Town of Cornish, New Hampshire

Master Plan

April 2, 2009

Prepared by:

Town of Cornish
Planning Board

With assistance from:
Upper Valley Lake Sunapee
Regional Planning Commission
30 Bank Street
Lebanon, NH 03766

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I. INTRODUCTION TO THE MASTER PLAN

Master Plan Adoption Statement

The Planning Board of the Town of Cornish, New Hampshire, in accordance with the provisions and procedures of RSA Chapter 675:6, including conducting a public hearing on April 2, 2009, does hereby adopt the Town of Cornish Master Plan of 2009. The goals and recommendations contained in this plan are designed to aid the Planning Board and other town boards in the performance of their respective duties for the purpose of guiding and accomplishing the coordinated and harmonious development of the Town of Cornish, New Hampshire.

Date Adopted: April 2, 2009

Cornish Planning Board:

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Chair

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Prelude

This Master Plan is the result of the Planning Board expending considerable effort gathering public input in order to prepare a plan which reflects our town's collective vision for the future of our community.

The overall guideline for the future development of our community expressed by the people of Cornish through this Master Planning process is:

Encourage the modest growth necessary to maintain the viability of Cornish as a living, social, working community while protecting and preserving the physical and social landscape. Modest growth will be concentrated around village centers preserving open spaces and natural resources. Local capital will support the agrarian economy by encouraging home-based business and cottage industries that utilize local resources and labor, and contribute to the community's working landscape.

Purpose of Master Plan

The process of developing an updated Master Plan is an opportunity to undertake a comprehensive evaluation of our community's needs and desires as they pertain to the anticipated growth of our town. The overall purpose of the Master Plan is to provide guidelines for the future growth and development of our community. It is a guide for future growth and a tool for public officials and private citizens in decision-making and in the administration of the Cornish Subdivision Regulations. It is a consensus-building planning process which attempts to identify the guidelines for growth of our town as preferred by the townspeople and not just a few individuals. The following Master Plan is based on reports supplied by Planning Board members, other officials and agencies, and on responses and comments developed by questionnaires. An attempt has been made to reflect the consensus viewpoints from these sources concerning the town's past, present and desired future. The goal of this master planning process is to proactively chart a course identifying the desired future of our community. Without this comprehensive planning process, in a relatively short time, Cornish could find it has lost many of the features our townspeople cherish.

Process to Update the Master Plan

In the spring of 2000, the Planning Board unanimously voted to prepare a Master Plan in accordance with the NH Planning Statutes, Chapter 36. At that time, the Planning Board and interested citizens identified the pertinent issues to address and the questions to include in a Community Survey. A Community Survey was prepared and administered in the summer of 2004. Tabulation of the survey results was completed in the fall of 2004. A community workshop was held in November 2004.

Under New Hampshire law (RSA 674:2, 3 & 4), the preparation and adoption of the Master Plan is under the purview of the Planning Board. For each chapter of the Master Plan update, the Regional Planning Commission prepared a draft based on public input for the Planning Board to review and critique. Following this review, the Regional

Planning Commission incorporated the requested revisions. After all the revised draft chapters were completed, they were assembled into an integrated document for the Planning Board's review. The Planning Board conducted a public hearing on the draft Master Plan update on April 2, 2009 and adopted the updated town plan at the end of the public hearing. It is the intent of the Planning Board to update the Master Plan as it perceives conditions are changing which warrant a fresh look at how to address these challenges. As reflected in RSA 674:3, the Master Plan is recommended to be updated every five to ten years to remain current. Future boards have a point of departure for keeping it current in changing times and for dealing with new problems, needs and issues.

Accomplishments Since the Adoption of the 1989 Master Plan

Before we look to the future and the development issues facing our community, it is beneficial to look back and take stock of the accomplishments the town has achieved since adoption of the 1989 Master Plan update. This is not intended to be an exhaustive listing of those accomplishments, but rather a summary of the highlights. Included are:

- Construction of two new Fire Stations;
- Construction of the new Highway Garage;
- Relocation of the Town Offices to an expanded and ADA-compliant facility;
- Repairs and improvements to the Town Hall;
- Adoption of revised zoning, subdivision, and Site Plan Review regulations;
- Strengthening town government practices;
- Creation of a 270-acre Town Forest with recreational trails;
- Completed the Cornish Recreation Education Area;

Priorities for Implementation

The Planning Board's efforts in developing this long range Master Plan have resulted in numerous recommendations on a variety of topics. In an effort to provide some guidance in the intermediate term, the Planning Board has identified the top priorities for implementation of the 2008 Master Plan:

A summary of all goals and recommendations is included in the Master Plan appendices.

Acknowledgments

The Planning Board wishes to acknowledge with gratitude the constructive assistance and input of the following, whose past and present contributions were invaluable in developing the Master Plan and the updates:

- The Cornish Selectboard,
- Questionnaire Respondents,
- Town Officials,
- Community Workshop Participants, and
- Upper Valley Lake Sunapee Regional Planning Commission.

The Cornish Master Plan is based on the views of the town's citizens and local officials. The Upper Valley Lake Sunapee Regional Planning Commission facilitated the master planning process for the Planning Board in the update of the Master Plan to prepare a document that reflects the goals and desires of the Town of Cornish and its citizens

Photo Credits
Cover photos are by the Upper Valley Lake Sunapee Regional Planning Commission. Other photos are by Bill Lipfert.

II. VISION

Land Use
Cornish will be a place where development is concentrated around village centers so that undeveloped and agricultural areas will be preserved. Our identity is tied to our landscape: our wealth of natural, agricultural, and historic resources. However, Cornish's greatest resource is its residents. Land use policies will encourage the modest growth necessary to maintain the viability of Cornish as a living, social, working community while simultaneously protecting and preserving the physical landscape which is so inextricably tied to the character of Cornish.

Economic Development
Businesses that support local resources and people will be promoted. Cornish will support and develop its agrarian economy. Home-based and cottage industries shall predominate the economic landscape in Cornish. Businesses on a scale larger than home-based will be concentrated in Village Zones. Cornish shall strive to identify appropriate new Village Zones and to expand the existing Village Zones in a manner which preserves open space and in avoidance of costly public investments or additional services.

Natural Resources
Open space is one of Cornish's greatest assets. Our agricultural lands, forests, groundwater, shorelines, watercourses, and wetlands will be preserved and protected. Their appreciation of and appropriate use by the public shall be promoted.

Historic Resources
Cornish is perhaps unique in that its history is to a large degree a living and tangible one. These resources shall be preserved and celebrated for the generations to come.

Community Facilities
Existing community facilities shall be used to their fullest potential. Cornish will strive to meet the health and safety

Trinity Church, Chase Street (Route 12A), built in 1808 based on plans of Philip Tabor.

needs of all its citizens, in particular its elderly and its children. Cornish will provide a quality education for its children through twelfth grade. The school will be supported by and will support the greater Cornish community.

Transportation/Communications
Cornish's network of roads and bridges will be maintained in an efficient and organized manner. The safety needs of drivers, cyclists, equestrians, and pedestrians will be met. Cornish's communication and transportation infrastructure will be able to support the needs of its citizens and businesses. Cornish will explore practical public transportation solutions and other alternatives to single-occupancy automobiles.

Policy Considerations

Land Use

- Consider appropriate new Village Zones and consider expanding the current Village Zones to direct new development toward those zones in order to protect and preserve open space.
- Evaluate the impact of an increase in the minimum lot size in the rural zone.
- Insure that the physical character of land can support a proposed use without necessitating the excessive expenditure (for the construction of municipal water or sewer systems, for example) of public funds to support the development.
- Consider the incorporation of a soils-based model in zoning.

Cornish grazing land and residential development with Mt. Ascutney in the background.

Economic Development

- Support businesses, in accordance with allowable uses in the Zoning Ordinance, which use and protect local resources and people and which are in harmony with Cornish's natural, rural, and historic qualities.
- Assist business owners through the zoning/permitting process to facilitate the ability of people to live and work in Cornish.
- Consider appropriate new Village Zones and consider expanding the current Village Zones to accommodate economic growth.
- Explore ways to support an agrarian economy.

Natural Resources

- Identify and map areas of particular natural and aesthetic importance. Use various tools available, from Conservation Zoning to Conservation Easements, to protect these areas.
- Encourage the funding and use of the Conservation Capital Reserve fund in order to obtain lands or easements on lands of particular natural or agrarian importance.
- Update the Natural Resources Inventory.
- Support the New Hampshire Current Use Program
- Protect the quality of groundwater, and protect groundwater from commercial extraction.
- Encourage the use of public spaces such as the Connecticut River boat landing, the Town Forest, and the CREA land.

Historic Resources

- Generate and periodically update a map and inventory of historical and archeological sites in Cornish.
- Continue to protect and use our historic buildings.
- Evaluate the desirability of designating additional scenic roads.
- Continue to protect Town Records.
- Keep Cornish's history alive through tours of historic sites, through the continued integration of local history into school curricula, and by supporting oral history projects, the Cornish Historical Society, and other historical/preservation groups.

George H. Stowell Library on School Street in Cornish Flat.

Community Facilities

- Encourage multiple uses of existing facilities: more community use of the school, CREA land and barn, and the meeting house, for example.
- Improve handicapped accessibility at the George H. Stowell Library.
- Expand current recycling hours/day and days/week.
- Periodically assess the Town's emergency preparedness.
- Continue to review the possibilities for senior housing and/or a senior center.
- Address the use of the elementary school facility in light of declining school enrollment.
- Support the Town website.

Transportation/Communication

- Create a 'Road Book' for Cornish which lists layout information of all Class V roads and which verifies the status of unused roads as closed or Class VI.
- Generate a Road Plan outlining maintenance and upgrades of Cornish's roads, bridges, culverts, and other relevant structures.
- Accommodate non-automotive traffic by considering options which may include widening shoulders along selected roads and ensuring that safe speed limits are posted and enforced.
- Consider a park & ride on Route 120 and Route 12-A.
- Provide an organized list of existing high-speed internet options and encourage the expansion of cable and Digital Subscriber Line (DSL) service throughout the Town. Continue to aggressively monitor cable franchise compliance.

III. LAND USE

Introduction

Existing land use patterns are the physical expression of numerous public and private decisions which have been made in the past; in turn, patterns of existing land use have a substantial impact on the rate, location, and type of future growth. The Land Use section of a community's Master Plan is the one "upon which all the following sections shall be based" (NH RSA 674:2). An understanding of the town's land uses, current zoning, growth trends, natural resources, transportation system and infrastructure is useful to determine the opportunities for and challenges to growth. Using the vision for Cornish as a guide, this chapter sets the outline for the size, location and pattern of the town's future land uses.

This chapter will encourage development patterns that will promote the health, safety, and the general welfare through planning principles, policies and proposed regulations. There are four major considerations which have governed the development of this land use analysis.

Day lilies and buckwheat along Route 12A in Cornish.

Vision for the Future

"Cornish will be a place where development is concentrated around village centers so that undeveloped and agricultural areas will be preserved. Our identity is tied to our landscape: our wealth of natural, agricultural, and historic resources. However, Cornish's greatest resource is its residents. Land use policies will encourage the modest growth necessary to maintain the viability of Cornish as a living, social, working community while simultaneously protecting and preserving the physical landscape which is so inextricably tied to the character of Cornish."

Goals and Objectives

Goal 1: Guide new development in a sustainable pattern of land use that is consistent with the Master Plan Vision.

Goal 2: Encourage a balance of uses that provide for places to live, work and engage in recreational activities through a suitable mix of open spaces and commercial, residential and small-scale cottage industrial growth.

Goal 3: Enhance the town's main transportation corridors by improving their appearance, encouraging an appropriate mix of land uses and establishing corridor management techniques to allow for compatible pedestrian and vehicular activity.

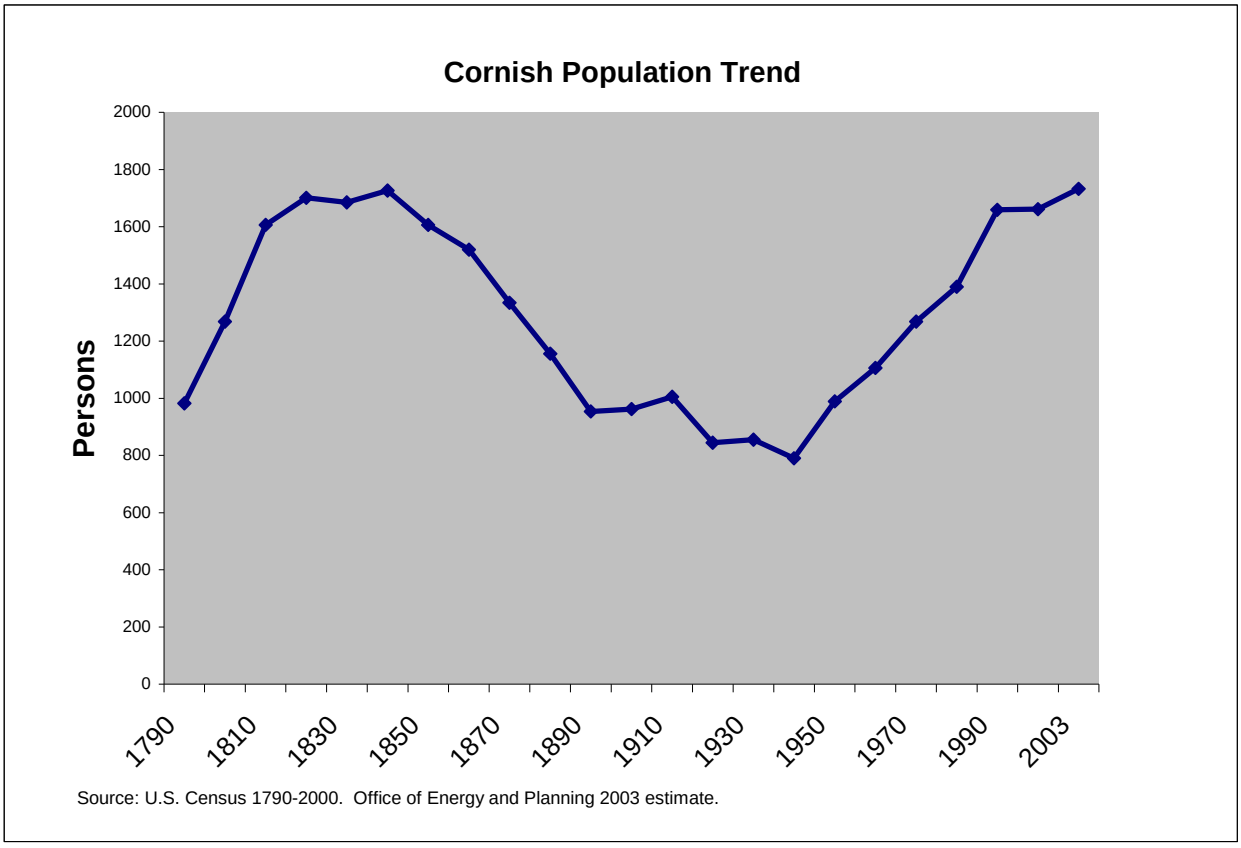
Goal 4: Maintain and enhance Cornish's historic role as a rural community with significant natural and agricultural character.

Goal 5: Protect and enhance the character of Cornish's villages and natural/cultural resources.

Historic Demographic Trends

The population growth experienced in Cornish and the region has resulted in land use changes. The current population estimate for the Town of Cornish indicates that the number of persons within the municipality has again reached the population peak which occurred in 1840. During Cornish's early development period, population levels almost

Figure III-1: Cornish Population Trend



Source: U.S. Census 1790-2000. Office of Energy and Planning 2003 estimate.

doubled during a fifty-year period in the early nineteenth century. This was the result of a growing agrarian economy. Over the next one hundred years, as the advantages of

farming and sheep herding left the northeast, the population of Cornish declined until after Word War II in 1940. Since that time, population levels have steadily increased.

Recent Demographic Trends

Population data for Cornish shows continued population growth, but its growth rate in the decade has decreased. Table III-1 summarizes the population growth in the past few decades. During the 1970s, the population increased 9.6 percent which lagged behind the national population increase (+11.5 percent), the Sullivan County increase (+16.5 percent), and the state increase (+24 percent). There was a very large increase from 1980 to 1990 and only a negligible increase from 1990 to 2000.

Table III-1: Population Change, 1970 – 2003

	% Change 1970-1980	% Change 1980-1990	% Change 1990-2000	% Change 2000-2003
Cornish	9.62%	19.35%	0.12%	4.27%
Sullivan County	16.52%	7.01%	4.84%	N/A
New Hampshire	24.80%	20.49%	11.41%	1.28%

Source: US Census

Note: The 2003 American Community Survey universe is limited to the household population and excludes the population living in institutions, college dormitories, and other group quarters.

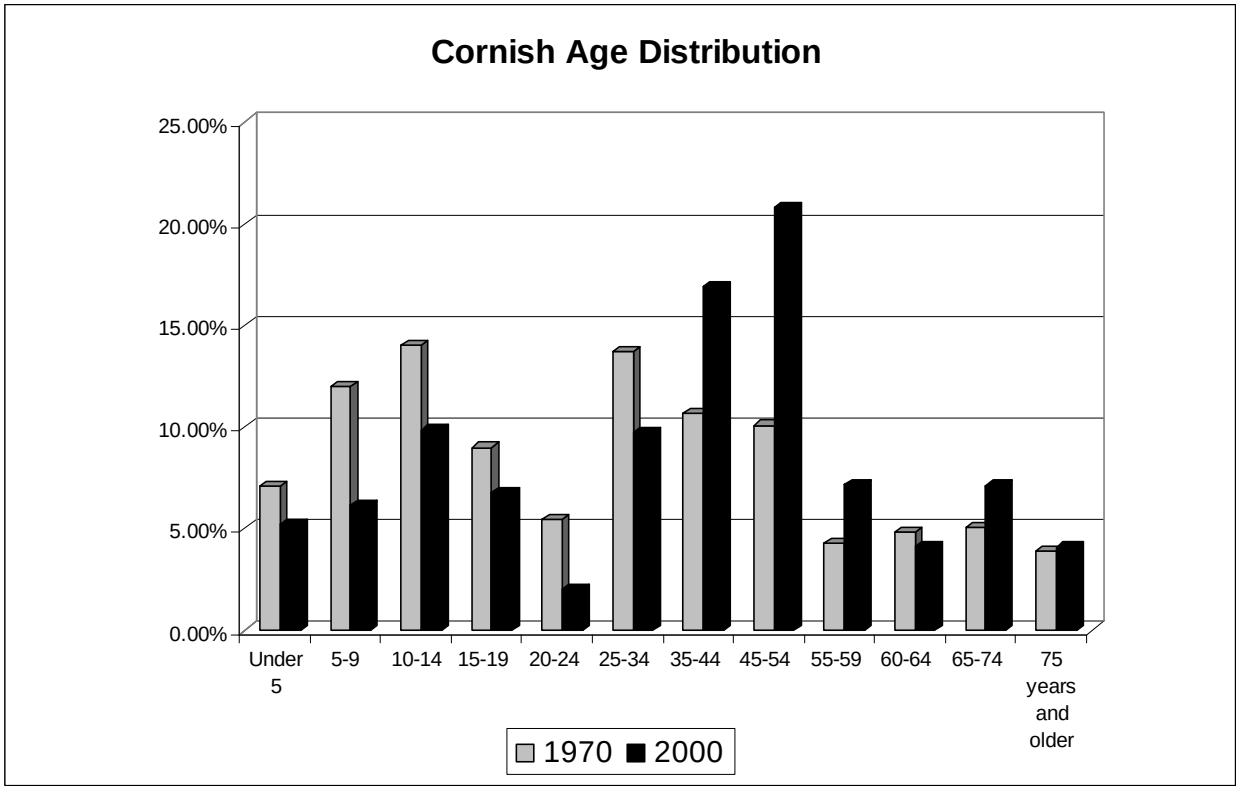
The two major determinants of population change are natural increase and migration. The excess of births over deaths, in any one period, is called natural increase. Migration refers to the number of people who have moved into or out of town. If a community has little in- and out-migration, almost all changes in population are attributable to natural factors alone. From 1990 to 2000, 151 Cornish births were recorded and 121 deaths recorded, for a natural increase of 30 persons (Source: NH Department of Health and Human Services). Since the town's population grew by only 2 persons during the same period, there was an out-migration of 28 persons. The combination of declining family size and college students/young adults moving out of town is likely responsible for these stable numbers.

Population by Age

The age composition of a community is of great importance in planning for future facility and service needs. An increase in the school-age population, for example, indicates the need for greater investment in educational facilities. Likewise, growth in the senior population requires the need for a different range of services and facilities. As seen in Figure III-2, the population of residents 45 and over (older labor force and senior citizen populations) has been increasing while the youth and young adult population has been decreasing since 1970. The 45-54 age group saw the biggest percentage increase between 1990 and 2000, and makes up 20.8 percent of the total population in Cornish. The 35-44 age group has declined since 1990 but holds the second largest percentage of the population. Nationally, the trend will be a relative increase in the over-65 age

group as the "baby-boom" generation moves through the age distribution and the effect of lower fertility rates is reflected.

Figure III-2: Cornish Age Distribution



Population Projections

The New Hampshire Office of Energy and Planning (OEP) periodically develops projections of future population growth for all cities and towns in New Hampshire. An important consideration in OEP's methodology is that town-level projections are controlled to county totals. In other words, they are based on the town's historical share of its respective county's growth and the assumption that established growth trends will remain about the same in the future. The county projections are roughly based on long-term trends that occurred during the 1960 to 2000 period.

As with any data projections, particularly for smaller areas, actual circumstances and events can drastically alter the figures. Factors such as job creation, the tax rate, and the general economic climate of the Northeast can alter these figures. Projections should be used for trend analysis only and care should be taken to review and revise the data, as updated information is made available. Growth is expected to occur at an annual compound average rate of growth of 1.3 percent per year between 2000 and 2025. This equals about 22 individuals per year, which is a faster pace of growth than has occurred in the past decade.

Table III-3: Cornish Population Projection

	2000	2005	2010	2015	2020	2025
Cornish	1,661	1,750	1,990	2,120	2,230	2,320

Source: NH Office of Energy and Planning

Shrinking Household Size

The average household size in Cornish has been slowly decreasing, following the county, state, and national trend. However, Cornish's average household size is slightly higher than the averages for Sullivan County and New Hampshire (see Table III-4). This change is attributed to a decline in larger family households. This trend may result in increasing demand for smaller housing units.

Table III-4: Household Size Comparison

	1980	1990	2000
Cornish	2.85	2.74	2.57
Sullivan County	2.68	2.56	2.41
New Hampshire	2.75	2.62	2.53

Source: US Census

Almost 63 percent of Cornish's households are married couple families, a percentage that is a good deal higher than the state and county average (Table III-5). The percentages of single-person, single-parent family, and non-family households are significantly lower for Cornish than for Sullivan County and the state of New Hampshire.

Housing Units

The 2000 U.S. Census counted 662 year-round units and 35 seasonal units for a total of 697 housing units (Table 9). This represents only a 1.2 percent increase since 1990, which is a good deal lower than the increases observed in nearby towns, the county and the state (Table III-6). The percentage of seasonal homes in Cornish (5 percent) is considerably lower than for Sullivan County (13.7 percent) and the state (10.3 percent). Many formerly seasonal dwellings have likely been converted for year-round use in recent years.

Table III-5: Household Type Comparison

Area	Household Type							
	1-Person Households #	1-Person Households %	Married Couple Family #	Married Couple Family %	Single Parent Family #	Single Parent Family %	Non Family Households #	Non Family Households %
Cornish	137	21.24%	406	62.95%	60	9.30%	42	6.51%
New Hampshire	--	24.44%	--	55.30%	--	12.90%	--	7.36%
Sullivan County	--	25.67%	--	54.65%	--	12.98%	--	6.70%

Source: US Census

Table III-6: Housing Units

# of Dwelling Units	1990 Year-Round Units	1990 Seasonal Units	1990 Total Units	2000 Year-Round Units	2000 Seasonal Units	2000 Total Units
Cornish	652	37	689	662	35	697

Source: US Census

According to the New Hampshire Office of Energy and Planning estimates from the 2000 US Census, Cornish housing is overwhelmingly dominated by single-family units, at an estimated 86.94 percent for 2003. Plainfield and Grantham are estimated to have 83.71 and 78.92 percent, respectively. These percentages are a good deal higher than the county and statewide averages for single-family homes. Cornish has an estimated 6.11 percent multi-family units and 6.94 percent mobile homes. With an increasing elderly population, there may be a need for more affordable housing options, including more multi-family units and accessory apartments.

Cornish's homeowner vacancy rate (the percentage of homes for sale at the time of the Census) and rental vacancy rate are .4 and 5.7 percent, respectively (compared with 1.6 and 5.4 percent for Sullivan County and 1 and 3.5 percent for the State of New Hampshire).

Table III-7: Percentage Increase in Dwelling Units, 1990–2000

Year	Year-Round Percent Change	Seasonal Percent Change	Total Percent Change
Cornish	1.5%	-5.4%	1.2%
Grantham	72.5%	-26.7%	17.4%
Plainfield	11.6%	26.7%	11.9%
Sullivan County	6.7%	-14.4%	3.2%
New Hampshire	9.8%	-1.3%	8.6%

Source: US Census

The median cost of housing in Cornish has increased by approximately 40 percent from 1990 to the year 2000. Median monthly mortgage cost for the Town of Cornish equals $1,002 and median monthly rents are $640 for the year 2000. To consider affordability, household incomes must be taken into consideration. It is generally accepted that housing costs should be no more than 30 percent of total household income. In Cornish, about 17 percent of renters and 23 percent of homeowners meet this classification. This rate of housing burden is consistent with other rural communities in the region.

Because Cornish's housing stock is dominated by single-family housing units, there are very few housing options for the elderly, first time home buyers, the disabled, and the economically challenged. In order to encourage housing options for these populations, Cornish should provide for a diversity of housing types and living arrangements. This could include providing for small housing units and small lot sizes. A senior center/assisted living facility, or possibly an adult day care center near local services and transportation options would assist older residents in aging within the community. This will be critical as the baby boomer generation ages and increases demands on community facilities.

Land Use Trends

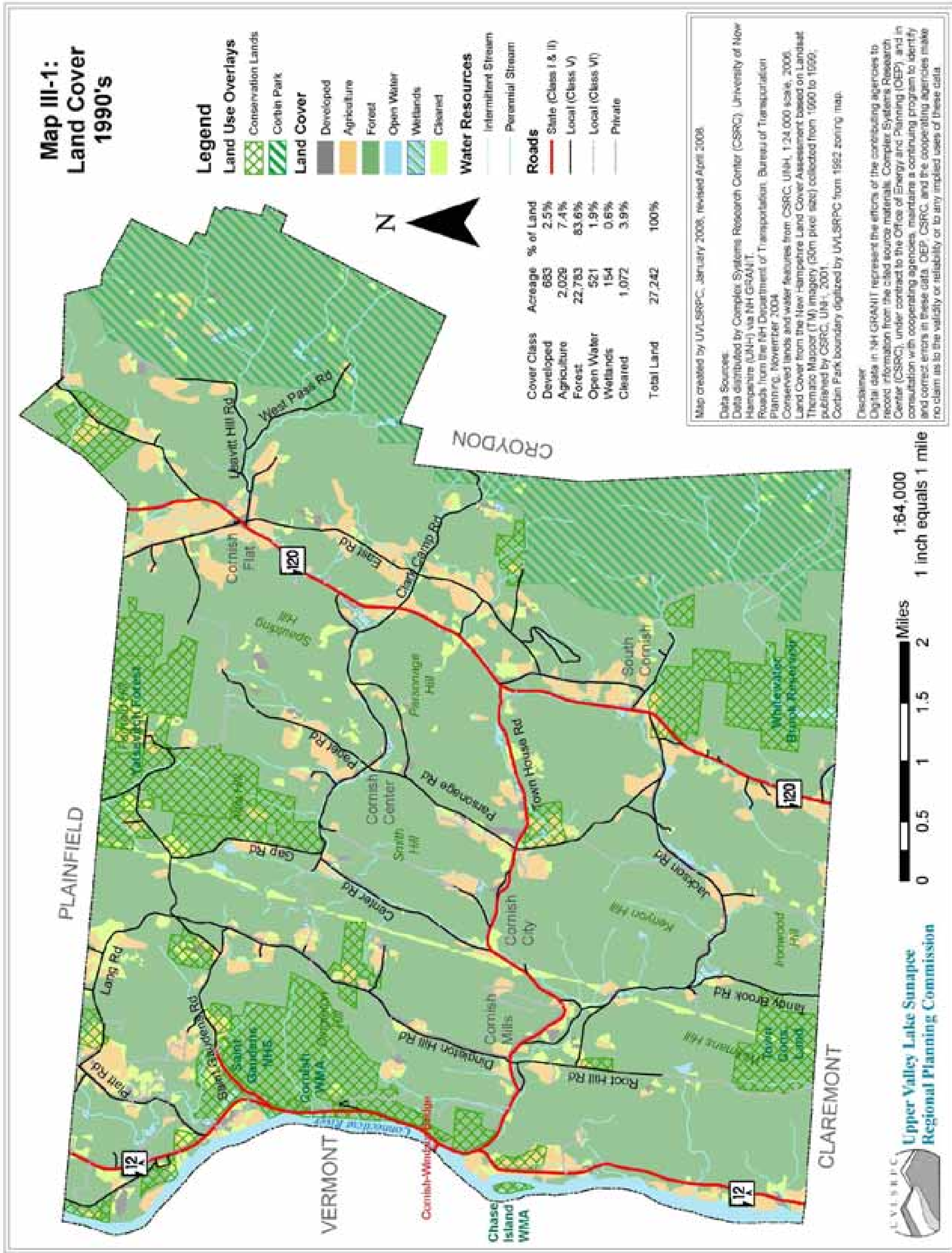
The pattern of existing land use in Cornish gives the community its particular character. This makeup is shaped by a variety of natural, historical and cultural features. The conventional settlement pattern that defines much of the Cornish's landscape consists of both rural forested/agricultural environments and village centers linked by major travel corridors. Small crossroad villages also sprung up to service the agricultural families. Eventually, Cornish developed a strong sheep farming agriculture that took advantage of the hilly terrain above the Connecticut River The village areas were established on relatively level areas within town. There are five village areas, not all of which are zoned Village: Cornish Flat, Cornish Center, Cornish Mills (Mill Village),

Cornish City, and South Cornish. Cornish's public institutions also developed here — the Town Hall, Elementary School, two fire stations, two town garages, library, meeting house, Selectmen's Office, fairgrounds, and recreational fields. A concentration of civic and institutional uses occurs at the intersection of Town House and Parsonage Roads. As sheep herding areas moved west, Cornish's agricultural land began to forest over and housing began to spread further over the landscape particularly along the major travel corridors of the town. These corridors included Route 120 and Route 12A. Over time more residential activity has continued to encroach onto land that was previously agricultural.

School Street, Cornish Flat, with Lovejoy Hill in the background.

