ruth LeClair. Despite some wide variations in expressed concerns, one desire among the survey responses emerged as paramount: Goshen's citizens want their town to retain its pleasant, rural environment. This was a reaffirmation of the wishes expressed in the Master Plan of 1982 and its 1985 amendments.

While the central desire of Goshen citizens has not changed much, if any, over the past nineteen years, there are ramifications from new challenges and state regulations that must find their way into any modern planning document. The Upper Valley Lake Sunapee Regional Planning Commission, and most especially its current Acting Director, Tara Bamford, provided excellent advice, suggestions, and material that assisted the Board with this update.

Goshen's original Master Plan was adopted in 1982. A copy of this historic document is maintained at the town office. Anyone examining it and its later 1985 amendments will see how much it has influenced this 2002 revision.

It is the intention of Goshen's Planning Board that the first revision of this document for the new century should be computer accessible. It should thereby be more easily updated, amended, and altered whenever it is found desirable by future Planning Boards.

The Planning Board would like to dedicate this 2002 document to our past chairman, Ruth LeClair, who provided the inspiration for this updating.

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Chapter 1

Introduction

The Goshen Planning Board gathered public input on this Master Plan update in order to prepare a plan that reflects our community's collective vision for the future of our town. The citizens' overall guideline for future development of Goshen can be summed up as follows:

Over the next ten years, Goshen should remain a small, rural residential community, with quiet, uncrowded living conditions, well-maintained buildings, roads, and recreational facilities, and undiminished scenic beauty.

Purpose of the Master Plan

The overall purpose of this Master Plan is to provide guidelines for future growth and development of Goshen. The preparation of an updated town Master Plan is an opportunity to undertake a comprehensive evaluation of our community's needs and desires with respect to the anticipated growth of our town. The goal of the plan update process is to proactively chart a course that leads to the desired future state of our community. Without this planning process, Goshen could quickly lose many of the features and characteristics that our citizens value.

Process to Update the Master Plan

Under New Hampshire law, the preparation and adoption of the Master Plan is the responsibility of the Planning Board. In the spring of 1998, the Goshen Planning Board began the process of updating the town's 1982 Master Plan, as amended in 1985. At that time the Planning Board developed and distributed a questionnaire to gather input from Goshen citizens.

Using citizen input and recommendations from the Upper Valley Lake Sunapee Regional Planning Commission, the members of the Planning Board drafted the 2002 Master Plan. It was the desire of the Planning Board to develop a plan that would reflect the concerns and suggestions of citizens and also take into account new local conditions and new state statutes.

The Planning Board conducted a public hearing on the draft 2002 Master Plan update on October 16, 2001, and continued the hearing to October 23 and October 30, 2001. After making appropriate amendments to the document as a result of the input received at the public hearing, the Planning Board adopted the updated Master Plan.

Summary of Community Survey

The Planning Board prepared a questionnaire to find out what the Goshen residents liked or disliked about their town, and what they might want to change in the future. The questionnaire was mailed to current and former town officials, and was made available at the Goshen Town Hall and the Goshen Post Office for any interested citizens to fill out. The questionnaire contained 16 open-ended questions, which allowed respondents to express their views and concerns in their own words. The summary below attempts to show the general flavor of the collective responses, without noting all the variations among the responses.

Goshen residents report that they were attracted to settle or stay in Goshen because it is a small, rural town with peaceful views, plenty of open space, and a variety of people with different life styles.

The most significant problems that residents identify are a lack of enforcement of zoning ordinances and building codes. They deplore the visible trash that accumulates around some homes, which they feel lowers the property values for everyone in town.

Most citizens are wary of growth and development, either residential or commercial. They prefer to see a residential growth rate that is very limited, and they would prefer that no new trailers be added to the housing stock in town. There is some support for new home businesses or carefully planned small businesses. However, residents do not want industrial parks, factories, or any commercial enterprises that are noisy, intrusive, or disruptive. They feel that whatever commercial growth takes place, it should be confined to the areas that are currently zoned for commercial use.

Citizens are not in favor of the construction of new roads in town, but they are interested in upgrading existing Class V roads. They would like to retain the current zoning requirement of a minimum of three acres for a lot size, and, in general, they do not see a need for changes in zoning ordinances or subdivision regulations, unless such changes would increase the quality of life in the town.

In general, residents do not want a town water system or septic system anywhere in town. However, there was some mention of such systems at Rand Pond if users were required to pay to hook up to them. There was also a suggestion that town water and sewer systems might be needed in the village center at some future time.

One area of improvement that citizens generally agree upon is an expansion of outdoor recreational facilities, particularly hiking, biking, and snowmobile trails. They would like the town to further develop and maintain the public beach at Rand Pond and the recreational facilities at Williamson Park by Gunnison Lake. They are also in favor of the town acquiring new land for recreation purposes. Some suggestions of desirable areas of land include the area along the west bank of Sugar River in the downtown area, the area between Route 31 and Gunnison Lake, and the area at the Route 31 end of Center Road. There is some support for the addition of a Parks and Recreation Department to the town government.

Citizens say that in ten years they would like Goshen to be very much the same as it is now. They want to live in a family-oriented community, with a neat, well cared-for center of town, and a stable tax base. The only real change they would like to see is an expansion of outdoor recreational facilities.

The results of the community survey provided the Planning Board with valuable insights on key growth issues, and citizen input has been incorporated as applicable throughout this Master Plan.

Accomplishments Since Adoption of the Last Master Plan

Before we look to the future and evaluate the development issues facing Goshen, it is beneficial to look back and take stock of the accomplishments that the town has achieved since the 1985 amendment to the 1982 Master Plan. This is not intended to be an exhaustive listing of those accomplishments, but rather a summary of the highlights. The town accomplished the following:

- Constructed and dedicated an addition to the Olive G. Pettis Library that provides sanitary facilities and handicap access to the library.
- Established a computerized system for the town's tax collection and town clerk activities.
- Acquired the parcel of land between the Town Hall and the Library.
- Carried out an extensive ongoing program of rehabilitation and repair at all three town cemeteries.
- Established a "911" call system, which included designating street address numbers and putting up street name signs.
- Completed the state requirements for official closing of the town dump, and began operation of an approved solid waste transfer station.
- Acquired and developed a public beach area on Rand Pond.
- Signed a lease agreement with the New Hampshire Water Resources Department that places Gunnison Lake under the administration of the Goshen Conservation Commission.

In addition to benefiting from its own work in bringing about so many positive changes, the town has also benefited from the generous donations of individual citizens. Hazel Gladue Johnson has donated a 60-acre parcel of recreational land to the town, which the Conservation Commission operates as a town park. Sylvan and Virginia Schendler have given a conservation

easement on 364 acres of land to the Society for Protection of New Hampshire Forests. This land will be preserved forever as forest land, agricultural land, and open space.

Capital Improvements Program

Throughout this Master Plan there are numerous recommendations pertaining to the capital improvement needs of the community. It is not the function of a Master Plan to attempt to prioritize and identify the capital improvements that the town thinks it can afford.

One of the most far-reaching recommendations in this Master Plan is for the town to authorize the Planning Board to develop a Capital Improvements Program. Such a program would allow the Planning Board, the Board of Selectmen, and the Budget Committee, working cooperatively with the town departments, to prepare a prioritized list of capital projects and costs, and to make recommendations on capital improvement needs to the Budget Committee and the Board of Selectmen as part of the annual budget process. The town would need to enact this program with a Town Meeting warrant article that authorizes the Planning Board to develop and amend a Capital Improvements Program.

Overall Goals

The Planning Board's efforts in developing this long range Master Plan have resulted in numerous recommendations in a variety of areas. To provide some framework for understanding these recommendations, the Planning Board has identified the following overall goals for the implementation of the Master Plan:

- To preserve and enhance the small town character of Goshen and the open, rural character of the land.
- To provide efficient and effective town services and recreational opportunities, at a level that is consistent with the ability of the community to pay for them.
- To preserve existing historic properties and areas, such as the town center, historic houses, town cemeteries, and the Pierce Lead Mine; and to enable citizens to understand and appreciate the early history and development of Goshen.
- To adopt good land use planning practices that take land slopes, soils, and other natural features of the land into account and that ensure that growth occurs only in an orderly fashion and in a pattern that will maintain the rural and scenic character of the town.
- To preserve and protect Goshen's natural and scenic resources, including brooks, rivers, lakes, ponds, wetlands, parks, agricultural land, and open land.

- To bring Goshen’s existing Class V roads up to town standards as soon as funds allow for this to be accomplished, and to keep existing Class VI roads as Class VI roads so that the town is not responsible for maintaining them.

Priority Policies

Chapters 2 through 6 of this Master Plan identify many specific policies that will contribute to the accomplishment of our goals. To provide some guidance in the short and intermediate term, the Planning Board has identified some top priority policies that it feels should be implemented:

- Adopt a Capital Improvements Program for the town. This would project how municipal needs could be satisfactorily met for the next 6 to 10 years.
- Review and update Goshen ordinances, regulations, and codes on a regular basis to ensure that they foster the implementation of this Master Plan and that they protect the best interests of the community.
- Develop specific ordinances to protect and preserve the visual and environmental quality of those portions of Goshen that are characterized by steep slopes, prominent knolls, ridgelines, and significant focal points.
- Develop and adopt local earth excavation regulations, for new or expanded pits, that are more stringent than the provisions of RSA 155-E and that are suited to Goshen’s needs.
- Strictly enforce all provisions of all ordinances, regulations, and codes.
- Appoint a Recreation Committee to study community recreation needs.
- Establish an historic district or districts in town.
- Adopt good land use planning practices to ensure that growth takes place in an orderly manner and in a pattern that maintains the rural character of the town.
- Develop and implement an effective groundwater protection ordinance.
- Ensure that new developments are not scattered and premature, which would necessitate an excessive expenditure of public money to supply required services.
- Work with the Conservation Commission and other groups to acquire open space land through gift or purchase.
- Bring town roads up to town standards as soon as funds allow for this to be accomplished.

Chapter 2

Historical Preservation

To enable citizens to understand and appreciate the early history and development of Goshen, this chapter presents a brief summary of the history of Goshen and a description of some historic properties and areas that exist in town today.

Historical Background

The first settlement of Goshen developed along the Province Road. This historic road was laid out in 1768 from Charlestown to Boscawen. The first settlers, Captain Benjamin Rand, William Lang, and Daniel Grindle, settled here in 1769. All came here from the Portsmouth area of New Hampshire. Crops of the first settlers were often destroyed by early frosts, the climate here being more severe than in the coastal part of the state. It was often necessary for these settlers who came in the early years, and even for the ones who came at a later date, to procure grain from Walpole and other Connecticut River towns.

Other settlers, most coming from many coastal towns, added to the growth of the tiny settlement. Portions of the surrounding towns of Fisherfield (Newbury), Wendell (Sunapee), Newport, Washington, Lempster, and Unity were incorporated as the Town of Goshen on December 27, 1791.

Nearly all of the first settlers were farmers. Gradually, as the population grew, many small water mills, such as sawmills, grist mills, a fulling mill, a clothespin factory, a tannery, a cooper shop, a carriage shop, several blacksmith shops, a woodworking shop, and two creameries existed along the Sugar River and its tributaries. Present-day Goshen is no longer an agricultural community. There are several part-time farms. The principal businesses in the center of town are now a building supplies store and a convenience store with gasoline pumps. There are also tourist facilities and numerous small businesses and home businesses that are scattered throughout the town.

The center of the town has shifted several times during the years. The town center was for many years located on Center Road. Later, the Town Hall was moved from its original Center Road location to its current location in the village, on Route 10. Currently, the Olive G. Pettis Library, Grange Hall, Fire Station, Church, Post Office, stores, and businesses are also clustered in the village.

Five religious societies existed in the town in the past: Congregational, Free Will Baptist, The Christian Chapel, the Methodist Society, and the Baptist Church. The Baptist Church in the village is still active as the Goshen Community Church, and it is currently the only church in Goshen.

The town was at one time divided into five school districts, each with its own one-room schoolhouse. These one-room schoolhouses were later reduced to two in number, one of which served grades one through four, while the other one served grades five through eight. This was the situation until the mid-1950s, when a cooperative district was formed with the neighboring town of Lempster.

Population reached an early high in 1840 with 779 residents, and then declined until it reached a low of 255 in 1930. Since that time, population increased until 1990 and then dipped to its current figure of 735.

In the 1800s, young people left farms and migrated to the towns and cities for factory employment. Gradually, as farms were abandoned, forests took the place of the fields and pastures. In time, lumbering became a lucrative local occupation. Present-day Goshen has become a town of retired people and younger families whose adult members are employed in nearby towns and cities. Appendix A of this Master Plan, “Community Characteristics,” presents a variety of population, housing, and economic statistics about present-day Goshen.

Historic Areas

A unique feature of Goshen is the Franklin Pierce Lead Mine. (This was actually a graphite mine, but by local custom it is referred to as the “lead mine.”) During the nineteenth century, ore from this mine was moved by oxcart to the railhead at Hillsboro, and from there it was shipped to Taunton, Boston, and other places to be used for the manufacture of melting-pots, or crucibles. The mine was first owned and operated by Benjamin Pierce and later became the property of his son, President Franklin Pierce. On Goshen Old Home Day each year, a hike to the Pierce Lead Mine is a highlight of the activities. Pieces of graphite are still to be found at the site. The property was donated to the New England Forestry Foundation in memory of the former owner’s father, Judge Jesse Barton of Newport.

Goshen was the birthplace of Captain John W. Gunnison, an important western explorer, who was massacred in Fillmore, Utah, in 1853. Nationally, two towns, a national forest, a canyon, a mountain peak, an island, a pass, a valley, and a butte all bear his name. At the canyon, a National Monument has been created to memorialize him. Locally, there is a lake named after him. The local house in which he was born is located on Center Road. It is formally entered on the National Register of Historic Places as the Captain John W. Gunnison House. One upstairs room still retains the original stenciling on the plaster walls. A state marker honoring Captain Gunnison has also been placed on the lawn of the Olive G. Pettis Library in the village.

The Benjamin Rand House, built by one of the three original settlers, is the oldest house in Goshen. Captain Benjamin Rand came to Goshen in 1769, and construction of his house started soon thereafter. The house is located on Ekberg Road, off Brook Road. It has been preserved and modernized, and it currently serves as a private residence.

There is a remarkably high concentration of plank houses in Goshen. These unusual houses are currently listed in the National Register of Historic Places. These structures are built of wide hemlock planks, two or three inches thick, set vertically with connecting dowels into sills and plates at top and bottom. Eighteen houses of full or partial plank construction were researched by Walter R. Nelson, who brought this type of construction to the attention of nationally known architectural historians. These houses were built between about 1800 and 1860. The houses are scattered throughout the town, but clusters exist on Route 10 in or near the village, as well as on Center Road. These houses are all shown on a map of conservation lands and historic sites in Goshen. Refer to Appendix B for information on maps of Goshen.

The following table provides a partial inventory of historic areas in Goshen.

Partial Inventory of Historic Areas in Goshen		
Historic Area	Location	Present Use
Franklin Pierce Lead Mine, formerly owned and operated by President Franklin Pierce	East of Washington Road, accessed off Mountain Road	Abandoned. Currently the property of the N.E. Forestry Foundation.
Captain John W. Gunnison House, birthplace of Captain Gunnison	Center Road	Private home.
Plank Houses	Eighteen houses located throughout town, with clusters in the village and on Center Road	Private homes and businesses.
Benjamin Rand House, built by one of the original settlers	On Ekberg Road, off Brook Road	Private home.
Goshen Community Church, originally the Baptist Church	Mill Village	Active community church.
One-room schoolhouses	One in Mill Village, and one on Center Road	The schoolhouse in the village is a used bookstore; the one on Center Road is a private seasonal "camp."
Site of the original Town Hall and Town Pound	Center Road	Abandoned site. Only the stone foundation of the pound remains.
Grange Hall	Mill Village	Until the fall of 2001, was still used by the Grange.
Nelson Wheelbarrow site	One-half mile east of Mill Village on Brook Road	Privately-owned building.
Old firehouse	One-half mile east of Mill Village on Brook Road	Privately-owned building.
Mill dam and waterfall	Junction of Route 10 and Lear Hill Road	Year-round natural dam and waterfall on the Sugar River.

In addition to the historic areas listed in the table above, Goshen has many other historic areas. Preservation and protection of all of these historic areas is important to the character of the town.

Assets

The Franklin Pierce Lead Mine, which is accessed via Mountain Road, has been donated to the New England Forestry Foundation and is visited annually on Old Home Day. This historic site is accessible to the public.

The Captain John W. Gunnison House, which is located on Center Road, was built in 1779. This home is on the National Register of Historic Places.

The Benjamin Rand House, which is the oldest house in town, was built in 1769. The house, which is located on Ekberg Road, off Brook Road, has been preserved and modernized, and it currently serves as a private residence.

Our community has 18 plank houses, which is a remarkably high number of these unusual homes in an individual town. All of these houses are entered on the National Register of Historic Places.

The Goshen Community Church serves an active membership. The church building is an example of typical New England architecture and has been in continuous use since it was built in the middle of the 19th century.

There is the stone foundation of the original town pound, where stray animals were gathered in colonial times. This is located next to the old Town Hall site on Center Road. It is now on privately owned land but is publicly accessible with permission of the land owners.

An active Historical Society generates interest in the history of the town and meets on a regular basis. The Historical Society plans and organizes Goshen's Old Home Day celebration each October, which brings together current and former residents for a day of remembrance and festivities.

A published town history and other historical publications have been produced, and many citizens have purchased copies.

The Cemetery Commission has assembled a complete collection of handwritten cemetery records and hand-drawn maps. These materials, which are in the keeping of the Cemetery Commission, are available to the town.

Problems

A significant problem in the preservation of Goshen's historical resources is the lack of a facility for proper housing of town artifacts. This presents storage and display problems for the Historical Society.

Many of the early deeds and probate records have been lost by fire. This causes gaps in some of the historical research that has been conducted.

Historic areas are scattered throughout town. However, there are clusters of historic buildings and historic sites in several part of the town. The Town could help to preserve our heritage by designating one or more areas as historic districts.

Goals and Policies

Goal 1

To preserve existing historic properties and areas in Goshen.

Policies

1. Work with appropriate groups to acquire historic properties (including easements to property, if needed).
2. Establish an historic district or districts in town.

Goal 2

To increase the appreciation of the history of the town in the minds of the townspeople and interested public.

Policies

1. Gather historical documents and artifacts, as well as encourage new research into the history of the town and its people.
2. Encourage the establishment of a secure and permanent site for the storage of significant items relating to the town's history.

Chapter 3

Municipal Facilities and Departments

Public facilities and departments of the town's government provide essential services to town residents. The public facilities in Goshen include both land and buildings.

The Planning Board's functions include a responsibility for establishing a policy for the improvement of public lands and buildings, as well as for setting priorities for implementing these improvements. A public facilities plan should serve as a stimulus to the development of a comprehensive core of community buildings and land that serve the needs of the residents. With a plan in place, Goshen can anticipate public outlays that may be required, and can incorporate them in the Capital Improvements Program and in future budget proposals.

Town Buildings and Facilities

Public buildings in Goshen include the Town Hall, the Olive G. Pettis Library, the Fire Station, and the Town Garage. The towns of Goshen and Lempster are jointly responsible for operating the Goshen-Lempster Cooperative School, which is located in Lempster.

The Town Hall has offices that enable various municipal boards to meet in a functional and attractive setting. The upstairs hall provides ample space to accommodate Goshen residents for the annual Town Meeting and other events. Space has been set aside in the Town Hall for the Police Department to carry out its office work. However, it seems apparent that more space will be needed in the near future.

The Olive G. Pettis Library is supported by the community in general, and by the "Friends of the Library" in particular. The town budgets money annually for this service.

The town also operates a modern transfer station that enables citizens to recycle a wide variety of materials. The Town Garage is located at the transfer station site.

The Goshen-Lempster Cooperative School, which is located in Lempster, offers education in grades K through 8 for the youth of the two communities, in an attractive environment. High school students and their families decide which high school in the nearby area the student wishes to attend on a tuition basis. Students have the option of applying for admission to any New Hampshire public high school. The Town of Goshen pays tuition for students at their selected schools, but makes no provision for their transportation. Currently, most high school students attend the Newport High School, while others attend schools in other nearby communities, such as Sunapee, Claremont, and Charlestown.

The Goshen Cemetery Commission administers and maintains three cemeteries: the Mill Village Cemetery, the Four Corners Cemetery, and the North Goshen Cemetery. In recent years, the Commission has carried out an extensive program of rehabilitation and repair at all three cemeteries. The Mill Village Cemetery is the only cemetery with any significant space available for future use.

Recreational Facilities

Goshen has a relatively large amount of open space in the form of forest and farm land. The community needs to begin a planned program of setting aside funds for public land acquisition for recreation for its present and future generations. (See Chapter 5, “Natural and Critical Resources,” in this Master Plan.)

An attractive recreational trail system has been developed in town. Hopefully, land acquisition and conservation easements will allow this network to expand throughout the community.

The 96-acre Gunnison recreational lake, which is surrounded by an additional 217 acres of land, holds tremendous potential for the community. The Williamson Park area at Gunnison Lake has been developed for family picnicking, a walking trail has been established around the lake, and other quiet family recreational uses are also possible. Through a lease agreement with the New Hampshire Water Quality Department, the Gunnison Lake area is now administered by the Goshen Conservation Commission.

The town was fortunate to have received the grant of a 60-acre parcel of land from native Hazel Gladue Johnson. This was given for recreational use in memory of her family, and it is known as Goshen Memorial Park. The Goshen Conservation Commission administers this park.

In 1994, the town voted to purchase a small parcel of land at Rand Pond, which has been made into a public beach by the Conservation Commission.

Police and Fire Departments

Goshen is serviced by a good volunteer Fire Department. It currently consists of a Chief and a maximum of twenty-five members. There is an ongoing training program for the members in the various aspects of fire-fighting and departmental work. Goshen is a member of the Mutual Aid program, which is a reciprocal arrangement that provides fire aid and assistance to participating towns, as it is needed. The towns of Newport, Washington, and Lempster are Goshen’s mutual aid partners.

The local Police Department appears to be adequate for a town of Goshen’s size and performs its tasks to the satisfaction of the townspeople. There is a part-time Officer in Charge, who is supported by Deputy Officers. The New Hampshire Police Standards and Training Council certifies Goshen officers. Currently, Goshen is involved in the federally funded COPS Program,

which enables the community to have a full-time officer for a three-year term. Goshen can also call upon the services of the State Police and County Sheriff if necessary. The town has established a Highway Safety Program to meet the needs of a small rural community.

A “911” call system has been implemented for quick reporting of fires and other emergencies. Services to Goshen are dispatched through the New London Police Department.

Capital Improvements Program

Under state law, in municipalities that have adopted a Master Plan, the town may vote to authorize the Planning Board to prepare a recommended program of municipal capital improvement projects that is projected over a period of at least six years. The Capital Improvements Program may encompass major projects currently being undertaken or future projects to be undertaken with federal, state, county, and other public funds.

The purpose and effect of the Capital Improvements Program is to aid the Board of Selectmen and the Budget Committee in their consideration of the annual budget. The program can stabilize year-to-year variations in capital outlay by scheduling proposed projects over a period of time.

A Capital Improvements Program classifies projects according to their urgency and the need for them, and it recommends a time sequence for their implementation. The program may also contain the estimated cost of each project, as well as sources of funds or the need for additional sources of funds for the implementation and operation of each project. The program is based on information submitted by the departments and agencies of the municipality.

In this Master Plan, there are numerous recommendations pertaining to the capital improvement needs of Goshen. However, it is not the function of a Master Plan to attempt to prioritize and identify the capital improvements that the town thinks it can afford. By developing a Capital Improvements Program, the town can project how it can meet its municipal needs satisfactorily over the next six or more years.

Also, by having a Capital Improvements Program in place, Goshen would be eligible to adopt certain ordinances that could better protect the town’s interests. For example, a town can enact an impact fee section in the zoning ordinances only if it has a Capital Improvements Program in place. According to a recent decision of the New Hampshire Supreme Court, a community can require a subdivision or site plan applicant to perform or pay for off-site improvements to municipal facilities only if the town has some basic type of impact fee ordinance added as an amendment to the zoning ordinances.

Assets

The Town Hall, Library, and Fire Station are grouped together in the attractive town center. The buildings are well maintained and provide comfortable and functional working space.

The Goshen-Lempster Cooperative School, which is located in Lempster, is also an attractive well-maintained facility. This school provides education for students in grades K through 8. High school students and their families decide which high school in the nearby area the student wishes to attend on a tuition basis.

The town has several outdoor recreational areas, including the Gunnison Lake and Williamson Park area, the Rand Pond Public Beach, and Goshen Memorial Park.

The town's three cemeteries are all well maintained and there is space available in the Mill Village cemetery.

Goshen is serviced by a good volunteer Fire Department whose member participate in fire-fighting training programs on an ongoing bases. Goshen is a member of the Mutual Aid program, which allows the town the potential use of fire aid and assistance, as we need it.

The local Police Department appears to be adequate for a town of Goshen's size. The New Hampshire Police Standards and Training Council certifies Goshen officers.

A "911" call system has been implemented for quick reporting of fires and other emergencies.

Members of the Goshen Garden Club have improved the appearance of the downtown area through such activities as establishing a lovely garden by the new entrance to the library and maintaining window box plantings at the Town Hall.

Problems

The Town Hall has a limited amount of space for conducting town business. Administrative activities, the functions of the municipal boards, and Police Department work are all conducted within this building.

Additional space is needed for housing town equipment. The high price of town equipment dictates a need to provide security and weather protection for the various pieces of town-owned equipment.

Because of its small population, Goshen has no medical facility. Patients must be transported privately, or by ambulance, to Valley Regional Hospital in Claremont, New London Hospital in New London, or Dartmouth-Hitchcock Medical Center in Lebanon. The nearest FAST Squad is located in Lempster. The town should decide whether there are better ways of providing adequate health protection for its citizens, and it should try to upgrade its emergency response capabilities.

The community has no recreational budget. However, the community would like to have its recreational facilities expanded. Park lands, trail systems, and equipment should be purchased or

developed. Recreation areas and facilities that are developed locally should be within walking, bicycling, or a short driving distance of everyone in the community.