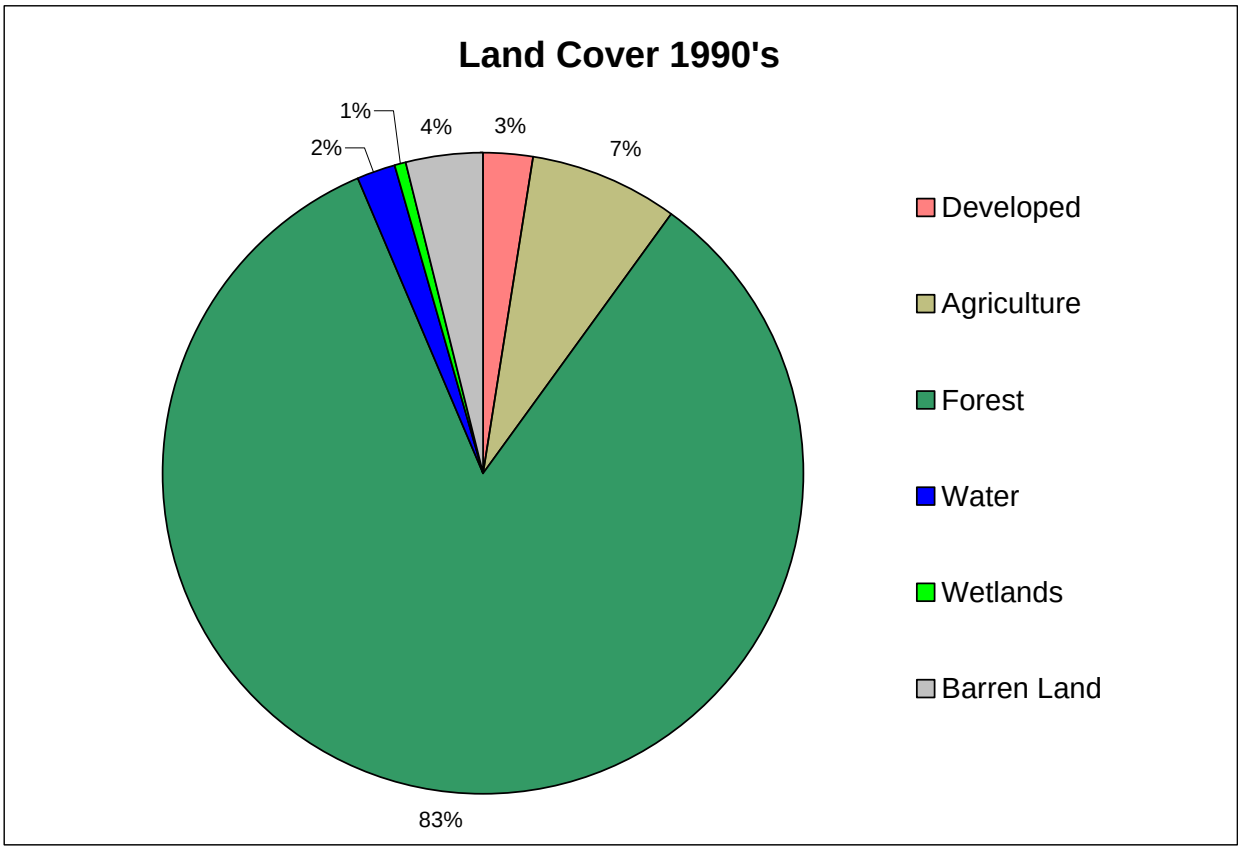
Existing Land Use

The Town of Cornish encompasses approximately 26,721 acres or 42 square miles of land area and one square mile of inland water area. As shown in Figure III-3 below, the


Map III-1:
Land Cover
1990's
Legend
Land Use Overlays
Conservation Lands
Corbin Park
Land Cover
Developed
Agriculture
Forest
Open Water
Wetlands
Cleared
Water Resources
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
N
Cover Class Acreage % of Land
Developed 683 2.5%
Agriculture 2,029 7.4%
Forest 22,783 83.6%
Open Water 521 1.9%
Wetlands 154 0.6%
Cleared 1,072 3.9%
Total Land 27,242 100%
Map created by UVLSRPC, January 2008, revised April 2008.
Data Sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT.
Roads from the NH Department of Transportation, Bureau of Transportation Planning, November 2004.
Conserved lands and water features from CSRC, UNH, 1:24,000 scale, 2006.
Land Cover from the New Hampshire Land Cover Assessment based on Landsat Thematic Mapper (TM) imagery (30m pixel size) collected from 1990 to 1999; published by CSRC, UNH, 2001.
Corbin Park boundary digitized by UVLSRPC from 1992 zoning map.
Disclaimer:
Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.
PLAINFIELD
CROYDON
CLAREMONT
VERMONT
Cornish Flat
Cornish Center
Cornish City
Cornish Mills
South Cornish
Spaulding Hill
Parsonage Hill
Smith Hill
Kenyon Hill
Ironwood Hill
Dingleton Hill
Saint Gaudens NHS
Cornish WMA
Chase Island WMA
Town Gods Land
Whitewater Brook Reservoir
Yatsevitch Forest
West Pass Rd
Hewitt Hill Rd
East Rd
Center Rd
Gap Rd
Parsonage Rd
Town House Rd
Jackson Rd
Tandy Brook Rd
Dingleton Hill Rd
Root Hill Rd
Lang Rd
Platt Rd
Saint Gaudens Rd
Paget Rd
Connecticut River
Cornish-Windsor Bridge
120
12A
1:64,000
1 inch equals 1 mile
0 0.5 1 1.5 2 Miles
Upper Valley Lake Sunapee Regional Planning Commission

single most extensive land use in Cornish is forest land which covers over 83% of the town's area. See Map III-1, Current Land Use/Land Cover.

Table III-3: Percentage Land Cover 1990's



Source: NH Land Cover Assessment, 1990-1999.

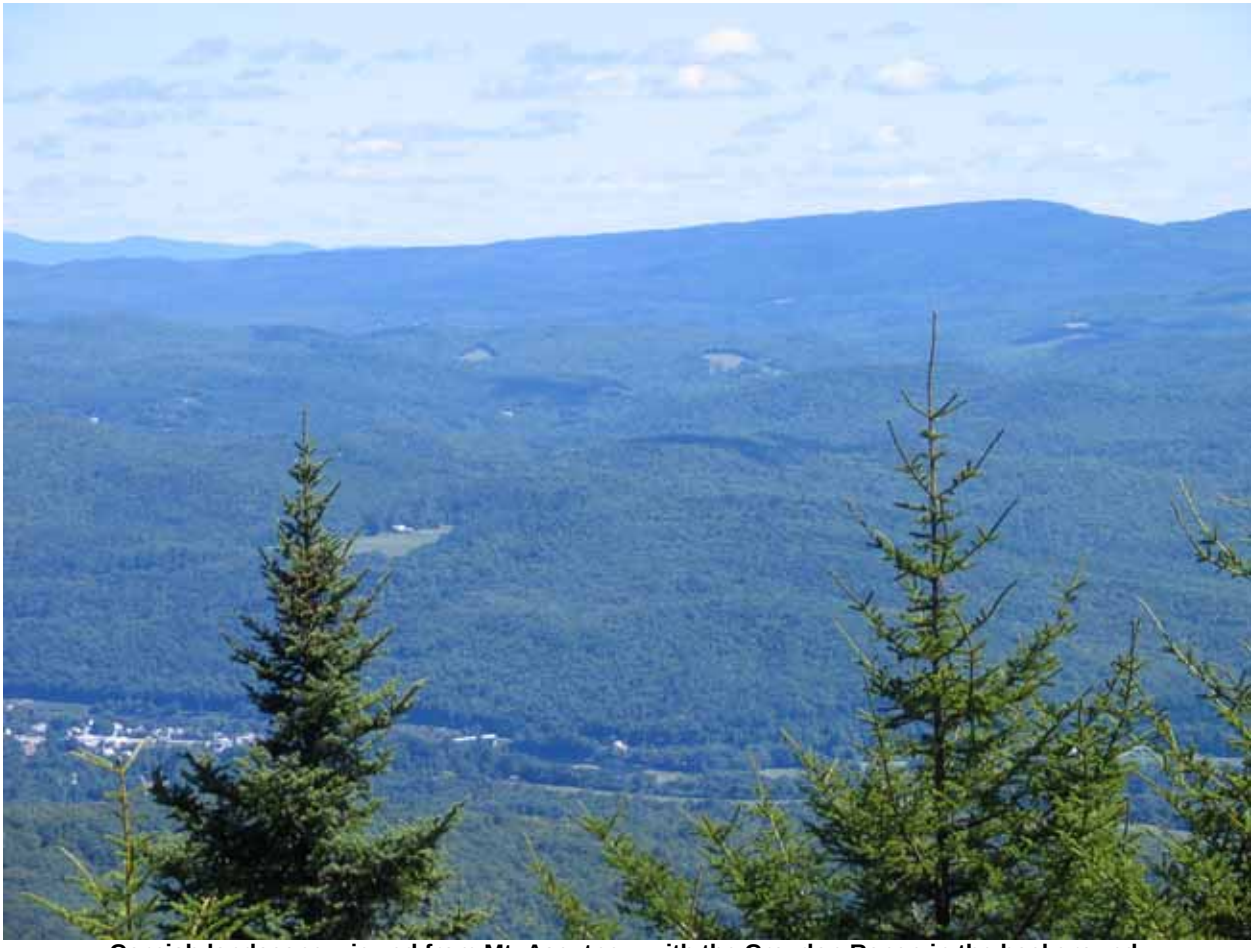
The largest contiguous concentration of this land cover is in the northeast quadrant of the town. It occupies many times the area of the next highest category of use, Agriculture, which occupies 7% of the town's land area. This activity is located throughout town. Barren Lands represent 4% of the land area, and Developed Land occupies approximately 3% of the town's land area. The remaining uses are all under 2%.

Land Use Change

Changes in land use over time provide an indication of those factors that have shaped and affected the character of Cornish. This information can also provide the basis for community land use policy to guide and manage future growth. The UNH Agricultural Experiment Station prepared a report in 1978 to determine the amount of land use change from 1952 to 1975 statewide by community. This study employed aerial photo

interpretation and used 5-acre minimum blocks of use for the following categories of use.

- Developed land—residential, commercial, industrial, institutional
- Agricultural land—cropland, pasture land, orchards, nurseries
- Forest land—land supporting tree growth with 30% crown closure
- Idle—land formerly in agriculture
- Other—wetlands, marshes, etc.



Cornish landscape, viewed from Mt. Ascutney, with the Croydon Range in the background.

Map III-2 depicts the most current aerial photography for the Town of Cornish.

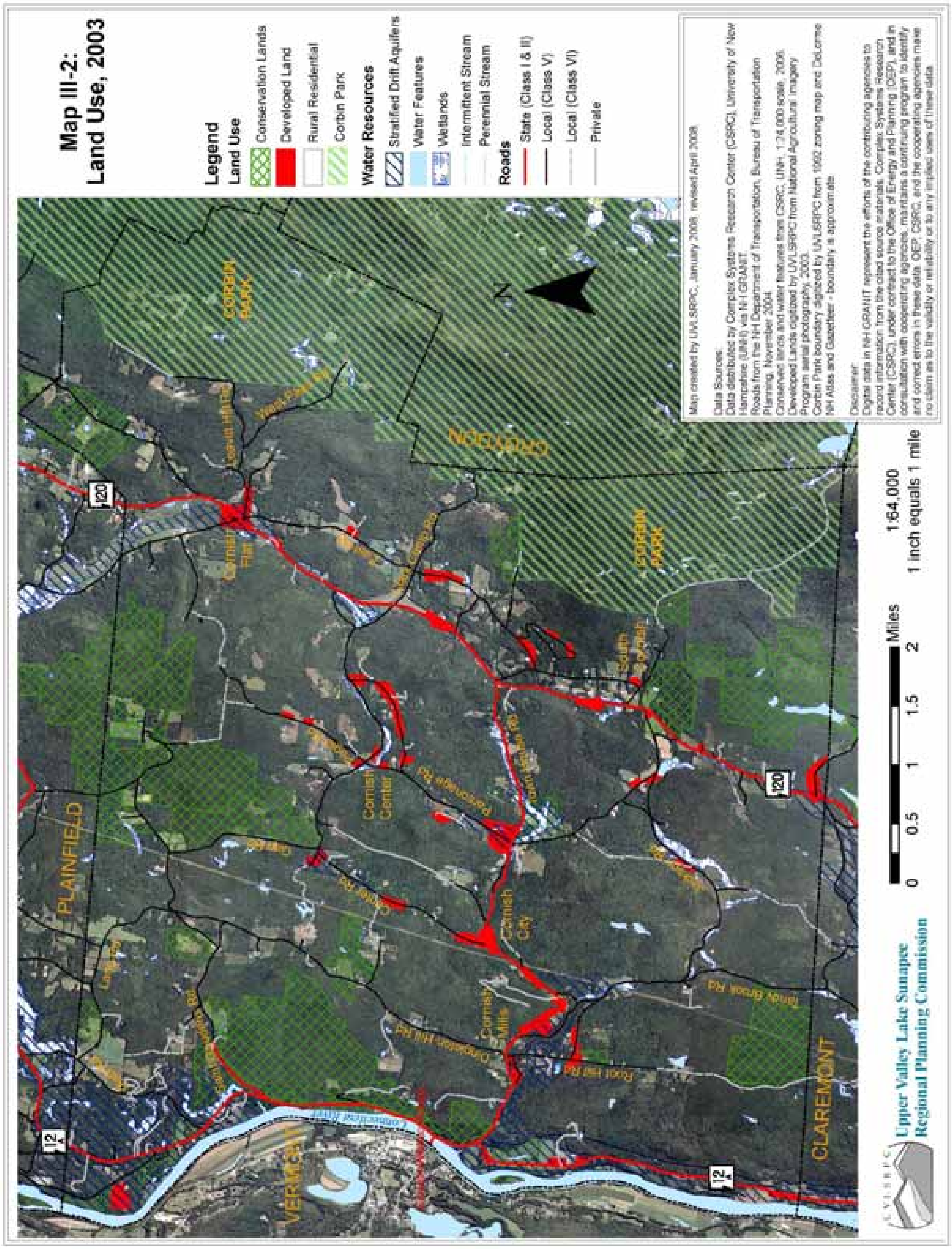
Table III-8: Land Use Change

Land Use Type	Percent of Total 1950's	Percent of Total 1970's	Percent Change
Developed	<1	1%	14%
Agricultural	19%	17%	-10%
Forest	76%	81%	7%
Idle	4%	1%	-79%
Other	<1%	<1%	0%

Agricultural Land
From 1953 to 1970, there was an approximately 10% decrease in agricultural land or approximately 495 acres. Much of this land was developed or reverted to forest.

Forest Land
During this period, forest land was the predominant land cover. By 1970 it increased by 1,324 acres to almost 22,000 acres or 81 % of the town.

Developed Land
During this twenty year period, developed land increased by 17 acres comprising a total of 135 acres of land. Much of this increased land was from conversion of agricultural and idle land. There is no current data that has tracked change in land use over the period of 1970 to 2000. Although the land use/land cover categories for the current land use map and the categories for the land use change report from 1978 differ, it appears that while there has been some change in use, forest land is still the predominant use. Developed land has increased as the result of residential growth since 1970. Much of this growth has resulted from agricultural land conversion. Much of the commercial activity occurs as home based businesses and, as such, is included in the residential acreage described above. Cornish Flat is the commercial center of town, although there is another cluster of businesses along Route 12A, south of the Cornish-Windsor Bridge.


Map III-2:
Land Use, 2003
Legend
Land Use
Conservation Lands
Developed Land
Rural Residential
Corbin Park
Water Resources
Stratified Drift Aquifers
Water Features
Wetlands
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
Map created by UVLSRPC, January 2008, revised April 2008
Data Sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT
Roads from the NH Department of Transportation, Bureau of Transportation Planning, November 2004
Conserved lands and water features from CSRC, UNH, 1:24,000 scale, 2006
Developed Lands digitized by UVLSRPC from National Agricultural Imagery Program aerial photography, 2003
Corbin Park boundary digitized by UVLSRPC from 1992 zoning map and DeLorme NH Atlas and Gazetteer - boundary is approximate
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N
1:64,000
1 inch equals 1 mile
0 0.5 1 1.5 2 Miles
Upper Valley Lake Sunapee
Regional Planning Commission
PLAINFIELD
CORBIN PARK
CROYDON
Cornish Flat
Cornish Center
Cornish City
Cornish Mills
VERMONT
CLAREMONT
120
12A

Zoning Regulations

Land use controls have contributed significantly to the existing pattern of land use in town. Site plan review and the building code are important to public health and safety, but have not been influential in determining the overall pattern of development in the town. Brief summaries of the current land use controls follow.

The Town of Cornish adopted a Zoning Ordinance in 1955. It has been amended by votes of the Town Meeting, with the most recent version being adopted in 2005. Zoning controls the use and intensity of the use of land in a town. Usually the town is divided into districts; the permitted uses and allowed intensity of those uses vary district to district. Zoning is considered one way to guide growth and development and to protect natural resources.

Three zoning districts have been established in Cornish with various overlay districts. The character of each district is described below. The Zoning Ordinance should be consulted for specific use and size restrictions. Minimum lot size requirements range from one to five acres.

R – Rural District – Districts of farms, residences, and woodlands with access to existing Town or State roads. Five-acre minimum lot size.

Res - Residential District – Districts of residences and woodlands which can accommodate greater density than more rural areas. Two-acre minimum lot size.

V – Village District – Includes residences, commercial establishments, community buildings, and neighborhood businesses in which most commerce and community activities will occur and in which the densest residential developments is permitted. One-acre minimum lot size.

F – Regulatory Floodplain District – Districts include the regulatory floodplain and in which the placement of all structures, buildings, dwellings, or mobile homes is prohibited.

About 61 percent of survey respondents indicate that existing zoning should encourage forestry and agriculture more than development.

Source: Town of Cornish Master Plan Survey, 2002

N -- Non-manufactured Housing Overlay District – includes an area in the northwestern quadrant of the town where no manufactured homes are permitted.

C -- Conservation Overlay Districts
Conservation Overlay Districts are established in order to protect Cornish's natural heritage and to ensure that land is developed only according to its natural capability.

Wetlands Conservation Overlay District- The Wetlands Conservation Overlay District is hereby defined as all areas comprising bogs, marshes, swamps and other very poorly drained or poorly drained soils, together with a 100 foot buffer zone around such areas.

Shoreland Conservation Overlay District- The Shoreland Conservation Overlay District is hereby defined as comprising all lands within 100 feet of the shore of all water courses and water bodies.

Connecticut River Shoreline Conservation Overlay District-- The Connecticut River Shoreline Conservation Overlay District is hereby defined as comprising all lands within 100 feet of the Regulatory Flood plain along the Connecticut River.

The existing areas zoned for residential development have constraints which have prohibited growth. This includes the area near Parsonage Road, which has drinking water constraints, and the area near the Route 12A/Town House Road intersection where development is restricted by a conservation easement. Reorganizing these districts to more suitable locations will allow them to better serve their purpose.

Wading in the Connecticut River, looking towards Vermont and Mt. Ascutney.

IV. OPPORTUNITIES AND CHALLENGES

Centers of Activity

As part of the Master Planning process a Community Forum was held in 2005 to solicit community attitudes related to a number of topic areas, including recreation, housing, economic development, and natural resources. Forum participants identified a number of cultural and recreational opportunities that were specific to Cornish, and that were very important centers of community activity. Community resources include:

- Town Hall
- Town Offices
- Meeting House
- Library
- Elementary School
- Fire Stations
- Highway Garage
- Recycling Center
- United Church of Cornish (Cornish Center)
- Town Villages
- Stream and River Corridors e.g., Connecticut River
- Town Forest/CREA Trails

These resources support community activities and are important in supporting the expansion of similar activities or complementary development if properly managed by the town. For example, the town has established a village district around the Cornish Flat that allows for similar uses. This district can provide a mechanism for village development. These "activity centers" can then be linked by walkways and trails.

<u>Cornish Flat</u>

Located at the junction of Route 120 and Stage Road in the northeast corner of Cornish, "The Flat" constitutes the town's major center of population. The small grouping of buildings includes the Meeting House, Soldiers Monument, Post Office, bank and general store. Some of the buildings are from the early to late 1800's, reflecting styles from Federal to Victorian. This area retains a remarkable sense of visual unity; modern intrusions into

The Cornish General Store, located in Cornish Flat.

the historic village center have been minimal. Much of the best land for development has been built upon.

Cornish Mills/Cornish City

A series of historic mills including the old S. Comings-Hall Grist and Sawmills were situated here, taking advantage of a fall of water on Mill Brook to power various operations. Mill foundations still survive as does the Dingleton Hill Covered Bridge. A handful of early residences are located just off Town House Road.

The Blacksmith Shop Bridge (1882) provides access to an area known as Slab City of Cornish City in earlier days. The Cornish Grange Hall No. 25 (1842) formerly housing Congregational, Methodist, and Unitarian congregations, and now the home of the Cornish Town Offices, is another noteworthy landmark in this area.

Cornish Colony Area – Platt Road and St. Gaudens Road

Beginning in 1885 prominent American artists – painters, sculptors, writers, architects, musicians, and naturalists -- were attracted to the New Hampshire hills along the Connecticut River as a place to work and relax. Many of them settled in the northwest section of Cornish and neighboring Plainfield, some as year-round inhabitants, others as seasonal residents. The structures which survive, many architect-designed, constitute some of the region's greatest resources. Also located in this area is the Blow-Me Down Bridge.

Visitors on the grounds of Aspet, the former home of Augustus St. Gaudens and now a National Historic Site operated by the National Park Service.

Transportation Corridors

The Town of Cornish is centrally located within New England within several miles of Interstate 91 Exits 8 and 9; major destinations such as New York City, Montréal, and Boston are within 250 miles.

The transportation system is an important factor in determining a community's land use pattern. The transportation system is a land use *form* in terms of its linear physical presence and a land use *function* in terms of the service it provides to shoppers, businesses and residents in their day-to-day activities. The town's transportation system is comprised primarily of roads with some parking, and limited public transportation. With few exceptions, land use development has conformed to existing transportation corridors.

Much of the transportation activity within the town is automobile oriented. The town's existing 82-mile road system was initially developed to serve agricultural transactions between the village centers and rural farms. The town's transportation system was designed to facilitate travel from farm to village centers and cities abroad. All of Cornish's main arterial roads (NH Routes 12A and 120) run north-south and do not converge. Town House Road is the town's major east-west corridor, connecting NH 12A and NH 120. Other local roadways intersect with these major corridors in several locations where existing villages developed.

RV heading south on Route 12A, part of the Connecticut River Scenic Byway.

Since World War II, development has responded to the use of the automobile as the main means of transportation, resulting in dispersed land uses, varied travel demands, and a more complex transportation network. Cornish also has an active rail line located on the southwestern portion of town adjacent to the Connecticut River. The system is primarily oriented towards freight traffic, but has daily passenger service to destinations between Washington, New York and St. Albans, VT provided by Amtrak. The nearest stations are located in Windsor, Vermont, to the north and the City of Claremont, to the south.

Pedestrian travel is accommodated along existing roads as there are no sidewalks within Cornish. Consideration should be given to creating walkways within village areas to help integrate land uses and support alternative transportation. Public transportation

is limited within the town. Community Transportation Services (CTS) provides a "Dial-a-Ride" paratransit service between Cornish and neighboring Sullivan County destinations, such as Valley Regional Hospital, and the Washington Street shopping area in Claremont.

Infrastructure & Utilities

Providing and maintaining community facilities and services is one of the primary functions of government. Changes in the town's population and employment levels may have a direct impact on the quantity and quality of services demanded and how they are provided. Demand for additional services may require expansion of public buildings and spaces or more hours of operation to serve residents. Growth and development will largely determine the amount and type of services demanded. Since Cornish's growth is projected to be slow to moderate, it is expected that there will not be significant additional demand for town services. Cornish currently does not provide any water or sewer services.

A future land use plan should consider the future demands for community services and their land use implications. Facilities and services are not only important in terms of planning for their adequacy; they are also land uses themselves which shape the community. Services that are high in quality are assets for growth and development, while poor facilities can detrimentally affect the quality of the adjacent development and be a drain on the local economy.

Natural & Scenic Resources

Natural resources contribute to defining a community's unique character. Cornish's natural resources provide residents with a rich quality of life and many recreational opportunities. Natural resources are also an important consideration in estimating the town's capacity for growth and development potential. Natural resources can provide both opportunities and challenges for growth. For example, steep slopes and wetlands are less suitable for development while better drained, flatter areas are generally considered more suitable for development. The natural resource base of Cornish is an important factor in determining local land use decisions. The following is a description and analysis of Cornish's natural resource base as it pertains to land use decisions.

Topography and Geology

Situated along the Connecticut River, Cornish is located in the New England upland region. Most of Cornish is composed of undulating topography where the highest points are between 1000 and 2300 feet above sea level. The highest point in Cornish is found on Croydon Mountain at approximately 2300 feet. The lowest point in Cornish is at the banks of the Connecticut River at approximately 280 feet. Mountains to note include Dingleton Hill (1300'), Wellmans Hill (1103'), Ironwood Hill (1100'), Kenyon Hill (1300'), Smith Hill (1309'), Parsonage Hill (1300'), Altai Hill (1300') Yatsevich Hill (1540'), Fernald Hill (1647'), and Spaulding Hill (1456').

Topography is an important factor in assessing development suitability. While areas of relatively high relief are considered a visual asset, they are also areas that may be

vulnerable to development. Due to the sensitivity of these areas, development should either be discouraged or carefully managed to maintain visual quality and minimize soil erosion. Alternatively, low lying areas are typically associated with water resources such as river corridors and may be prone to flooding, and/or contain deposits of sand and gravel or rich farmland soils.

Geology

Bedrock geology is an important consideration in determining future land use suitability. Where bearing strength is high, most types of development can be supported. The bedrock in Cornish is fairly uniform in strength, and the bearing strength of all the formations is adequate for most types of development. Alternatively, bedrock at or near the surface can pose a constraint to development.

Blow-me-Down Mill, built in 1891 and restored by the National Park Service.

The surficial geology of Cornish is primarily characterized by areas of glacial till. Along the Connecticut River and other major streams, stratified drift deposits are found as well as alluvial deposits (floodplain deposits).

The following are common features in Cornish:

- *Bedrock outcrops/ledge* are composed of metamorphic rocks located close to or above the surface of the ground. This formation presents a constraint to development, particularly where septic systems or foundations are involved.

- *Unstratified drift or glacial till* is composed of a mix of sand, silt, clay, gravel and boulders that overlays much of the bedrock in Cornish. These glacial deposits may limit percolation for proper siting of septic systems and do not generally hold sizable supplies of groundwater.

- *Stratified drift* is composed of fine sands and gravel. In Cornish these deposits are generally associated with the Connecticut River, along Town house Road and in the area of Cornish Flat. They provide suitable sources for drinking water supplies and sand and gravel deposits. Where potable groundwater is present, caution is necessary in the regulation and design of septic systems to prevent ground water contamination.

- *Swamp deposits* occur in low, poorly drained areas along watercourses. These areas typically contain high water tables and may have water ponded at the surface. Wetland resources are usually associated with these deposits.

Wetland (Hydric) Soils

These soils are formed in association with silts and clays, some areas of till, and the more recent alluvial sediments deposited by streams and rivers. These include poorly and very poorly (Hydric A and B) drained material having a water table at or near the ground surface for five to nine months of the year. Wetland soils are commonly found along water courses and in low lying areas, such as near Clark Camp Road and Route 120. Wetlands provide many valuable natural functions and are best left undeveloped and in their natural state. These soils occur mostly in natural drainage areas and are valuable to the community for absorbing excess flood waters and preventing downstream flooding, providing habitat for fish and wildlife, groundwater recharge to aquifers and acting as a surface water filter by trapping sediment and other pollutants. These soils comprise approximately 154 acres within the town.

Agricultural Soils

Agricultural soils are an important natural resource which is both highly productive and limited in quantity (see Map II-3). On the basis of soil quality, moisture supply, availability, and slope, the Soil Conservation Service has defined important farmland in three categories: 1. prime soils; 2. agricultural soils of statewide importance; and 3. agricultural soils of local (Sullivan County) importance. Soil types associated with each of these three categories are found in Cornish, primarily along the Connecticut River and along Route 120.

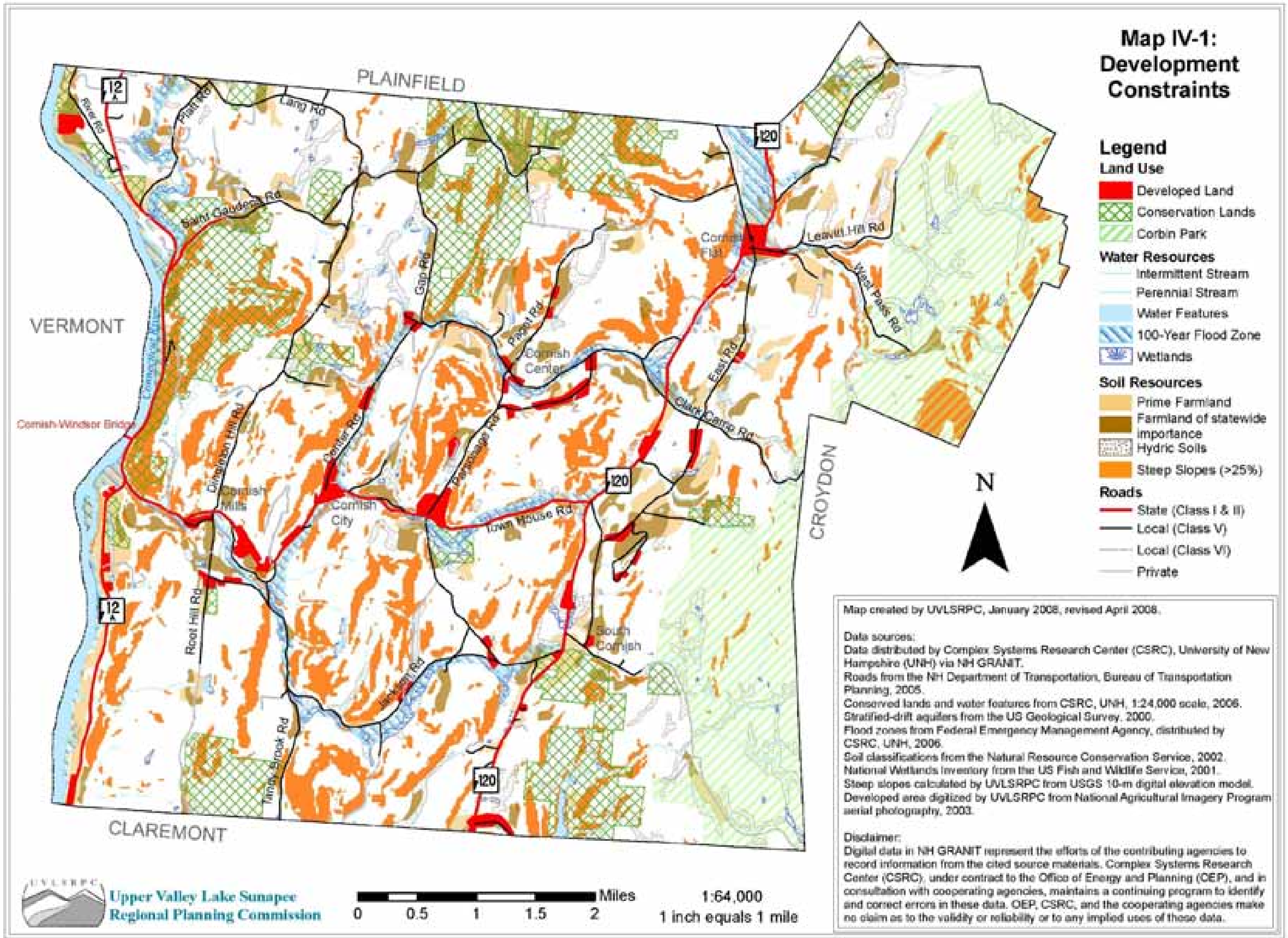
Prime agricultural soils in Cornish Flat.