An overarching issue to be solved is how the town can balance the demand for services, as the population grows, with the resources of part-time boards and departments.

To date, the town has not engaged in any long-term planning for municipal facilities that would help to ensure that it can meet the needs of the community as it grows.

Goals and Policies

Goal 1

To create a core of attractive, functionally sound municipal buildings either in their current locale or in a more appropriate location.

Policies

1. Establish a Municipal Buildings Review Committee to inspect all town buildings for repair, improvements, and possible additions.
2. Prepare a priority listing of additions, replacements, or alterations of existing or proposed facilities. This list should be prepared by the Town Municipal Joint Boards and should include provision for adequate space for all town employees and officials.
3. Adopt a Capital Improvements Program for the town. This would project how municipal needs could be satisfactorily met for the next 6 to 10 years.
4. Explore the concept of a uniform architectural style for the municipal buildings.
5. Improve the aesthetics in the municipal core area by planting trees, landscaping, or other practices. Such practices should also be encouraged throughout the community.

Goal 2

To provide town services at a level consistent with the ability of the community to pay for them.

Policies

1. Allocate funds to Capital Reserve Funds on a regular basis after priority needs for the town have been determined in 6 to 10-year modules.
2. Require all departments to submit budgets that show expenditures that are expected annually and in 6 to 10 years.

3. Ensure that there will be no excessive expenditure of public money to supply required services for any new development.

Goal 3

To continue to improve the effectiveness of the Fire Department. The policies listed below specify ways that the Fire Department should work towards this goal.

Policies

1. Establish, mark, and number the water supply locations in Goshen.
2. Divide the town into sections and map these sections to the available water supply locations.
3. Purchase full protective clothing for every fire fighter.
4. Purchase up-to-date equipment, such as infrared detection equipment, for the Fire Department.
5. Continue to improve the Fire Department's training program.

Goal 4

To continue to improve the effectiveness of the Police Department. The policies listed below specify ways that the Police Department should work towards this goal.

Policies

1. Upgrade and add new police equipment, techniques, and manpower as needed to ensure adequate response capabilities.
2. Coordinate emergency medical services with other local suppliers of emergency medical services.
3. Prepare a traffic management plan that can be implemented during community events held in the municipal area of Goshen.
4. Work with the school to develop safety programs at each grade level.

Goal 5

To maintain attractive cemeteries in Goshen at a reasonable lot price.

Policies

1. Prepare a 6-to-10-year plan for improvements to town cemeteries, and present this plan for voter consideration.

Goal 6

To promote efficient use of Highway Department equipment.

Policies

1. Require the Highway Department to prepare a comprehensive maintenance schedule for Highway Department equipment and to submit a monthly maintenance check-off sheet to the selectmen.
2. Protect and shelter the town's highway equipment. Additional buildings should be planned and constructed as soon as there is a need for them.
3. Before purchasing new equipment, make sure there is a location where the equipment can be adequately housed.

Goal 7

To closely monitor any proposed subdivisions in town and notify appropriate departments so that they may consider the possible impacts of these subdivisions.

Policies

1. Notify the Fire Chief of any major subdivision that could have an impact on fire protection requirements. Involving the fire chief early in the process of reviewing subdivision applications can help to minimize the impacts of new development on existing services and can help to identify opportunities to increase the safety of future residents.
2. Notify the School Board of any major subdivision that could have an impact on school building space, school programs, and quality of instruction.

Goal 8

To develop a long-range comprehensive recreation plan for the town.

Policies

1. Appoint a Recreation Committee to study community recreation needs.
2. Develop a plan for adequately maintaining and policing each existing recreational area and each area that is acquired or established in the future.
3. Evaluate various pieces of property in town that might increase recreational opportunities for the town, and determine how to obtain appropriate properties at a reasonable cost.
4. Establish a Capital Reserve Fund to help pay for easements and rights-of-way for future public recreation areas.

5. Appropriate funds each year to cover the cost of any care and maintenance work that the town Highway Department might need to perform for recreational facilities, and include these funds in the regular Highway Department annual budget.
6. Develop a network of public recreational trails throughout town, while being careful to ensure that home and land security needs are met.

Chapter 4

Land Use and Development

Since the mid-1960s, Goshen has been working to devise orderly procedures to control and direct development. Municipal boards that carefully apply these procedures will protect the property values of established local residents and will serve the long-term interests of the entire community. Wise land use planning and orderly growth, expressed through the application of well thought-out zoning ordinances, subdivision regulations, and building code regulations (as well as applicable state statutes), are all in Goshen's best interest.

Good land use planning practices take into account the limitations of the natural environment, such as slopes and wetlands, and follow sensible guidelines drawn up by municipal boards in the town. Improper design during development produces waste and loss of valuable resources, some of which may be impossible to recover. This can lead to economic and aesthetic losses for Goshen.

The underlying principal that Goshen recognizes is that the natural limitations of the land are not to be taken lightly by its citizens or by developers. In many instances, the success or failure of a plan is determined by whether the design or construction of a project is compatible with the natural environment, and whether it preserves natural features, scenic areas, and natural resources.

Topography

Topographic features are among the major features that have shaped the present day development pattern and land use in Goshen. Walter R. Nelson's *History of Goshen, New Hampshire* states:

“Swinging in a strong and rugged curve to east and south, the Sunapee mountain range is thrown, making a barrier difficult to cross. On westerly mountain slopes several small streams have their sources, flowing down into the narrow valley of the South Branch of Sugar River. In reality it is this watershed that by act of incorporation became united in the new town of Goshen.”

Along the western portion of Goshen, a scenic range of hills running in a north-south direction has, in the past, created a barrier to the population expansion of the town in that path.

Slope

Slope, expressed as a percentage, is the amount of rise in elevation covering a specific horizontal distance. Therefore, a rise in elevation of 10 feet over a horizontal distance of 100 feet would be considered as a 10 percent slope.

A review of five general slope categories and their suitability for development is presented below. There are three slope categories that are particularly vulnerable: 0-3 percent, 15-25 percent, and 25 percent and over. The general locations in Goshen where slopes fall into one of these three categories must be considered especially carefully before any decisions for land use are made. Any development that is proposed in these areas must be controlled to avoid environmental damage, visual damage, or both.

Maps of land slopes in Goshen are available at the Town Hall.

Slope of 0 to 3 Percent

In general, the level or nearly level land in this slope category can sometimes be suitable for some types of industrial, commercial, public, or residential use. However, slope in this category is frequently found along streams that flood, or is associated with soils that may not drain well. Therefore, level land must be developed with caution, if at all, to assure that damage will not occur to the flood plain of the river or brooks.

Soils in the flood plain are usually permanently wet and subject to periodic flooding by adjacent streams. They are the alluvial soils that have been deposited by receding floodwaters of nearby streams.

While development is possible in flood plain areas from an engineering standpoint, there are a number of reasons why it should be considered undesirable. Stream valleys play a vital role in retaining the natural balance. When development, with its roads, pavements, rooftops, parking lots, and so on, takes place in the flood plain, it reduces the absorption capacity of lands within the watershed. In contrast, an undeveloped flood plain allows for absorption of a large portion of rainfall, thereby replenishing the ground water table and releasing storm water at a gradual rate. This reduces the potential of serious flooding and at the same time produces a more constant water flow between storms.

The ability of a watercourse to recharge its underground supplies is reduced by development on water-absorbing areas. This reduction in the underground water supply can cause dry wells, which thus creates a demand for public water facilities in regions that otherwise have never had a need for them. When absorption capacity is reduced, the seasonal flow of water is affected; the wet season becomes wetter, and the dry season becomes more pronounced. The result is a stream and adjacent area more subject to flooding and an increased inability of a stream to dispose of whatever foreign substances are placed in it. In addition to these factors, development that interferes with the natural process of river and stream evolution adversely affects vegetation and animal life.

Furthermore, development should take place only if soil conditions are adequate to assure proper septic tank operation. Septic systems must only be installed where there are suitable conditions and the septic systems will not leach into ground water, streams, other waterways, or wetlands.

Left undeveloped, land in this category is suitable for agriculture, forestry, and recreation.

Slope of 3 to 8 Percent

Part of the land in the north and west of Goshen has gentle slopes of between 3 and 8 percent. Land in this category is ideal for residential subdivisions and for most other types of development, if this is the wish of the community. Unless associated with extremely poor soil conditions, this type of land generally permits good drainage and provides an interesting and variable landscape suitable to home construction. Good design and a harmonious balance between open areas and buildings should be attained in larger residential projects.

Providing that soil conditions are adequate to assure proper septic tank operations, development could probably be justified in such areas. However, septic systems must only be installed where there are suitable conditions and the septic systems will not leach into ground water, streams, other waterways, or wetlands.

Slope of 8 to 15 Percent

Land with moderate slopes of 8 to 15 percent is located in parts of the north and central sections of Goshen. This slope category can allow for residential development. Care must be taken, however, to be certain that drainage characteristics and the installation of individual septic systems are acceptable to the town. Again, septic systems must only be installed where there are suitable conditions and the septic systems will not leach into ground water, streams, other waterways, or wetlands.

Standards applied to development of these areas may not be as rigid as those for the steeper slope categories. Nevertheless, precautions should be taken to assure that subdivisions are carefully designed and that standards for street design, lot layout, and so on, are geared to the hilly nature of the terrain. The width of the travel surface of roads, whether paved or unpaved, should be kept to a minimum to reduce storm water runoff.

This type of land is usually too steep for most industrial, commercial, or high-density uses. In addition, slopes in excess of 10 percent generally make the construction of good roads difficult.

For any type of development on slopes in this category, there is the potential for erosion of the shallow soil that remains after trees and stumps are removed. Any development plans should include provisions to avoid this hazard. The later section of this chapter “Stormwater Management and Erosion and Sediment Control” provides a further discussion of this issue.

Slope of 15 to 25 Percent

Land that has a moderately steep slope of between 15 percent and 25 percent is too steep for streets, drainage systems, and lot layouts that meet the requirements of a well-planned

subdivision. These slopes usually have shallow soils, which cause problems with drainage. Current zoning ordinances prohibit the construction of residential buildings on land with slopes in this category except by Special Exception granted by the Zoning Board of Adjustment. If buildings are allowed to be constructed on these slopes, they should be confined to deep, well-drained soils, and extreme caution should be taken with foundations and sewage disposal systems. It becomes of increased importance to ensure that septic systems are installed only where there are suitable conditions and the septic systems will not leach into ground water, streams, other waterways, or wetlands.

Road access on these slopes should be considered a major limitation. These slopes, in addition to all of the problems of grading and access, usually have shallow soils. When the grade of the road itself is of four percent or more, good road drainage design is critical to avoid erosion and sedimentation and contamination of waterways.

For any type of development on slopes in this category, there is a high potential for erosion of the shallow soil that remains after trees and stumps are removed. Any development plans should include provisions to avoid this hazard. The later section of this chapter “Stormwater Management and Erosion and Sediment Control” provides a further discussion of this issue.

To protect the scenic quality of the community for the enjoyment of everyone, any structures that are built on hillsides should be screened from view. Natural vegetation (trees and shrubs) or a landscaped buffer should be maintained or established on the downhill side of the slope between any view points and the buildings. Ridgeline and hillside siting issues are discussed further in the later section of this chapter “Land Uses with Visual Implications.”

Slope of 25 Percent and Over

Steep or very steep slopes in excess of 25 percent are found especially in eastern and western Goshen. Current zoning regulations prohibit the construction of residential buildings on land having a slope of 25 percent or greater. Development on hillsides of this type is undesirable because of the special nature of the land and the excessive costs of proper road construction and maintenance. The presence of highly erodible and shallow-to-bedrock soils on these slopes precludes building and development without the probability of serious long-term environmental damage.

For any type of development on slopes in this category, there is an extremely high potential for erosion of the shallow soil that remains after trees and stumps are removed. Any development plans should include provisions to avoid this hazard.

It is best to leave these areas in their natural state, for use as watersheds, conservation areas, or passive recreational areas.

Drainage

The term *drainage* signifies the natural action of all water in response to gravity as it travels downward toward the sea. The path that water follows may be in rivers, streams, or

underground aquifers. In New Hampshire, all drainage is to the Atlantic Ocean. Individual areas in which the land contributes water to a common course are called *drainage basins* or *watersheds*. Most land in Goshen is in the Sugar River watershed; a small area of town to the southeast drains to the Ashuelot.

Drainage basins are important from a planning standpoint, in that they identify the natural boundary of an area. The effects of change in a portion of the basin will be felt in the lower elevations of that basin. Poor development practices within the basin can create far-reaching problems in other areas of the basin. These may include increased runoff with flooding, higher levels of siltation, and pollution from septic systems.

Groundwater

Groundwater is a critical natural and economic resource in Goshen, as it is throughout New Hampshire. It is our most frequently used source of drinking water, in addition to being an integral part of the hydrologic system and vitally important for fish, wildlife, and recreation.

Groundwater can be contaminated when chemicals are spilled or discharged onto or into the ground. Liquids can flow through the ground into groundwater, and both solids and liquids can be flushed downward by rain and snowmelt. Once contaminants reach groundwater, they often move along with the groundwater flow. Although there are many state and federal programs that directly or indirectly serve to protect groundwater, it is generally acknowledged that local programs are necessary to maximize the effectiveness of groundwater protection.

Groundwater Protection

The most effective way to protect groundwater is by controlling land uses, through acquisition of the land, easements, or land use controls. Land use controls can include zoning ordinances, site plan review regulations, and subdivision regulations. Local regulations can address specific activities such as gravel excavations, septic system operation and maintenance, and the use of fertilizer and underground storage tanks. Non-regulatory approaches include household hazardous waste collection and public education.

The New Hampshire Office of State Planning has developed a “Model Groundwater Protection Ordinance” in response to numerous requests from municipal officials for help in developing local tools to protect stratified-drift aquifers. The model ordinance was designed for the protection of aquifers and other locally important groundwater, which may include wellhead protection areas.

The town of Goshen should review this model ordinance and adopt or adapt, for its own use, those portions that are applicable to our particular situation. This may include the regulation of specific permitted uses, such as the storage of animal manure, fertilizers, and regulated substances. This may also include a specification of uses that require a special exception from the Zoning Board of Adjustment, such as commercial agriculture and earth excavations, together with the requirements that must be satisfied in order for a special exception to be granted. Finally, this may also include the prohibition of specific types of uses, such as the

outdoor storage of road salt or other de-icing chemicals in bulk or the siting or operation of a junkyard.

A report prepared in December 2000 by the New Hampshire Department of Environmental Services (DES) identifies those areas in Goshen that are drinking water resources and potential contamination sources. The report includes a map, a land use key, and a list of sites where public drinking water is supplied. The map also designates the location of stratified-drift aquifers, as determined by the U.S. Geological Survey in cooperation with the New Hampshire DES. The identified drinking water resources and aquifers must be considered in each and every development decision that the town makes in the future. If the need should arise in Goshen for the establishment of a public water system, drinking water sources indicated on the map would be the resources to be explored. The New Hampshire DES also publishes maps that focus exclusively on stratified-drift aquifers. Refer to Appendix B for information on maps of Goshen.

Wetlands

Wetlands include areas that are waterlogged and that may contain shallow, intermittent surface water. They include such places as bogs, marshes, swamps, and meadows. In Goshen, these lands are spread throughout the town. Goshen defines wetlands as poorly drained or very poorly drained soils, as determined by the USDA Natural Resources Conservation Service.

While in the past wetlands have often been considered as nuisances to be filled in or drained, Goshen recognizes their value as one of the most productive ecosystems for their size. They provide an excellent habitat for a wide range of birds, mammals, amphibians, and other wildlife because of abundant food and shelter and favorable breeding conditions. Because of the variety of life found in wetlands, they can be valuable for recreational purposes, including nature study, as well as for fishing or hunting.

Wetlands also have the ability, because of the dense root and surface vegetation that is typical of them, to absorb and store water. Thus, they act as retention areas during periods of high water runoff. In many areas of the country, the filling or drainage of wetlands for development has led to more frequent and intense flooding downstream. Conversely, during dry periods, wetlands gradually release water to augment streams and water table levels and, therefore, lessen the possibility of a severe drought.

Physiography

Four major physiographic land features characterize the town of Goshen. These are flood plains, terraces, mountains, and upland hills.

Flood Plains

The nearly level flood plains are those areas subject to flooding from adjacent streams. They are located adjacent to the South Branch of the Sugar River, Blood Brook, Gunnison Brook, and Babb Brook.

Terraces

Short, steep slopes in some areas, and slightly sloping topography in others characterize the terraces in Goshen. Terraces consist of deep sand or gravel. Large areas of terrace-type land features occur west of Route 10 and between Route 10 and Route 31. Numerous small areas are just outside the flood plains of Gunnison, Blood, and Babb Brooks. A few additional, very small, isolated acreages are scattered throughout parts of the town.

Mountains

Mountains in Goshen are mainly in the Mount Sunapee and Gove Mountain areas. They are typically steep and stony, with many areas of rock outcrop. Mountains occupy nearly one quarter of the town of Goshen.

Upland Hills

The remainder of Goshen consists of upland hills, ranging from about 1,300 to 1,600 feet in elevation.

Soils

Certain kinds of soils are associated with each of the physiographic land features in Goshen.

The kinds of soils, coupled with the steepness of slope, affect human use of the land. Each kind of soil shown on the detailed soils map of Goshen has assets and liabilities for various uses. Refer to Appendix B for information on maps of Goshen.

For detailed information concerning the use of specific soils, see the Sullivan County Soil Survey, which was conducted by the USDA Natural Resources Conservation Service.

Flood Plains

Soils of the flood plain are mainly sandy, well drained to poorly drained, and subject to flooding from adjacent streams. Some of these soils are well suited to agricultural uses. All of these soils are typically considered poor for most types of development, because of the threat of flooding.

Terraces

Soils of terraces are typically droughty and sandy or gravelly. Water tables are usually at depths greater than five feet below the ground surface. Slopes range from nearly level to very steep. These soils are in most places too droughty for consistent high yields of agricultural crops

without irrigation. In some areas, these soils are sources of sand and gravel. Where slopes are not too steep, soil characteristics are generally considered good for housing development.

Mountains

Large areas of steep, stony, shallow-to-bedrock soils, with many outcroppings of ledge characterize the mountain areas of Goshen. Areas of steep soils, with and without hardpan layers, also occur in these areas. Pockets of very wet soils are found in some places. Forestry and recreation are the most common uses in mountainous areas.

Upland Hills

Upland hills sections of Goshen are characterized by three kinds of soil conditions, as described below.

There are very large areas of soils having a hardpan at about two feet. Where surface stones are removed, these soils have excellent potential for agricultural production. Where buildings with basements are constructed, foundation perimeter drains to intercept water moving over and through the pan layer should be considered.

Smaller areas of steep soils without hardpan layers occupy some of the hilly areas. Most of these soils are too stony for agricultural use. However, where slopes are not too steep and drainage is good, they are typically considered suitable for housing and other structural development.

Shallow-to-bedrock soils are scattered throughout the upland hills. Small areas are cleared of surface stones. However, most areas have sufficient stones or rock outcrop to limit use mainly to forestry.

Stormwater Management and Erosion and Sediment Control

Stormwater runoff is water from rainstorms or snowmelts that flows over the land rather than evaporating or soaking into the ground. In the undeveloped landscape, vegetation slows the runoff of stormwater and allows more time for percolation into the groundwater reservoir. However, in developed areas where the natural landscape cover has been replaced with non-porous surfaces (for homes, businesses, roads, and parking), the character of runoff changes dramatically. These impervious surfaces cause water to remain on the land surface and, without slow percolation into the soil, water accumulates and runs off in larger quantities. This faster moving water washes soil from all earth surfaces that are not securely held in place by structural means or by healthy vegetation. The results are found in eroded stream banks, damaged vegetation, widened channels, and the sedimentation of streams and surface waters.

Soil erosion and sedimentation are particularly likely to occur when the soil is exposed because of construction, logging, or excavation activities. The steeper the slope on which these activities are taking place, the more serious the problems can be.

Current subdivision regulations provide some standards for sediment and erosion control. However, to preserve our natural environment, the town of Goshen should develop comprehensive ordinances or regulations to manage stormwater runoff and to control soil erosion and sedimentation resulting from any type of land use or activity. Such land use or activity includes development of roadways, earth excavation, logging operations, and building site construction and development. Goals of such an ordinance or regulations should include:

- Controlling erosion and sedimentation to prevent its deposition into streams and receiving surface waters
- Maintaining the ecological and structural integrity of streams, ponds, and lakes
- Preventing decreases in groundwater recharge to maintain stream base flows during periods of dry weather
- Conserving topsoil
- Reducing the degradation of surface waters by removing pollutants from stormwater runoff
- Preventing on-site and downstream flooding, and associated hazards and costs, by controlling the volume and velocity of stormwater runoff
- Minimizing disruption of the natural drainage patterns

All stormwater management and erosion and sediment control measures should meet established Best Management Practices, which are proven or accepted structural, non-structural, or vegetative measures. These measures are designed to reduce erosion, sediment, or peak storm discharge, or to improve the quality of stormwater runoff.

Land Uses with Visual Implications

Development and construction proposals must be carefully designed and reviewed to ensure that the scenic quality and the rural character and environment of Goshen are preserved and protected. Examples of land use proposals that are potentially visually intrusive include commercial transmission towers, ridgeline and hillside siting of structures, and earth excavations.

Commercial Transmission Towers, Antennas, and Similar Structures

Erection of commercial transmission towers and similar structures can greatly affect the rural characteristics of the town. Towers or antennas are not only unnatural during daylight, but they also often must have lights at night, which is not in keeping with the rural atmosphere.

Construction of visually intrusive transmission towers, antennas, and other structures, including personal wireless service facilities, is discouraged. Alternative sites in the region that already have towers should be used if at all possible, thereby minimizing the visual impact of these

structures. If alternative sites are commercially unfeasible, then construction of such structures should be done in the town in a manner that minimizes their visual impact through the use of camouflage (for example, disguised as a pine tree of appropriate height), collocation with existing transmission or telecommunication structures, or vegetative buffering.

The applicant for such a project should provide information that demonstrates that the structure or facility will meet all applicable standards of the Federal Communications Commission (FCC) for health effects of radio frequency radiation. The applicant should also provide to the town appropriate financial surety to guarantee that the structure or facility can and will be removed upon discontinuation of its use.

Ridgeline and Hillside Siting

Goshen is a rural town with many hills. The tops and sides of those hills are very important to the appearance of the town. Although there has been, and continues to be, extensive forestry use of the hillsides, the pattern of settlement, to date, has included relatively little construction of structures on the tops of hills. The ridgeline may be determined by the contour of the highest elevation, but in most places it is actually defined by vegetation, usually trees. Indiscriminate removal of trees breaks the natural ridgeline and detracts from the natural beauty of an area.

Structures placed on or near a ridgeline or on a hillside are more visible to viewers. The views available at a particular house site must be balanced against the desire of the town to retain scenic areas and maintain hillside forestry and agricultural resources. Thus, placement of structures, access roads, and utilities needs to be done carefully.

The placement of new buildings, or alterations or additions to existing buildings, should not detract from the visual setting or obstruct significant views. Structures should be placed downgrade of the ridgeline and constructed in a manner so as not to exceed (be taller than) the nearby natural or vegetative ridgeline as viewed from public vantage points. Structures, roads, and utilities on hillsides should be placed to preserve forestry and agricultural land uses, as well as aesthetic quality.

The rapid proliferation of personal wireless service facilities (cellular phones and similar technologies), and the need to locate transmission towers at regular intervals to ensure continuity of service, also places the ridgeline landscape at risk, since ridgelines and hilltops are prime sites for such structures. While the town recognizes the industry's need to use the most efficient locations for such structures, the town also expects that the aesthetic integrity of the landscape will be maintained through the use of camouflage, collocation of facilities, and vegetative buffering.

When any ridgeline or hillside building construction is proposed, the Planning Board should require the applicant to employ siting and design tools to ensure that there will be minimum scenic impacts. Some useful tools that can be employed include the following:

- Conducting a visibility study, including a viewshed analysis, prior to project approval, to assess the visual impact of the proposed application

- Preparing a landscape plan, including existing vegetation and proposed landscaping and clearing plans, prior to project approval, to assess the effectiveness of plans for visual screening of the development area
- Preparing a lighting plan and conducting a lighting study prior to project approval, to assess the impact of both interior and exterior lighting
- Locating buildings at the edge of fields, rather than in open areas
- Minimizing the use of bright or glazed siding and roof coverings

All hillside and ridgeline development should also be designed to minimize environmental impacts, as well as visual impacts. In particular, erosion control measures should be implemented. The earlier section of this chapter “Stormwater Management and Erosion and Sediment Control” provides a further discussion of this issue.

Commercial and Industrial Development

In keeping with Goshen’s citizens’ expressed desire to maintain a quiet, rural community, all commercial and industrial development that is not in keeping with this objective is actively discouraged. Any commercial development should be appropriate to the scale and character of the community. Large businesses that employ large numbers of non-residents or that despoil the environment or that measurably increase traffic are undesirable. Conversely, small light businesses that employ local residents, that are clean environmentally, and that do not noticeably change traffic patterns are acceptable. Goshen should project any future development of this type in the town’s Commercial zone along Route 10.

To protect the scenic and functional quality of the town, commercial strip development should be avoided. Strip development occurs when commercial establishments develop along a particular stretch of roadway. If such development simply evolves, with no zoning ordinances in place to control it, the results are likely to include a high consumption of land, an excessive number of entrances and exits to the roadway, and an unattractive strip that lacks design coherence. The town can mitigate these problems through the use of zoning districts, site design standards for each district, access standards, and guidelines for roadway and site landscaping.

Construction Materials

Sand and gravel are excavated commercially in Goshen. These resources provide construction aggregate for roads and other development activities. However, sand and gravel are nonrenewable assets, and thus it is important that known deposits of these resources be identified and wisely used.