Slope

The slope or steepness of the land is defined by the change of elevation over horizontal distance. For instance, a 10 foot rise within 100 feet is a 10% slope. Slope is important for planning purposes for several reasons. The increase in slope corresponds to the potential increase for surface runoff and erosion. The soil depth is also thinner as slopes increase, thereby decreasing the capacity of the land to filter septic system effluent.

Slopes can be determined from USGS topographic maps. The most suitable slopes for development are from 0 to 12-15%. Within the town, slopes vary significantly. See Map

IV-1 Development Constraints. Once slopes exceed 15 to 20 % slope, there is greater chance for environmental impact and increased development costs. There are approximately 7,510 acres (28% of the town) of slopes greater than 25% in Cornish *(Natural Resource Conservation Service, 2002).*


Map IV-1:
Development
Constraints
Legend
Land Use
Developed Land
Conservation Lands
Corbin Park
Water Resources
Intermittent Stream
Perennial Stream
Water Features
100-Year Flood Zone
Wetlands
Soil Resources
Prime Farmland
Farmland of statewide importance
Hydric Soils
Steep Slopes (>25%)
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
N
PLAINFIELD
VERMONT
CLAREMONT
CROYDON
Cornish-Windsor Bridge
River Rd
Platt Rd
Lang Rd
Saint Gaudens Rd
Gap Rd
Dingleton Hill Rd
Center Rd
Parsonage Rd
Paget Rd
Town House Rd
Root Hill Rd
Tandy Brook Rd
Jackson Rd
East Rd
Clark Camp Rd
Leavitt Hill Rd
West Pass Rd
Cornish Mills
Cornish City
Cornish Center
Cornish Flat
South Cornish
12A
120
Map created by UVLSRPC, January 2008, revised April 2008.
Data sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT.
Roads from the NH Department of Transportation, Bureau of Transportation Planning, 2005.
Conserved lands and water features from CSRC, UNH, 1:24,000 scale, 2006.
Stratified-drift aquifers from the US Geological Survey, 2000.
Flood zones from Federal Emergency Management Agency, distributed by CSRC, UNH, 2006.
Soil classifications from the Natural Resource Conservation Service, 2002.
National Wetlands Inventory from the US Fish and Wildlife Service, 2001.
Steep slopes calculated by UVLSRPC from USGS 10-m digital elevation model.
Developed area digitized by UVLSRPC from National Agricultural Imagery Program aerial photography, 2003.
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Upper Valley Lake Sunapee Regional Planning Commission
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1:64,000
1 inch equals 1 mile

Water Resources

Cornish is relatively rich in water resources—making up approximately 521 acres *(Land Cover Assessment, 1990 to 1999)*. The Connecticut River flows on the western border of the community as well as a number of smaller brooks like Mill Brook, Blow-Me-Down Brook, Notch Brook, Bryant Brook, Leavitt Brook, Whitewater Brook, and Wine Brook. There are no major lakes, although there a several small ponds and manmade reservoirs such as the Whitewater Brook Reservoir south of South Cornish and a number of unnamed ponds. Regulatory measures such as shoreline set backs and conservation districts can help preserve the health of water resources.

Canoeing and kayaking on the Connecticut River near Chase Island.

Groundwater

Groundwater makes up the subsurface link in the hydrologic cycle. A recharge area is an area of land surface that contributes water to an underground groundwater aquifer that may support groundwater wells. Land use activity within a recharge area may directly affect the quantity and quality of the ground water supply. Consequently, such uses should be carefully managed. Cornish is served by a few small stratified drift aquifers comprising 2,902 acres *(U.S. Geological Survey, 2000)* that correspond to the Connecticut River in the western area of the town. See Map IV-1, Development Constraints. Groundwater yield is rated by the transmissivity or yield of the stratified drift aquifer. Yield is measured in feet squared per day and the USGS has classified yield into four categories: Less than 500, 500 to 1000, 1000 to 2000 and 2000 to 3000. Although the groundwater is potentially recoverable by wells, the pumping of water from an aquifer requires careful analysis. Current provisions for groundwater protection in Cornish include protective well radii, septic setback requirements and a prohibition on commercial water extraction.

Floodplains

There are approximately 1,506 acres of floodplain lands in Cornish *(Federal Emergency Management Agency)*. See Map IV-1, Development Constraints. Floodplains are adjacent to rivers, streams and surface water bodies. Cornish's 100-year flood boundaries are generally associated with the Connecticut River and Mill Brook. These are areas susceptible to flooding during periods of excessive stormwater runoff. Floodplains play an important role in that they accommodate excessive water during flooding thereby protecting adjacent properties and downstream areas. Floodplains also

provide critical habitat to wildlife. Wetlands are often connected to floodplain areas. The Federal Emergency Management Agency (FEMA) has prepared Special Flood Hazard Area maps. The maps identify the 100-year flood areas. Areas in the 100-year floodplain may be eligible for federally subsidized flood insurance. The maps also serve as planning tools to establish districts that would limit certain land uses in these flood-prone areas. The town's zoning ordinance regulates activities in the floodplain areas.

Conserved Lands & Forest

These are land areas greater than two acres held for purposes of protection and conservation. These areas have been identified by the Society for the Protection of NH Forests and various NH state agencies. They comprise 2,325 acres within the town, most of which is forested. Each of these resource areas presents both constraints to development but also opportunities for open space protection and resource management.

In 2005, approximately 21,315 acres of land in Cornish were in Current Use, with approximately 1,547 acres being in some "other" means of conservation restriction. A large portion of land that is in current use is within Corbin Park on the eastern edge of town.

Wildlife & Rare or Endangered Species

Cornish's riverbanks, streams, ponds, marshes, fields, forests, and hilltops are home to variety of plant and animal species. Maintaining this natural habitat will support a diverse assortment of plants and animals. A list of rare plants, animals and habitats found within Cornish are listed with the New Hampshire Natural Heritage Inventory.

The Natural Heritage Program has designated four areas in Cornish to be protected. Listed in order of priority for protection, they are as follows:

1. Chase Island
2. Rich woods of Dingleton Hill (down to the river)
3. Northern New England Flood-plain Forest
4. Blow-Me-Down Pond

Scenic Resources

Natural topography, namely ridges, run generally north-south and provide higher elevations and remarkable views of the Connecticut River and other water bodies, villages, forest, and open fields. These ridgelines and prominences lend natural definition to the town as a distinct, identifiable space. Agricultural activity, such as that near Cornish Flat and other locations scattered throughout town, offer a scenic working landscape that contributes to Cornish's rural character.

V. DEVELOPMENT ISSUES

Rural Community Character

The Town of Cornish has a significant history and culture, which the town would like to preserve. Recognizing Cornish's position in the region, the Town of Cornish has little control over area development pressures affecting growth within the town. Preserving the rural community character of Cornish will require a concerted effort to guide future development in a manner that preserves rural features such as open lands, agricultural practices, and ridgelines throughout the community.

Sunset concert on Dingleton Hill.

Another significant contributor to rural character is the community's historic resources. There is currently no historic district within town, although the creation of one or more historic districts has been pursued twice since the 1980s. In both cases, the proposed creation of a historic district was defeated at Town Meeting. Cornish currently does not have any protection in place to prevent the demolition or "remuddling" (renovation that removes significant architectural character) of historic structures. Many of the remaining agricultural resources which contribute to Cornish's character, such as old barns, are being lost due to neglect. Preserving these features is difficult given their private ownership. However, town buildings include some significant historical resources that are directly within the community's control and may be preserved. Cornish currently does not have a Capital Improvement Program which would help guide these investments.

The Town has the ability through zoning to encourage the use of old barns and structures as accessory dwellings. This may provide a profitable use for old structures which have been identified as valuable contributors to rural character. Accessory structures are permitted in zoning and these provisions could be strengthened. The special exception requirement for multifamily conversions could be eliminated in some locations to encourage redevelopment. The Site Plan Review process would remain as a means to review and

Almost 90 percent of survey respondents indicate that the town should encourage the protection of "rural qualities."

Source: Town of Cornish Master Plan Survey, 2002

address site development issues.

Smart Growth

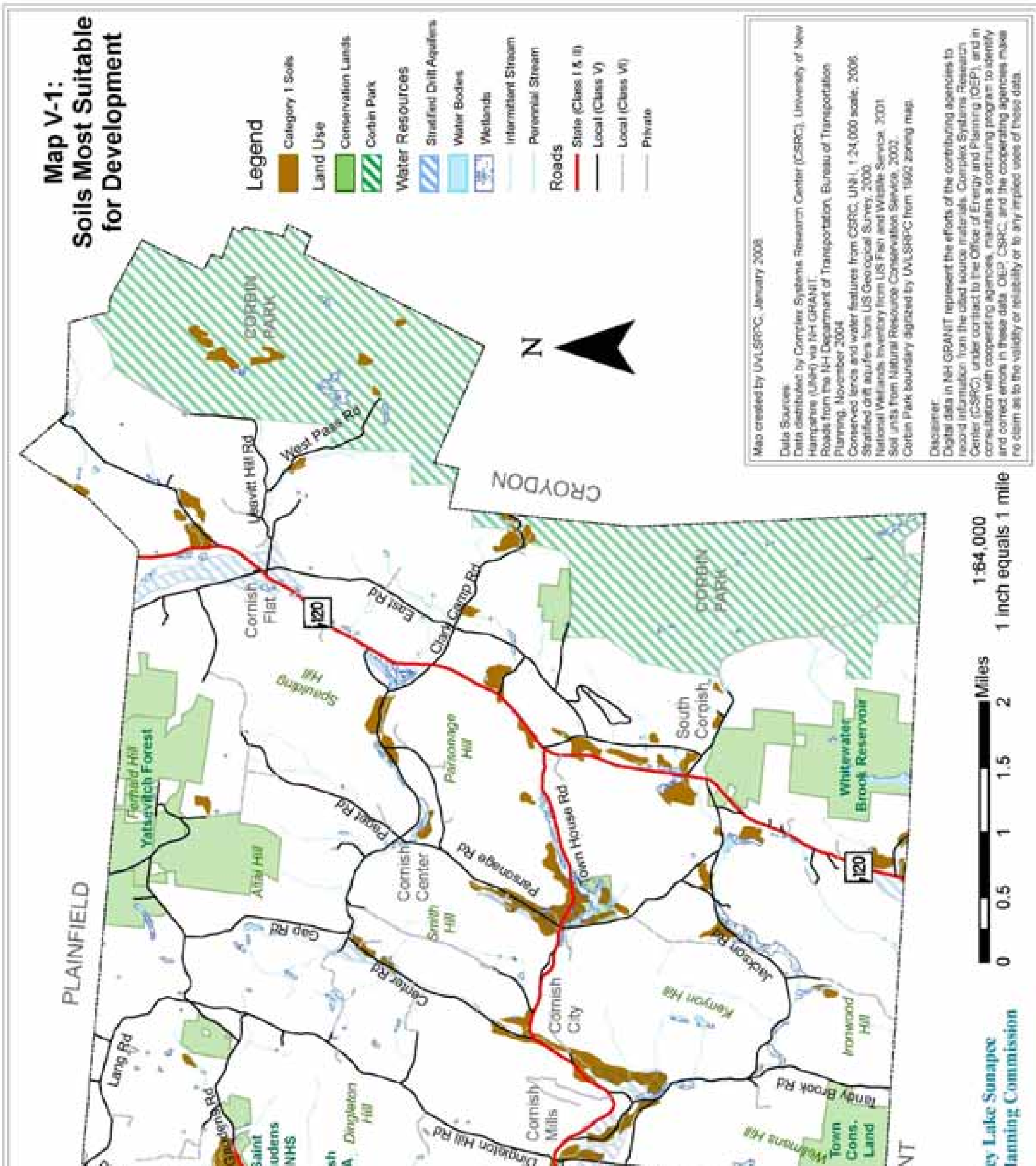
It is Cornish's goal to focus residential and commercial development around existing village centers; however, land availability is limited in these areas due to issues with drinking water availability, and other development constraints (i.e. steep slopes). Concentrating businesses and services in these village areas will also be difficult without water and sewer infrastructure.

Employment opportunities must be balanced with the protection of important environmental resources and "quality of life." As cottage industries and home-based businesses grow, some of these land uses will require infrastructure such as water and sewer and will need to relocate outside of town for these services. Other businesses may be of an appropriate type and scale that they may be encouraged to locate in Cornish village areas. However, at some point in the future when land becomes scarce, new village areas will need to be explored and/or higher densities will need to be attained. Increasing densities will require investment in water and sewer infrastructure. This would be a major expense that appears to have very little support in the Town of Cornish. Another option would be to explore the creation of an additional village area.

A tool to help facilitate this growth is the existing provision for cluster subdivisions within the Town of Cornish's Zoning Ordinance, however, it is underutilized; possibly because of the small scale of development that typically occurs (e.g. one or two lots at a time). Encouraging and providing for concentrated housing development is important not only from a preservation perspective, but also from a municipal management standpoint. For instance, the community may lessen the expense associated with serving the aging Baby Boomer generation by concentrating a mix of development types, thereby reducing the demands this population will place upon housing, transportation, medical/social services, and community facility infrastructure. The existing cluster provision does include a density bonus of one extra lot for every five allowed lots allowed under the standard lot size for the applicable zone. The density bonus could be increased to encourage its use. Another option would be the implementation of the Village Plan Alternative, an optional Innovative Land use Control and subdivision regulation designed to promote "efficient and cost effective" land development and "encourage open space" (RSA 674:21,VI). Other innovative land use controls should be explored to help promote the goals of the Master Plan and, more specifically, to direct planned growth to village areas.

Growth Centers

Most development in recent years has occurred along state and local roads. A continuation of this trend could be detrimental to the community's rural character as houses are constructed on remaining open spaces such as pastures and farms. In order to mitigate this trend, growth may be directed to village areas. To achieve this, growth within the villages will need to be based on the soil's capability to support development, provide potable water, and treat septic effluent.


Map V-1:
Soils Most Suitable for Development
Legend
Category 1 Soils
Land Use
Conservation Lands
Corbin Park
Water Resources
Stratified Drift Aquifers
Water Bodies
Wetlands
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
N
PLAINFIELD
VERMONT
CLAREMONT
CROYDON
CORBIN PARK
Cornish Flat
Cornish Center
Cornish City
Cornish Mills
South Cornish
Saint Gaudens NHS
Cornish WMA
Chase Island WMA
Yatsevitch Forest
Whitewater Brook Reservoir
Town Cons. Land
Cornish-Windsor Bridge
Connecticut River
Spaulding Hill
Parsonage Hill
Smith Hill
Kenyon Hill
Ironwood Hill
Dingleton Hill
Fernald Hill
Atla Hill
Lang Rd
Platt Rd
Saint Gaudens Rd
Dingleton Hill Rd
Root Hill Rd
Center Rd
Gap Rd
Parsonage Rd
Town House Rd
Jackson Rd
Tandy Brook Rd
East Rd
Clark Camp Rd
Leavitt Hill Rd
West Pass Rd
12A
120
0 0.5 1 1.5 2 Miles
1:64,000
1 inch equals 1 mile
Map created by UVLSRPC, January 2008
Upper Valley Lake Sunapee Regional Planning Commission

Basing lot sizes on soils' ability to support development is an option for communities without sewer infrastructure to encourage denser development. In order to identify the most suitable soils, the Site Specific Soil Mapping Standards published by the Society of Soil Scientists of Northern New England were used. These standards classify soils into six categories based on soil properties such as depth to water table, texture, and infiltration rate. Soil classification and existing development trends were used to conceptually identify potential future growth areas. See Map V-1 identifying the soils that can support the highest development densities, referred to as Class I soils.

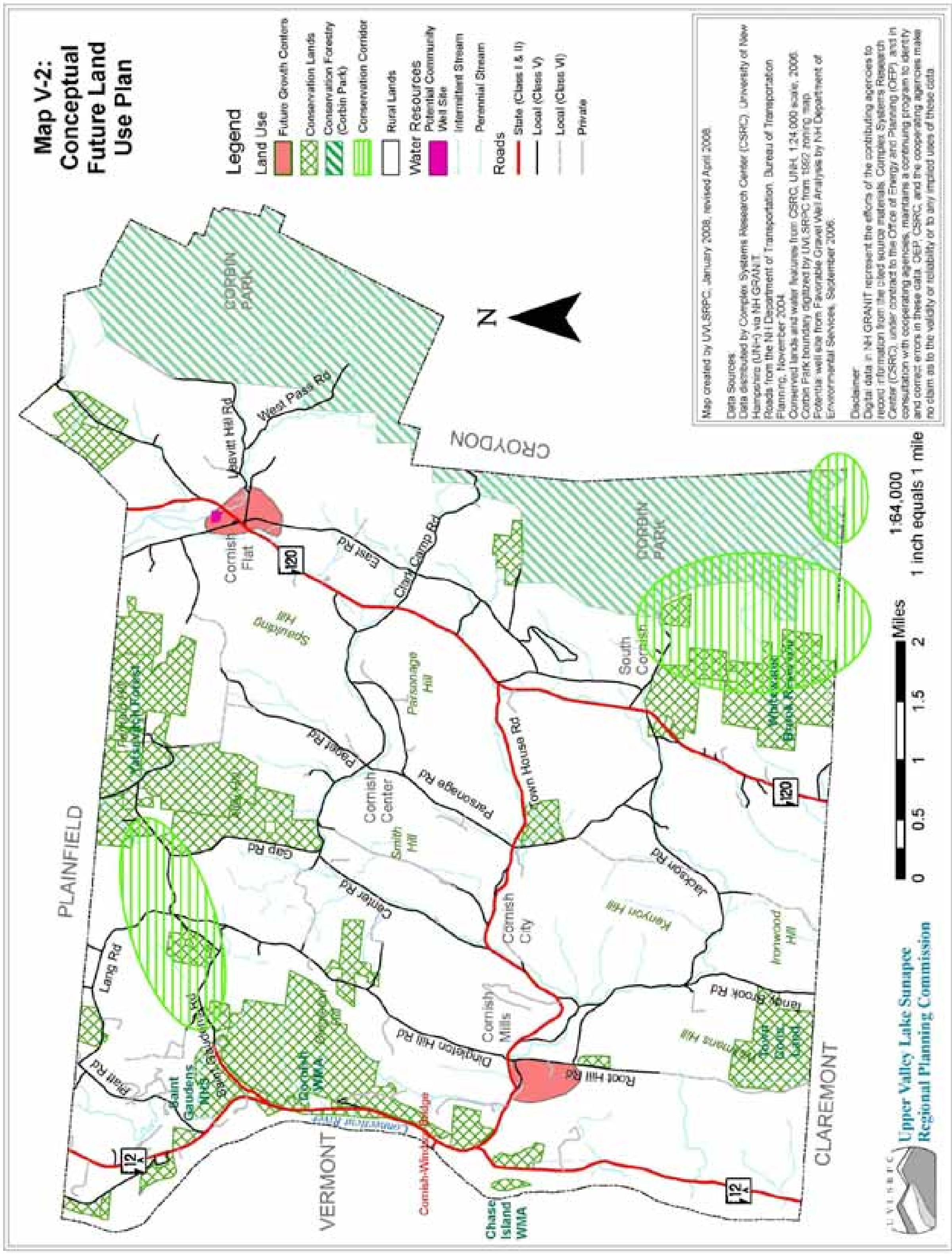
If the Town of Cornish chooses not to base lot sizes according to soil type within identified growth centers, then consideration should be given to changing the minimum lot size in the current Residential and Village Zones. Within the Residential Zone, this may include a reduction from two acres to one acre (or possibly less if desired) and a reduction in setbacks to correspond with those in the Village District. Similar changes may be implemented within the Village Zone.

An evaluation of soils and the existing development trends, allows the identification of conceptual growth centers for Planning Board consideration and public debate. These potential future growth centers are shown on Map V-2, the Conceptual Future Land Use Plan. Each area is described below. See Table V-1 for a comparison of these areas. Other areas were investigated, but were not selected for further consideration at this time (See Appendix D).

Cornish Flat Expansion

Cornish Flat is the town's only practical option to accommodate future village development within the existing settlement pattern. Due to steep slopes, floodplain, and the limited availability of drinking water, there few other logical village areas. The eastern and southern portions of the Cornish Flat area are best suited for development and have the least constraints. Soils in these areas would likely support similar development densities as the existing land uses. However, areas within the Flat are flood-prone and many of the best soils have already been developed. There remains some growth potential in the southeastern area near East Road. This development could be supported, in part, by a public drinking water supply within the "favorable gravel well area" identified by the NH Department of Environmental Services (See Map V-2). Expanding Cornish Flat Village has the potential to provide for approximately 48 residential units. A detailed map is provided in Appendix F.

Agricultural and residential buildings in Cornish Flat.


Map V-2: Conceptual Future Land Use Plan
Legend
Land Use
Future Growth Centers
Conservation Lands
Conservation Forestry (Corbin Park)
Conservation Corridor
Rural Lands
Water Resources
Potential Community Well Site
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
PLAINFIELD
VERMONT
CLAREMONT
CROYDON
CORBIN PARK
Cornish Flat
Cornish Center
Cornish City
Cornish Mills
South Cornish
Chase Island WMA
1:64,000
1 inch equals 1 mile
Miles
Upper Valley Lake Sunapee Regional Planning Commission

Cornish Mills

The area west of Town House and Root Hill Roads contains an historic settlement called Cornish Mills ("Mill Village"). Water power from Mill Brook spurred this growth. Land south of this area along Root Hill Road contains some favorable soils for development. The Planning Board has identified this area as having potential as a residential growth center. Given the number of commuters in Cornish, this location will offer easy access to the Lebanon, Claremont and Windsor employment areas without using local roads. The primary constraint to promoting development in this location is vehicular access to Town House Road, which provides poor sight distances. Farmland is another issue. The soils best suited for development in this location are farmlands of statewide importance, although not currently used for agriculture. Expanding Mill Village has the potential for approximately 94 residential units.

Table V-1: Conceptual Growth Center Comparison

Potential Growth Area	Typical Soil Classification	Area (Acres)	Range of Prescribed Lot Sizes (sq/ft)	Total Soil Capacity (units)
Cornish Flat Expansion	Class II	84	46,000-132,000	48.32
Mill Village	Class II	111	31,750-132,000	94.11
Total	…	195	…	142.43

Source: "Soil Based Lot Sizing, Environmental Planning for Onsite Wastewater Treatment in New Hampshire", SSSNNE Special Publication No. 4 Version I (September, 2003).

Notes: Developed area subtracted from the Cornish Flat area. On-site investigations are always necessary when siting subsurface waste disposal systems.

62 percent of survey respondents indicate that the town should encourage more land conservation through easements.

Source: Town of Cornish Master Plan Survey, 2002

Village Character

The rural, traditional New England appearance of Cornish's villages is critical to the fabric of the community. Maintaining this character will require a concerted effort as development occurs. It will be important that building renovation and new development respect some basic principals in order to maintain the look and feel of the historic village.

These include maintaining:

1. Consistent lot sizes and dimensional requirements
2. Village scale and design

3. Vibrant assortment of land uses

The Town of Cornish does not regulate design elements of development.

Land Conservation & Protection

While development pressure within Cornish has been minimal from a regional standpoint over the past decade compared to other towns, the attractiveness of Cornish, together with regional employment growth in the Upper Valley and emerging growth in the Precision Valley, have provided the potential for increased housing development. Given household preferences for solitude and existing settlement patterns, balancing growth in housing with the protection of important natural resources is critical.

According to the US Census, the Town of Cornish added two persons to the community and eight housing units between 1990 and the year 2000. During the same period, the Town of Plainfield added 185 persons and more than 90 units.

Agricultural resources by nature are easy to develop and Cornish has no strict regulation in place for their protection. This has contributed to a steady loss of agricultural land over the past 30 years. Existing natural resource protections are limited to water resources and wetlands and do not include agricultural land. Lot size requirements in the rural areas are small, leaving potential for significant development densities which are frequently contrary to protecting these resources. Groundwater availability is limited, and currently few protections exist for this resource.

Corbin Park, a private hunting and game preserve, has a considerable amount of land within Cornish. It is frequently taken for granted that this land will never be developed. However, this land is privately owned by the Blue Mountain Forest Association and currently has no conservation easements or development restrictions, other than a Current Use designation which may be easily removed. Other areas adjacent to the park should be considered for inclusion as well, such as the Whitewater Brook Reservoir. Given the size of these lands, the impact from possible development of these areas is a concern. One option to help protect these lands is to consider the creation of a conservation zone. There is also the potential for a conservation corridor in the area near St. Gaudens National Historic Site (See Map V-II).

Tax Base

The Town of Cornish, like most communities, is concerned about property taxes, both in terms of ensuring their adequacy as a source of revenue and ensuring they are not so high that they burden residents and make housing unaffordable. The current (2007) total tax rate for the Town of Cornish equals $16.55 for every one thousand dollars of assessed value. This is significantly less than the 2001 rate of 30.91. The decrease in the tax rate since 2001 is due to a significant increase in assessed values; in general, tax bills have not decreased with the tax rate.

One way to avoid significant year-to-year changes in the tax rate is to plan for future capital improvement purchases. Since Cornish has no water and sewer infrastructure, this primarily includes road maintenance equipment and municipal buildings. Schools are the largest expense for residents; however, School District expenditures are somewhat beyond the control of the Town.

There are three basic ways to maintain steady-low tax rates:

1. Improve service delivery efficiency
2. Capital Improvement Planning, and
3. Development Planning (e.g. encouraging conservation and a mix of land uses).

VI. FUTURE LAND USE PLAN

The future land use plan is the most important element of the comprehensive planning process. It synthesizes all of the Master Plan chapters, which are based on the opinions expressed in the Community Attitudes Survey and on an inventory and analysis of trends, existing conditions, and future needs with respect to land use, natural resources, population, housing, economic development, transportation, utilities, community facilities and services, and historic resources.

The future land use plan is a comprehensive policy statement of desired land use which can be used as a guide for future growth and development of the town. Future land use decisions and local ordinances, regulations, and policies should be consistent with the land use plan.

The conceptual future land use plan is depicted on Map V-2.

Projected Future Land Use Needs

Cornish's population is projected to grow at a moderate rate over the next twenty-five years; to rise from 1,661 (2000) to 2,320 residents in the year 2030. This equals about 22 individuals each year or a total of 659 persons. The Office of Energy & Planning reports that the per capita land consumption in New Hampshire has risen to 1.6 acres per capita. Using this assumption, the 659 persons would result in about 1,050 additional acres being consumed for residential development. This is less than four percent of Cornish's total area. Still, there is good reason for planning since it can be expected that this new development will be in-fill along existing roads, intensifying the sprawling pattern and giving the impression of higher densities than really exist.

Any unexpected change such as the addition of a large employer or housing development could alter the population projections dramatically for a relatively small community such as Cornish. Therefore, these projections should be updated as needed as conditions change or new information becomes available.

Non-residential growth projections were not completed. These land uses comprise a small portion of the town's historic development and is highly variable.

Rural Development Plan

This area would include two districts. One district would cover most of town and correspond with what is now predominantly the Rural Zoning District. A second district would correspond with Corbin Park with a stronger conservation emphasis.

<u>Function</u>

To preserve "rural character" and encourage natural resource-based industries such as farming and forestry, while allowing limited low-density residential development.

Characteristic Land Uses

- Agriculture/Forestry
- Conservation Lands & Low-impact Outdoor Recreation
- Low-density Single Family Residential
- Accessory Apartments
- Home-based Businesses
- Cottage Industries

Temporary log landing to accommodate a timberstand harvest on Route 12A.

Residential Development Plan

Function

To allow for more diverse residential development in moderate densities.

Characteristic Land Uses

- Single Family Residential (moderate density)
- Accessory Apartments
- Duplexes
- Home-based Businesses
- Cottage Industries
- Agriculture/Forestry

Village Development Plan

Function

Provide a multi-use center where relatively high densities are allowed and vibrant activity encouraged by a range of goods and services.

Characteristic Land Uses

- Single and Multi-family Residential
- Commercial and Multifamily Conversions
- Elderly Group Housing
- Commercial and Retail Businesses
- Services
- Retail Agriculture/Forestry

Land Use Action Plan

The future land use plan is focused on the primary land use types and existing land use regulatory structure of the Town of Cornish. This section considers the future needs of the community and outlines suggested actions and/or requirements to fulfill this vision and associated goals.

Goal 1: Guide new development in a sustainable pattern of land use that is consistent with the Master Plan Vision.

Rural Development Plan

- Consider the creation of a conservation zoning district which prohibits most residential development in order to focus growth to less environmentally sensitive areas. One logical area may be the undeveloped lands on the eastern edge of town, which is currently used as a wild game preserve. Additional areas include the southeast corner of town and a wildlife corridor in the northwest portion of town connecting large conserved parcels.
- As part of the conservation zoning district, consider whether only seasonal housing units should be permitted.

Residential Development Plan

- Merge the Residential Zone in the Cornish Flat area with the Village Zone.
- Eliminate the Residential Zone on North Parsonage Road due to concerns about adequate water supplies.
- Reorganize the Residential Zones to be in more appropriate locations. Possibilities to gain public consensus include Mill Village and a modest expansion in Cornish Flat.
- Change the minimum lot size in the Residential Zone from two acres to one acre.
- If the Residential Zone remains with two-acre minimum lot sizes, consider eliminating the Route 12A Residential District, as most of the district is subject to a conservation easement and no new residential construction appears feasible.
- Promote Low Impact Design (LID) and construction to minimize adverse impacts on the water supply.
- Provide for a diverse housing stock to accommodate a wide range of preferences and needs. This could include the continuation of accessory housing provisions such as in-law apartments, eliminating or reducing the requirements for multifamily conversions, and provide for small lots to reduce land costs.
- Ensure that multi-family units comply with fair housing laws and are accessible to the handicapped.
- Continue to allow for manufactured homes in appropriate areas within town.

Village Development Plan

- Consider increasing the size of the Cornish Flat Zoning District towards the southeast along East Road.
- Through the existing Site Plan Review process, require the following of commercial development and redevelopment when appropriate:
    - Provide vegetative cover and landscaping to enhance the aesthetic environment; and
    - Develop pedestrian connections
- Consider areas within the Village Zones or new areas to accommodate business with storage needs.
- Require new larger scale commercial and residential development to undertake an environmental and energy impact review in an effort to minimize such impacts as part of the town's Site Plan Review process.
- Review and consider increasing the maximum building footprint and maximum lot coverage dimensional standards.
- Consider the Village Plan Alternative and other Innovative Land Use Controls (RSA 674:21) to promote village development and preserve valued land and features.

Goal 2: Encourage a balance of uses that provide for places to live, work and engage in recreational activities through a suitable mix of open spaces and commercial, residential and small-scale cottage industrial growth.

Rural Development Plan

- Encourage natural resource-based industries such as agriculture and forestry.
- Encourage recreation based businesses such as hunting, fishing, canoeing, hiking, riding, and biking
- Within conservation zoning proposed in Goal 1, increase lot sizes to allow only supporting residential development (e.g. 50 acres).
- Strategically aid in the establishment of conservation easements according to an accepted plan, including adequate resources for long-term stewards.