Moreover, any earth excavation should be done without disruption to the community. Earth excavations, if not carefully sited and managed, can be a disruptive land use, creating a negative

visual impact, dust, noise, fumes, and heavy truck traffic. Furthermore, they may lower values for surrounding property and leave a damaged landscape. Plans for excavations should consider impacts on community property values, transportation, aesthetics, wildlife, ground and surface waters, air quality, roads, adjacent land uses, and the character of the surrounding area. Restoration plans and security to ensure implementation of those plans are needed for every excavation that is permitted.

Badly sited or improperly managed excavation activities may cause erosion and sedimentation, fuel spills, and exposure of the water table, which may, in turn, contaminate the groundwater. Excavation too close to the water table may result in local flooding in wet years when the water table is unusually high, and it may damage surrounding aquifers and pollute residential wells.

One of the provisions of the state law allows a town in which known aquifers exist, as designated by the U.S. Geological Survey, to protect those groundwater resources by prohibiting any excavation that would damage a known aquifer. Accordingly, it is extremely important to carefully consider potential groundwater impacts associated with excavation. The NH Department of Environmental Services has produced maps that indicate where stratified-drift aquifers are located in Goshen. Refer to Appendix B for information on maps of Goshen.

The earlier sections of this chapter “Groundwater Protection” and “Stormwater Management and Erosion and Sediment Control” provide further discussions of these issues.

The New Hampshire Legislature, in 1989, amended the enabling statute that addresses the purpose and description of a Master Plan to incorporate a Construction Materials section. RSA 644:2, VIII-a calls for a “construction materials section which summarizes known sources of constructions materials which are available for future construction material needs, including at a minimum, the location and estimated extent of excavations which have been granted permits under RSA 155-E, as well as reports filed pursuant to RSA 155-E:2, I(d) with respect to non-permitted excavations.”

Information on construction materials resources that are located in the town of Goshen can be identified from the Sullivan County Soil Survey, which was conducted by the USDA Natural Resource Conservation Service. This survey is available at the Newport office of the University of New Hampshire Cooperative Extension.

The following table lists the commercial sand and gravel excavations that are currently operating in Goshen.

Existing Commercial Sand and Gravel Excavations in Goshen in 2002		
Name of Property Owner	Location of Site	Open Pit Area in Acres
Gary Caron	Route 10 and Route 31	< 5
Guildhall Sand and Gravel	Lear Hill Road	> 50

Any other active excavation pits in town are non-commercial, with owners using the excavated material on their own premises.

State law requires all commercial excavations to be reclaimed when no longer in use. In addition, the town ought to require that non-commercial excavations be reclaimed when no longer in use.

Goshen wisely requires that all commercial excavations be subject to a three-year review. The renewal of a permit of an existing excavation entails a Planning Board review and hearing that is as rigorous as that applied to an initial application. Such reviews are necessary to ensure that potentially disruptive operations are only located where they will cause minimal disruption to the community and adjacent neighborhoods. Local review also should ensure that adequate standards and safeguards will be set up to provide for responsible operations and to minimize environmental impacts when such excavations are permitted.

The Planning Board should also require that future commercial excavations must proceed in stages, with an acreage reclaimed for a comparable acreage opened. The Planning Board should further specify that the goal of reclamation is to restore the original capacity of the land to support natural native vegetation. To achieve this goal, the Planning Board might require that topsoil and even subsoil be stockpiled at the excavation site for use in reclamation, or that the layers of earth be replaced with an adequate amount of comparable material that is sufficient for the growth of natural vegetation.

Good Land Use Planning Practices

By adopting good land use planning practices, we can preserve the rural character of Goshen and minimize the demands on the town's services and resources. Good land use practices require that town boards take into account such factors as the natural features of the land, the services that are available to the proposed development site, and the financial and environmental impact of the development.

Growth should take place in an orderly fashion and in a pattern that maintains the rural character of the town. Prohibiting premature or scattered development of land is a key element of good land use planning. To paraphrase state statute, premature or scattered development may involve danger or injury to health, safety, or prosperity. Problems may arise due to a lack of adequate water supply, drainage, transportation, schools, fire protection, or other public services. Furthermore, such development may necessitate an excessive expenditure of public funds to supply such services.

Development should be allowed only in those locations where roadways can support it. Growth should not put a strain on existing roads, either by creating excessive traffic or by causing road deterioration. For example, commercial strip development, with an excessive number of entrances and exits along a particular stretch of roadway, causes traffic congestion in the area.

Ensuring that a site is appropriate for its proposed use is another key element of good land use planning. This involves analyzing the slope, soils, aquifers, and other natural features of the site

before a proposal is approved. We are fortunate that there is an increasing availability of solid data concerning the nature, characteristics, and geographical distribution of Goshen's natural resources. Town boards should use these tools to make land use decisions that are environmentally more sound.

In addition, good land use practices involve the use of carefully written ordinances and regulations that are specifically designed to protect our environment. A groundwater protection ordinance, regulations to manage stormwater runoff and to control soil erosion and sedimentation, excavation regulations, and a water resources management protection plan are examples of tools that the town can employ to preserve the environmental quality of the town. Chapter 5 of this Master Plan, "Natural and Critical Resources," provides a further discussion of the ways in which our natural resources can be protected.

Assets

The town of Goshen, unlike many communities, is not currently impacted with all of the attendant problems that come when people are crowded together. Most citizens move to the town because they are seeking a quiet, rural setting and wish to enjoy the natural open space atmosphere.

By employing good land use planning practices, the Goshen town boards will be able to maintain the rural atmosphere that its citizens value. Town boards will be able to control how our land is used at the present time and to determine what restrictions they wish to place on land use in the future.

Because of the increasing availability of solid data concerning the nature, characteristics, and geographical distribution of Goshen's natural resources, town boards now have resources that will better enable them to make environmentally sound decisions.

The Goshen Planning Board can make use of basic natural resource information tools, such as flood plain facts, soil survey maps, and legal requirements for controlling soil erosion in town whenever it considers any construction or building proposal.

To date, the water supplies in Goshen have not been compromised. By following good land use planning practices and implementation regulations, we can protect water supplies in Goshen for the future. The Planning Board has an opportunity, through its subdivision regulations, to control any building activity around potential water recharge areas, homeowner water supply sources, and larger bodies of water.

Town boards now recognize that good land use planning will allow residents and visitors to have more wildlife to photograph, enjoy, or hunt.

Problems

Zoning and subdivision regulations and ordinances need to be regularly examined and updated to be certain that the best interests of the community are being protected. Moreover, existing zoning ordinances and building code regulations need to be enforced.

To protect public health and safety, as well as to protect the aesthetic quality of the town, zoning ordinances should be employed to promote the removal of abandoned buildings and the removal of unsightly or unsanitary “clutter” on private property.

Goshen should adopt good land use planning practices in order to ensure that growth takes place in an orderly manner and in a pattern that maintains the rural character of the town.

Scattered and premature development projects (as defined in the earlier section “Good Land Use Planning Practices”) should be discouraged. Projects should be approved only when roads and other town services are sufficient to serve the new development without placing an increased tax burden on our residents. In addition, commercial strip development should be avoided in order to protect our roads and the scenic character of the town.

Goshen has several natural limitations for land development projects. The town needs to manage land development based on slopes and other natural resource information. In some instances in the past, land has been left without vegetative protection while development has been started. This has led to erosion and siltation, particularly in hilly areas. Thus, the construction phase needs to be carefully evaluated as part of a review of development projects.

Poorly planned logging operations also need to be curbed in order to prevent erosion, sedimentation, and resulting water quality problems. In addition, when logging operations are completed, the land should be left neat and without large brush piles that create a fire hazard. Cooperative plans worked out between town officials, landowners, and loggers need to be implemented and enforced.

The town should review the “Model Groundwater Protection Ordinance” prepared by the New Hampshire Office of State Planning and, based on this, adopt a suitable local groundwater protection zoning ordinance to protect our valuable groundwater resources.

The town needs to develop specific ordinances to protect and preserve the visual and environmental quality of those portions of Goshen that are characterized by steep slopes, prominent knolls, ridgelines, and significant focal points. All development in such areas should be designed and sited in a manner that does not cause undue adverse impact to the visual or scenic character of the landscape or to the physical environment.

Scenic setbacks from roads and environmental setbacks from all streams and bodies of water should be established. By designating such offsets, we can ensure that vulnerable land cannot be logged, excavated, or changed in any way.

To ensure that earth extraction projects will not result in significant degradation to the economic base, quality of life, environment, or aesthetic values of the community, any

additional commercial excavations should be rigidly limited and carefully controlled. If not properly sited and managed, sand and gravel excavations can be a disruptive land use that adversely affects property values and diminishes the quality of community life. Poorly sited or poorly managed excavations may create dust, noise, fumes, heavy truck traffic, and highway safety problems, and they may also leave a damaged landscape. Excavation activities can cause erosion and sedimentation, fuel spills, and exposure of the water table, which can, in turn, contaminate the groundwater. Excavation too close to the water table can result in local flooding in wet years when the water table is unusually high and can damage aquifers and pollute residential wells.

If badly sited, sand and gravel excavations can have the effect, individually or cumulatively, of diminishing the aesthetic quality of life in town. During the period of active excavation, the site can be visually intrusive. When excavation is complete, the landscape will remain permanently altered and may never regain its original scenic quality.

Goshen should secure technical help to ensure that the town uses the most recent and up-to-date sound land use techniques. We need to determine what we already have for land assets in Goshen, and we need to decide what we can do to improve these assets.

Goals and Policies

Goal 1

To preserve and enhance the small town character of Goshen and the open, rural character of the land.

Policies

1. Adopt good land use planning practices to ensure that growth takes place in an orderly manner and in a pattern that maintains the rural character of the town.
2. Establish scenic setbacks on roads through town to preserve the rural character of Goshen.
3. Develop specific ordinances to protect and preserve the visual and environmental quality of those portions of Goshen that are characterized by steep slopes, prominent knolls, ridgelines, and significant focal points.
4. Require setbacks not only of all buildings, but also of all signs (including on-premises advertising signs for businesses) and other man-made features on roads throughout town to preserve the scenic quality and rural character of Goshen.

Goal 2

To limit or restrict certain types of development that would alter the rural character of the town so valued by the residents.

Policies

1. Enlist the technical assistance of existing planning agencies, when appropriate, to review development proposals. Applicants should be required to pay the associated costs.
2. Discourage and control the construction of visually intrusive commercial transmission towers, antennas, and similar structures.
3. Avoid ridgeline development, to prevent erosion and to protect the scenic quality of the community.
4. Require that hillside building sites retain or add sufficient tree cover to screen the structures from the view of other town residents and from public view points.
5. Carefully control and monitor development projects that propose multi-residence structures, such as condominiums, apartment buildings, town-house complexes, and the like, to ensure that zoning and building code regulations and ordinances, and especially building site minimum acreage requirements, are applied and enforced in such a way that the rural character of the town is preserved.
6. Restrict development projects, such as shopping malls, that would include the construction of large paved areas.
7. Control development projects that could lead to commercial strip development.
8. Discourage development that would put an undue strain on existing roads, either by creating excessive traffic or by causing road deterioration.
9. Discourage any commercial development that is inappropriately large for the scale or character of the community.
10. Prohibit development projects, such as heavy industry, that are noisy, hazardous, or environmentally unsound.
11. Discourage large commercial excavation projects, especially those that are likely to continue for a period of many (five or more) years.

Goal 3

To ensure that earth extraction methods will not result in significant degradation to the economic base, quality of life, environment, or aesthetic values of the community. Furthermore, to ensure the future restoration of those land areas that are disturbed by the extraction of earth materials. The policies listed below specify ways that the Planning Board should work towards these goals.

Policies

1. Conduct whatever hearings are necessary to investigate all possible negative impacts before granting new permits or renewing permits for existing or expanding gravel pits. Plans for excavations should consider impacts on community property values, transportation, quality of life in the community, aesthetics, wildlife, ground and surface waters, air quality, roads, adjacent land uses, and the character of the surrounding area. An evaluation of the impact of the excavation project should include a study of the visual impact of the excavation site. This study should assess the visual impact from abutting properties and from public vantage points such as public roads and public recreation areas. Reclamation plans and security to ensure implementation of those plans are needed for every excavation. The goal of reclamation should be to restore the original capacity of the land to support natural native vegetation.
2. Develop and adopt local earth excavation regulations for new or expanded gravel pits that are more stringent than the provisions of RSA 155-E and that are suited to Goshen's needs. These regulations should include standards both for pit operations and for reclamation. In the absence of such local regulations, the Planning Board must carefully review each application for a new or expanded earth excavation to ensure that the operation will comply with all the provisions and standards of RSA 155-E.
3. Require the applicant for a new or expanded earth excavation to identify the location of the proposed operation relative to known aquifers, as designated by the U.S. Geological Survey, and to municipal and residential wells and other sources of drinking water. (Refer to Appendix B for information on maps of Goshen.) The Planning Board should require the applicant to demonstrate that the earth excavation operation will not damage a known aquifer or any drinking water resources.
4. Call upon outside engineering or environmental consultants, including the Natural Resource Conservation Service, as needed, when reviewing an earth excavation proposal for a new or expanded gravel pit. These consultants can provide advice on potential adverse impacts of the proposed operation and recommendations on how to mitigate those impacts, and they can also review proposed reclamation plans. All impact studies shall be at the applicant's expense.
5. Enforce all stipulations that are made in connection with granting an excavation permit.

Goal 4

To use town ordinances, regulations, and codes to protect the best interests of Goshen residents and taxpayers.

Policies

1. Review the current zoning ordinances and develop proposed amendments that will foster implementation of this Master Plan.
2. Examine and update zoning and subdivision regulations and ordinances on a regular basis to be certain that the best interests of the community are being protected.
3. Develop zoning regulations that enable the town to control the removal of abandoned buildings and the accumulation of unsightly or unsanitary clutter on private property.
4. Update the town's Building Code to make it more up to date and reflective of town wishes.
5. Ensure that subdivision regulations, zoning ordinances, and the building code recognize and support the idea that any growth and change must not unjustly affect the town residents and taxpayers.
6. Strictly enforce all provisions of all ordinances, regulations, and codes, including those dealing with water pollution control, septic systems, building development, signs, subdivisions, and excavations in order to protect the health, safety, and general welfare of Goshen's citizens.
7. Consider employing an Enforcement Officer, perhaps in a joint arrangement with neighboring communities, to facilitate the enforcement of Goshen's ordinances, regulations, codes, and by-laws.

Goal 5

To use town ordinances and regulations to protect and enhance land values in town.

Policies

1. Establish environmental setbacks on all waterways and bodies of water.
2. Develop and implement an effective groundwater protection ordinance.
3. Develop and implement an effective ordinance or regulations to manage stormwater runoff and to control soil erosion and sedimentation resulting from roadways, earth excavation activities, and site construction and development.
4. Implement and enforce cooperative plans between loggers, town officials, and landowners to prevent erosion and sedimentation during logging operations, and ensure that the land is left neat and without brush piles that create a fire hazard.

Goal 6

To base plans for development projects and land use in Goshen on the carrying capacity of our natural resources.

Policies

1. Require a low density of development in areas of town where slope, soils, or other natural features make the land less suitable for development.
2. Choose land that has natural drainage and suitable soils and slope for any intended development.
3. Ensure that septic systems are installed only where there are suitable conditions and the septic systems will not leach into ground water, streams, lakes, ponds, or wetlands.

Goal 7

To minimize the impact of development projects on our natural resources.

Policies

1. Save natural vegetation and trees whenever possible, both during and after all development projects.
2. Plan roads to fit the contour of the land, avoiding stretches of steep land and wet areas.
3. Keep the width of the travel surface of roads, especially when paved, to a minimum to reduce storm water runoff.
4. Require that all development, including grading, clearing, and construction of driveways, shall provide for the retention of native topsoil, stabilization of hillsides, prevention of erosion, and prevention of consequent sedimentation of streams and watercourses.
5. Require that stormwater discharge from a site, after development, shall not exceed pre-development levels and that existing drainage patterns will not be altered in a manner that causes adverse impact on neighboring properties, town highways, or surface waters.
6. Require that plans for development on any type of slope must include provisions to avoid erosion of the shallow soil that remains after trees and stumps are removed.

Goal 8

To prohibit scattered or premature subdivision or development of land.

Policies

1. Work within the Planning Board to thoroughly research and evaluate each subdivision proposal to ensure that the town's prohibition of scattered or premature subdivision of land (as defined in the earlier section "Good Land Use Planning Practices") is observed.
2. Ensure that there will be no excessive expenditure of public money to supply required services for any new development.
3. Discourage development in the underdeveloped portions of the community until road accesses and other town services are upgraded to accommodate a higher density without placing an increased tax burden on our current residents. (Also see Chapter 6, "Roads and Transportation," in this Master Plan.)

Chapter 5

Natural and Critical Resources

A basic issue that should be considered when examining growth and development in Goshen is the management and preservation of natural and critical resources. This chapter provides some information on the natural resources that exist in Goshen, and discusses some methods by which these resources can be managed and protected.

Inventories of Natural and Critical Resources

The two tables that follow provide a partial inventory of the natural and critical resources in Goshen. The first table lists natural and scenic areas, while the second table lists major bodies of water. The data in both tables is largely based on information from the USDA Soil Conservation Service.

Partial Inventory of Natural and Scenic Areas in Goshen			
Name/Identity of Area	Location	Present Use	Description
Goshen Brook	Off Route 10	Wooded	Beautiful wetland area.
Chandler Hill	Off Center Road	Wooded	Intermediate mountain with view of surrounding countryside.
Ledges west of the old Crane farm	One-half mile west of village	Woods	Ledge on hill west of Sugar River. Overlooks Mount Sunapee.
North Goshen-Sunapee Line	Brook Road	Woods and open fields	Beautiful view of north and west overlooking Wendell Valley to Croydon Range and Mount Ascutney.
Gunnison Brook	Along Brook Road	Public and private	Beautiful babbling brook, trout stream, rocks.
South Branch of the Sugar River	Along Route 10, passing through the center of Goshen	Public and private	Scenic waterway, flowing very close to the downtown area of Goshen.
Mill dam and waterfall	Junction of Route 10 and Lear Hill Road	Private	Year-round natural dam and waterfall on Sugar River. Swimming pool, beautiful rocks. Could be developed into a nice area.

Partial Inventory of Natural and Scenic Areas in Goshen			
Name/Identity of Area	Location	Present Use	Description
Chimney Rock and Elephant Rock	Off Province Road	Private	Unusual geological features with historic interest
Mount Sunapee – Pillsbury ridgeline	Newbury to Goshen and Washington	Public and private	Scenic ridgeline with recreational trail along ridge from top of Mount Sunapee to Pillsbury State Park, for hiking, skiing, and wildlife observation.
Williamson Park	Adjoining Gunnison Lake, off Route 31	Public	Picnic area and boat launch.

Inventory of Major Lakes in Goshen		
Name of Water	Statistics	Description
Rand Pond	Area: 49 acres Length: 1.1 miles Elevation: 1254 feet Average Depth: 12 feet Maximum Depth Sounded: 25 feet	Color: Colorless Bottom: 5% gravel, 80% muck, 10% rock, 5% sand Emergent Vegetation: Scant Submerged Vegetation: Common Shoreline: 10% rocky, 89% wooded, 1% meadow
Gunnison Lake	Area: 96.2 acres Length: 4100 feet Elevation: 1232 feet Average Depth: 19-20 feet Maximum Depth: 44 feet	Color: Colorless Bottom: Mostly sand and silty sands (very little organic matter). <i>Note:</i> Site was cleared, but had stumps when construction ended. These will decay, however, leaving the bottom noted above. Emergent and Submerged Vegetation: Difficult to predict at this point, although there will be some. Shoreline: Nearly all wooded; some open.

In addition to the scenic areas and major bodies of water listed in the two tables above, Goshen has many scenic vistas and many small ponds and brooks. Preservation and protection of all of these natural resources is important to the quality of life in Goshen.

The Goshen Conservation Commission is currently preparing an inventory of natural resources in Goshen.

Management of Natural and Critical Resources

To manage and preserve Goshen's natural and critical resources, growth and development should occur only in areas that are capable of supporting it environmentally. Expense to taxpayers should also be a concern.

While the principal value of open land derives from its scenic and recreational importance, it should be kept in mind that open space land also provides economic value to the community. Recent studies conducted by the University of New Hampshire Cooperative Extension in a variety of New Hampshire communities have shown that town revenues from open space land consistently exceed expenditures for those lands, often by a very wide margin. This is true even for open space land that is enrolled in the state's Current Use program. In contrast, revenues from residential land use consistently fall short of the town's expenditures for residential use. Thus open space can be an economic asset that contributes to the stability of the community tax rate.

Chapter 4 of this Master Plan, "Land Use and Development," points out that much of the land in Goshen is unsuited to development for such uses as homes, roads, commercial buildings, and so on. These areas include land with slopes over 15 percent, wetlands, water recharge areas, and flood hazard areas.

In the interest of maintaining the rural character of the town, it is a good idea to preserve as much prime agricultural land as possible, instead of converting such land into building lots. Note that prime agricultural land includes forest land.

Prime agricultural land is defined as land that is best suited for producing food, feed, forage, fiber, and oilseed crops. The land can also be cropland, pasture land, forest land, and the like. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern methods.

Those places listed in the two tables above, "Partial Inventory of Natural and Scenic Areas in Goshen" and "Inventory of Major Lakes in Goshen," must be protected. In addition, those places listed in the table "Partial Inventory of Historic Areas in Goshen," which was presented in Chapter 1, "Historical Preservation," must also be protected.

The town must conserve these lands, not only because of potential health and safety problems if these lands were developed, but also because they are scenic and are recreationally important.

Another way to maintain the rural character of the town is to provide Scenic Road designations when appropriate public support exists. New Hampshire statutes allow the local establishment of Scenic Roads in order to protect the scenic quality of the roads. Designation as a Scenic Road means that repair, maintenance, and reconstruction work to the roadway should not involve the cutting of trees with a circumference of 15 inches or more at a 4-foot height or the tearing down of stone walls without permission. If a town desires, it may impose different or additional

provisions with respect to Scenic Roads. For example, it could provide protection for trees with circumferences that are smaller than the 15 inches specified by the state statute.

It should be remembered that Goshen's natural setting is one of its main attractions for recreation. It is extremely important that we place an emphasis on preserving any points of natural beauty, both to ensure that future construction does not strain town services and to ensure our future attractiveness for residents and visitors alike.

The responsibility of protecting Goshen's critical resources lies with the individual landowner, as well as with the community.

Open Space Protection Techniques

We should use whatever methods are available, including acquisitions, easements, and land use management controls, to ensure the protection of our critical resources. In some cases, the town, or an agency of the town, such as the Conservation Commission, acquires land from a private owner, either by a sales arrangement or a donation arrangement. In other cases, the landowner retains ownership or use of the land, but provides for public access and conservation. In yet other cases, a non-profit entity such as a land trust acquires the land and holds the land for the benefit and enjoyment of the entire community.

In most methods of open space protection (except when the land is purchased outright at full market value), the landowner can receive tax benefits through the land transfer. In all cases, the result of the transfer is that the land will be properly managed beyond the lifetime of the owner.

The simplest, most direct, and most permanent method for protecting open space is the outright transfer of land, either through sale or donation, from a private citizen to a town or governmental agency. The town can also purchase land through an installment-buying plan, in which the owner remains on the land and continues to use it, but the town can relieve the owner of local property taxes. Another strategy that the town can use is to purchase land and resell some portion of it that is most suitable for development, while retaining and protecting the rest of the land as permanent open space.

In arrangements such as a Life Estate or a Purchase and Leaseback arrangement, a landowner can donate or sell a piece of land, but retain or lease the right to use all or part of the land, subject to appropriate restrictions on land use.

Transfers of land may also be restricted through easements or reverter clauses. The underlying principle that allows for restricted transfer is that ownership of land involves a "bundle of rights," such as the right to farm, cut wood, build on the land, or bequeath the land. It is also the right of the owners to put restrictions on the future use of their land that may be binding forever.

An easement conveys a right, privilege, or advantage in the use of a particular piece of land apart from the ownership of the land itself. The public purpose might not require easements over

the total land, but would be satisfied by holding a few strategic areas, such as strips along the sides of streams or parcels of farmland.

A reverter clause is a stipulation included in a donation of land or in an easement that insures that the conditions placed upon the transfer by the grantor will be honored.

Restricted transfers of land are perhaps the easiest way for landowners to preserve the integrity of their old homestead even after they sell it. It is also an easy way for the town to encourage protection of open space and other critical areas.

Land can also be preserved through acquisition by a conservation land trust. A conservation land trust is a private, non-profit service entity, yet it is also a “public trust,” since its lands are held for the benefit and enjoyment of the entire community. Similarly, a community land trust can acquire land for the public benefit. A community land trust is a non-profit corporation. Once land is acquired by a conservation land trust or a community land trust, it is generally held forever by the trust and is subject to conditions written into the trust.

Finally, the town of Goshen could preserve land and at the same time generate revenue for the community by acquiring land for use as town forests.

Assets

There is currently a lot of open space in Goshen. We have not yet reached the development stage where open space is a luxury. Most people in Goshen are oriented toward the outdoors and thoroughly enjoy being able to walk through open woods and fields.

There is a natural playground potential in Goshen. The numerous brooks and hills allow us to have close-to-home recreational opportunities.

We now have local control of Gunnison Lake. Through a lease agreement with the New Hampshire Water Resources Department, Gunnison Lake has been placed under the administration of the Goshen Conservation Commission.

The town is fortunate in that Pillsbury State Park and the adjoining Jessie Barton Memorial Forest are preserved as conservation lands. This provides a guaranteed natural open space for the future. It would be desirable if adjoining land in Cherry Valley (and along Mountain Road) could be added to this preserved open space.

The town does not have a municipal water system. Each family depends on being able to dig or drill for fresh, clean water on their own property. Thus far, community members have had the luxury of being able to do this without interfering with their neighbors’ intentions or with the town’s intentions for land use.

Until now, air quality in the community has been excellent. Contributing factors include the absence of heavy industry, low density of population, and Goshen’s distance from cities.

There are several scenic vistas in Goshen. Some of these might be improved even more with a modest amount of time and money being invested by the town.

Wildlife constitutes another important asset in Goshen. Fish and wildlife populations have economic importance, because they provide hunting, fishing, and nature study opportunities. Wildlife and its habitat provide an index to the quality of life for the people of Goshen.