Residential Development Plan

- Continue to allow for appropriate home-based businesses in the Residential Zone.

Village Development Plan

- Increase the maximum lot coverage dimensional standard for the Village Zone.

Goal 3: Enhance the town's main transportation corridors by improving their appearance, encouraging an appropriate mix of land uses and establishing corridor management techniques to allow for compatible pedestrian and vehicular activity.

Cornish Fair Parade, Town House Road.

Rural Development Plan

- Continue to carefully manage access to local roads.
- Work with the NH Department of Transportation District 2 to jointly manage access to state roads.

Residential Development Plan

o Consider encouraging residential growth near State-maintained roads -- Route 120, Route 12A and Town House Road -- to allow commuter access to outside employment centers without the use of local roads.

Village Development Plan

o Ensure that the state maintains the crosswalk connecting the Cornish Elementary School and the CREA area.

Goal 4: Maintain and enhance Cornish's historic role as a rural community with significant natural and agricultural character.

Rural Development Plan

o Initiate a process for designation of Prime Wetlands as provided for in RSA 483A:7 that are based upon the *Guide to the Designation of Prime Wetlands in New Hampshire*, 1983. Such a designation will provide added protection for particularly valuable wetlands over and above the Wetlands Conservation District.

Village Development Plan

o Consider flexible parking standards to allow for shared parking within village areas.

- Encourage that parking be provided in the rear of buildings or, when not feasible, require the shielding of parking with vegetation and/or fencing.
- Establish uniform standards for such public amenities as walkways, street trees, and benches that encourage pedestrian activity in the village.

Goal 5: Protect and enhance the character of Cornish's villages and natural/cultural resources.

Rural Development Plan

- Institute a process to consider the designation of additional Scenic Roads under NH RSA 253.

Residential Development Plan

- Consider increasing the density bonus in the cluster subdivision provisions.

Village Development Plan

- Create a water resource protection district in the Cornish Flat area to ensure a potable supply is available to serve current and future residents.

    - Ensure that the physical character of land can support a proposed use without necessitating the excessive expenditure (for the construction of municipal water or sewer systems, for example) of public funds to support the development.

VII. COMMUNITY FACILITIES

Introduction

The level of town services provided in Cornish is consistent with other small Sullivan County towns. The town provides emergency services, town government, recycling, and road maintenance with a total town budget of about $1 million (as of 2008). There is currently no capital improvement program to help manage community buildings.

Cornish School soccer game, CREA Field, Parsonage Rd.

With a few exceptions, the existing community facilities meet the current space demands and service needs of the community. All of the facilities have on-going maintenance requirements. Some of the municipal structures (the Town Offices and Town Hall, for example) are old and will require repair and modernization.

Due to the rural character of the town, the population is scattered, making it impractical to provide municipal water and sewer service to the majority of the residents. This distribution of residents also makes it difficult to service the population with community services as well. Currently, municipal buildings are scattered throughout town, along Route 120 and Town House Road and in the Cornish Flat (See Map VII-1).

Vision

"Existing community facilities shall be used to their fullest potential. Cornish will strive to meet the health and safety needs of all its citizens, in particular its elderly and its

children. Cornish will provide a quality education for its children through twelfth grade. The school will be supported by and will support the greater Cornish community."

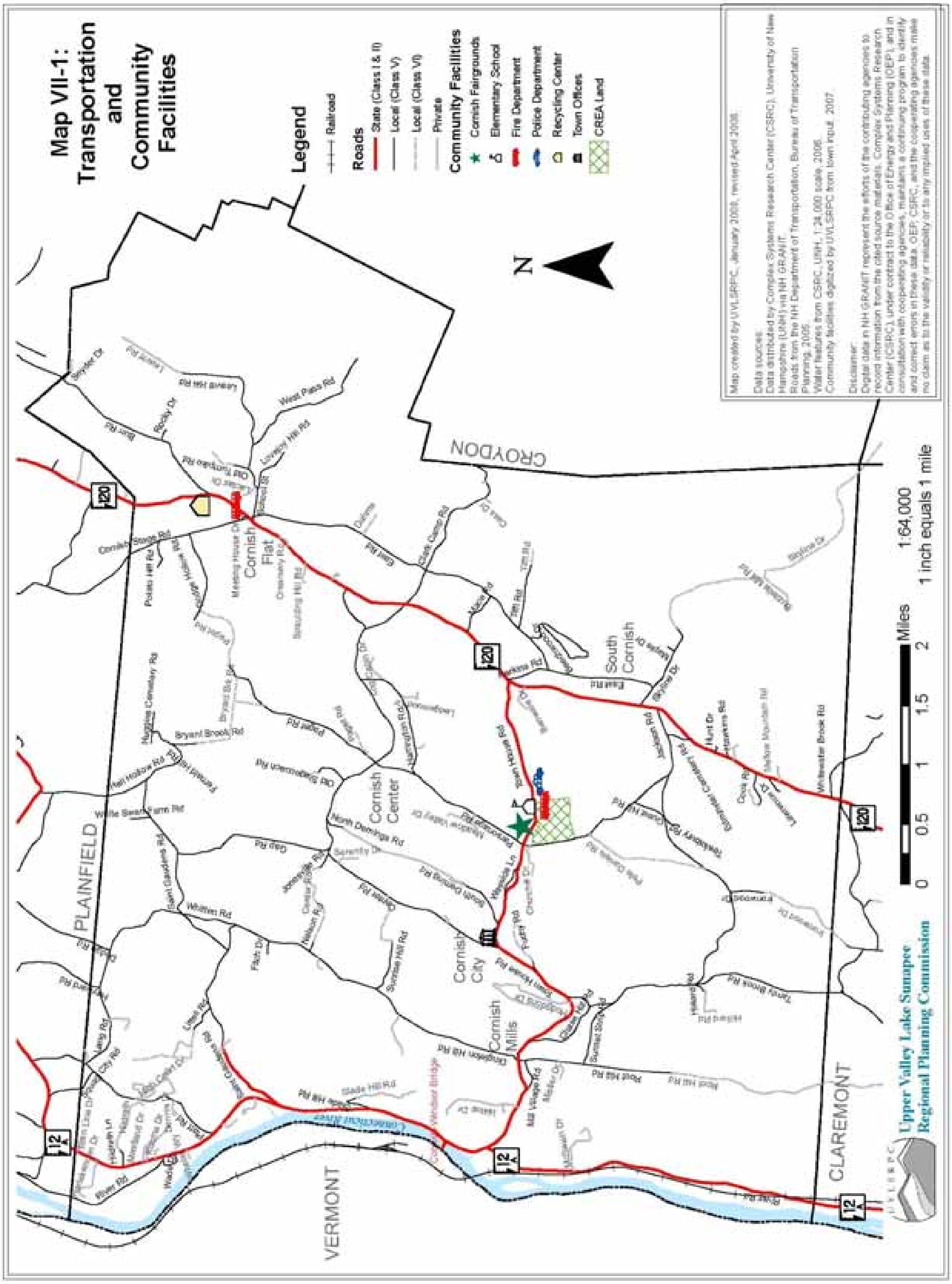
Goals and Objectives

- Encourage multiple use of existing community facilities.
- Provide high quality and efficient community services.
- Provide equitable town services.
- Provide sufficient community services.
- Increase the percentage of solid waste that is recycled.
- Create and implement a comprehensive maintenance and improvement program for municipal buildings.

Existing Community Facilities and Needs

Cornish's facilities are not managed under a single comprehensive maintenance program; rather improvements have taken place on an as-needed basis.

There currently is an emphasis on volunteer management of town functions, including maintenance. This makes it challenging to dedicate the necessary time and resources to properly manage these buildings.


Map VII-1: Transportation and Community Facilities
Legend
Railroad
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
Community Facilities
Cornish Fairgrounds
Elementary School
Fire Department
Police Department
Recycling Center
Town Offices
CREA Land
N
PLAINFIELD
CROYDON
CLAREMONT
VERMONT
Cornish Flat
Cornish Center
South Cornish
Cornish City
Cornish Mills
Connecticut River
Miles
0 0.5 1 1.5 2
1:64,000
1 inch equals 1 mile
Upper Valley Lake Sunapee Regional Planning Commission
Map created by UVLSRPC, January 2008, revised April 2008
Data sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT.
Roads from the NH Department of Transportation, Bureau of Transportation Planning, 2005.
Water features from CSRC, UNH, 1:24,000 scale, 2006.
Community facilities digitized by UVLSRPC from town input, 2007.
Disclaimer:
Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.

Rehabilitation of buildings affords an opportunity to upgrade the structures with current technologies such as installing energy conservation measures and installing networks and video wiring. It is also a time to consider space needs of various municipal services and the space required for storage. While determining how Cornish will house its various government functions, consideration should be given to the sharing of certain facilities such as central record keeping, community rooms and kitchens. Perhaps the best way to achieve the optimal arrangement and use of buildings is through a comprehensive review of facility needs and organization.

As improvements take place to these historic structures, care should be taken that construction techniques and materials are appropriate and consistent with the structure in order to maintain the building's character. Key to this process is careful planning for needed improvements. The National Park Service has published a series of historic preservation briefs to assist building owners with the rehabilitation and preservation of historic buildings. The NPS has a "rehab yes or no" service to help communities make decisions regarding rehabilitation. They also have a wealth of resources to help community officials manage moisture in buildings, fix roofs, repair masonry, chimneys and decorative features. Caring for old buildings is expensive. However, the consequence of poor maintenance and rehabilitation practices is degradation of building character and structure.

Built circa 1766, the Chase House on Route 12A was the site of the 1808 birth of Salmon P. Chase, Secretary of the Treasury under Abraham Lincoln.

Future population projections indicate that growth will likely influence the existing scope of services provided by the town very little over the next 30 years. However, there has been an increase in the demand for expanding some services, e.g. more recycling hours and senior facilities. Care should be taken so that as development occurs, it does not cause impacts that are beyond the capacity of the existing community services. During the permitting process, off-site exactions can help pay for capital improvements that are necessitated by specific developments. Capital improvement planning can assist the town in identifying and planning for these improvements.

Municipal (Town) Offices

Selectboard functions and the Town Offices are housed in a brick building on Town House Road. The addition of a handicap accessible lift in 2006 has opened up the upper floor so that larger meetings can be held at the Town Office. A high-speed internet connection has made an interface with State Offices possible. Foundation work performed in 2008 will ensure the building's structural integrity. Additional structural investigation is on-going due to building shifting. The building is more than adequate for the current population and for the foreseeable future.

Cornish Flat Farmers Market pumpkin carving contest at the Cornish Meeting House.

(Old) Town Offices

After the relocation of municipal services, the old municipal building located in Cornish Flat has been used by the Historical Society. The building, which was once a jail, has some historical significance and is located close to other historic buildings. Although the space is small, an addition to the existing building may detract from the visual quality of Cornish Flat. It is also not clear whether or not the existing lot size would accommodate any expansion of the building. Aside from the use by the Historical Society, there are no other planned uses for this facility.

Town Hall

Town Meeting was held in the Town Hall until it was moved to the Elementary School Gym in the late 1980s. The Cornish Fair Art Show and weekly Bingo hosted by the local Fire Department are held at the Town Hall. In addition the Town Hall is often rented out at a reasonable rate, with a discount given Cornish residents, for private parties – weddings, birthdays, etc. Located off Town House and Parsonage Roads, the Town Hall is sufficiently large to accommodate these public functions. The building is in average condition and has had recent improvements with the addition of a water filtration system and renovations to the bathrooms. Some exterior improvements are still needed for the Town Hall

Most survey respondents believe town highways are maintained in either adequate or excellent condition.

Source: Town of Cornish Master Plan Survey, 2002

Meeting House

The Meeting House in Cornish has undergone restoration, but improvements are needed and ongoing. This historic building serves as the meeting place for the Historical Society (in addition to the old Town Offices), the Thanksgiving and Christmas Farmers Market, as well as other organizations. It is also is available for social events. The Meeting House is situated on Cornish Stage Road in Cornish Flat. Despite the recent improvements, the Meeting House has no water source which severely limits its use.

Library

The library is located adjacent to the Old Municipal Offices in Cornish Flat. The building is adequate in terms of space and materials for current use. The building is old and is in average condition. There is no water supply; restrooms may be required in the future. The building does not have access for the disabled.

Highway Department

The department occupies a new facility off Town House and Parsonage Roads. The building is in good condition and is satisfactorily serving community needs

Building Inspection and Permits

Unlike many communities in the Upper Valley, Cornish has no building inspector. At the same time, Town Building Permits, issued by the Selectboard, tend to cost less than those in other towns. Permit cost depends on the type of project, following a fixed fee rather than a formula based on a percentage of construction cost. The small town nature of Cornish supports self-regulation of building contractors and most other trades people, with plumbers and electricians requiring state licensure. On rare occasions, State officials inspect local plumbing and electrical work. The Cornish Fire Department inspects new homes, newly installed home heating devices, smoke detectors and wood stoves upon request of property owners or tenants.

New (2008) Cornish Volunteer Fire Department station in Cornish Flat, constructed without taxpayer funds.

Fire Protection

Two fire stations are located in Cornish. One is located on Route 120 and the other on the corner of Town House and Parsonage Roads. The latter is about 25 years old and remains in good condition. The station located in Cornish Flat was constructed in 2007-8 and should adequately serve the community for many years.

The volunteer fire department consists of a number of fire fighters and the fire chief. Fire services rate well with community survey respondents. Having two buildings in different locations is helpful in responding to calls.

Police Department

The Police Department shares quarters with the Fire Department in the building on Town House Road, across from the Cornish Elementary School. The department is currently well equipped to carry out its responsibilities. Community survey results indicate that most responses find polices service adequate.

Ambulance Services

The Windsor Fire Department and Golden Cross Ambulance of Claremont provide transportation ambulance services provide services for all patients to the Town of Cornish by contract. Town coverage is divided between the two based on who can provide the quickest response time to all areas of Cornish.

In the 2002 Master Plan survey, of the 146 people who had an opinion, 94 rated ambulance services as excellent.

Solid Waste Disposal

The town dump has been closed for many years and over the past decade the town joined the Sullivan County Regional Refuse Disposal District, which was served by the Wheelabrator incinerator in Claremont. This relationship was recently disbanded. The town currently contracts with a private hauler which takes solid waste to an approved landfill outside of town.

The old town dump was converted into a recycling center

Saturday morning activity at the Cornish Recycling Center, Route 120.

in effort to reduce the volume of waste that was sent to the incinerator, and thereby reduce the cost of disposal. The location of the recycling center near Cornish Flat seems to serve the community well. Hours have recently been expanded. The town also participates in the household hazardous waste collections. The current disbanding of the Sullivan County Solid Waste Project has provided Cornish an opportunity to reduce the emphasis on disposal and incineration and decrease waste by recycling more.

Increasing the amount of recycling can have benefits. Municipal solid waste budgets total over $100 million for the state and the per capita expense to dispose of solid waste is approximately $77 (2006). The Town of Lyme's recycling rate increased from 13.4 percent in 2005 to 51.9 percent in 2006 after the implementation of a pay-as-you-throw system. The town disposed of 310 tons of waste in 2006--264 tons less than in 2005. Pay-as-you-throw programs, essentially a pay-as-you-use approach, have proven to increase recycling in many communities. Cornish residents currently (2006) recycle about 19 percent of their solid waste, about 2 percent less than the 21 percent state average.

Recreation

The Town recently developed the Cornish Recreation Education Area. The 70 acre parcel is located in the southeast quadrant of the Town House Road and Parsonage Road intersection. A soccer field, baseball diamond, and associated parking were constructed as part of this development. Hiking and cross-country trails are some of the additional improvements that have been added.

The Elmhurst Barn, located on the lower soccer field has been restored by a group of dedicated volunteers headed by the CREA Barn Committee. A new foundation, a new roof, and new siding are among the improvements to this historic barn. When complete, the CREA Barn will be available for community use.

The Connecticut River too offers recreational opportunities in Cornish. The town is one of few towns to have good access to the river. The State of New Hampshire has acquired thirty-eight acres of stream-bank to be used as fishing access. While the Connecticut River offers wonderful opportunities for boating and fishing, the town should consider acquiring land along the Connecticut for a swimming beach and picnic area. Even if the land is not developed for use until some future date, it would be wise to purchase it now before waterfront prices rise even higher.

Schools

A community's school system can have significant influence on land use form and function. It also has the potential to influence the growth of the area served. School Administrative Unit (SAU) No. 6 provides administrative services to the Town of Cornish

and the neighboring City of Claremont and Town of Unity. The Cornish Elementary School is part of the SAU 6; the facility is owned by the Town of Cornish.

The Cornish school (K-8) is adequate for the current school population in 2006/2007. In fact, enrollment has been decreasing over the past decade which is freeing up space in the school. In recent history school enrollments were at capacity.

Cornish does not have a high school. At the present time, nearly half of all Cornish high school students attend Windsor High School. The remainder attends Hartford High School, Stevens High School in Claremont, Lebanon High School and Hanover High School, for which tuition support is provided by the Cornish School District. Other Cornish high school students attend Kimball Union Academy in Meriden and other private schools; the School District does not provide tuition support for these students.

School enrollment projections completed in 2001 indicate that the elementary school population will continue to decrease until 2008/2009 and then stabilize until 2011. This may result in the Town of Cornish considering the consolidation of schools, should enrollment at the Cornish Elementary School not justify its continued operation. The closing of the Cornish Elementary School would pose several challenges for the Town of Cornish. First, the school offers an attraction which adds vibrancy to this area of town; and second the school facility provides a gymnasium which is frequently used by the town for various activities. If there is ever an opportunity to purchase the facility, the community may consider the acquisition of the building for the purpose of continued use of the gymnasium and/or other municipal purposes. The building could be used for consolidating town services or a senior center.

Former, current and future Cornish School students at a school fundraising dinner.

The school is located across from the CREA Recreation area. A crosswalk currently connects these attractions to assist in safe pedestrian travel.

Community Service Organizations

Following are non-profit organizations with which the Town of Cornish is not affiliated who offer services to community residents:

Cornish Rescue Squad

The Cornish Rescue Squad is a non-profit organization supported in part by donations from the Towns of Cornish and Plainfield. The majority of the squad's funding is through the generosity of individuals.

The Rescue Squad operates out of a relatively new building off Route 120 and Center Road. The Squad's rescue truck is housed at the station and is equipped with a full compliment of emergency medical equipment as well as extrication equipment for auto accidents and lighting equipment used in support of the Fire Department. A number of area residents volunteer their services to the squad and respond directly from their homes. Squad members operate under the protocols and licensing set up by the NH Board of EMS.

Southwestern Community Services

Southwestern Community Services delivers services in the fields of energy, housing, nutrition, education, mediation, and health. Southwestern Community Services, Inc. (SCS) is one of six community action agencies throughout New Hampshire, and part of the larger network of 70 agencies in New England and nearly 900 agencies nationwide. SCS strives to empower low income people and families through direct assistance, reducing stressors and advocating for such persons and families as they lift themselves toward self-sufficiency.

Meals on Wheels

Meals on Wheels is operated through Sullivan County Nutrition Services. The organization provides meals to seniors, 60 years or older, and to people with qualifying disabilities. The organization served over 100,000 meals to Sullivan County residents in 2007.

Sullivan County Hospice

Sullivan County Hospice is a volunteer agency that provides practical and emotional support to terminally ill patients and their families within Sullivan County. In addition to hospice service, the organization also offers a bereavement group.

Visiting Nurse Association & Hospice of VT and NH

The Visiting Nurse Association is a not-for-profit organization providing home healthcare, hospice, and maternal child health services.

Recommendations

In order to manage community facilities and services, it is recommended that the town develop a comprehensive program for identifying facilities and service needs and managing the maintenance, repair and rehabilitation of community buildings. As part of this approach consider the following:

- Maintain concurrency between the capacity of community facilities and facility demand.

- Form committee(s) to study alternative facility options. Examine space and improvement needs.

- Develop a Capital Improvements Program to assist the Selectboard with identifying and prioritizing capital improvement needs.

- Provide handicap accessibility at the Library. Identify ways to improve accessibility to all municipal building and community infrastructure.

- Ensure that the crosswalk connection between the school and the CREA Land is maintained, i.e. freshly painted and visible.

- Ensure that improvements to municipal infrastructure do not destroy the historic character of the building or its surroundings.

- Impose off-site exactions upon new development that requires improvements to drainage, highway or water/sewer capital facilities.

- Improve handicap accessibility to municipal buildings and facilities, in accordance with the Americans with Disabilities Act (ADA).

VIII. PUBLIC ROADS AND TRANSPORTATION

Introduction

Cornish's transportation system consists of inter-regional highways and local streets and an active rail corridor. This transportation network enables safe and efficient circulation within the town, and ensures the town's links with the rest of the state and its markets. Given that the transportation network in Cornish is part of the commuting route between the Lebanon and Claremont economic centers, traffic volumes along Cornish roads are likely to increase over the coming years.

This chapter provides an overview and evaluation of Cornish's existing highway network and levels of present and projected future use, an inventory of other transportation characteristics and needs, and recommendations for improving the present transportation system and meeting future needs. The purpose is to develop and maintain a transportation system that meets the needs of residents while maintaining and complementing Cornish's rural village character.

Vision

Cornish's network of roads and bridges will be maintained in an efficient and organized manner. The safety needs of drivers, cyclists, equestrians, and pedestrians will be met. Cornish's communication and transportation infrastructure will be able to support the needs of its citizens and businesses. Cornish will explore practical public transportation solutions and other alternatives to single-occupancy automobiles.

Goals and Objectives

The following goals are established for the Town of Cornish transportation network.

- Continue to develop a safe, efficient, equitable, and flexible transportation system that meets the needs of residents while maintaining and complementing Cornish's rural village character.

- Respect the need for economical and environmentally-sensitive "flexible" design, construction, and long-term maintenance of Cornish's transportation system, while maximizing public safety and utility.

- Encourage the arrangement of roads and building layout to minimize the future maintenance expenses to be borne by the town.

- Encourage the maintenance, construction, and repair of town roads in a manner consistent with the rural character of the town and reflective of the historical pattern of tree-lined and scenic highways, including but not limited to, the preservation of stone walls

- Encourage the development of safe, viable transportation alternatives including walking, biking, and public transportation.

Public Road System

The public road system in Cornish totals 96.84 miles. Table VIII-1 presents a breakdown of road mileage by legislative classification.

Table VIII-1: Highway Mileage by Legislative Classification

Highway Mileage by Legislative Classification in Cornish			
Class	**Description**	**Mileage**	**% Road Mileage**
I	Primary State Highways	6.84	7.1%
II	Secondary State Roads	11.52	11.9%
III	Recreational Roads	0	0.00%
IV	Town and City Streets	0	0.00%
v	Rural Highways	54.85	56.6%
VI/Private	Unmaintained and Private Roads	23.63	24.4%
Total		**96.84**	**100.00%**

Source: NHDOT Bureau of Planning and Community Assistance, 2007

Class I, Trunk Line Highways, consist of all existing or proposed highways on the primary state highway system, excepting all portions of such highways within the compact sections of cities and towns. The state assumes full control and pays costs of construction, reconstruction and maintenance of its sections. Class I roads in Cornish include the entire length of NH Route 120 and the Cornish-Windsor Bridge, both of which are also classified as "Major Collectors" in the state's functional classification system.

Class II, State Aid Highways, consist of all existing or proposed highways on the secondary state highway system, excepting portions of such highways within the compact sections of cities and towns, which are classified as Class IV highways. All sections improved to the satisfaction of the commissioner are maintained and reconstructed by the State. All bridges improved to state standards on Class II highways are maintained by the State. All other bridges on the Class II system shall be maintained by the city or town until such improvement is made. Bridge Aid funds may be utilized to effect such improvements. Class II roads in Cornish include the entire lengths of NH Route 12A and Town House Road. Under the state's functional classification system, NH Route 12A is classified as a "Minor Arterial", and Town House Road is classified as a "Minor Collector."

Class V, Rural Highways, consist of all other traveled highways which the city or town has the duty to maintain regularly. Examples of Class V roads in Cornish include Center Road, Clark Camp Road, and Dingleton Hill Road.

Class VI, Unmaintained Highways, consist of all other existing public ways, including highways discontinued as open highways, and made subject to gates and bars, and highways not maintained and repaired in suitable condition for travel thereon for five (5) successive years or more. However, if a city or town accepts from the state a Class V highway established to provide a property owner or property owners with highway access to such property because of a taking under RSA 230:14, then notwithstanding RSA 229:5, VII, such a highway shall not lapse to Class VI status due to failure of the city or town to maintain and repair it for five (5) successive years, and the municipality's duty of maintenance shall not terminate, except with the written consent of the property owner or property owners. Examples of Class VI roads in Cornish include Fuchy Road and Pete Daniels Road.

Development along Class VI Roads

Class VI roads are often considered attractive with few, if any homes, and little traffic. Often, lands along Class VI roads represent "what's left" after easily developable lands along Class V roads have been consumed. As a result, property is usually more affordable off Class VI roads than on main local and state roads, and many people are interested in building in a private and scenic area of town. However, after homes are built, issues arise surrounding school access, emergency vehicle access, maintenance, town liability, and the overall efficiency of the Town road network.

Route 120 surface and bridge, maintained by the State of New Hampshire Department of Transportation, in Cornish Flat.

Class VI Roads in Cornish

The Class VI road information presented within this Master Plan is currently being revised to be consistent with the Town's Official Class VI Road Map on display in the Selectboard's office.

The current unwritten policy of the Town of Cornish Selectboard, is not to issue a building permit to a lot with frontage solely on a Class VI Road unless the applicant can show that improvements to the portion of the Class VI road in question will create suitable access to the lot. The standards for improvements are set by the Selectboard.

This approach may affect the classification of the road, depending upon the improvements made, who maintains the road, and whether the improvements were made under the emergency lane statute RSA 231:59-a. In general, continued improvement and maintenance of a Class VI road changes its classification to a Class V road.

The Town of Cornish may prohibit the issuance of building permits on Class VI roads. The authority to deny building permits is in RSA 674:41, I(c). Instead of denial, the town may adopt a policy that restricts development unless the applicant upgrades the road for reclassification to a Class V road. This will require continued town maintenance of the upgraded road.

It is not recommended that the town issue building permits on Class VI roads, however, if the town maintains the current policy, the procedures of RSA 674:41, I(c) should be followed. This includes, but is not limited to, review and comment by the Planning Board and the town not accepting maintenance or liability of the road.

Discontinued portion of Root Hill Rd., with the Cornish Town Forest on the right.

Class VI roads provide valuable rights-of-way for a community which can be beneficial if reserved for future use. If discontinued completely, these corridors are lost for future public use as roads or utility corridors. The only time a complete discontinuance should be considered is when there is a specific alternative use for the land planned by the only owner of the highway. A town can save on maintenance costs and maintain the highway right-of-way by discontinuing the highway subject to gates and bars.

Recommendations:

- Review town records to determine the status of all purported Class VI roads in the community and continue to update the Town's inventory of Class VI roads.
- The Selectboard and Planning Board jointly develop a written Class VI Road policy for adoption by the legislative body at Town Meeting.
- Maintain public right-of-way by implementing sound discontinuance policies which preserve public right-of-way unless it is absolutely necessary to relinquish.

- Ensure that Selectboard road improvement policies are consistent with the Planning Board's standards for new roads.
- If issuing building permits on Class VI roads following the requirements of RSA 674:41, I(c)

Scenic Roads

The Scenic Road designation permitted under state law protects trees and stonewalls situated on the public right-of-way of a particular road. This tool can help in the preservation of the rural, scenic and historical landscape in a town.

The procedure under RSA 231:157 allows 10 or more persons who are voters of the town or whose lands abut the proposed designated road to petition for a vote to be held at Town Meeting to consider the proposal, with Class I and II highways being excluded from this law. After Town Meeting designation, any repair, maintenance, reconstruction or paving work shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, except with the prior written consent of the Planning Board or other designated municipal body and following a public hearing. However, the limited removal of natural and man-made obstructions is allowed for trees that are "public nuisances" threatening safety or property and for restoring the service of a public utility under emergency circumstances.

Per RSA 231:158, the Scenic Road classification does not affect the town's eligibility to receive state aid for road construction, nor does it affect the rights of abutting landowners to work on their own property. In Cornish, the following roads have been officially designated as scenic:

- St. Gaudens Road (to Hell Hollow Road)
- Lang Road
- Whitten Cemetery Road

Recommendations:

Review town roads for potential scenic road designation, including:

- Dingleton Hill Road
- Gap Road
- Sunrise Hill Road
- East Road

Access to Roads and Highways

Access points along highway and road corridors are important for the public's transportation needs. Driveways and site entrances actually connect the transportation system to the land. However, excessive or poorly planned accesses can have a major impact upon safety and roadway capacity. Too many uncoordinated curb cuts and/or driveways can cause higher accident rates and safety hazards. Improperly designed

and constructed accesses could cause adverse harm to the adjacent roadway and to the health and safety of town residents and to the traveling public. Therefore, accesses should be designed, built, and maintained in the best way possible to provide access to land and to minimize potential problems.

The New Hampshire Department of Transportation regulates access by issuing driveway permits for all residential driveways, commercial entrances and new subdivision roadways along Class I and II highways. The State's design requirements limit a site to two driveways unless highway frontage exceeds 500 feet. Additionally, the maximum width of any access is 50 feet, the driveway turning radius is not to exceed 50 feet, and driveway grades are to slope away from the highway to the existing ditch line.

Because the NHDOT regulates the issuance of driveway access permits on state highways and towns regulate the use and development of parcels adjoining the roadway, access management programs should be a cooperative effort between towns along the corridor and the Department of Transportation. The New Hampshire Department of Transportation has been supportive of access management programs in corridors around the state. To facilitate this cooperation, the NHDOT has shown a willingness to enter into memorandums of understanding with communities for coordinating highway access on state thoroughfares. The Town of Cornish corridor should consider the possibility of entering into a cooperative agreement with the NHDOT related to access permitting on either NH 12A, NH 120, and Town House Road. Such a memorandum of understanding could help ensure that there is cooperation between the town and NHDOT in regulating highway accesses in the village centers of Cornish Flat, Cornish City, and Cornish Mills.

The Town of Cornish currently has a permit system for driveways on Class V roads under RSA 236:13-V, which authorizes Planning Boards to adopt driveway regulations and require a permit for all driveways, entrances or exits to public ways under municipal jurisdiction. Driveway regulations are based on safety and maintenance issues such as adequate sight distances, maximum grade, minimum and maximum width requirements and proper drainage. In most communities, after the Planning Board has developed and adopted driveway regulations with standards for these areas of concern, the road agent administers the driveway permit system with appeals to the Planning Board. All new access points should be given careful consideration in driveway regulations in order to maintain and preserve the health, safety and general welfare of the town.

Recommendations:

- Continue cooperative efforts between the Road Agent and Planning Board in administering the Driveway Permit system.
- Consider developing a Memorandum of Understanding with the New Hampshire Department of Transportation for the coordination of access management on state highways in the Town of Cornish.

Traffic Patterns

Table VII-2 presents a summary of traffic counts in Cornish along Route 12A, Route 120, the Cornish-Windsor Bridge, and selected local roads. The highest traffic volumes in the Town of Cornish are found on the Cornish-Windsor Bridge, which sees 3,300 vehicles per day. Traffic volumes on the two numbered state highways in Cornish, NH 12A and NH 120, range from 2,100 to 2,800 vehicles per day. The highest observed traffic on a state highway in Cornish is found on NH 12A at the Plainfield Town Line currently, which sees approximately 2,800 vehicles per day. This is likely due to two factors: the cluster of businesses located in this area and the location of the St. Gaudens National Historic Site.

Table VIII-2: Traffic Volumes

Historic and Projected Traffic Volumes in the Town of Cornish					
Location	**Average Annual Daily Traffic**				
	Actual				**Projected**
	1985	**1995**	**2000**	**2006**	**2015**
Cornish-Windsor Bridge	2,600	2,400	3,000	3,300	3,940
NH 120 South of Cornish City Road	N/A	2,000*	2,000	2,400	2,870
NH 120 at Plainfield Town Line	1,100	1,700	2,100*	2,200*	2,630
NH 12A South of Cornish Mills Road	N/A	1,800*	1,900	2,100	2,510
NH 12A at Plainfield Town Line	1,600*	1,900	2,500*	2,800*	3,350
Center Road West of Gap Pond Road	N/A	130*	200	240	290
Leavitt Hill Road over Notch Brook	N/A	130*	170	240	290
Platt Road over Blow-me-Down Brook	N/A	100*	80	90	110

* Indicates that traffic data were collected in 1983, 1993, 2001 and 2005 respectively.
Projections assume 2% average annual growth rate in traffic volumes, prepared by UVLSRPC (2007).

Table VIII-2 also presents an extrapolation of these growth trends to the year 2015. The projections indicate that traffic on Cornish-Windsor Bridge would approach 4,000 vehicles per day by 2015, and that traffic on NH 12A and NH 120 would range from approximately 2,500 to 3,350 vehicles per day. The highest projected traffic volume on a state highway would be 3,350 vehicles per day along NH 12A at the Plainfield Town Line. This number could fluctuate significantly depending on whether the town encourages or discourages further business development in this area.

Much of the traffic along these arterial highways continues to be comprised of work-related trips. The 2000 U.S. Census provided data on town-to-town commuter patters for each state in New England. Commuter flows to and from the Town of Cornish are presented in Table VIII-3, below.

Table VIII-3: Commuter Flows

Commuter Flows to and from Cornish		
From Cornish	**To/From**	**To Cornish**
169	Cornish	169
223	Lebanon	7
153	Claremont	72
85	Hanover	N/A
33	Plainfield	19
33	Newport	N/A
8	Charlestown	13
11	Remainder of Sullivan County	14
N/A	Windsor, VT	8
N/A	Remainder of Windsor County, VT	22
8	Worked Elsewhere	5

Source: 2000 U.S. Census, Minor Civil Division Worker Flow Data

The commuter flow data give a picture of prevailing traffic trends within the town. The majority of commuters travel to either the Lebanon/Hanover or Claremont employment center, and are likely using NH Route 12A or NH Route 120. Approximately 450 Cornish residents commute to these employment centers each day. Which road is used most likely depends on whether people live on the east or west side of town. However, those commuting to Lebanon would probably seek to avoid using Route 12A due to congestion in the West Lebanon commercial district. The highest observed traffic volumes in Cornish are seen at the Cornish-Windsor Bridge. Some commuters may use the bridge to access I-91 to commute to either Lebanon or Claremont, however much of this traffic is likely from residents of both Cornish and Windsor conducting their daily business (shopping, banking, etc.) in the neighboring community.

The commuter flow numbers also indicate that nearly 25% of workers (16 years and older) living in Cornish are employed in town. This speaks to the continued success of home-based businesses in the community. Many of these people likely travel on local, Class V roads towards local employment centers along Town House Road and Route 120. It is also important to note that the Town of Plainfield is the fifth largest employment destination for Cornish residents. It is likely that many of these commuters also use Class V roads to reach their destinations in Plainfield. Center Road, Gap Road, Lang Road, and Cornish Stage Road are all potentially used by these commuters.

Road and Bridge Conditions/Upcoming Transportation Projects

The New Hampshire Department of Transportation has evaluated certain sections of highways throughout the state as part of its Road Surface Management System. Table VIII-4 below shows current pavement conditions on state-maintained highways in the Town of Cornish.

Table VIII-4: Pavement Condition

Pavement Condition on State Highways in the Town of Cornish			
Road	**Segment**	**Rating**	**Summary**
Route 120	Entire length within the Town of Cornish (except for two approximately ¼ mile sections immediately north and south of the Town House Road intersection)	Red	Major Work Required
Route 12A	From approx ½ mile north of Town House Rd. to ½ mile south of Town House Rd.	Red	Major Work Required
St. Gaudens Rd.	From NH 12A to start of Class V section	Red	Major Work Required
Town House Road	Entire length	Yellow	Some Work Required

As Table VIII-4 shows, the NHDOT rates much of the state highway mileage in the Town of Cornish as requiring "some" or "major" work. The New Hampshire Department of Transportation also assigns sufficiency ratings to bridges based on inspections by its civil engineering staff. The sufficiency ratings are organized under a color-coded system. Red list bridges require interim inspections due to known deficiencies, poor conditions, weight restrictions, or type of construction. The NHDOT inspects Red List bridges twice each year. As shown in Table VIII-5 below, the Town of Cornish currently has six "Red List" bridges, five of which are municipally owned. At the time of issuance of this Master Plan (early 2009), the Clark Camp Rd. bridge is closed.

Table VIII-5: "Red List" Bridges

Status of Bridges in the Town of Cornish- State/Municipal "Red List" Bridges		
Bridge Number	**Bridge Location**	**Owner**
064/108	Cornish-Windsor Covered Bridge	NHDOT
071/168	Blow-Me-Down Covered Bridge	Town of Cornish
081/095	Dingleton Covered Bridge	Town of Cornish
089/082	Tandy Brook Rd. over Mill Brook	Town of Cornish
113/127	Center Road over Mill Brook	Town of Cornish
151/122	Clark Camp Rd. over Mill Brook	Town of Cornish

Currently, there are no projects in the Town of Cornish scheduled on the state's Ten-Year Transportation Improvement Plan. Given the current under funding of the Ten-Year Plan, it is unlikely that NHDOT will be soliciting new projects in the near future. In addition, NHDOT has established a moratorium on Transportation Enhancement program funding until 2009.

Infrastructure needs in Cornish will continue to arise regardless of the current funding situation at the state level. However, there are two programs within NHDOT that could potentially benefit the Town of Cornish: the State Aid Bridge Program and the State Aid Highway Program. The State Aid Bridge program allocates $6.8M per year for the rehabilitation or replacement of municipally-owned bridges, and requires a 20% local match. The State Aid Bridge program may be especially applicable to Cornish, given that the town has five municipally-owned red list bridges. The State Aid Highway program allocates $1.7M per year for improvements to Class II and III highways, and requires a 1/3 local match. In Cornish, the State Aid Highway program would be applicable to any improvements on Route 120, Route 12A, Town House Road, or the Class V section of St. Gaudens Road. Another funding option is for the Planning Board to levy off-site exactions to finance transportation improvements when a specific project necessitates (RSA 674:21Vj).

With the uncertainty surrounding the current Ten-Year Plan, it would be prudent for the Town of Cornish to consider the State Aid Bridge and State Aid Highway programs. However, this will require foresight and the political will to raise capital for specific infrastructure projects. The Town currently retains capital reserve funds for both highways and bridges; however, in the future the Town may consider creating special reserve funds for specific projects. These funds could then be used as the local match necessary for inclusion in the State Aid programs. The first step, and most important step, in this process is to prioritize the town's necessary infrastructure improvements. Many towns in the Upper Valley Lake Sunapee Region have created a local Highway Advisory Committee to prioritize local infrastructure needs, and the Town of Cornish may consider developing such a committee.

Recommendations:

- Consider creating a local Highway Advisory Committee to prioritize local infrastructure needs and potential projects.
- Re-evaluate existing Highway and Bridge Capital Reserve Funds, and consider developing project-specific reserve funds that may be used as the required local match for State Aid Bridge and State Aid Highway projects.
- Consider requiring off-site exaction from projects which necessitate transportation improvements.

Road Maintenance

The Town of Cornish typically devotes between 30 and 40% of its total budget to road maintenance and general highway expenditures. Between 2001 and 2005, the amount spent for highways has risen from approximately $325,000 to approximately $375,000. For FY 2008, State aid to Cornish will be approximately $88,000.

Table VIII-6: Highway Expenditures (Actual): Town of Cornish

Year	Highway Expenditures	Total Town Expenditures	% of Total Expenditures
2005	374,616	1,219,950	30.7%
2004	350,957	983,824	35.7%
2003	N/A	N/A	N/A
2002	334,668	928,188	36.1%
2001	327,394	803,355	40.8%

In 2002, in a community survey, residents were asked to provide their opinion of town highway maintenance. Approximately 82% of respondents indicated that summer and winter maintenance efforts in Cornish were “adequate” or “excellent.” Similarly, 74% of respondents indicated that spring maintenance efforts were either “adequate” or “excellent.”

Deteriorated pavement conditions on Route 120 in Cornish Flat.

Because road maintenance is such a significant portion of the town’s budget each year, it is necessary to conduct road maintenance in the most cost-effective manner. One method of increasing the efficiency of road maintenance efforts is by maintaining a Road Surface Management System, which targets roads maintenance and reconstruction. The Cornish Highway Department should make the necessary updates to the Road Surface Management System to develop a methodology for managing municipal highways and determining a budget and priorities for future roadway improvements. This work may be done in conjunction with a local Highway Advisory

Committee, as mentioned previously.

The town of Cornish should also consider developing a Capital Improvement Program. A Capital Improvement Program (CIP) is a nonbinding and advisory process that assists the governing body in budget planning. It provides costs and estimates for capital expenditures that allow a community to prepare for major expenses and avoid surprises. The application in terms of transportation may include preparing for replacing the highway garage, maintaining roads and bridges, and purchasing new highway equipment.

Recommendations:

- Consider developing a Road Surface Management System to increase the efficiency of road maintenance efforts.
- Consider developing a Capital Improvement Program to advise the Selectboard on the capital needs and priorities of the Cornish Highway Department.

Safety Concerns at Key Intersections in Cornish

During the Master Planning process, the Town of Cornish conducted a community survey and held a community forum to gather public feedback about the issues currently facing the community. Many residents expressed concerns about the safety of intersections in Cornish, namely the intersection of NH Route 120/Town House Road and the intersection of NH Route 12A/Town House Road.

Cornish emergency responders work at the scene of a collision, Route 12A and Town House Rd.

NH Route 120/Town House Road:

This intersection links two of the most traveled roads in the Town of Cornish. The intersection is currently a channelized intersection, as drivers on Town House Road are guided into specific paths to execute turns onto Route 120. Many residents in Cornish feel uncomfortable with the current design of the intersection and the lack of sight distance along Route 120 when turning. The speed of traffic along Route 120 is also a concern as is the intersection's proximity to the Perkins Road intersection. Sight distances at the Perkins Road intersection are also a safety concern.

It is likely that addressing the issues at this intersection would require a significant engineering/realignment project to raise the intersection and convert it to a traditional "T" intersection. However, such a project would likely require inclusion in the state's Ten-Year Transportation Improvement Plan.

Options:

- Realign and raise the intersection to a traditional "T", eliminating the two existing 45 degree intersections and providing additional spacing between the Perkins and Town House Road intersections.
- Investigate low-cost safety improvements including:
    - Modest tree removal to enhance sight distances
    - Additional signage or warning flashers to slow traffic on Route 120 in the vicinity of the Town House Road intersection

NH Route 12A/Town House Road:

This alignment of this intersection, which is adjacent to the "12% Solution" store, is confusing for users. Primarily, this is due to an existing yield condition on NH 12A southbound that creates confusion between major road (NH 12A) and minor road (Town House Road). There are also a series of constraints that complicate potential solutions, including a 70-foot grade drop on NH 12A northbound approaching the intersection, the bridge across Mill Brook, the Connecticut River floodway, the terrain behind the store, and the store itself and its associated parking. In 2004, NHDOT proposed to change the NH 12A southbound yield condition to a stop condition; however, the town roundly rejected this concept. The town should work cooperatively with NHDOT District Two to investigate potential low-cost safety improvements that could be implemented.

Options:

- Change the NH 12A southbound yield condition to a stop
- Consider a "Left Turns Yield" condition to replace the existing "All Turns Yield" condition along with alternative striping layouts to help eliminate confusion between major road (NH 12A) and minor road (Town House Road).
- Place stop condition for NH 12A northbound, with the east-west road (Town House Road)

Freight train consisting of Liquefied Petroleum Gas (LPG) tank cars rolls through Cornish on the New England Central Railroad.

being the major road.

Rail Transportation and Infrastructure

The New England Central Railroad operates a portion of its Connecticut River Line that connects New London, CT with St. Albans VT in Cornish, totaling about four miles. There are no passenger stations or rail-served industries in Town. The railroad has between 8 and 10 daily trains, including 2 Amtrak trains and freight trains operated by both New England Central Railroad and Pan Am Railways. There is one public crossing (Ballochs Crossing) on Route 12A in Town; it was extensively rebuilt by NHDOT and the Railroad in 2003. It is equipped with flashing lights but no gates, as the skewed angle of the crossing makes gate installation problematic. There are seven active private at-grade railroad crossings in Town, including one that serves a residence, according to the current Federal Railroad Administration (FRA) national database. These crossings have no active warning devices and crossing safety is a continued issue in Town, as train speeds are relatively high (up to 59 MPH) and sight lines are very limited. There have been numerous close calls between trains and vehicles crossing the tracks at private crossings.

Amtrak Vermonter heads south through Cornish at one of several private and unsignalized crossings in Town.

The freight railroads haul numerous hazardous loads, including propane and chlorine tank cars. There is presently no known opportunity for Cornish or regional emergency responders to receive training in handling of incidents involving these cargoes.

Recommendations:

- Work cooperatively with NHDOT to encourage the Railroad to improve sight lines at private crossings through regular brush cutting and install passive warning signs, including crossbucks or stop signs.
- Pursue federal funding to close and/or consolidate private crossings.
- Work cooperatively with the New Hampshire Bureau of Emergency Management (NHBEM) and the Railroad to provide emergency responder training for possible train incidents, especially those involving hazardous cargoes.

Pedestrian and Cyclist Infrastructure

To encourage additional pedestrian activity, the town must provide the facilities and amenities necessary for pedestrians. Currently, pedestrian facilities in Cornish are

limited to the Class VI road system and scattered recreational trails. Many of the Class VI roads in Cornish serve as the only access to important community resources. For instance, the Class VI portion of Root Hill Road provides the only public access to the Town Forest. The town may consider designating the Class VI portion of Root Hill Road and other Class VI roads that provide the sole access to important community resources as municipal trails pursuant to the provisions of RSA: 231-A.

Pedestrian walkways are an especially important consideration given that the town seeks to concentrate development in its village centers and If designed and located properly, walkways and trails can encourage walking. The town should consider constructing walkways and trails in areas with dense existing development and/or a concentration of existing community services. With Cornish's village centers being located along state highways, pedestrian safety is a significant concern. Beyond the need for walkways, there is also a need for crosswalks in Cornish's village centers. This is especially so in Cornish Flat, where the Department of Transportation has denied requests from the town to install a crosswalk across Route 120. The town should work cooperatively with NHDOT to provide a crosswalk or other safe method for pedestrians to traverse Route 120 in Cornish Flat.

As evidenced by the results of the Cornish Community Forum, held in 2005, providing safe cycling opportunities is an important issue for many residents in town. Specifically, narrow shoulders were cited as a major safety concern, especially along Town House Road. The NHDOT has officially designated the following roads in Cornish as regional bicycle routes:

- NH 12A (Entire Length)
- Town House Road (Entire Length)
- NH 120 (from Claremont Town Line to Cornish Stage Road)
- Cornish Stage Road (from NH 120 to Plainfield Town Line)

The town does not have any projects on the current Ten Year Transportation Improvement Plan. As such, there are no plans to widen the shoulders on any of these roads, including Town House Road. However, the town may consider applying for Transportation Enhancement (TE) Program funding to expand the shoulders on one of these roads. For instance, it the town were to apply for TE funding to expand the shoulders of Town House Road, the application could be developed around the fact that NHDOT has officially designated the road as a regional bicycle route. This may give the application additional consideration at the state level. Although there is currently a moratorium on Transportation Enhancement funding until 2009, the town could consider developing an application for the subsequent funding round.

Recommendations:

- Consider pedestrian walkways and trails to improve safety and encourage walking. Potential locations for new walkways or trails include:
    - The Cornish Flat Village Center

    - Vicinity of Town House Road/Parsonage Road
    - The Cornish City Village Center
- Work cooperatively with NHDOT to provide a crosswalk or other safe method for pedestrians to traverse Route 120 in Cornish Flat.
- Consider designating the Class VI portion of Root Hill Road, which provides access to the Town Forest, as a municipal trail.
- Consider applying for Transportation Enhancement Program funding to expand shoulders along Town House Road or other NHDOT designated bicycle routes as a means of increasing safety and encouraging bicycle travel.
- Consider additional forms of outreach to inform cyclists of local safety concerns, including Balloch's Rail Crossing through the Town Newsletter or other forms of local media.

Public Transportation in Cornish

Community Transportation Services (CTS) of Newport provides a demand response "Dial-a-Ride" service to elderly and disabled persons in Cornish. Currently, CTS provides approximately 10 rides a week between Cornish and Claremont. This service provides mobility to elderly and disabled residents in Cornish, including transportation to medical appointments, essential human services, and shopping destinations. For some elderly and disabled residents in town, the Dial-a-Ride service provides their only means of transportation. The town may consider making an annual contribution to CTS to ensure that Dial-a-Ride service to Cornish continues in the future.

Eighty-six percent of survey respondents do not carpool.

Source: Town of Cornish Master Plan Survey, 2002

Community Transportation Services has also started investigating the development of a potential commuter transportation service between Cornish Flat and Claremont along NH Route 120. The development of a small Park-and Ride facility in Cornish Flat could facilitate transit use. Although this idea remains conceptual, a transit link between Cornish and Claremont would connect the town with Claremont, Newport, and Sunapee via CTS' existing fixed-route services. In addition, CTS has recently extended its Claremont-Newport line to the Exit 8 Park-and-Ride facility in Ascutney, Vermont to provide a transit connection to Connecticut River Transit (CRT) "River Route" along Interstate 91 between Bellows Falls, Vermont and Lebanon/Hanover, NH. Thus, the development of a transit link between Cornish and Claremont would connect the town with employment and service centers throughout the bi-state region.

Recommendations:

- Work cooperatively with Community Transportation Services and the Upper Valley Lake Sunapee Regional Planning Commission to investigate developing a commuter transit link from Cornish to Claremont.
- Consider an annual financial contribution to Community Transportation Services to support “Dial-a-Ride” services to residents of the Town of Cornish
- Consider the development of a small-scale Park-and-Ride facility in Cornish Flat that could facilitate future transit use.

IX. ECONOMIC DEVELOPMENT

Introduction

The Town of Cornish is primarily a bedroom community for nearby employment centers. The Town also is home to a number of self-employed individuals in the trade and service sectors. Therefore, the ability to run a small home-based business and the ability to encourage small village-oriented nonresidential development is a basic premise of this plan.

The presence of prime agricultural soils has created some farming opportunities within Cornish but these opportunities are limited by the steep terrain found throughout the community. In fact, while so much of Cornish's appearance is shaped by agricultural activities, only about three percent of residents are employed in agricultural industries. Development within the villages is limited due to the small amount of available land within these areas. Currently, the largest employer is the Cornish Elementary School, which employs about 35 persons and is located in Cornish City. Other village development includes predominately small businesses such as a bank, general store, and post office. Most of Cornish's employment base is supported by cottage industry and home-based business scattered throughout town. While these local businesses provide goods and services for residents and the regional community alike, the major determinant of the overall quality of life for Cornish citizens is the economic conditions within the Lebanon-Hanover and Claremont-Windsor employment centers.

Vision

> *"Businesses that support local resources and people will be promoted. Cornish will support and develop its agrarian economy. Home-based and cottage industries shall predominate the economic landscape in Cornish. Businesses on a scale larger than home-based will be concentrated in Village Zones. Cornish shall strive to identify appropriate new Village Zones and to expand the existing Village Zones in a manner which preserves open space and in avoidance of costly public investments or additional services."*

Goals and Objectives

- Maintain agricultural industries.

- Support businesses, in accordance with allowable uses in the Zoning Ordinance, which use and protect local resources and people and which are in harmony with Cornish's natural, rural, and historic qualities. Allow the gradual expansion of business and industry that is appropriate for Cornish.

- Provide jobs for Cornish residents while retaining the rural character of the town.

- Allow for a broader selection of goods and services for the town's population.

- Assist business owners through the zoning/permitting process to facilitate the ability of people to live and work in Cornish.

- Focus appropriate non-residential development in the Village Zone.

- Encourage the expansion of broadband service throughout the Town.

- Encourage a working landscape.

Agricultural exhibits at the Cornish Fair.

Proximity to Employment

Cornish's location between the Hanover-Lebanon employment center and the Claremont-Windsor, Vermont area has positioned the community to provide housing for outside employment centers. The 2000 Census indicates that most residents (81%) work outside of Cornish, predominantly in the Lebanon-Hanover and Claremont-Windsor employment centers. Although Cornish only provides employment for about 170 people or 18 percent of its residents, the town ranks second behind Lebanon as the most popular place to work. Commuting patterns have changed very little during the past 20 years. In 1980, about 22 percent of resident workers worked in Cornish. Only a very small number of workers from surrounding towns commute to Cornish for employment. During the past decade there has been strong employment growth in the Lebanon-Hanover area and only modest growth in the Claremont and Windsor areas. This trend is reflected in a commuting pattern change, i.e. an increased emphasis on commuting to the Lebanon area.

Local Industries

Employment numbers within the Town of Cornish are very small (<100) and fluctuate significantly. Between 2000 and 2006, employment levels have decreased by 22 jobs from 88 to 66. Most residents are employed outside of town in industries related to manufacturing, trade, management, sales, and professional services (see Table IX-1).

Table IX: Employed Residents by Industry Type

Type of Industry	1990	2000
Manufacturing	20.68%	17.10%
Construction	5.91%	6.50%
Agriculture, Forestry, Fisheries, Mining	4.77%	3.20%
Transportation, Communication, Utilities	6.48%	3.30%
Trade	19.55%	14.00%
Finance, Insurance, Real Estate	3.41%	3.30%
Business/Personal Services	6.70%	N/A
Professional and Related Services	5.57%	6.00%
Public Administration	4.55%	4.10%

Source: US Census 1990 & 2000.

Agriculture

The Town of Cornish cherishes its bucolic environment which is typical of agricultural communities. However, agriculture is an extremely small portion of employment within Town. Less than four percent of Cornish's working resident population work in farming and forestry. Years ago, agriculture was much more prominent than it is today. Working farms can be found in the Connecticut River Valley and in Cornish Flat, where

Round baling in progress in fields along Route 12A.

slope conditions are suitable for crop cultivation.

Two dairy farms are located in the Cornish Flat area. In addition to producing dairy products, these farms grow silage corn and hay for their herds. Maple syrup production, sheep farming, vegetable farming/nurseries, and beef cattle operations are also present in the town. Many agricultural operations struggle to be profitable and when development pressures become significant, farmland is often developed. The community may consider a number of ways to slow or reverse this trend. One way is to create or participate in an agricultural commission. The objective is to work cooperatively with government to express the interests of the agricultural community as it relates to:

- Natural resource inventories,
- Strengthening agriculture education,
- Resolution of farm related conflicts,
- Protecting farmland, and
- Creating right-to-farm bylaws.

Another option would be to lobby the State of New Hampshire to create a Farm Viability Program similar to what exists in the State of Vermont. This program provides grants for farmers to complete business plans, and provide technical analysis in support of agricultural operations. If Cornish would like to dedicate increased resources to support agriculture, consideration should also be given to a Lease of Development Rights (LDR) program**.** Leasing development rights (from farmers) for a specific term of years would help "buy time" and stabilize farmland ownership that has come under pressure to be sold. This would allow farmland owners the opportunity to carefully plan the diversification, expansion, or generational transfer of their farm business and resist selling the land for development. A more expensive option would be the town simply purchasing these lands for conservation.

Spring plowing of a field near the Connecticut River.

Cornish's rich agricultural history is highlighted at the annual Cornish Agricultural Fair. This "agritourism" event raises awareness of the industry and increases marketing opportunities for Cornish farms. Direct sale of agriculture goods is the most profitable opportunity for NH farmers. Enhancing this event should be considered.

Recommendations

- Establish a local agricultural commission according to the guidance in the NH Coalition for Sustaining Agriculture, Creating an Agricultural Commission in your Hometown. Possible tasks for the Commission include:

    - Increase marketing opportunities for Cornish farms. Direct sale of agriculture goods is the most profitable opportunity for NH farmers. An example of this activity is the Cornish Agricultural Fair. This could include the promotion and possible expansion of the existing fair or the creation of new ones.

    - Establish, participate, or lobby for the creation of a farm viability program. Increase on-farm income through business planning and capital investment in order to keep land in agricultural use.

    - Prioritize farms for protection/conservation (in cooperation with the Conservation Commission)

    - Purchase conservation easements to protect agricultural land.

    - Consider establishing a Lease of Development Rights (LDR) program**.** Leasing development rights for a specific term of years would help "buy time" and stabilize farmland ownership that has come under pressure to be sold. This would allow farmland owners the opportunity to carefully plan the diversification, expansion, or generational transfer of their farm business.

    - Strengthen school curricula concerning agriculture to help students understand the food system. How food is safely produced, transported, prepared, and consumed is essential knowledge. A broader knowledge about agriculture and how it affects our world is essential to making informed land use decisions.

Note: The creation of a local agricultural commission was put on the 2008 Town Meeting Warrant by petition and was voted down by a margin of two to one.

Allied Industries/Home Occupations

More widespread than farming in terms of acreage and income is forestry and allied industries. As in other Sullivan County towns, over the past several decades forests and woodlands have reclaimed considerable tracts of farmland in Cornish. In the 1990's, approximately 84 percent of the town's land area was forested. This resource has contributed to tree farming and forest management enterprises and secondary industries such as furniture making and the manufacturing of home accessories.

Most of these operations are home-based. Home-based work can offer advantages for the public sector, including savings in public transportation, parking, day care, and increased vitality and safety of neighborhoods.

The town's economy is based on numerous small businesses. Traditional cottage type trades and crafts make up a large share of these. Often the proprietor is the sole worker, or is assisted by family members, and in many cases the business is a so-called home occupation, meaning that the business is run out of the owner's home. It is a business that is secondary to the primary residential use. Once these industries become larger or are no longer accessory to the residential use, they are referred to as "cottage industries", which typically have greater impacts, however, are still small in size and scale such that they are easily assimilated into rural residential areas. Businesses compatible with the traditional activities in Cornish include forest-based enterprises, such as furniture and toy manufacturing, and industries that are ancillary to the construction trades, such as manufacturers of doors, windows, trusses, cabinets, and modular homes. Also suitable are businesses retailing lumber, building materials, gardening and nursery supplies, furniture, and home accessories. Related professional services, e.g. architects, engineers, surveyors, and landscapers would also be compatible, as would artisans and trades people.

Of those with home-based businesses, 39 percent are service occupations and 18 percent are agriculture.

Source: Town of Cornish Master Plan Survey, 2002

The Town of Cornish uses home-based occupation provisions within zoning to regulate the impact of these businesses. Home-based occupations are not regulated in terms of size and are permitted in all zoning districts. Existing regulation has non-quantifiable provisions related to the establishment's appearance, traffic, water use, outside storage, and noise. Signage is the only home-based business standard that exists. Cottage industries are permitted by Special Exception in all zoning districts and have the following performance standards:

1. specify the number of employees allowed,

Beekeeping in Cornish.

2. regulate floor areas (business cannot occupy more than 25% of total floor area), and
3. detail specific traffic standards.

All Cottage Industries must have frontage on a state-maintained road. There is also an Expanded Cottage Industry provision which allows additional increases in terms of the number of employees and allows the addition of an accessory building. There is no clear threshold of when a home-based business becomes a cottage industry because there are no specific standards for traffic, employees and floor areas within the home-based occupation provisions. It is also somewhat challenging to understand what provisions apply when seeking a permit. The Town may consider consolidating these provisions into one set of standards, including thresholds to determine when different regulations apply.

The Town may also consider revising the allowable home-based business to prohibit occupations that have a tendency to increase (in terms of impacts) beyond the limits typically permitted for home-based business and thereby impair the use and value of residential areas.

Practicing for a horse plowing competition.

Retail commerce in Cornish may be tied to a home occupation trade or exist independently in a conventional commercial establishment, primarily within the villages. A number of business offices, a bank and general stores are also present, but health care, child care, and other professional services are absent. The Town's natural beauty and tourism potential should not be overlooked either. Country inns, bed and breakfasts, and fine restaurants are examples. Businesses which rely upon and relate to that beauty and potential should be encouraged.

Recommendations

- Continue to monitor home-based occupation provisions.
- Consider modifying the definition of home occupation to allow for the reasonable use of outdoor space.
- Consider the consolidation of home-based business and Cottage Industry performance standard and permitting. This should include a clear description of when a home-based business becomes a cottage industry and the additional provisions that apply.

- Consider prohibiting home-based businesses that have a tendency to increase beyond the limits permitted for home occupations e.g., auto repair and painting of vehicles.

Tourism

According to the NH Tourism Public Policy Coalition, tourism is a proven cornerstone of New Hampshire's economy. In 2005, $5.6 billion was generated in direct and indirect spending. The Town of Cornish is located along the Connecticut River Scenic Byway. The Town has two prominent features along the byway which attract visitors: Saint Gaudens National Historic Site and the Cornish-Windsor Covered Bridge.

Cornish-Windsor Covered Bridge, spanning the Connecticut River and dating from 1866.

Tourism is an industry that is well suited for the Town of Cornish. It allows the Town to build upon its most valued economic elements such as agriculture, historic sites, and natural features. Tourism caters to the recreation and leisure needs of the traveling public. Tourism as an industry is the related consumption of goods and services by tourists. For example, within Cornish, this may include maple sugar products, fruits and vegetables, lodging, and events like the Agricultural Fair.

While considering the encouragement of this industry, the Town of Cornish should consider the following:

- Implementing strong protections targeted at historic resources. This could include an historic district and/or designation of historic resources, zoning

provisions that regulate design review and demolition permits, strengthen sign regulations, and protect scenic roads.
- Investing in interpretation infrastructure such as signage, maps, exhibits, and guidebooks.
- Maintaining convenient access to attractions by making them handicap accessible and open at appropriate times and seasons.

Recommendations

- Promote and enhance the tourism economy by:
    - Actively participating in the Scenic Byway Program.
    - Consider developing a cultural plan to appropriately highlight Cornish's prominent features and plan for their future.
    - Preserve cultural, historic and natural features. Consider the development of an historic district.
    - Encourage a design review district in Cornish Flat area and near the Saint Gaudens Historic Site.