Numerous detailed map overlays have been produced to help determine locations of various natural and critical resources. A map overlay is available for each of the following:

- Open land wildlife suitability
- Woodland wildlife suitability
- Soils subject to flooding
- Agricultural land capability
- Slope
- Wetlands
- Rivers and streams
- Aquifers

It is hoped that these maps will help to increase community awareness of important natural and critical resources that could either be managed or conserved for the benefit of the town. Refer to Appendix B for information on maps of Goshen.

Problems

The town must balance the public's desire for clean air and water, along with the desirability of preserving and conserving natural resources, with the desire of some individuals or businesses to "develop" private lands.

A proliferation of individual sewage disposal systems may be straining the soil's natural abilities to safely cleanse wastewater. It seems likely that a future public sewage system may be necessary for downtown Goshen, as well as at Rand Pond.

Heavy use of road salt or other de-icing chemicals in the winter months may be endangering private wells, wetlands, other water resources, and roadside trees.

The town must ensure that gravel excavation and transportation activities in town do not adversely affect air quality, scenic vistas, or the natural beauty of the region.

The town should use whatever methods are available, including acquisition, easements, and land use management controls, to ensure the protection of our open spaces and critical resources.

Goals and Policies

Goal 1

To acquire open space land that is particularly suitable for recreational uses or that contains critical resources that should be protected for the common good.

Policies

1. Work with the Conservation Commission and other groups to acquire land through gift or purchase.
2. Restrict the use and development of certain land by acquiring conservation easements, deed restrictions, or development rights.

Goal 2

To preserve and protect existing open space land.

Policies

1. Provide for open space preservation by encouraging and planning for permanent open space in the design and layout of all new development projects.
2. Through zoning and other land use regulations, control development to minimize its impact on the natural and scenic character that presently exists throughout most of Goshen.

Goal 3

To protect Goshen's natural and critical resources, so that they will continue to contribute to our economic, aesthetic, and physical well-being.

Policies

1. Maintain and periodically review an inventory of our natural and critical resources and work for their protection.
2. Develop and implement natural and critical resource conservation ordinances.
3. Determine what steps are necessary to establish the highest possible water quality at Gunnison Lake and Rand Pond and see that they are followed.
4. The Conservation Commission should work with appropriate state and regional agencies to develop a water resources management and protection plan, or "local water plan," for Goshen.
5. Provide Scenic Road designations when appropriate public support exists.

6. Require sound mining and excavation practices, including the protection of our land, water, and air quality.
7. Work with the New Hampshire Department of Environmental Services, the Health Department, and other agencies to carry out proper guidelines in the installation and maintenance of septic systems.
8. Work with the town and state Highway Departments to ensure that the use of road salt or other de-icing chemicals in the winter months does not adversely affect drinking water, any other water or wetland resources, or roadside trees.
9. Monitor the excavation and transportation of sand and gravel in town to ensure that our air quality is not adversely affected by these activities.

Goal 4

To ensure that agricultural operations are in keeping with the rural character of our town.

Policies

1. Inventory all agricultural lands and open spaces in Goshen.
2. Make a concerted effort to protect our agricultural land. Cluster subdivision and conservation easements are examples of potential tools for accomplishing this.
3. Prohibit the development of “agribusiness” (factory farming) or any high-density animal farming in town.

Chapter 6

Roads and Transportation

A sizable percentage of the money that Goshen appropriates yearly for town use (other than school and county taxation) goes for our highways. Despite the critical importance of our roads to our community and the high cost that is required to maintain them, long range plans have not been formulated for maintaining and updating the road system.

In order to keep our highway expenditures down, as well as to ensure adequate fire protection, we should allow growth to take place only where roads are adequate to support the growth. We should, in most cases, prohibit development on Class VI roads. The Class VI roads should be kept passable as fire lanes and available for public recreation. However, these roads are not, and should not be, maintained by the town. Growth, if allowed in these areas, would eventually result in the town facing the issue of accepting the responsibility for road maintenance, thus placing an increased tax burden on landowners.

It is imperative that the Planning Board should enforce the town's subdivision regulations that specify road design requirements and that require new subdivisions to conform to town standards. The town standards for road design are currently published in the "Town of Goshen Subdivision Regulations." Traffic problems must not be allowed to develop in Goshen as a result of a lack of good subdivision control and land use. It is crucial that each proposed subdivision be scrutinized to make sure that subdivision regulations are followed.

Highway Classification System

New Hampshire roads are classified into seven classes, depending on the type of road and whether it is the state or the town that has responsibility for constructing and maintaining the road.

The main roads in Goshen are Route 10, Route 31, and Brook Road. These roads, which are the most heavily traveled roads in town, are maintained by the state. The town of Goshen has no responsibility for construction or maintenance of these roads.

The remaining roads in Goshen are legally classified either as Class V roads or as Class VI roads:

- Class V roads are regularly traveled highways that the town has the duty to maintain regularly. The Class V town road system in Goshen is composed of both paved and gravel roads.

- Class VI roads are public rights-of-way for which the town has no duty for maintenance, nor liability for accidents (RSA 231:50). Class VI roads include all highways discontinued as open highways and made subject to gates and bars, as well as all highways that have not been maintained and repaired by the town in suitable condition for travel thereon for five successive years or more (RSA 229:5, VII).

A highway map of Sullivan County is available at the Town Hall. This map shows the classification of all roads in the state and town highway systems in the town of Goshen. Refer to Appendix B for information on maps of Goshen.

Inventory of Town Highways

The New Hampshire Department of Public Works and Highways retains records on the legal status of town highways for the purpose of allocating Town Road Aid Funds. According to their records, Goshen’s town road system contains 14.46 miles of Class V roads and 2.66 miles of Class VI roads.

This section presents two charts that give information about the town road system. These charts were designed for use by the town boards and the general public.

The charts list the town’s highways alphabetically by name and are designed to include important information about each highway. The first chart provides general statistics, such as the length, width, and surface type of each road. The second chart is designed to list legal status statistics about each road. An explanatory key precedes each chart.

General Statistics for Goshen Highways

The following table provides an explanatory key for the chart “Goshen Highway Statistics.”

Explanatory Key to the Chart “Goshen Highway Statistics”	
Chart Element	Description of Code
Name	The common name for the highway. If a highway has more than one common name, the secondary names are listed below the primary name.
Class	The appropriate class is marked as V or VI.
Section	Describes the location of each section to the Fire Department. The grid will be keyed. (This information is not yet available.)
Length	Length of the highway, expressed in miles.
Width	Width of town right-of-way, expressed in feet.

Explanatory Key to the Chart “Goshen Highway Statistics”	
Chart Element	Description of Code
Surface Type	The following letter codes are used for the surface type: BC = Bituminous Concrete BP = Bituminous Penetration G+D = Graded and Drained GR = Gravel MIX BIT = Mixed Bituminous PRIM = Primitive STG = Surface Treated Gravel UNIMP = Unimproved
Bridges and Culverts	BR indicates a bridge. CU indicates a culvert.

The following chart provides statistics for each highway in the Goshen town road system. Missing information should be collected and entered into this chart

Goshen Highway Statistics						
Name	Class: V or VI	Section	Length	Width	Surface Type	Bridges & Culverts
Ball Park Road	V				GR	CU/BR
Brickyard Road (Farr Road)	V				GR	CU
	VI					
Center Road	V				GR/BP	CU
Cross Road	V				GR	CU/BR
DeRo Road	VI				GR	CU/BR
Ekberg Road	V				GR	CU
Four Corners Road	V				GR	CU/BR
Lear Hill Road	V				BP	CU/BR
Messer Road	V				GR	CU
Mountain Road	V				GR	CU
	VI					
Mummery Road East	V				GR	CU/BR
Mummery Road West	V				GR	CU/BR
Page Hill Road (Trudeau Road)	V				GR	CU
Province Road	V				GR/BP	CU
Rand Pond Road	V				GR	CU
Sholes Road	V				MIX BIT	CU
Stagecoach Road (Lempster Coach Road)	V				GR	CU/BR
	VI					

Note that for roads classified as both V and VI, the town maintains the portion of the road that is Class V, but not the portion classified as VI. In addition, some Class V and Class VI roads end as trails. The town has no responsibility of any sort for these trails.

Legal Status Statistics for Goshen Highways

The following table provides an explanatory key for the chart “Goshen Highway Legal Status Statistics.”

Explanatory Key to the Chart “Goshen Highway Legal Status Statistics”	
Chart Element	Description of Code
Record	The following codes are used to indicate the information contained in the record: C = Complete layout of highway I = Incomplete layout N = No layout
Year and Status	Date of layout, together with the following information: ALT = Alteration ALT POR = Alteration of Portion DIS = Discontinued EXT = Extension Wid = Widened
Book Page	“B” indicates that the book is located in the Town Clerk’s office.
Return	The code “YES” indicates whether a return was ever entered in town records and accepted by the town.

The following chart is designed to provide legal status statistics for each highway in the Goshen town road system. This chart should be filled out when the information has been compiled.

Goshen Highway Legal Status Statistics					
Name	Class: V or VI	Record	Year and Status	Book Page	Return
Ball Park Road	V				
Brickyard Road (Farr Road)	V VI				
Center Road	V				
Cross Road	V				
DeRo Road	VI				
Ekberg Road	V				
Four Corners Road	V				
Lear Hill Road	V				
Messer Road	V				

Goshen Highway Legal Status Statistics					
Name	Class: V or VI	Record	Year and Status	Book Page	Return
Mountain Road	V				
	VI				
Mummery Road East	V				
Mummery Road West	V				
Page Hill Road (Trudeau Road)	V				
Province Road	V				
Rand Pond Road	V				
Sholes Road	V				
Stagecoach Road (Lempster Coach Road)	V				
	VI				

Assets

Our three main roads, Route 10, Route 31, and Brook Road, are the most heavily traveled roads in town. The state, rather than the town, has the responsibility for construction and maintenance of these roads.

The state also takes responsibility for inspecting bridges on town roads and notifying the town if a bridge needs to be repaired or replaced.

The road system that is currently in place in the community would appear to be able to support any transportation needs for the next 6 to 10 years, provided that orderly growth is maintained and that roads are brought up to town standards (as funding permits). The town standards for road design are currently published in the “Town of Goshen Subdivision Regulations.”

There are several scenic vistas along the highway system that add to the aesthetics of the community. These should be taken into consideration if any additional construction work or building is anticipated.

Because Goshen is not serviced locally by airport or railroad facilities, it does not have to allow for heavy use of its roads to accommodate passenger traffic. Local residents can use the commercial airports that are located in Lebanon, Keene, and Manchester. AMTRAK passenger rail service is available at Claremont Junction, in Claremont.

The nearest access to the Interstate highway system is 20 miles from Goshen. Residents can access Interstate highway I-89 via Routes 10 and 11. Interstate highway I-91 is accessible via Routes 10 and 103.

Problems

Road maintenance and improvement in Goshen require a very high level of funding by the town. Even without including the cost of purchasing any major piece of highway equipment, the town has devoted about 30 percent of its budget to the highway department in each of the last three years. This indicates that the community needs to spend highway funds very wisely.

Because it is very costly to upgrade town roads, it is essential that an explicit written plan be developed for upgrading existing town roads in an orderly fashion. The town also needs to develop an explicit plan for upgrading bridges in accordance with the state's identification of bridges that need to be repaired or replaced.

There are several historic problems related to the maintenance and repair of our roads. First, because of methods that were used in the past for constructing road foundations, road surfaces have been unable to stand up to changing weather conditions and traffic volume. The town needs to closely monitor any new road foundation work.

Second, some culverts were improperly constructed and this has led to erosion of road foundations, road surfaces, and bordering property. To facilitate future culvert maintenance, the Road Agent should keep a log of culvert locations and size requirements for run-off, as is currently done. The need for additional culvert placements should also be logged.

To help ensure that roads, culverts, and bridges are well designed and maintained, the town should use the services of an engineer with highway design expertise, such as the Sullivan County engineer. Such an individual should assist in reviewing the current standards for town roads and in recommending ways in which the standards should be updated. Further, this individual should help the town in evaluating the current condition of existing roads and culverts, and in drafting a prioritized strategy for bringing town roads up to town standards.

The town should also work to ensure that existing roads are not damaged by excessive traffic, heavy vehicles, or traffic resulting from improper development of the land that adjoins them.

Logging, gravel, or other heavily loaded truck traffic can adversely affect road quality. When permitting logging operations, gravel excavations, and the like, the town must consider the possible damage and expense to town highways. All such approved operations should be subject to seasonal regulations and should be closely monitored to assure that such traffic does not exceed the posted town weight limits or violate seasonal restrictions.

Because of the potential for legal disputes and liability with respect to local roads, the town should collect information on the location, width, history, legal status, and construction plans for every road in town. This information should be organized in a file system in the town office, with a separate file folder for each road. The two charts presented earlier in this chapter provide a starting point for this effort.

The fact that Goshen is not on a regularly scheduled bus line means that the town does not have access to a public transportation service. This creates a problem for our high school students

who must travel outside of town, and for any residents who do not wish to use, or do not have access to, private transportation vehicles.