Scale and Type of Development

Until such time that Cornish develops a municipal water supply and provides for off-site sewage disposal, future economic development can only consist of small and moderately-sized businesses, which do not use large quantities of water. Such a scheme is also very much in keeping with the desires of the residents, who wish to preserve the quiet rural character of the town. Within these parameters, however, it may be possible to develop a moderately-sized water source to serve a number of businesses within relatively close proximity to one another. Alternatively, the Town may continue to rely on on-site facilities. Shared water and septic systems may help provide for more intense development in the village areas if desired. However, extreme care should be taken to protect the quantity and quality of all Cornish's water resources, especially in locations where development is desired and where water availability issues exist.

When it is appropriate, nonresidential development will be focused towards the village areas of Cornish Flat, and potentially to a lesser extent within other village areas. Larger businesses and light manufacturing should be permitted, but only in village locations with adequate access to the transportation network. This focuses the land consumptive, traffic-intensive enterprises to the village areas and allows micro-businesses/cottage industries throughout town. In order to encourage the modest growth necessary to sustain Cornish as a living, working community, expanding the current Village Zones and/or designating new Village Zones should be considered. Dimensional standards within the village areas should also be examined to allow development to occur in the same design as historical settlement patterns. This includes parking standards which make village development challenging. Consideration should be given to making existing parking standards flexible, such as allowing shared parking or provide fewer spaces when appropriate.

Adding diversity to the land uses within the village areas will contribute to the vibrancy of the village by providing goods and service that attract residents and shoppers. There are a number of land uses which are permitted by Special Exception which would also need Site Plan Review. This may be redundant for small minor-impact industries such as a bed and breakfast and multi-family conversion. Eliminating the Special Exception requirement for these land uses may encourage their development. Also, more diverse land uses in the Village Zone will enhance the sense of community in Cornish Flat.

Integral to that investigation must be whether the land physically can support the density and use expected in a Village Zone. These types of industries and their location should support the historic settlement pattern and should be compatible with the existing community infrastructure.

Recommendations

- Businesses which pose a threat to water quality and availability should be carefully controlled and/or not permitted. Home-based businesses and cottage industries must be reviewed with consideration given to water quality impacts. Village development must respect the quantity and quality of limited water resources.

- In order to provide flexibility in parking, convenient off-site parking solutions should be allowed in the village areas. This could include encouraging shared parking lots and/or flexible parking standards.

- Amend Village District provisions within zoning to allow a broader range of land uses to accommodate growth in the business sector. This could include removing the special exception requirement from multi-family conversions, bed and breakfasts, general store, and restaurants; and could include adding uses such as child and/or adult day care and medical offices.

Information and Telecommunications Technology

Small businesses flourish throughout the Town with concentrations of business activities in Cornish Flat and along NH Route 12A. Small cottage industries and home-based operations have evolved over the years from mostly natural resource-based industries, such as furniture making, to include high-tech businesses. New information-related home-based businesses have significantly different needs to be competitive. Telecommunication and high-speed data transfer are critical for graphic designers and software developers, but the service is currently not available within most parts of town.

Cell phone service is limited but available to some degree within Cornish Flat and along state roads, with the exception of Route 120. Digital Subscriber Lines (DSL) and Cable Modem are also available, but are limited to the Town House Road area. Providers of these services typically do not serve such rural areas because the demands for the services are scattered and are relatively small in terms of the number of potential

subscribers. Typically, telephone and cable companies provide these services and they do not find that installing infrastructure in rural communities will pay off in the near term. Also, the terrain in these areas is more challenging and expensive than urban areas. Hence, Internet service in Cornish predominantly includes poor quality dial-up and dedicated leased lines (i.e., T1) which are exorbitantly expensive. Much of the new telecommunications tower development that has been proposed within town is focused on propagating service towards Vermont and Interstate 91. The only telecommunications tower at the date of this writing is located off Town House Road. The tower is 160-foot tall monopole using tree-type stealth technology.

Wireless Broadband, defined loosely by the federal government as any technology that provides downstream access—from the Internet to the user—at a minimum of 200/ Kbps, has the potential to provide a viable service option to rural communities. Broadband service includes Digital Subscriber Lines (DSL), Cable Modem, Satellite, and Wireless Internet. Typically, the most viable of these options is the Wireless Internet which uses antennae, such as telecommunications towers, to relay the service. The benefit of this option is that it does not require wires. However, its weakness is that a line-of-sight is needed to carry the necessary signal. So while the service may be obtained in the Cornish Flat area, connecting that service to the elementary school, for instance, would be difficult given the terrain. Cellular services are also limited throughout town. In the 2002 Community Survey, about half of the community survey respondents indicate that they are unsatisfied with cellular service in town. Note that since the Community Survey, there have been advances in cell phone technology and new tower installations in surrounding towns and in Cornish.

The benefits of broadband are significant in terms of distance learning opportunities, telemedicine, and e-commerce, all of which are perhaps more valuable in rural areas than urban ones. When planning a telecommunications strategy, communities are best advised to target the highest level of bandwidth they can reasonably afford and to avoid technologies that may well become obsolete in the near future. It appears that wireless services are an option which warrants investigation. Important to this process is including the public in the decision making process. Community involvement in providing this service will require management, which may prove challenging for such a small community with limited staff. It will also be necessary to better understand the demand for these services and maintain a high level of coordination with the school district and the private sector.

Recommendations

- Support the enhancement of telecommunications and high-speed internet access throughout town. This could include:
    - Seek wide public participation in the development of a telecommunications/broadband internet policy that is in accordance with the goals of the entire Master Plan.
    - Give further consideration to the best means of proliferating high speed internet.
    - Identify priority areas for service. (e.g., Cornish Flat and residential areas)

- Determine if public use of existing telecommunication towers is permitted and at what cost (if any).
- Consider whether Cornish would like the added administration and management of such a program.

Creative Economy

The Creative Economy is an industrial sector that is comprised of idea-based occupations. Early on, this group was reserved for artists, musicians, and teachers. However, this definition has recently been expanded to include a broader group of idea-based professions including computer programmers, publishers and architects to name a few. Growth in this sector is believed to have great secondary benefits, such as promoting money circulation within the community. Cornish continues to have a rich history with the traditional creative economy. Since the late 19th century, prominent American artists were attracted to the area as a place to work and relax. The Cornish Colony, as they are referred, flourished from 1885 to 1930. One of the most prominent members was Augustus Saint-Gaudens whose home and studio is now a National Historic Site. The Colony contributed a large share to the Town's tax base and provided employment opportunities to residents. The group's contributions to the community went well beyond that of typical summer tourists to include supporting town libraries and the commercialization of a creamery and grist mill.

Volunteers in period dress at the St. Gaudens National Historic Site.

The Cornish Colony is consistent with the traditional notions of the creative economy. However, this group is now defined much more broadly to include all "idea-based" professions, including architects, publishers, and engineers to name a few. These professions are important to a community because they are based on ideas which act as the foundation for economic growth. An example of this occurred nearby in the Vermont towns of Springfield and Windsor, a.k.a. Precision Valley, with the birth and growth of the machine tool industry.

Growth in these economic sectors holds significant growth potential for the Town of Cornish. One way to start promoting these industries is to start a cultural commission to begin the process of promoting these community features and how to appropriately leverage them to support economic growth. Another cost-effective initial step is to make arts and culture visible by promoting it in town buildings and schools.

Recommendations

- Support the Creative Economy by establishing a cultural commission. Consider the following activities to enhance Cornish's cultural identity:
    - Inventory Cornish's cultural assets.
    - Create a communications network and forge partnerships between the arts and cultural community and business and government.
    - Maximize the use of Town building space for the promotion of cultural activities and viewing of art.

X. WATER RESOURCES PROTECTION PLAN

Introduction

The future of every community depends on an adequate supply of water.

Water supplies and water resources are threatened by misuse and contamination unless actions are taken to protect them. This section of the Master Plan constitutes Cornish's Water Resources Protection Plan and complies with the *Rules for Local Water Resource Management and Protection Plans* developed by the Office of State Planning under the authority of NH RSA 4-C:20, I.

In order to assure a continued supply of potable water, wildlife habitat, and groundwater recharge and the cleansing functions of the water cycle, the enhancement of existing programs and policies are critical. This section focuses on measures to address the following water resources threats:

1. Potential Contamination Sources (a.k.a. Land Use)
2. Siting and design of development
3. Construction practices
4. Waste disposal
5. Site access
6. Post construction activities

There is also a great need for public education, especially with regard to proper forestry and agricultural practices, septic system maintenance, and proper disposal of waste.

The specific resources mentioned in this section are examples and are meant to complement the full inventory of water resources and supporting maps found in the Opportunities and Challenges section of the Master Plan. A table listing the range of options for water protection may be found in the Appendix E.

Vision

"Our…groundwater, shorelines, watercourses, and wetlands will be preserved and protected. Their appreciation of and appropriate use by the public shall be promoted."

Goals and Objectives

- Manage construction with regard to water quality in all areas
- Protect wetlands
- Protect lakes & ponds
- Protect rivers & streams
- Protect flood storage capacity and prevent flood damage and manmade debris
- Conserve groundwater quantity
- Protect drinking water supplies

- Protect groundwater quantity
- Protect Important viewsheds - (See land Use Section for Recommendations)
- Coordination with adjacent communities

Public Drinking Water Supplies

Developing a well or reservoir to supply the Cornish Flat village with potable water should be investigated as an exercise in planning for future village development. Three public drinking water supplies exist in Cornish: the Cornish Elementary School, the Cornish General Store and St Gaudens NHS. No municipal public water supplies currently exist.

About 92 percent of survey respondents indicate that the town should encourage the protection of drinking water supplies.

Source: Town of Cornish Master Plan Survey, 2002

It may be helpful for the town to consider a public water source in an effort to have control over the protection of the source and encourage growth at desired densities within growth centers. The Meriden Road aquifer and Blow-Me-Down Pond #3 should be considered as sources. The Town should compare the costs and benefits of developing a surface water and a ground water supply. If the surface water option is preferred, the Blow-Me-Down Pond #3 should be studied to determine the feasibility of developing it as a source. If either water resource is selected, land use controls should be implemented to restrict development and protect the water quality. The Town should identify and study its preferred water supplies before entering into an aggressive easement protection program. However, the Town should welcome gifts of conservation easements. Land acquisition is recommended to control the area of a future community water system, including the supply, storage tanks, and treatment plant. The cost of this non-regulatory approach cannot be determined until the water system is better defined. The town may also consider zoning overlay districts, such as a wellhead protection area to protect drinking water. Other practices that are discussed in this chapter may also be used to protect drinking water.

The City of Claremont's primary water supply is the Whitewater Brook Reservoir located in the southeastern part of Cornish. Although protected by conserved lands, Cornish should continue to respect this water source in its land use decisions.

Recommendations

- Study the possible development of a future drinking water supply in the Cornish Flat village in effort to encourage higher development densities.
- Consider comprehensive groundwater protection regulations within zoning.
- Continue to protect the Whitewater Brook Reservoir.
- Consider overlay districts to protect existing and any future public water supply.
- When considering land conservation, rank those lands which help to protect water quality as a priority.

Potential Contamination Sources (a.k.a. Land Use)

There are a number of land uses that are potential contamination sources (PCS) and are best located away from water resources, especially drinking water supplies. The New Hampshire Groundwater Protection Act has identified these potential contamination sources in RSA 485-C:7. Prohibiting these land uses, such as salt storage, junk yards, underground storage tanks, and auto service activities near water resources is one of the most effective ways to protect water quality (see appendix for list of PCS).

Connecticut River looking north from the Cornish shoreline.

Land uses within aquifer recharge areas and surface water intakes are of particular concern. Aquifer areas must be protected to ensure the availability of safe, potable water for Cornish's populace in the future. The town should pay particular attention to its aquifer areas along Route 12A, Route 120, and at the corner of Town House and Parsonage Roads. It is in these places where future development may threaten water resources.

If the town chooses not to prohibit PCSs, there are other options. The town may specify performance standards that each new business or industry would have to meet to ensure a continued healthy water quality; for instance, limiting density and impervious surfaces in aquifer areas and/or near surface waters, or implementing Best Management Practices (BMPs). Non-regulatory approaches may be used as well. Non-fee land or easement acquisitions programs can be used to protect the shores of waterbodies and watercourses and to protect aquifer areas in a non-regulatory manner.

Transportation-related PCSs are the most common. The town may request that environmentally sensitive areas along state roads not be salted or receive less salt. The town should continue its policy of not salting town roads. Salt storage areas must be covered and the salt stored on an impermeable base to prevent contamination of the underlying aquifer area.

Recommendations

- Avoid the development of any PCS near any existing or future public drinking water supply. Consider prohibiting these land uses within zoning.
- Protect water resources by prohibiting PCS in their proximity.

- Consider performance standards for land uses to protect water quality e.g., erosion and sediment standards and limiting impervious surfaces.
- Require information about underground storage tanks, including age, type, contents, capacity, and location.
- Consider an easement acquisitions program to help protect critical water resources.
- Within a framework dictated by safety first, promote reduced or prohibited salt use policies on state roads. Continue policy of not salting town roads.

Siting and Design

The siting and design of development can have a significant impact on water quality. Low Impact Development (LID), which minimizes impervious surfaces and incorporates Best Management Practices (BMP) to lesson development's impact on water quality, is a reinvented concept that is gaining recognition. It is a process where development avoids features that are a concern to water quality, like steep slopes and locating development away from shorelands, wetlands and other important resources. For instance, all manure storage pits and other such impoundments should be covered and, unless occurring on a naturally impervious soil, should be lined to protect water quality.

Cornish currently has overlay districts protecting 100 feet around shorelands. Buffers or setbacks around water resources are another design consideration. These areas act as a filter to remove pollutants from stormwater, regulate stream flows, stabilize banks, reduce streambed scour, and provide wildlife habitat. These areas should be rich and diverse environments. The Connecticut River Joint Commissions fact sheet series on Riparian Buffers for the Connecticut River Watershed provide an excellent resource for buffer development.

Prime wetlands may also be identified per RSA 483A:7 for added protection.

Recommendations

- Consider LID and BMPs provisions for site design (e.g. riparian buffers) within zoning, site plan and subdivision regulations. Consider enhancing buffer provisions with these standards.
- Avoid development on steep slopes and near sensitive areas.
- Ensure that encroachment on wetlands and impacts on surface waters are considered in the review of development. For example, loading areas where toxic chemicals are handled should be paved, bermed and covered to contain spills.
- Initiate a process for designation of Prime Wetlands as provided for in RSA 483A:7 that are based upon the *Guide to the Designation of Prime Wetlands in New Hampshire*, 1983. Such a designation will provide added protection for particularly valuable wetlands over and above the Wetlands Conservation District.

Construction
The best of development proposals are only effective if they are implemented according to plan. Minimizing sedimentation and erosion during the construction process is critical and is often overlooked. Current BMPs should be used during the construction of development to avoid and remove sedimentation from stormwater and protect water resources from pollution. One of the most effective administrative ways to do this is to require a sediment and erosion control plan with all developments.

Soil compaction during the construction process may also limit groundwater infiltration. Care should be taken to avoid soil compaction or aerate soils if they should become impacted during construction.

Where construction takes place is also critical. The town continues to prohibit development within the 100-year floodplain. For public health and safety reasons, no development is recommended in Cornish's floodplains. Other sensitive areas where construction should be avoided include wetlands and wetland buffers, steep slopes, near surface waters and within aquifer recharge areas.

The Planning Board should consider adopting excavation regulations pursuant to RSA 155-E for gravel and other soil extraction. This would provide the town with guidelines for a more thorough review of excavation operations. Water resources can be protected by ensuring that excavations never come closer than a few feet to the water table and that restoration of pits is completed. The Town may also require that a bond be posted to cover restoration costs and that the operations be reviewed regularly and re-permitted as conditions change.

Recommendations
- Require a sediment and erosion control plan for all developments.
- Consider an inspection process for monitoring site development.
- Continue to prohibit the placement of structures in the floodplain and, where possible, within 250 feet of the normal high water mark of the Connecticut River.
- The Planning Board should adopt excavation regulations pursuant to RSA 155-E.
- Consider hiring a code enforcement officer to enforce construction practices. This could be done jointly with neighboring community(ies) to save resources.
- Avoid locating development on or near sensitive resources such as wetlands, steep slopes, surface waters and within aquifer recharge areas.

Waste Disposal
Ensure the proper disposal of waste. Homeowner education programs are particularly useful to inform homeowners about septic systems and alternatives to household chemicals.

The Town should be sure that the density of development does not contribute to septic system effluent loading in village areas. Lot sizing by soil type is an effective way to

accomplish this. However, it is not a substitute for the proper siting, design, construction and maintenance of septic systems. Health regulations could be adopted that require more strict design standards of new and replacement septic systems. Also, many homeowners are not aware that septic tanks, if not regularly pumped, can cause leach field failure. The town could help educate its residents about this important preventive maintenance practice.

Under NH RSA 147:1, Cornish's health officials may adopt regulations for the prevention and removal of a nuisance relating to public health. These regulations may be as simple or as complex as the town would like, but must be directed towards the protection of the public health. Some towns have required that septic system designs be reviewed and approved locally prior to submission to the state. Currently a member of the Selectboard must witness the digging of test pits and percolation tests. Since most towns do not have a septic system design expert, the important and most beneficial aspect of this process is that the town can flag proposals with potential problems so that they may be considered as part of the state review.

Other towns have established more stringent standards for septic system design than required by the State. These might include a larger leach bed size, setting minimum design loading rates, greater depth to ledge or seasonal high water table or greater setbacks from surface water, wells, drainageways, and slopes. Conversion from seasonal to year-round use and repair or replacement of septic systems may, by local regulations, be subject to review and subsequent improvement of systems to meet local standards. Among the standards that should be included are that septic systems should be set back 75 feet from property boundary lines in order to accommodate on-site wells and 125 feet from wetlands and the banks of watercourses.

The Town may want to consider adopting groundwater protection regulations through the use of zoning and/or a health bylaw regarding underground storage tanks. Cornish could include underground residential tanks of any size in required inspections, monitoring systems and technical standards. The Town could prohibit any underground storage tanks in environmentally sensitive areas mapped as potential aquifer zones or important recharge areas.

The Selectmen may adopt controls for hazardous waste and all underground fuel storage tanks under 1100 gallons in size pursuant to RSA 31:39. This would provide the town with more protection than is currently available under the state regulations. For example, tank construction standards and required monitoring and lead detection could be mandated. The Town could prohibit any underground storage tanks in environmentally sensitive areas mapped as potential aquifer zones or important recharge areas. Underground storage of liquefied natural gas or propane tanks should, however, be permitted as a fire safety measure.

The Town should continue to support household hazardous waste collection days and promote the idea of proper disposal of toxic substances.

Recommendations

- Continue to sponsor Household Hazardous Waste Collections.
- Provide educational materials to homeowners to inform them about septic system maintenance and the alternatives to hazardous chemicals.
- A water protection district should be created for the Cornish Flat area. Consider groundwater protection provisions in zoning, including an aquifer protection district. Regulate activities in that area that would pose a threat to water quality including underground fuel storage tanks, businesses that use, process, or store toxics.
- Consider regulating post development septic system compliance.
- Consider regulating underground fuel tanks as part of groundwater protection regulations.

Access

Access to land via roads is an important issue for Cornish given the amount of steep slopes within town. Roads and other related facilities such as parking can be minimized to reduce the amount of impervious surface and reduce the amount of stormwater. Grass drainage swales may be used in place of curbs and the grade of driveways and roads may be reduced. These development considerations can be considered during the driveway permit process, subdivision, and Site Plan Review.

Recommendations

- Require sediment and erosion control plan for driveway construction.
- Consider flexible design alternative for site access e.g., narrower roads, reduced parking, grass swales.
- Limit the grade of site access to less than or equal to 10 percent.

Post Construction

After construction is complete, the operation and maintenance of land uses can contribute to pollution. This could include failing stormwater infrastructure or septic systems or the use of toxic chemicals, pesticides or fertilizers.

Ensure proper long-term maintenance and inspection of stormwater devices and septic systems by requiring an execution of operations and maintenance plan as condition of approval, and filing of annual report for developments of sufficient size. In order to regulate post construction activities the town must make concerted provisions. During development review, conditions subsequent may be used to regulate and monitor a development after Planning Board approval. Engineers and other experts may be secured to provide professional review and guidance of plans and their implementation. This could include monitoring stormwater infrastructure and fire protection cisterns to ensure they continue to work properly and perform at their designed capacity throughout their life.

A septic system inspection and monitoring program may be implemented under RSA 485-A:34 to ensure systems continue to work properly. This will require the Department of Environmental Service to approve a local inspector.

Recommendations

- Provide for professional monitoring of site development and construction activities to ensure that erosion controls are in place and effective.
- Consider the development of a post construction stormwater infrastructure inspection and reporting program as a condition to approval.
- Consider implementing a septic system monitoring and inspection program.

Fire Protection Water Supplies

Without a water system, Cornish is dependent on an arrangement of fire ponds and dry hydrants to supply water for its fire protection efforts. The Town is considering development of a Town-wide fire pond plan to ensure that water supplies are located conveniently across Town for firefighting purposes. Where there are no water supplies, sufficient water for fire fighting should be required during the development review process.

Recommendations

- Consider the development of an inventory and map of all water resources available for fire fighting. Assistance may be obtained by the New Hampshire Rural Fire Protection Initiative.
- Continue to evaluate and require sufficient water supply needs as part of development review.
- Construct a series of dry hydrants and cisterns through out the community to effectively provide water for fire fighting.

APPENDICES

Appendix A: Community Attitude Survey

MASTER PLAN SURVEY
2002
Town of Cornish, NH

I. Household

A. Population

1. Specify the number of people you have in your household in each age group that applies:
   a. 0-4 years _____32
   b. 5-11 years _____47
   c. 12-13 years _____25
   d. 14-17 years _____42
   e. 18-34 years _____105
   f. 35-62 years _____305
   g. 63 years and over ___139

2. Which of the following best describes your residency in Cornish?
   a. Year-round_____284
   b. Part-time _____7
   c. Non-resident_____22

3. How long has each adult member of your household lived in Cornish? If more than one adult falls in the same category, indicate the number next to that category.
   a. 0-5 years _____101
   b. 6-10 years _____79
   c. 11-20 years _____146
   d. 21-30 years _____101
   e. 30 years and over ___120

A. Housing

4. Do you own a home in Cornish? Yes____295 No_____14

5. Do you rent a home in Cornish? Yes_____9 No_____232

6. In what type of housing do you live?
   a. Single Family_____291
   b. Two Family_____15
   c. Apartment_____3
   d. Mobil/Manufactured Home_____12
   e. Other (tent, yurt, etc.)_____1

7. Approximately how many acres do you own in Cornish? Check one.
   a. Less than 1 acre_____24
   b. Less than 2 aces_____49
   c. 3-5 acres_____77
   d. 6-15 acres_____70
   e. 16-50 acres_____50
   f. 51-99 acres_____18
   g. 100 acres or more__24___

8. Is any part of the acreage used for agriculture or forestry? Yes_____111 No_

9. If yes, specify how much acreage is in the following:
   a. Christmas trees _____30
   b. Cropland _____340
   c. Managed Forest ___2142
   d. Orchard _____8
   e. Pasture land ___568
   f. Sugarbush _____53
   g. Unmanaged Forest 1280_

B. Occupation

10. Are the adult members of your household (Check all that apply)
   a. Retired_____112
   b. Employed part-time_____78
   c. Employed full-time__256
   d. Unemployed_____15
   e. Other 14
   self-employed 4
   disabled 3
   student 3

11. Do you have a home-based business? If yes, specify the type of occupation. If not, please go to question twelve.
   a. Agriculture_____14
   b. Manufacturing____6
   c. Retail goods_____4
   d. Service_____31
   e. Studio_____11
   f. Other 14

12. What the occupation of each adult household member? Check all that apply.
   a. Agriculture_____17
   b. Artist, writer, musican__20
   c. Crafts_____10
   d. Education____56
   e. Farm employee_____4
   f. Forestry_____9
   g. Healthcare____64
   h. Homemaker____31
   i. Manufacturing___31
   j. Professional_____93
   k. Retail_____32
   l. Retired_____84
   m. Student_____15
   n. Technology____21
   o. Tradesman____30
   p. Other _____39

13. Where do the adult members of your household work? Please specify town(s) and state(s).

Lebanon/West Lebanon	82
Cornish	61
Claremont	58
Hanover	31
Windsor	21
Newport, NH	8
Plainfield	8
White River Jct	8
Meriden	5
springfield	4
Wilder	4
Woodstock	4
Bow	3
Hartland	3
Ascutney	2

Brattleboro	2
Croyden	2
Randolph	2
Walpole	2
Bethel	1
Burlington	1
Charlestown	1
Enfield	1
Goshen	1
Grantham	1
Guild	1
Hartford	1
Lyme	1
New London	1
Norwich	1
Sunapee	1
Upper Valley	3
NH	4
MD	2
MN	1
NY	1
WI	1

14. Do you carpool? Yes_____6 No____233 Occasionally___31

15. What distance do you travel to work? Please specify in miles. _____

0-5 (31)	41-50 (5)
6-10 (48)	51-100 (5)
11-15 (50)	101-200 (1)
16-20 (48)	201-300 (0)
21-25 (36)	301-500 (0)
26-30 (8)	500+ (1)
31-40 (9)	

C. Public Transportation

16. Do you use public transportation? Yes_____2 No__277 Occasionally___1

17. Would you use public transportation to any of the following towns?

a. Charlestown, NH_____1
b. Claremont, NH_____56
c. Hanover, NH_____59
d. Lebanon, NH _____70
e. New London, NH____0
f. Newport, NH_____9
g. Norwich, VT_____5
h. Plainfield, NH_____15
i. Brownsville, VT_____2
j. Sunapee, NH_____0
k. West Lebanon, NH__46
l. White River Jct., VT___20
m. Windsor, VT_____39
n. Woodstock, VT_____5
o. Other 2
Lyme, NH
Manchester, NH

Meriden, NH
Westminster, VT
exit 9 park & ride
Boston, MA

II. Municipal Services Please mark the appropriate box.

A. Police Department

18.	Excellent	Adequate	Needs Improvement	No Opinion
a. Response time	47	103	31	97
b. Follow up	29	62	26	81

B. Health

19.	Excellent	Adequate	Needs Improvement	No Opinion
a. Rescue Squad	150	32	0	103
b. Ambulance	94	51	1	117
c. Visiting Nurse	38	27	2	184
d. Hospice	21	18	2	196
e. Town Health Officer	17	28	0	195
f. Elderly Health Care	10	21	6	202
g. Handicapped Services	8	22	10	202
h. Welfare System	13	22	7	171

C. Public Utilities and Services

20. Which electric service do you have?
    a. CVEC_____153
    b. CVPS_____16
    c. Granite State Electric___48
    d. New Hampshire Coop___88
    e. None____2

21. Do you use a cellular phone? Yes___50 No___133

22. Are you satisfied with your cellular phone reception in Cornish? Check one.
    Yes___50 No___140 No Opinion____71

23. Do you support cell towers in Cornish? Check one.
    Yes____150 No___103 No Opinion____46

24. What type of sewerage system(s) do you have? Check more than one if appropria
    a. Cesspool___7
    b. Chemical_____0
    c. Composting toilet_____1
    d. Holding tank_____1
    e. Privy_____3
    f. Septic tank_292
    g. Other __2

25. What type of energy do you use? Please check as applies.

	Primary Heating	Cooking	Hot Water	Supplemental Heat
a. Oil	192	2	105	24
b. Kerosene	11	4	2	3
c. Electricity	2	159	81	28
d. Bottled gas	61	134	86	43
e. Wood	77	7	12	111
f. Wood pellets	2	0	0	5
g. Coal	2	0	1	0
h. Windmill	0	0	0	0
i. Solar	3	1	5	3
j. Other (Please specify)	1	1	1	0

D. Solid Waste

26. Do you believe Cornish has a solid waste disposal problem?
Yes___69 No_____130 No Opinion_____107

27. Which solid waste disposal method do you use? Check all that apply.
a. Claremont Waste to Energy Plant (private hauler) _____184
b. Claremont Waste to Energy Plant (take it yourself) _____49
c. Recycling Center in Cornish_____155
d. Other recycling center (where?)Clmt (23) Leb (7) Windsor (14)
e. Waste disposal facilities in other towns (where?)Clmt (6) Leb (7) Windsor (6) Other (11)
f. Waste disposal facility at work_____12
g. Other _____13

28. The Claremont Waste to Energy contract expires in 3 years. Which would you favor?
a. Remaining in the current Solid Waste District_____97
b. Joining with a different solid waste district_____21
c. Expanding the Town's recycling program_____117
d. Exploring other options_____128

E. Recreation

29. Choose your top THREE recreational priorities.
a. ATV riding_____15
b. Baseball_____5
c. Basketball____21
d. Bicycling_____43
e. Boating_____30
f. Camping_____42
g. Canoeing/Kayaking___56
h. Cross-country skiing___48

i. Fishing 63
j. Hiking 113
k. Hockey 17
l. Horseback riding 24
m. Hunting 55
n. Picnicking 30
o. Skating 16
p. Sledding 13
q. Snowmobiling 26
r. Snowshoeing 55
s. Soccer 23
t. Softball 6
u. Swimming 53
v. Tennis 16
w. Other _____

30. Which Town facilities do you use for non-school related recreational activities?

a. CREA Baseball Field 19
b. CREA Soccer Field 31
c. Town Forest 77
d. Other (please specify)

child care	3
pub/rest	2
crea brn	1
garden	1
gym	1
ice rink	1
movie theater	1
rec center	1
sen hsng	1
swimming hole	1
tea room	1

31. Do you feel there is a need for any of the following in Cornish? Please check all that apply.

a. Senior citizen center 72
b. Music center 18
c. Teen center 42
d. Theater/Outdoor amphitheater 28
e. Art gallery 21
f. Combination of the above 33
g. No need for any of the above 113
h. Other _____

F. Highway Department

32. What is your opinion of the Town highway maintenance? Please mark the appropriate box.

	Excellent	Adequate	Needs Improvement	No Opinion
a. Summer	120	146	52	8
b. Winter	137	115	47	10
c. Spring	88	160	75	13

33. What is your road type? (nearest road, not driveway) Check one from each column.

a. Hardtop 127
b. Gravel 142

a. State maintained 77
b. Town maintained 189
c. Private Road 7

34. Do you know of a road or intersection where safety could be improved? If so, please explain where.

Townhouse and Rt. 120	7
Intersection 12%	4
Jackson and Rt. 120	4
Root Hill and Mill Village	4
Dingleton and Townhouse	2
Leavitt & Old Turnpike Roads	2
Left from School to Rt 120	2
need yield sign @ West Pass	2
12A lights	1
Barrett Corners	1
Beechwood and East Road	1
Better signs at Flat on 120	1
Clark Camp and East Road	1
Clark Camp and Townhouse	1
lighting @ covered bridge	1
Mace and East Roads	1
North Parsonage & Harrington Roads	1
Parsonage Road	1
reduce speed 12-A to 40mph	1
RR Crossing, Rt. 12A	1
Rt. 120 and Whitewater Brook Road	1
Townhouse and Center Road	1

G. Town Government

35. How satisfied are you with each of the following?

	Satisfied	Not Satisfied	No Opinion
a. Building codes	146	12	111
b. Building permits	155	18	103
c. Campsite ordinance	85	6	171
d. Conservation Commission	127	13	129
e. Minimum lot size requirements	135	27	104
f. Mobile home overlay district	81	32	143
g. Non-residential site plan review	71	11	169
h. Planning Board	126	26	111
i. Protecting historical buildings	135	29	104
j. Selectboard	145	32	91

k. Subdivision regulation	91	28	141
l. Town Master Plan	93	19	144
m. Tower regulations	78	27	158
n. Water pollution control	98	21	140
o. Wetlands Ordinance	109	25	130
p. Zoning Board of Adjustment	95	26	129

36. Please indicate whether the currently available hours of the following serve the public sufficiently.

	Yes	No	No Opinion
a. Selectmen (Wed 9-noon, Fri 6:30-8:30pm)	239	20	40
b. Selectmen's Office (Mon-Th, 9-noon)	232	27	38
c. Town Clerk (Mon, Thurs 9-noon, 4-7pm; Fri 9-noon, Last Sat 9-noon)	247	42	13
d. Library (Mon, Wed 3-5pm; Mon, Wed, Fri 6:30-8:30pm; Sat 10-noon; Last Tues 9-11am)	185	28	66
e. Tax Collector (hours same as Town Clerk)	204	22	23

III. Conservation

37. Should the Town encourage the protection of Cornish's rural qualities?
Yes_____271 No_____13 No Opinion_____19

38. Are there any unique scenic or natural areas that you particularly enjoy? If so, please give the location and describe, below.

39. Do you feel these areas should be protected?
Yes_____161 No_____14 No Opinion_____37

40. Should the Town continue to preserve and protect our covered bridges?
Yes_____289 No_____9 No Opinion_____9

41. Should the Town encourage more land conservation through easements?
Yes_____184 No_____39 No Opinion___74

42. Should the Town continue to create stream/riverbank buffer zones?
Yes_____218 No_____26 No Opinion___55

43. Are you aware of any stream/riverbanks that should be protected? If yes, please describe, below.

Yes_____53 No____186

44. Should the Town encourage the protection of its public and private water supplies? Yes_____273 No_____5 No Opinion_____18

45. Would you favor prohibiting development on the following:

	Yes	No	No Opinion
Steep slopes	188	60	58
Ridge lines	190	53	64

46. Would you favor a Forest/Conservation Zone with a minimum lot size of between 25 and 50 acres?
Yes_____128 No_____79 No Opinion_____95

IV. Land Use (see map on page ##)

A. Zoning

47. Are you satisfied with the current Zoning Ordinance? If no, please explain.
Yes_____144 No_____41 No Opinion___99

48. Cornish has a Zoning Ordinance that divides the Town into Village, Rural, and Residential Zones. Please refer to the map on page ##. Mark the box that indicates your opinion of the area encompassed by each zone.

	Too Large	Too Small	Adequate	No Opinion
a. Residential (2 acre min)	11	33	179	47
b. Rural (5 acre min)	31	20	180	48
c. Village (1 acre min)	10	31	187	51

49. Do you feel the present Zoning Ordinance allows for appropriate land uses? If no, please explain. Yes_____148 No_____31 No Opinion___90

50. According to the map on page 11, in which zone do you live?
    a. Village_____23
    b. Rural Residential_____46
    c. Rural_____218
    d. Non-manufactured Overlay_____20

51. Should zoning encourage agriculture/forestry more than development?
Yes_____172 No_____50 No Opinion_____61

52. Do you feel Cornish's wetlands and floodplains are adequately protected? If no, where? Yes_____157 No_____25 No Opinion_____105

53. Indicate which zone or zones would be appropriate for the following businesses. You may indicate more than one zone.

	Residential	Rural	Village
a. Agriculture	101	249	62
b. Apartments	120	60	226
c. Auto Repair	101	119	194
d. Cluster Developments	133	55	139
e. Duplex (two family)	178	83	181
f. Forestry	93	236	43
g. Gas Station	66	37	222
h. General Store	95	52	230
i. Home based business	222	200	190
j. Industrial Park	38	51	81
k. Inn/ Bed & Breakfast	199	198	193
l. Light manufacturing	86	103	124
m. Log Yard	47	185	43
n. Motel	69	54	155
o.Multifamily Dwellings	113	59	182
p. Nursing home	113	89	158
q. Office park	60	52	131
r. Professional Offices	89	64	190
s.Recreation/Amusement	104	126	141
t. Restaurant	92	70	297
u. Retail shops	79	40	210
v. Shopping center	33	29	118
w. Single Family Homes	227	209	187
x. Small engine repair	133	127	174
y. Small manufacturing	93	107	139
z. Trash removal	106	124	124
aa. Other (Please specify)	0	0	5

V. Town Heritage

54. Check the approximate date your house was built.

a. 1760-1850_____72
b. 1851-1900_____34
c. 1901-1950_____34
d. 1951-present_____181

55. Do you know of a building, early barn, house, cellar hole, industry building, site, or area that is of historic interest? If so, please give the location and describe, below.

56. Should we continue to preserve and protect our historic structures? Check one.
Yes_____267 No_____16 No Opinion_____27

57. Are you in favor of improved/expanded facilities on the existing St. Gaudens National Historic site? Yes____93 No ____135 No Opinion____78

VI. Further Comment

56. What are your visions for the future of Cornish?

	Encourage	Discourage
Agriculture/Forestry	262	12
Residential development	119	136
Open space	257	1
Small business	211	54

57. Have we forgotten something? Please use the space below or enclose a separate piece of paper to state your opinion on any matter affecting the Master Plan for Cornish that you think is important but is inadequately covered in this survey. Please refer each comment to the question number if appropriate.

Thank You!

Appendix B: Community Workshop Summary

2005 Comm Forum

Chapter	Comment	red	grn	score
Nat Res	stricter zoning for agricultural land	6	1	13
Land Use	housing development should be concentrated (open space development) bigger incentive	5	2	12
Nat Res	Preservation of open space for future needs	3	6	12
Trans/Com	high speed internet (organized list of subscribers)	4	1	9
Trans/Com	wider shoulders: cyclist, school cyclist safety	1	5	7
Ec Dev	low impact business	1	4	6
Nat Res	protection of agricultural land from subdivision	2	2	6
His Res	historical directory map/village quest	2	1	5
Trans/Com	park & ride lot (120/12A); ride matching	2	1	5
Nat Res	support current use	2	1	5
Comm Fac	recycling - more days/week, twice/week	1	2	4
Ec Dev	keep home occupancy requirement	1	1	3
Land Use	preserve water supply, undeveloped ridgelines, and agricultural land	1	1	3
Ec Dev	promote clean businesses	1	1	3
Land Use	protect areas of important natural resources through soil-based zoning	1	1	3
Trans/Com	public transit (120/12A): Advanced Transit/High School		3	3
Comm Fac	senior facilities: housing, transport, meals	1	1	3
Land Use	affordable housing - allow for denser development to preserve open space	1		2
Land Use	cap on assessments; tax incentives for agriculture		2	2
Ec Dev	continue home-based businesses	1		2
Comm Fac	CREA: more dev-agristudies, nature studies, winter rec, exhibitions, snack shops(sports), continue trail, gardens	1		2
Comm Fac	daycare center		2	2
Ec Dev	professional-type office building, limit number per	1		2
Ec Dev	promote business that uses and protects local resources and people		2	2
Nat Res	protection against water bottling plants		2	2
Ec Dev	seek to get high speed internet		2	2
Comm Fac	senior center	1		2
His Res	town boundary markers	1		2
His Res	celebrate Cornish History: bike tour, garden tour/garden club, sugar house tour		1	1
Comm Fac	community website		1	1
Comm Fac	CREA Barn - what to do?		1	1
Ec Dev	create development strategy		1	1
Trans/Com	dangerous intersection: Townhouse/120/Perkins		1	1
Nat Res	encourage family farm		1	1
Comm Fac	Flat library: expand hours, computers		1	1

His Res	Historic Directory: what, where, how, why, when	1	1
His Res	historic restoration/conservation funding	1	1
Ec Dev	improve cell service	1	1
Ec Dev	increase employees in cottage industry	1	1
Ec Dev	loosen home occupancy requirement	1	1
His Res	mills/water power - operating	1	1
Nat Res	more roadside trees/protection of existing	1	1
His Res	more scenic road designation	1	1
Land Use	more wetland protection	1	1
Ec Dev	no box stores	1	1
His Res	oral history	1	1
Land Use	prevent rural sprawl	1	1
Comm Fac	recycling: always allow chemicals	1	1
Comm Fac	recycling: youth groups to run	1	1
Nat Res	road salt - none	1	1
His Res	Saint-Gaudens	1	1

2005 comm forum

Chapter	Comment	red	grn	score
Comm Fac	recycling - more days/week, twice/week	1	2	4
Comm Fac	senior facilities: housing, transport, meals	1	1	3
Comm Fac	CREA: more dev-agristudies, nature studies, winter rec, exhibitions, snack shops(sports), continue trail, gardens	1		2
Comm Fac	daycare center		2	2
Comm Fac	senior center	1		2
Comm Fac	community website		1	1
Comm Fac	CREA Barn - what to do?		1	1
Comm Fac	Flat library: expand hours, computers		1	1
Comm Fac	recycling: always allow chemicals		1	1
Comm Fac	recycling: youth groups to run		1	1
Comm Fac	accessibility: library, town offices, hist society, town hall			0
Comm Fac	boat landing on river			0
Comm Fac	cell towers			0
Comm Fac	cemetery building repairs			0
Comm Fac	cemetery facilities			0
Comm Fac	community bulletin boards			0
Comm Fac	community center			0
Comm Fac	composting facility			0
Comm Fac	comprehensive recycling facility			0
Comm Fac	CREA - community theatre, sports locker rooms, bathrooms, activity committee			0
Comm Fac	CREA Barn - barn dances			0
Comm Fac	CREA Barn - mtg space			0
Comm Fac	CREA Barn: concerts			0
Comm Fac	CREA land: more guided trail tours			0
Comm Fac	flat fire house			0
Comm Fac	Flat library: accessibility			0
Comm Fac	flat library: updates, electronic access			0
Comm Fac	Flat meeting house: more community use			0
Comm Fac	Flat meeting house: more community use			0
Comm Fac	historical society: bathroom facilities, community readings, expansion			0
Comm Fac	keep small school			0
Comm Fac	Masonic hall: community access, part. Kitchen			0
Comm Fac	meeting hall: above offices			0
Comm Fac	meeting house: repairs, find uses, upgrades			0
Comm Fac	new school			0

Comm Fac	new school: invest in infrastructure, music & art rooms, facilities to enhance education			0
Comm Fac	pool			0
Comm Fac	recycling: access, larger facilities, hazardous waste holding area			0
Comm Fac	school emergency shelter: cots, blankets, supplies			0
Comm Fac	school greenhouse			0
Comm Fac	school library: open for public use			0
Comm Fac	school: more community use, daycare center			0
Comm Fac	senior housing, planning board research needed			0
Comm Fac	skating facility			0
Comm Fac	sound barrier fencing by town sheds using recycled materials			0
Comm Fac	teen center			0
Comm Fac	town forest improve access, parking			0
Comm Fac	trash: town pick-up			0
Comm Fac	tree planting program			0
Ec Dev	low impact business	1	4	6
Ec Dev	keep home occupancy requirement	1	1	3
Ec Dev	promote clean businesses	1	1	3
Ec Dev	continue home-based businesses	1		2
Ec Dev	professional-type office building, limit number per	1		2
Ec Dev	promote business that uses and protects local resources and people		2	2
Ec Dev	seek to get high speed internet		2	2
Ec Dev	create development strategy		1	1
Ec Dev	improve cell service		1	1
Ec Dev	increase employees in cottage industry		1	1
Ec Dev	loosen home occupancy requirement		1	1
Ec Dev	no box stores		1	1
Ec Dev	allow auto repair garages			0
Ec Dev	allow for more businesses along main roads			0
Ec Dev	assisted living facility			0
Ec Dev	building supply store/Agway			0
Ec Dev	create new or expand village zones			0
Ec Dev	current zoning serving us well			0
Ec Dev	decrease lot size in village zone			0
Ec Dev	no large agri-business			0
Ec Dev	no large car dealerships			0
Ec Dev	no small car dealerships			0

Ec Dev	restaurant/tavern on back roads			0
Ec Dev	wind farms			0
His Res	historical directory map/village quest	2	1	5
His Res	town boundary markers	1		2
His Res	celebrate Cornish History: bike tour, garden tour/garden club, sugar house tour		1	1
His Res	Historic Directory: what, where, how, why, when		1	1
His Res	historic restoration/conservation funding		1	1
His Res	mills/water power - operating		1	1
His Res	more scenic road designation		1	1
His Res	oral history		1	1
His Res	Saint-Gaudens		1	1
His Res	architecture			0
His Res	art			0
His Res	available labor: scouts, 4H, youth groups			0
His Res	better access to covered bridges			0
His Res	books			0
His Res	buildings, bridges, farms, barns, old houses, school houses, hears houses			0
His Res	cemeteries (15)			0
His Res	cemeteries, quarries, hydro			0
His Res	cemetery tours			0
His Res	connecticut river			0
His Res	Corbin Park			0
His Res	Cornish Fair			0
His Res	dowsing for water			0
His Res	famous people - Dartmouth College, American Precision, Cornish Colony			0
His Res	fire protection to covered bridges/water source			0
His Res	grange halls			0
His Res	Hilliard Rifles			0
His Res	historic awareness			0
His Res	historic districts: Cornish Flat Common, Cornish Flat, Chase St, Cornish Colony, Cornish Mills			0
His Res	historical roads/old maps, stage coach roads			0
His Res	historical society: bathroom facilities, community readings, expansion			0
His Res	historical tradesmen			0
His Res	historical use of land			0
His Res	Lake Hitchcock			0
His Res	life insurance benefactors			0

His Res	living history: school house, mills, dairy farms			**0**
His Res	Mastlands/pine trees			**0**
His Res	meeting houses, churches			**0**
His Res	memorials			**0**
His Res	muster grounds - Trinity Church, Cornish Flat			**0**
His Res	Native American history			**0**
His Res	plant more trees			**0**
His Res	railroad/coach road			**0**
His Res	re enactment			**0**
His Res	stone bridges			**0**
His Res	stone walls/bridges			**0**
His Res	stone watering trough			**0**
His Res	sugar bushes			**0**
His Res	sugar houses			**0**
His Res	tape tour around town			**0**
His Res	town records			**0**
His Res	updated town genealogy			**0**
His Res	updated town history 1974 to present			**0**
His Res	website - historical			**0**
Land Use	housing development should be concentrated (open space development) bigger incentive ←	5	2	**12**
Land Use	preserve water supply, undeveloped ridgelines, and agricultural land	1	1	**3**
Land Use	protect areas of important natural resources through soil-based zoning	1	1	**3**
Land Use	affordable housing - allow for denser development to preserve open space	1		**2**
Land Use	cap on assessments; tax incentives for agriculture		2	**2**
Land Use	more wetland protection		1	**1**
Land Use	prevent rural sprawl		1	**1**
Land Use	be careful of impact businesses put on land: prevent 'business sprawl'			**0**
Land Use	be careful that increasing lot size does not affect affordability`			**0**
Land Use	Define 'rural quality'			**0**
Land Use	designate certain areas for denser development			**0**
Land Use	expand village zone in the Flat or around school; find a new village zone; smaller lot size in the village			**0**
Land Use	have the town buy agricultural easements ; increase cap reserve fund for conservation			**0**
Land Use	how do we keep agricultural land agricultural?			**0**
Land Use	increase rural lot size from 5 to 10 acres			**0**
Land Use	prevent ridgeline development: protect & repair buffers, steep slopes			**0**
Land Use	protect certain areas through easements; use $ incentives			**0**

Land Use	quantify & qualify wetlands			**0**
Land Use	rent control' on assessments			**0**
Land Use	water plan for Flat			**0**
Nat Res	stricter zoning for agricultural land	6	1	**13**
Nat Res	Preservation of open space for future needs	3	6	**12**
Nat Res	protection of agricultural land from subdivision	2	2	**6**
Nat Res	support current use	2	1	**5**
Nat Res	protection against water bottling plants		2	**2**
Nat Res	encourage family farm		1	**1**
Nat Res	more roadside trees/protection of existing		1	**1**
Nat Res	road salt - none		1	**1**
Nat Res	agricultural land: restriction of factory farms			**0**
Nat Res	air			**0**
Nat Res	air quality			**0**
Nat Res	air quality: incinerator, tire burning			**0**
Nat Res	alternative energy			**0**
Nat Res	awareness of state federal funds available for sustainable agriculture practices			**0**
Nat Res	better enforcement of zoning			**0**
Nat Res	composting: home, community, more info made available			**0**
Nat Res	Connecticut River			**0**
Nat Res	Corbin's Park			**0**
Nat Res	CREA land, water, fields, recreation			**0**
Nat Res	disposal of septic waste in Flat			**0**
Nat Res	education of benefits of conservation easements			**0**
Nat Res	education: resource management, awareness, types of crops			**0**
Nat Res	encourage family farms			**0**
Nat Res	encourage tree farming			**0**
Nat Res	encouragement of sustainable forest management (compensation)			**0**
Nat Res	funding for easements to reduce fragmentation			**0**
Nat Res	large stone quarry			**0**
Nat Res	light pollution (night)			**0**
Nat Res	more strict current use			**0**
Nat Res	municipal water supply			**0**
Nat Res	people: next generation			**0**
Nat Res	picnic area near river			**0**
Nat Res	preservation of open space for agriculture			**0**

Nat Res	preservation of water from Corbin Park			0
Nat Res	provide info on energy use: how to use native materials			0
Nat Res	quarry: sand, stone			0
Nat Res	recreation: public trails			0
Nat Res	recreation: town trails			0
Nat Res	regulation of water exportation			0
Nat Res	river: use of			0
Nat Res	road salt - none			0
Nat Res	soil: understand types and best uses (zoning)			0
Nat Res	solar			0
Nat Res	timber: clear cut regulations			0
Nat Res	timber: town forest			0
Nat Res	tree farms			0
Nat Res	views			0
Nat Res	waste water in Flat			0
Nat Res	Water mngt: drinking, septic for every village district			0
Nat Res	water supply for the Flat location			0
Nat Res	watershed protection			0
Nat Res	wetlands: criteria, use, protection			0
Nat Res	wetlands: education - watershed			0
Nat Res	wildlife			0
Nat Res	wildlife: habitat, corridors			0
Nat Res	win gate falls			0
Trans/Com	high speed internet (organized list of subscribers)	4	1	9
Trans/Com	wider shoulders: cyclist, school cyclist safety	1	5	7
Trans/Com	park & ride lot (120/12A); ride matching	2	1	5
Trans/Com	public transit (120/12A): Advanced Transit/High School		3	3
Trans/Com	dangerous intersection: Townhouse/120/Perkins		1	1
Trans/Com	ATV enforcement			0
Trans/Com	cell phone coverage: steeple cell sites, restrict to steeple height			0
Trans/Com	consider ordinance re: personal watercraft			0
Trans/Com	covered bridge sidewalk/lighting			0
Trans/Com	dangerous intersection '12% Solution' intersection			0
Trans/Com	dangerous intersection: Jackson Road/120			0
Trans/Com	dangerous intersection: Root Hill/Townhouse			0
Trans/Com	East Road/School Street stop sign confusion			0

Trans/Com	Emergency Communication	0
Trans/Com	emergency coverage/coordination	0
Trans/Com	emergency response plan:town-wide alarm system, school as shelter, drill?, 1st responders' manual	0
Trans/Com	Lebanon Airport service	0
Trans/Com	pedestrian safety in Flat: crosswalk at Gen. Store	0
Trans/Com	rail service: local and interstate, Balloch's Crossing station	0
Trans/Com	river access	0
Trans/Com	road access to town forest	0
Trans/Com	road sign alignment (lack of clarity)	0
Trans/Com	snow pushback/visibility	0
Trans/Com	speed enforcement (traffic 'calming')	0
Trans/Com	speed fines to stay in town	0
Trans/Com	town communication/ news (web site?)	0
Trans/Com	verizon reliability	0

Appendix C: Cornish Demographic Profile

Cornish Master Plan
Community Profile:
Population, Housing, and the Economic Base

INTRODUCTION

This Chapter focuses on the various facets and segments of the population of Cornish, including population trends, demographics, and projections for future growth. In many cases the information is presented so that it can be compared with surrounding municipalities, the County and the State. Information for this section was derived from a variety of sources; the Office of Energy and Planning, US Bureau of Census, the New Hampshire Department of Employment Security, and the NH Department of Health and Human Services. The 2000 US Census data was available and was supplemented by estimates from the NH Office of Energy and Planning for the recent years in between the dicennial Census. The findings in the Community Profile Chapter in particular have an important influence on the remaining Master Plan chapters.

POPULATION

One of the most important elements of the Master Plan is an analysis of population trends and characteristics and population projections. Any significant changes in the population will consequently affect land use patterns, the town's economic base, and local demand for housing, transportation, human services and community facilities. This section will first address overall population trends, and then the composition of the population, and finally, the future population projections for Cornish.

1. POPULATION TRENDS

Cornish Historical Population Trends

An analysis of population trends is the foundation of a master plan. Significant changes in population affect many other factors, including land use patterns, economic development, and the needs for community services and facilities. The historical trends of Cornish's population growth are presented in Table 1.

Cornish experienced rapid population growth in its early years, particularly between 1767 and 1810. Cornish's population reached a historical peak in 1840 when the population reached 1726. Over the next 50 years, the population steadily declined to a low of 754 in 1890. Between 1890 and 1940, the population fluctuated and between 1940 and 1980, Cornish again experienced a steady increase in population. During the 1970s, the population increased 9.6 percent which lagged behind the national population increase (+11.5 percent), the Sullivan County increase (+16.5 percent), and the state increase (+24 percent). There was a very large increase from 1980 to 1990 and only a negligible increase from 1990 to 2000 (Figure 1 and Table 1).

Table 1: Cornish Population Trends, 1767–2000

Year	Town of Cornish		Sullivan County		State of New Hampshire	
	Population	% change	Population	% change	Population	% change
1767	133	--	816	--	--	--
1773	213	60.2	2,184	167.6	--	--
1775	309	45.1	2,610	19.5	--	--
1783	509	64.7	2,595	-0.6	--	--
1786	605	18.9	6,259	141.2	--	--
1790	982	62.3	9,107	45.5	141,885	--
1800	1,268	29.1	14,537	59.6	183,858	29.6
1810	1,606	26.7	16,514	13.6	214,460	16.6
1820	1,701	5.9	18,533	12.2	244,161	13.8
1830	1,685	-0.9	19,669	6.1	269,328	10.3
1840	1,726	2.4	20,340	3.4	284,574	5.66
1850	1,606	-7.0	19,375	-4.7	317,976	11.74
1860	1,520	-5.4	19,041	-1.7	326,073	2.55
1870	1,334	-12.2	18,058	-5.2	318,300	-2.4
1880	1,156	-13.3	18,161	0.6	346,991	9.0
1890	754	-34.7	17,304	-4.7	376,530	8.5
1900	962	27.6	18,009	4.1	411,588	9.3
1910	1,005	4.5	19,337	7.4	430,572	4.6
1920	844	-16.0	20,922	8.2	443,083	2.9
1930	855	1.3	24,286	16.1	465,293	5.0
1940	790	-7.6	25,442	4.8	491,524	5.6
1950	989	25.2	26,441	3.9	533,242	8.5
1960	1,106	11.8	28,067	6.1	606,921	13.8
1970	1,268	14.6	30,949	10.3	737,578	21.5
1980	1,390	9.6	36,063	16.5	920,475	24.8
1990	1,659	19.3	38,592	7.0	1,109,252	20.5
2000	1,661	.1	40,458	4.8	1,235,786	11.4

Source: US Census

Cornish Population, 1960–2000

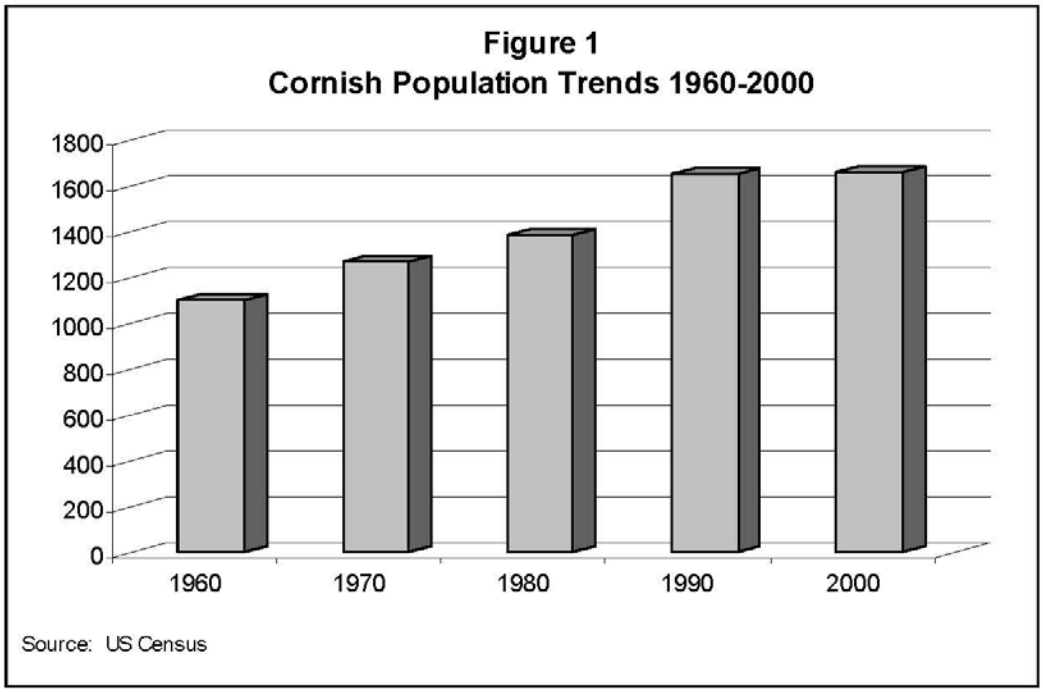


Table 2: Population Change, 1970–2000

Area	% Change 1970-1980	% Change 1980-1990	% Change 1990-2000
Cornish	9.6%	19.4%	0.1%
New Hampshire	24.8%	20.5%	11.4%
Sullivan County	16.5%	7.0%	4.8%

Source: US Census

2. POPULATION DENSITY

Population Density of Cornish and Surrounding Communities

Cornish's population density is similar to that of Plainfield but quite a bit less than Grantham, another bedroom community to Lebanon that includes the Eastman housing development. Cornish's population density has remained fairly stable over the past few decades.

Table 3: 2000 Population Density of Cornish and Surrounding Communities

Town	Persons Per Square Mile
Claremont	305.0
Cornish	**39.5**
Croydon	18.0
Grantham	82.0
Newport	144.0
Plainfield	42.9

Source: Economic & Labor Market Information Bureau, NH Employment Security; Population density from US Census

Natural Increase and Migration

The two major determinants of population change are natural increase and migration. The excess of births over deaths, in any one period, is called natural increase. Migration refers to the number of people who have moved into or out of town. If a community has little in- and out-migration, almost all changes in population are attributable to natural factors alone. From 1990 to 2000, 151 Cornish births were recorded and 121 deaths recorded, for a natural increase of 30 persons (Source: NH Department of Health and Human Services). Since the town's population grew by only 2 persons during the same period, there was an out-migration of 28 persons. The combination of declining family size and college student/young adult moving out of town is likely responsible for these stable numbers.

3. AGE DISTRIBUTION

Population Increase by Age Group, 1970–2000

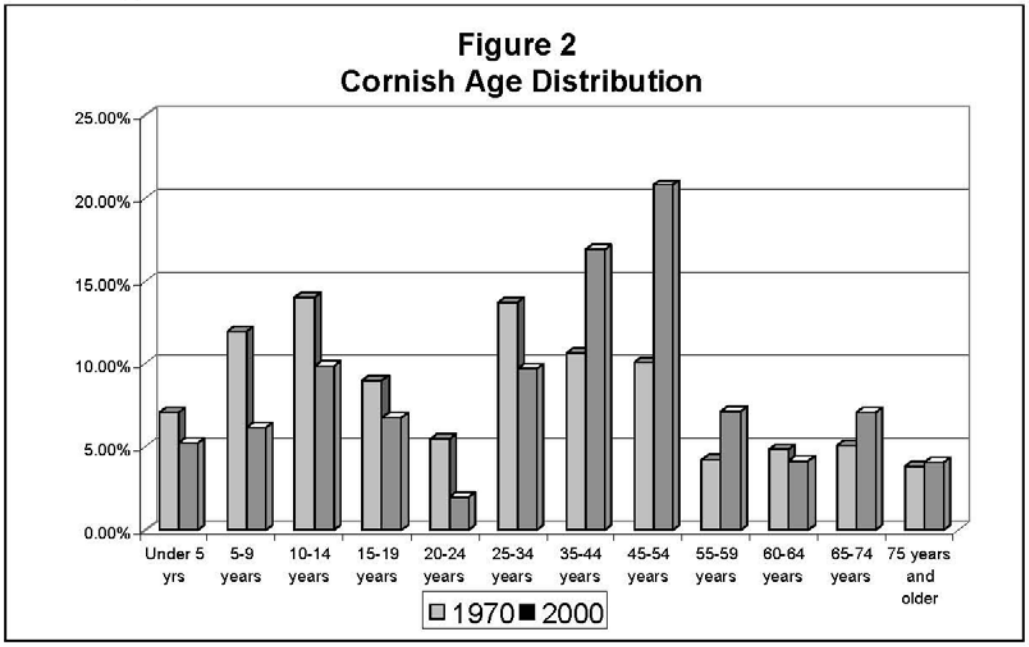
The age composition of a community is of great importance in planning for future facility and service needs. An increase in the school-age population, for example, indicates the need for greater investment in educational facilities. Likewise, growth in the senior population requires the need for a different range of services and facilities. As seen in Table 3 and Figure 2, the population of residents 45 and over (older labor force and senior citizen populations) has been increasing while the youth and young adult population has been decreasing since 1970. The 45-54 age group saw the biggest percentage increase between 1990 and 2000, and makes up 20.8 percent of the total population in Cornish. The 35-44 age group has declined since 1990 but holds the second largest percentage of the population. Nationally, the trend will be a relative increase in the over-65 age group as the "baby-boom" generation moves through the age distribution and the effect of lower fertility rates is reflected.

Table 4: Population Increase by Age Group

Age Group	1970	1970-1980 Increase	1980	1980-1990 Increase	1990	1990-2000 Increase	2000	% Change 1970-1980	% Change 1980-1990	% Change 1990-2000
Under 5	90	-4	86	+43	129	-43	86	-4.4%	50.0%	-33.3%
5-9	152	-44	108	+33	141	-40	101	-28.9%	30.6%	-28.4%
10-14	178	-51	127	-14	113	+49	162	-28.6%	-11.02%	43.36%
15-19	114	+2	116	-15	101	+10	111	1.7%	-12.9%	9.9%
20-24	69	+13	82	-14	68	-35	33	18.8%	-17.0%	-51.5%
25-34	174	+108	282	-40	242	-82	160	62.0%	-14.2%	-33.9%
35-44	135	+51	186	+192	378	-100	278	37.8%	103.2%	-26.5%
45-54	128	-3	125	+59	184	+158	342	-2.3%	47.2%	85.9%
55-59	54	+23	77	-4	73	+45	118	42.6%	-5.2%	61.6%
60-64	61	-2	59	+10	69	-1	68	-3.3%	16.9%	-1.4%
65-74	64	+26	90	+7	97	+20	117	40.6%	7.8%	20.6%
75 & over	49	+3	52	+12	64	+3	67	6.1%	23.0%	4.7%

Source: US Census

Cornish Age Distribution



Source: US Census

Cornish Median Age

The figures in Table 5 translate to a median age which has increased fairly dramatically from 31.3 in 1980 to 41.6 in 2000. This is a higher median age than that for the state or county, but fits the overall national trend of a steadily aging population.