Goals and Policies

Goal 1

To develop and implement a Capital Improvements Plan for repairing and upgrading existing roads, culverts, and bridges.

Policies

1. Establish a listing of town road section(s), culverts, and bridges that should be brought up to town standards in the next 6 to 10 years, and prioritize this list so that work can be planned and implemented in an orderly fashion. This work should be done with the assistance of an experienced highway engineer, such as the Sullivan County engineer.
2. Prepare a highway drainage plan for town roads.
3. Bring town roads up to town standards as soon as funds allow for this to be accomplished.
4. Include funds for repairing and upgrading the highway system in the Town Budget each year, and specify the amount of this money that is to be expended that year and the amount that is to be put into a Capital Reserve Fund for use in the future.

Goal 2

To ensure that Goshen roads are designed to meet modern road engineering standards.

Policies

1. Use the services of an engineer with highway design expertise, such as the Sullivan County engineer, to assist in the design of any new road construction or any major improvements to existing roads.
2. Protect the roadside environmental quality through appropriate design of new roads and repair of existing roads.
3. Monitor any new road foundation work to make sure it will stand up to changing weather conditions and projected traffic volume.
4. Keep the width of the travel surface of roads, especially when paved, to a minimum to reduce storm water runoff, to reduce construction and maintenance costs, and to preserve the natural features of the environment.

Goal 3

To discourage undue expenditure by the town for repair, improvement, or construction of roads.

Policies

1. Identify and list any town roads that are unable to support increased traffic because of their present condition. Draw up another list of roads that are able to support a minor traffic increase.
2. The Planning Board should discourage growth in areas that are serviced by roads that are unable to support increased traffic, as well as in any other areas that they determine are unsuitable.
3. Disapprove development plans if significant improvements to an existing town road are necessary to service a new development, or approve such plans only if the applicant volunteers to bear the entire cost of such improvements.
4. Do not allow subdivision roads to become an additional burden and expense to the town.
5. Keep all Class VI roads as Class VI roads, so that the town is not responsible for maintaining them. Any minimal maintenance (such as for access for forest fire equipment) should be done using the state “Emergency Lane” statute (RSA231:59-a). The status of Class VI roads should be recorded in town and state records.
6. Adopt a zoning ordinance or subdivision regulation that, in most cases, prohibits subdivision for building purposes on Class VI roads.
7. Adopt a zoning ordinance that, in most cases, prohibits buildings on Class VI roads.
8. The Board of Selectmen should adhere to a Class VI road policy that, in most cases, prohibits buildings on Class VI roads.

Goal 4

To deter any misuse of the town road system, including misuse that occurs through improper or excessive development of the land that adjoins it.

Policies

1. Continue to apply current driveway regulations that prohibit hazardous driveways and that require that drainage from driveways should not have an adverse affect on town roads.
2. Prohibit new land development that will place an inordinate demand on town roads.
3. Monitor gravel, logging, and other heavy vehicular traffic through town to ensure that it does not damage the town roads. Enforce the state statue that provides that the owners of

any vehicles that cause damage to town roads are liable to the town for the cost of repairs (RSA 236:39 and 236:9 - :12).

4. Monitor the volume of traffic through town to ensure there is no increase that causes a clogging effect or a deterioration of the town road system.

Goal 5

To promote efficient use of Highway Department manpower and equipment.

Policies

1. Work to reduce the high cost per mile of road maintenance.
2. Set up, maintain, and use a filing system for town highways that includes information such as the class, length, width, surface type, bridges, culverts, legal status, history, construction plans, and repair and maintenance data for each town road. (The charts that were presented earlier in this chapter provide a starting point for this effort.)
3. Encourage the Road Agent to attend public works training programs at town expense.

Appendix A

Community Characteristics

This appendix provides some general background data about Goshen, including geographic information and statistics on population, housing, and economic factors. The statistical information is based on actual census data from the U.S. Census of 1990 and 2000 and on estimates from the New Hampshire Office of State Planning for the years 1996, 1998, and 1999. For all measures, the latest available data is presented. To obtain updated or additional information about Goshen, you can refer to the New Hampshire Office of State Planning Web site, at www.state.nh.us/osp.

Geographic Information

Location

Goshen is located in Sullivan County in southwest New Hampshire. It is bordered on the north by Sunapee and Newport, on the south by Lempster and Washington, on the west by Unity, and on the east by Newbury.

Topographical Characteristics

Goshen lies between Sunapee Mountain on the east and Lear Hill on the west. The South Branch of the Sugar River runs through the community, and Blood Brook and Gunnison Brook join it as it runs north toward Newport.

Area

Goshen occupies a total of 22.53 square miles or 14,420 acres.

Population Statistics

The U.S. Census reports that the Goshen population in 2000 was 735. Historical data from the U.S. Census gives the following counts of population starting with the 1800 census.

Year	Population	Year	Population	Year	Population	Year	Population
1800	383	1850	659	1900	345	1950	356
1810	563	1860	576	1910	329	1960	351
1820	687	1870	507	1920	285	1970	395
1830	772	1880	511	1930	255	1980	549
1840	779	1890	384	1940	352	1990	742

Notice that population increased until it reached an all-time-high of 779 in 1840, and then declined until it reached a low of 255 in 1930. Since that time, population increased until 1990 and then dipped to its current figure of 735.

The tables that follow give the age of Goshen residents by age group. The age categories used by the U.S. Census are different for 1990 and 2000, and therefore a separate table is presented for each of these two census years.

Age of Population	1990
5 years and under	62
6 to 17 years	141
18 to 29 years	85
30 to 59 years	324
60 to 69 years	79
70 years and over	51
Total	742

Age of Population	2000
5 years and under	38
6 to 19 years	163
20 to 34 years	100
35 to 44 years	137
45 to 59 years	147
60 to 74 years	107
75 years and over	43
Total	735

Using the above data, a direct comparison can be made between the years 1990 and 2000 for three groupings of population: those of age 5 and under, those of age 6 to 59, and those of 60 or over.

Age of Population	1990	2000
5 years and under	62	38
6 to 59	550	547
60 years and over	130	150
Total	742	735

The above table shows a distinct shift in the age of the Goshen population between 1990 and 2000. The number of children of 5 years and younger decreased substantially, while the number of people of 60 years or older increased substantially. The U.S. Census reports that in 2000 the median age of the Goshen population was 40.3 years.

Housing Statistics

The two tables below indicate that the number of housing units in Goshen far exceeds the number of households. This discrepancy is due primarily to the fact that many housing units in town are used only on a seasonal basis, and the U.S. Census does not include the seasonal occupants in the count of Goshen households. The count of households is based only on year-round Goshen residences.

The U.S. Census has not yet reported housing data broken out by types of housing units for the year 2000. Therefore, the two tables below show the most recent estimates from the New Hampshire Office of State Planning (1998 and 1999, respectively, in the two tables) along with the 1990 census data.

Count of Households, by Housing Type	1990	1998
Single Family		246
Multi-Family		8
Manufactured Housing and Mobile Homes		33
Total	270	287

Note: The U.S. Census reports that in 2000 the total number of households in Goshen was 277. Therefore, the 1998 estimates by the New Hampshire Office of State Planning may be inflated.

Count of Housing Units, by Type	1990	1999
Single Family	338	369
Multi-Family	13	12
Manufactured Housing and Mobile Homes	43	56
Total	394	437

Note: The estimates of housing units for 1999 are based on building permits that were issued.

The next table shows the number of housing units that were occupied versus those that were vacant in 1990 and 2000. Housing units that are classified as “vacant” are primarily seasonal units. The U.S. Census reports that in the year 2000, 97 of the 110 vacant units in Goshen were for “seasonal, recreational, or occasional use.”

Count of Occupied Housing Units	1990	2000
Occupied	263	277
Vacant	131	110
Total	394	387

The next table focuses on the occupied housing units and shows how many of these units were occupied by their owners and how many were occupied by renters.

Occupant Status of Occupied Housing Units	1990	2000
Owner-Occupied	236	249
Renter-Occupied	27	28
Total	263	277

Economic Statistics

Economic data is not yet available from the U.S. Census for the year 2000. Therefore the next table compares 1990 per capita income data with the latest estimate that is available from the New Hampshire Office of State Planning (1996).

Per Capita Income	1990	1996
Town of Goshen	\$12,847	\$18,011
Sullivan County	\$12,935	\$22,914
State of New Hampshire	\$15,959	\$26,418

According to the estimates of Per Capita Income from the New Hampshire Office of State Planning, Goshen ranked 110th out of the 234 municipalities in New Hampshire in 1996 and 6th out of the 15 municipalities in Sullivan County. Sullivan County ranked 9th out of the 11 counties in New Hampshire in 1996.

Commuting Patterns	1990
Mean Travel Time to Work (in minutes)	24.04
Percent of Residents Working in Goshen	15.7%
Percent of Residents Commuting Elsewhere	84.3%
Percent of Goshen Workforce Commuting In	40.2%

As the above table shows, in 1990 less than 16 percent of working Goshen residents worked in Goshen. About half of working Goshen residents commuted to either Newport or Claremont, with other workers commuting as far as Keene, Concord, Hanover, and Lebanon.

Appendix B

Maps and Other Resources

This appendix lists resources that the Planning Board used in preparing the 2002 Goshen Master Plan. Throughout this document, there are references to these resources, and town board members are urged to consult these resources when making decisions on planning issues. The maps and other publications that are listed below are available at the Goshen Town Hall, where any resident can inspect them. It is anticipated that updated maps will be procured and regularly updated.

Maps

Goshen, NH - Base Map Showing Conservation Lands and Sites on National Register of Historic Places. Prepared by the Upper Valley Lake Sunapee Regional Planning Commission, 1999.

Drinking Water Resources and Potential Contamination Sources for the Town of Goshen. Prepared by the New Hampshire Department of Environmental Services, December 18, 2000. The map also identifies the locations of stratified-drift aquifers. The map is accompanied by a document, keyed to the map, which lists potential contamination sources and locations in Goshen where public drinking water is supplied.

Stratified-Drift Aquifers, Town of Goshen. Prepared by the Upper Valley Lake Sunapee Regional Planning Commission, 1998.

Altitude of Water Table, Data Collection Locations, Concentration of Major Chemical Constituents, and Surficial Geology for Stratified –Drift Aquifers in the Lower Connecticut River Basin, Southwestern New Hampshire, Town of Goshen; and Saturated Thickness and Transmissivity of Stratified Drift in the Lower Connecticut River Basin, Southwestern New Hampshire, Town of Goshen. Prepared by the New Hampshire Department of Environmental Services, Water Resources Division, in cooperation with the U.S. Department of the Interior, Geological Survey, 1992.

General Highway Map of Sullivan County, 1962, Revised 1987.

Soil Types, Town of Goshen. Prepared by the Upper Valley Lake Sunapee Regional Planning Commission, 1997.

Soil Survey Map of Goshen, New Hampshire. Prepared by Sullivan County Conservation District in cooperation with the U.S. Department of Agriculture, Soil Conservation Service, 1976. The following map overlays are available:

- * Slope Map
- * Agricultural Land Capability
- * Soil Limitations for Dwellings
- * Soil Limitations for Local Roads, Streets, and Parking Lots
- * Soil Limitations for Septic Effluents
- * Wetlands
- * Soils Subject to Flooding
- * Probable Sources of Sand & Gravel
- * Inventory of Existing Natural and Man-Made Ponds
- * Stream Patterns
- * Suitability for Woodland Wildlife
- * Suitability for Open Land Wildlife

Other Publications

Soil Survey of Sullivan County New Hampshire. Prepared by the USDA Department of Agriculture, Soil Conservation Service, in Cooperation with New Hampshire Agricultural Experiment Station, 1983. Updated survey data is available at the Newport office of the University of New Hampshire Cooperative Extension.

New Hampshire Planning and Land Use Regulation, 2000-2001 edition. Issued by the New Hampshire Office of State Planning.

Ground-Water Resources in New Hampshire: Stratified Drift Aquifers (Water-Resources Investigations Report 95-4100). Prepared by the U.S. Geological Survey in cooperation with the New Hampshire Department of Environmental Services, Water Resources Division, 1995.

Geohydrology and Water Quality of Stratified-Drift Aquifers in the Lower Connecticut River Basin, Southwestern New Hampshire (Water-Resources Investigations Report 92-4013). Prepared by the U.S. Geological Survey in cooperation with the New Hampshire Department of Environmental Services, Water Resources Division, 1994.

History of Goshen, New Hampshire, by Walter R. Nelson, published in 1957, and republished, with the author's handwritten notes, in 1984. Published by the Goshen Historical Society and the Town of Goshen.

A Supplement to the History of Goshen, New Hampshire, by Doris Nelson Newman and Harry W. Wassier, edited by Ronald O. Whiting. Published by the Goshen Historical Society, 1976. This is an update to Walter R. Nelson's *History of Goshen, New Hampshire.*

Open Space for New Hampshire, a Toolbook of Techniques for the New Millennium, prepared by Dorothy Tripp Taylor, New Hampshire Wildlife Trust, 2000.

Web Sites

New Hampshire Department of Environmental Services: www.des.state.nh.us.

New Hampshire Office of State Planning: www.state.nh.us/osp.

Upper Valley Lake Sunapee Regional Planning Commission: www.uvlsrc.org.