Table 5: Median Age

Area	1980	1990	2000
Cornish	31.3	N/A	41.6
New Hampshire	30.1	32.8	37.1
Sullivan County	31.6	N/A	40.0

Source: US Census

4. HOUSEHOLD TYPE AND SIZE

Household Type

Almost 63 percent of Cornish's households are married couple families, a percentage that is a good deal higher than the state and county average (Table 6). The percentages of 1-person, single parent family, and non-family households are significantly lower for Cornish than for Sullivan County and NH.

Table 6: Household Type

Area	Household Type							
	1-Person Households #	1-Person Households %	Married Couple Family #	Married Couple Family %	Single Parent Family #	Single Parent Family %	Non Family Households #	Non Family Households %
Cornish	137	21.24%	406	62.95%	60	9.30%	42	6.51%
New Hampshire	--	24.44%	--	55.30%	--	12.90%	--	7.36%
Sullivan County	--	25.67%	--	54.65%	--	12.98%	--	6.70%

Source: US Census

Mean Household Size

The average household size in Cornish has been slowly decreasing, following the county, state, and national trend. However, Cornish's average is slightly higher than the averages for Sullivan County and New Hampshire (Table 7).

Table 7: Mean Household Size

Area	1980	1990	2000
Cornish	2.85	2.74	2.57
New Hampshire	2.75	2.62	2.53
Sullivan County	2.68	2.56	2.41

Source: US Census

5. FUTURE POPULATION

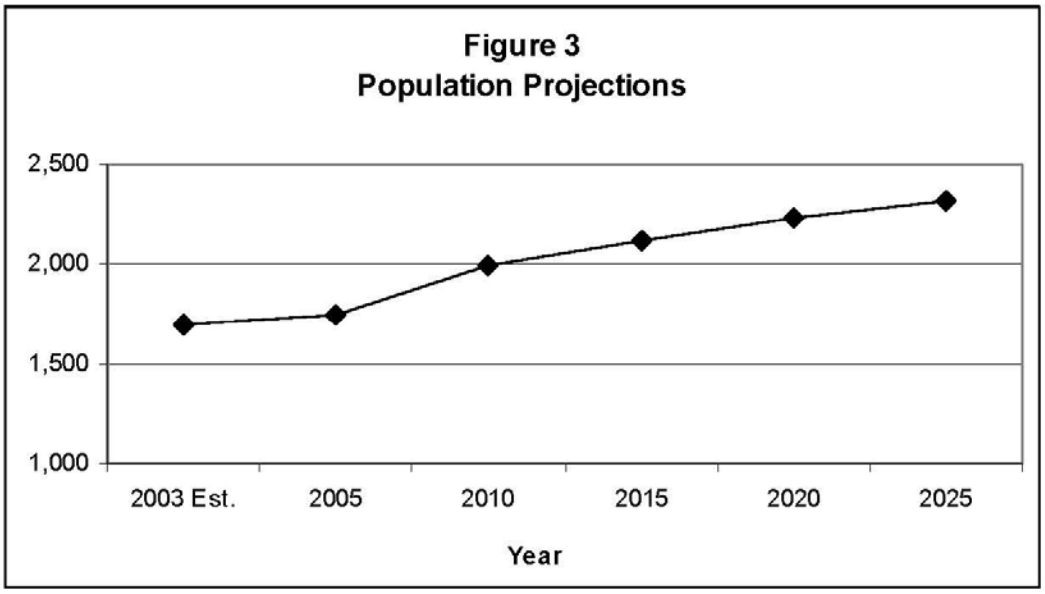
The New Hampshire Office of Energy and Planning (OEP) periodically develops projections of future population growth for all cities and towns in New Hampshire. An important consideration in OEP's methodology is that town-level projections are controlled to county totals. In other words, they are based on the town's historical share of its respective county's growth and the assumption that established growth trends will remain about the same in the future. The county projections are roughly based on long-term trends that occurred during the 1960 to 2000 period.

As with any data projections, particularly for smaller areas, actual circumstances and events can drastically alter the figures. Factors such as job creation, the tax rate, and the general economic climate of the Northeast can alter these figures. Projections should be used for trend analysis only and care should be taken to review and alter the data, as updated information is made available.

Table 8: Population Projections for Cornish

Projection	2000	2005	2010	2015	2020	2025
Cornish	1,661	1,750	1,990	2,120	2,230	2,320

Source: NH Office of Energy and Planning



HOUSING

1. HOUSING SUPPLY

Number of Dwelling Units

The 2000 U.S. Census counted 662 year-round units and 35 seasonal units for a total of 697 units (Table 9). This represents only a 1.2 percent increase since 1990, which is a good deal lower than the percent increase for nearby towns, the county and the state (Table 10). The percentage of seasonal homes in Cornish (5 percent) is considerably lower than for Sullivan County (13.7 percent) and and the state (10.3 percent). Many formerly seasonal dwellings have likely been converted for year-round use in recent years.

Table 9: Number of Dwelling Units

# of Dwelling Units	1990 Year-Round Units	1990 Seasonal Units	1990 Total Units	2000 Year-Round Units	2000 Seasonal Units	2000 Total Units
Cornish	652	37	689	662	35	697

Source: US Census

Table 10: Percentage Increase in Dwelling Units, 1990–2000

Year	Year-Round Percent Change	Seasonal Percent Change	Total Percent Change
Cornish	1.5%	-5.4%	1.2%
Grantham	72.5%	-26.7%	17.4%
Plainfield	11.6%	26.7%	11.9%
Sullivan County	6.7%	-14.4%	3.2%
New Hampshire	9.8%	-1.3%	8.6%

Source: US Census

Cornish's homeowner vacancy rate (the percentage of homes for sale at the time of the Census) and rental vacancy rate are .4 and 5.7 percent, respectively (compared with 1.6 and 5.4 percent for Sullivan County and 1 and 3.5 percent for the State of New Hampshire).

2. HOUSING TYPE AND CONDITION

Housing Stock by Type

According to NHOEP estimates from the 2000 US Census, Cornish housing is overwhelmingly dominated by single-family units, at an estimated 86.94 percent for 2003. Plainfield and Grantham are estimated to have 83.71 and 78.92 percent, respectively. These percentages are a good deal higher than the county and statewide averages for single-family homes. Cornish has an estimated 6.11 percent multi-family units and 6.94 percent mobile homes. With an increasing elderly population, there may be a need for more affordable housing options, such as increased multi-family units and accessory apartments.

Table 11: Housing Stock by Type – 2003 Est.

Area	Total Units 2000	Total Units 2003 Est.	Single Family Units 2003 Est.	% of Total 2003	Multi-Family Units 2003 Est.	% of Total	Mobile Home	% of Total
Cornish	697	720	626	86.94%	44	6.11%	50	6.94%
Grantham	1,513	1,684	1,329	78.92%	328	19.48%	27	1.60%
New Hampshire	546,524	579,211	365,005	63.02%	176,528	30.48%	37,678	6.51%
Plainfield	877	939	786	83.71%	75	7.99%	78	8.31%
Sullivan County	20,158	20,958	14,023	66.91%	4,727	22.55%	2,208	10.54%

Source: 2000 Figures from US Census 2000. 2003 Estimates from NH Office of Energy and Planning based on building permits issued from 2000-2003.

Percentage of Renter-Occupied Units in 2000

The percentage of renter occupied housing units in 2000 was 12.7 percent. This is less than half the average for Sullivan County (28 percent) (Table 12).

Table 12: Renter–Occupied Units

Renter Occupied Units - 2000	# of Units	Percentage
Cornish	82	12.7 %
New Hampshire	143,906	30.3%
Sullivan County	4,627	28%

Source:

3. HOUSING AFFORDABILITY

Housing Cost

As shown in Table 13, the median rent and median value of owner-occupied housing units in Cornish is a good deal higher than Sullivan County averages but lower than state averages. All communities should provide a sufficient supply of quality housing to ensure healthy families and a stable workforce, necessary elements of a sustainable economy. Cornish does not now have a sufficient supply of affordable housing. Cornish's housing costs are not conducive to first-time home buying; the prime age group associated with first-time home buying (25-34 years of age) has been declining as a proportion of the total population.

Table 13: Housing Cost - 2000

Area	Median Rent	Median Value of Owner Occupied Housing Units
Cornish	$640	$104,400
New Hampshire	$646	$133,300
Sullivan County	$537	$91,900

Source: US Census

Table 14: Median Rent and Income - 2000

Area	Median Rent	Median Household Income
Cornish	$640	$53,393
New Hampshire	$646	$49,467
Sullivan County	$537	$40,938

Source: US Census

It is generally accepted that housing costs should be no more than 30 percent of a household's income. As seen in Table 15, seventeen percent of renters and twenty-three percent of homeowners in Cornish pay 30 percent or more of their household income on housing. This means that for these residents, there is not enough money left after housing payments to cover other basic necessities.

Table 15: Percentage of Income Spent on Housing, 2000

	Gross Rent as a % of Household Income				Monthly Owner Cost as a % of Household Income			
	Less than 15.0%	15% - 19.9%	20.0% - 29.9%	30.0% and greater	Less than 15.0%	15% - 19.9%	20.0% - 29.9%	30.0% and greater
1999	23	25	19	**17**	30	16	30	**23**

Source: US Census

ECONOMIC BASE

The economic base of a community refers to many different aspects of the local economy and is evaluated using various economic indicators. In this section, indicators related to employment, income and the property tax base are all addressed. All of these factors are interrelated and changes in one affect all others. For example, business development in the region determines what kinds of jobs are available to residents and how well the jobs pay. Local business development and personal incomes both influence how much property tax income is available to the Town for the provision of facilities and services. Consequently, the condition of a community's economic base is a major determinant in the overall quality of life for its citizens.

Number and Percentage of Cornish Residents Employed

In 2003, Cornish's unemployment rate was 1.2 percent, compared to 3.6 percent for Claremont, 2.8 percent for Sullivan County as a whole and 4.3 percent for New Hampshire. The unemployment rate fell in Cornish from 3.7 percent in 1993 to 1.2 percent in 2003. The unemployment rate is defined as the percentage of the labor force that is jobless and is actively seeking work. This provides incomplete information about the labor market, however, as many people settle for part-time employment and/or hold jobs that do not offer a livable wage, ie. do not offer a wage that adequately covers housing, health insurance and transportation costs.

Workplace of Cornish Residents

It is estimated that 1,026 of Cornish residents are employed in 2003. Roughly twenty-one percent of these residents (223) are employed in Lebanon and sixteen percent (169) are employed in Cornish. The third largest workplace for Cornish residents is Claremont (14 percent), and Hanover is fourth with eight percent of residents employed there. Windsor, VT and Hartford, VT employ five and three percent of Cornish residents, respectively. Mean travel time to work for Cornish residents in the year 2000 was roughly 25 minutes.

The largest employers in the Town of Cornish (2004) are:

- Cornish Elementary School, which has 30 employees
- Dingee Machine Co., which employs seven people
- Cornish Highway Department, which employs five people
- 12% Solution
- Cornish General Store
- St. Gaudens

(Department of Employment and Security).

Table 16: Commuting Patterns

Year	% Residents Commuting Out of Town	Most Common Commute To:		
		1st	2nd	3rd
1990	76.6%	Claremont	Lebanon	Hanover
2000	81%	Lebanon	Cornish	Claremont
Year	**# of Nonresidents Working in Town**	**Most Common Commute From:**		
		1st	**2nd**	**3rd**
1990	126	Claremont	Plainfield	Lebanon
2000	160	Claremont	Plainfield	Charlestown

Source: US Census

Distribution of Employed Cornish Residents among Various Types of Industry

Manufacturing, despite a decline in the last decade, continues to be the industry employing the largest percentage of Cornish residents, which is true for Sullivan County as a whole. This is followed by Trade, which also declined. There was a slight rise in the percentage employed in the Construction industry, and very slight increase in the Professional category; all other categories experienced slight declines from 1990-2000.

Table 17: Distribution of Employed Cornish Residents Among Types of Industry

Type of Industry	1990	2000
Manufacturing	20.68%	17.10%
Construction	5.91%	6.50%
Agriculture, Forestry, Fisheries, Mining	4.77%	3.20%
Transportation, Communication, Utilities	6.48%	3.30%
Trade	19.55%	14.00%
Finance, Insurance, Real Estate	3.41%	3.30%
Business/Personal Services	6.70%	N/A
Professional and Related Services	5.57%	6.00%
Public Administration	4.55%	4.10%

Source: US Census 1990 & 2000.

Distribution of Cornish's Employed Residents among Various Occupational Categories
Between 1990 and 2000, there was a sharp increase in the number of employees in Managerial and Professional positions, and a moderate increase in the Service occupational category.

Table 18: Distribution of Cornish's Employed Residents Among Various Occupational Categories

Type of Occupation	1990	2000
Managerial, Professional	27.73%	39.50%
Technical, Sales, Administrative Support	29.43%	22.30%
Service Occupations	10.68%	12.90%
Farming, Forestry, Fishing	3.5%	1.60%
Precision Production, Craft, Repair	12.16%	10.30%
Operators, Fabricators, Laborers	16.48%	13.40%

Source: US Census 2000

Income: 2000 Median Household Income, 2000 Per Capita Income
Per capita incomes are helpful to measure any disparity within towns in a county. The income is what the wage-earners from the respective towns bring home prior to taxes, and is total income divided by the number of individuals within the community or region. Median household income is defined as the earnings derived by all members of the household. Cornish's median household income is significantly higher than the median for Sullivan County and higher than New Hampshire as well. The per capita income is higher than that of the county but just slightly lower than that of the state (Table 17).

Table 20: 2000 Median Household and Per Capita Income

Area	Median Household Income	Per Capita Income
Cornish	53,393	23,165
Claremont	34,949	20,267
Hanover	72,470	30,393
Lebanon	42,185	25,133
Plainfield	57,083	26,062

New Hampshire	49,467	23,844
Sullivan County	40,938	21,319

Source: US Census 2000

Percentages of Individuals and Families below Poverty Level

The US Census Bureau uses money and income thresholds by family size and composition to determine if an individual is "poor." If a family's total income is less than that family's defined threshold, then every individual in that family is considered poor. These thresholds are adjusted annually for inflation. The percentages of individuals and families below poverty level in Cornish is significantly lower than those for both the county and the state, and the percentages have declined dramatically in the last couple of decades (Table 21).

Table 21: Percentages of Families Below Poverty Level

Area	1980	1990	2000
Cornish	9.3%	3.7%	4.5 %
New Hampshire	8.2 %	6.4 %	6.5 %
Sullivan County	10.4 %	9.8 %	8.5 %

Source: US Census

Town Tax Rates

An examination of the tax rates also helps to gauge the economic health of a community. Table 22 compares Cornish's full value (equalized) tax rate in 2003 ($20.76) to communities of similar size in Sullivan County. If the Town wishes to increase its tax base, it should continue to make land use decisions that will maintain a high quality of life. Strong zoning, site plan review, and subdivision regulations are essential to ensure quality development.

Table 22: Equalized Town Tax Rates

Municipality	1990 Equalized Tax Rate	1995 Equalized Tax Rate	2000 Equalized Tax Rate	2001 Equalized Tax Rate	2002 Equalized Tax Rate	2003 Equalized Tax Rate
Claremont	29.11	40.69	33.71	35.50	33.94	31.53
Cornish	17.91	29.65	27.50	30.91	25.36	**20.76**

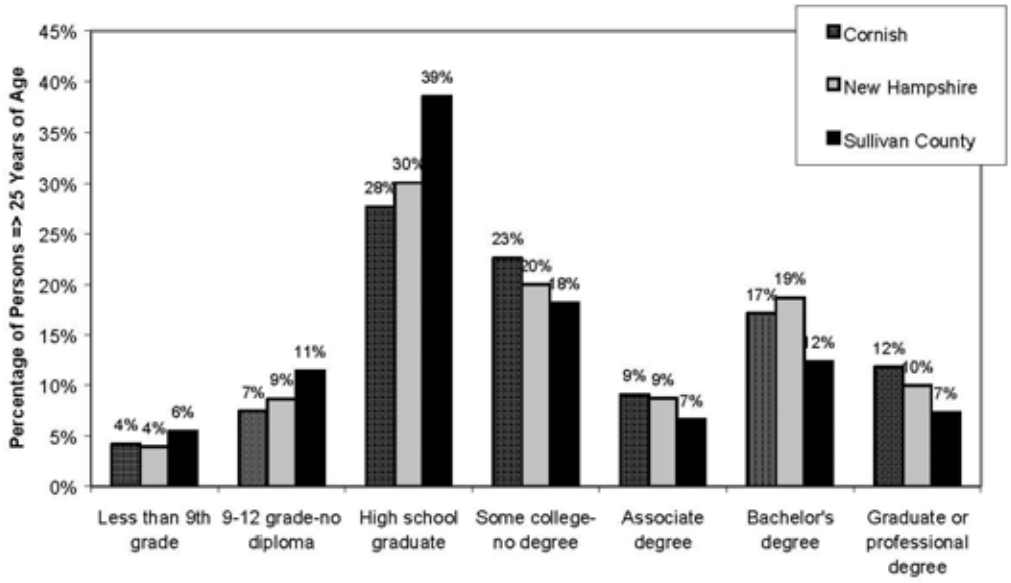
Croydon	12.74	22.79	20.55	27.19	16.97	18.18
Goshen	24.41	30.01	28.46	31.93	25.31	24.55
Grantham	9.99	13.55	18.71	21.69	15.21	15.05
Lempster	18.29	30.35	31.79	32.55	24.15	20.23
Plainfield	25.82	31.2	31	34.75	23.11	21.36

Sources: NH Office of Energy and Planning; NH Dept. of Revenue; NH Community Profiles

Educational Attainment, Persons 25 Years and Older, 2000

The percentage of Cornish residents that have obtained a graduate or professional degree is higher than the percentages for both the county and the state (Figure 4).

Figure 4: Educational Attainment



Source: US Census Bureau, Census 2000

TRAFFIC VOLUMES

Table 23: Cornish Average Annual Daily Traffic Counts

Location	1997	2000	2003	Percent Change 1997-2003
NH Route 12A South of Cornish Mills Road	2300	1900	2600	13
Windsor Bridge at Vermont SL	3100	3000	2700	-13
NH Route 120 South of Cornish City Road	2400	2000	2100	-13
Town House Road over Mill Brook	980	970	1600*	63*
Center Road West of Gap Pond Road	150	200	210	40
Leavitt Hill Road over Notch Brook	140	170	160	14

Source: NH Department of Transportation. Note: * 2004 count; percent change is calculated using 1997 and 2004 data.

Summary: Traffic Volumes

- Route 120 traffic volumes fluctuate. In 1993, average annual daily traffic (AADT) on Route 120 south of Cornish City Road was about 2,000. Similar variations are found in the traffic count data at the Plainfield Town Line, which went from 1,800 in 1993 to 2,400 in 1997 to 2,100 in 2001.
- Traffic on Route 12A is steadily increasing.
- Town House Road has experienced the greatest increase in traffic of all the roads counted, a 63 percent increase between 1997 and 2004.
- Local roads such as Center Road, Town House Road and Leavitt Hill Road have experienced significant increases in traffic volumes, placing pressures on local road maintenance.
- Traffic across the Windsor-Cornish Covered Bridge has been steadily decreasing for several years (in 1991, the AADT was 3,200).

Data Sources

US Census Data:

- http//factfinder.census.gov
- Limited data available at www.uvlsrpc.org - and full data available in hard copy at the UVLSRPC office

Employment and Economic Data:

- NH Economic and Labor Market Information Bureau: http://www.nhes.state.nh.us/elmi/onlinelmidat.htm
- www.uvlsrpc.org
- NH Community Profiles: http://www.nhes.state.nh.us/elmi/communpro.htm

Traffic Volume Reports, NH Department of Transportation:

- http://www.nh.gov/dot/transportationplanning/traffic/index.htm

Appendix D: Conceptual Growth Center Comparison (Alternative Areas)

In addition to the primary growth areas identified in Chapter V. DEVELOPMENT ISSUES), the Planning Board, with the assistance of the Upper Valley Lake Sunapee Regional Planning Commission, identified several other potential growth centers in Cornish. While the Board, based on input from the public, opted to exclude these additional potential growth centers from the Master Plan itself, they are presented in this appendix in the interest of completeness.

East Road Area

East Road between Town House Road and South Cornish is another possible growth center. This may be the area most suitable for future residential development. The existing East Road may be used as a frontage road separating access from the arterial Route 120. Given the high number of commuters in Cornish, this location will offer easy access to the Lebanon, Claremont and Windsor employment areas without using local roads. Growth here may require the improvement of the Town House Road/Route 120 intersection.

Northwestern Corner

The northwestern corner of town contains the largest contiguous tract of Class 1 soils, which will support lot sizes as small as 31,750 square feet. Although there are currently no future aspirations from the town for directing development towards this area, the location contains adequate roadway access, soils suitable for development, and is adjacent to the Town of Plainfield's commercial zoning district. This area may be a viable growth center if additional space for development is needed and when the community is ready to direct growth to undeveloped areas. This may be a viable area for light commercial or industrial activities, i.e. a place where cottage industries may locate when their impacts have become too great for their residential surroundings. Some of the drawbacks of development in this area include disruption of prime agricultural soils and visual impacts along the Connecticut River.

Mace Road Area

Another undeveloped area that may be suitable for future residential development is located around Mace Road. This area is similar in terms of opportunities and constraints as the East Road location. This site contains predominantly well-drained soils. It is also located proximate to Route 120.

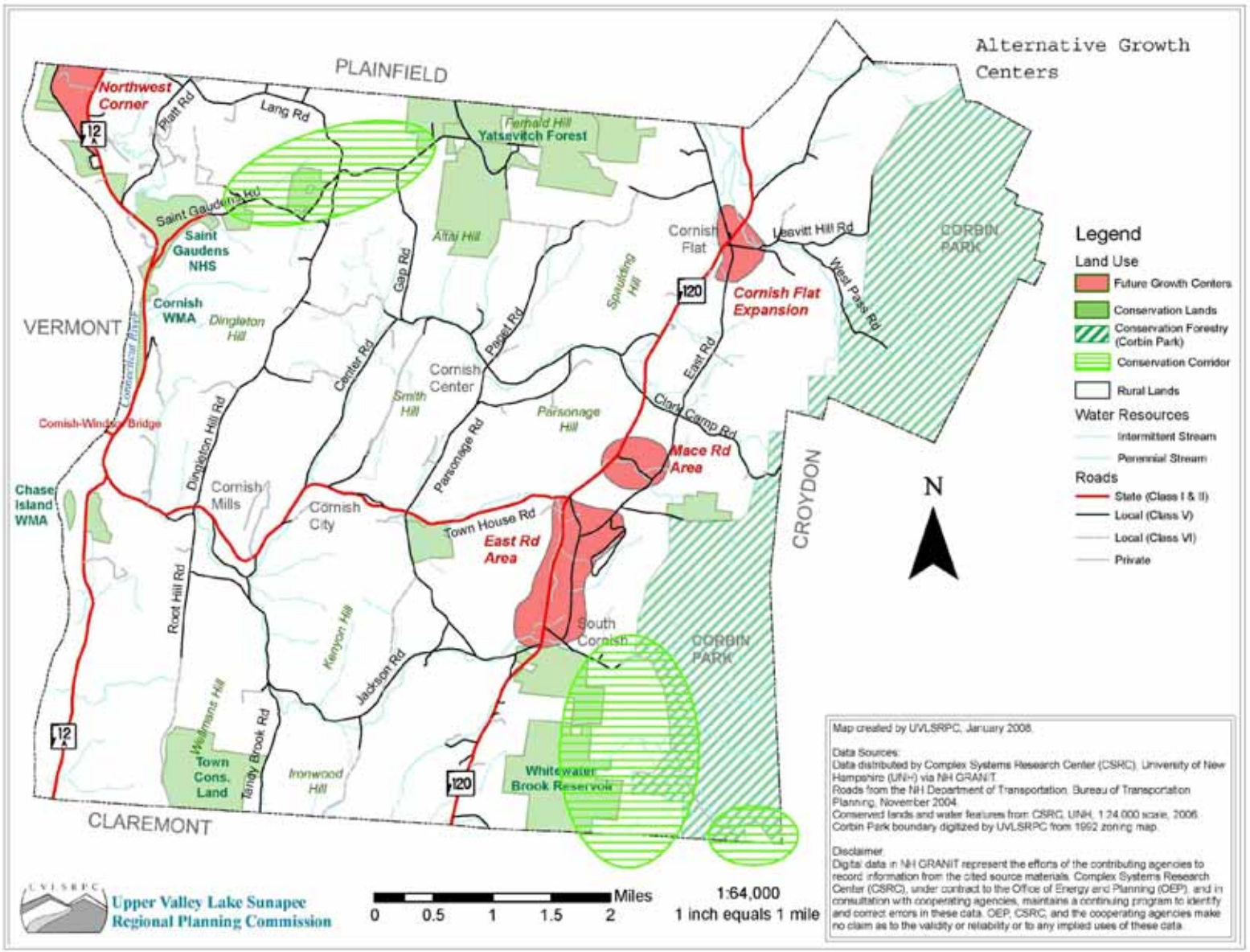

Alternative Growth Centers
PLAINFIELD
VERMONT
CLAREMONT
CROYDON
Northwest Corner
Platt Rd
Lang Rd
Fernald Hill
Yatsevitch Forest
Saint Gaudens NHS
Saint Gaudens Rd
Cornish WMA
Dingleton Hill
Connecticut River
Comish-Windsor Bridge
Chase Island WMA
Gap Rd
Altai Hill
Cornish Flat
Leavitt Hill Rd
CORBIN PARK
Spruiding Hill
Cornish Flat Expansion
West Pass Rd
Center Rd
Smith Hill
Cornish Center
Pinnet Rd
East Rd
Clark Camp Rd
Parsonage Hill
Parsonage Rd
Dingleton Hill Rd
Cornish Mills
Cornish City
Mace Rd Area
Town House Rd
East Rd Area
Root Hill Rd
Kenyon Hill
Jackson Rd
South Cornish
Wellmans Hill
Tandy Brook Rd
Ironwood Hill
Town Cons. Land
Whitewater Brook Reservoir
Legend
Land Use
Future Growth Centers
Conservation Lands
Conservation Forestry (Corbin Park)
Conservation Corridor
Rural Lands
Water Resources
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
N
Map created by UVLSRPC, January 2008.
Data Sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT.
Roads from the NH Department of Transportation, Bureau of Transportation Planning, November 2004.
Conserved lands and water features from CSRC, UNH, 1:24,000 scale, 2006.
Corbin Park boundary digitized by UVLSRPC from 1992 zoning map.
Disclaimer:
Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. OEP, CSRC, and the cooperating agencies make no claim as to the validity or reliability or to any implied uses of these data.
Upper Valley Lake Sunapee Regional Planning Commission
Miles
0 0.5 1 1.5 2
1:64,000
1 inch equals 1 mile

Table V-1: Conceptual Growth Center Comparison

Potential Growth Area	Typical Soil Classification	Area (Acres)	Range of Prescribed Lot Sizes (sq/ft)	Total Soil Capacity (units)
Cornish Flat Expansion	Class II	84	46,000-132,000	48.32
East Road Area	Class II	409	31,750-132,000	256.47
Northwestern Corner	Class I	112	31,750-40,000	141.93
Mace Road Area	Class II	129	31,750-132,000	95.65
Total	…	734	…	542.37

"Soil Based Lot Sizing, Environmental Planning for Onsite Wastewater Treatment in New Hampshire", SSSNNE Special Publication No. 4 Version I (September, 2003). Developed area subtracted from the Cornish Flat area.

Appendix E: Water Resource Protection Plan Supplement

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Manage Construction with regard to Water Quality in all areas	**SITING**
NHDES-NHARPC steep slope model, 2006; NHARPC lot size averaging model, 2006; NHARPC-NHDES Permanent (Post-Construction) Stormwater Management model, 2006; NHARPC-NHDES erosion and sediment control model, forthcoming; LRPC stormwater management and erosion control model, 1994; CRJC homeowners guide; UVHHWC educational materials; UNH Technology Transfer Center; VT Better Backroads Program; Nonpoint Education for Municipal Officials, technical papers.	Restrict Development on Steep Slopes - No disturbance over 25% slope, erosion and sediment control plan for any disturbance of land 15-25%, typical threshold 20 ft. elevation change or 1 acre disturbed area.
	Cluster development away from slopes, shorelines, and wetlands, and other important resources, both to provide a buffer between the resources and human activity, and to reduce road length and other disturbed areas.
	DESIGN
	Follow natural contours as much as possible to minimize grading. Minimize cut and fill, maximum hgt. of fill or depth of cut area 10 ft. Cut & fill ratio not to exceed 2:1. Limit size of contiguous impervious area.
	Combine minimum parking standards with maximum parking standards, and reduce requirements when demand management techniques used. Encourage shared parking and porous surfaces for drives and parking areas. Require landscaping to break up impervious surfaces. Minimize number, width and length of driveways. Use vegetated swales instead of curbs.
	CONSTRUCTION
	Manage erosion and sedimentation, min. threshold disturbance, e.g. 20,000 sq. ft. or smaller in highly erodible soils or slopes GT 15%, road construction, major subdivisions, within stream, pond or wetland buffers. Use current best management practices to prevent erosion and remove sediment from runoff. Construction practices to minimize soil compaction. Inspections paid by developer.
	WASTE DISPOSAL
	Ensure proper siting, design, construction and maintenance of septic systems, incl. homeowner education programs re inspection and pumping, & about alternatives to household chemicals.
	ACCESS
	Review road standards for opportunities to reduce stormwater runoff. Use traffic calming methods to achieve safety with narrower street width, e.g. 18 ft. for low volume roads. Limit grade. Pervious surfaces for overflow parking and emergency access.
	Restrict driveways on steep slopes - e.g. limit residential driveways to 10%, nonresidential 8%, require stormwater management & erosion and sediment control plans. Reduce runoff with e.g. grassy swales instead of curbs.
	POSTCONSTRUCTION
	Stormwater management plan for min. threshold disturbance, e.g. 20,000 sq. ft. (or smaller in highly erodible soils or slopes GT 15%), road construction, major subdivisions, and within stream, pond or wetland buffers. Limit impervious surfaces. BMPs for control of peak flow and total volume of runoff, water quality protection, and maintenance of on-site groundwater recharge. Include mandatory consideration of nontraditional and nonstructural stormwater management measures, including bioretention, infiltration, and site design, to reduce runoff rates, volumes, and pollutant loads, e.g. total suspended solids, chlorides, oils, pathogens, and phosphorus. Stormwater pollution prevention plans for uses with significant volumes of regulated substances, hydrocarbons, metals, or suspended solids. Ensure proper long-term maintenance and inspection of stormwater devices, execution of operations and maintenance plan as condition of approval, and filing of annual report.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Protect Wetlands	
model ordinance - NCC with UVLSRPC, NHDES, CRJC, 1994; LRPC 1994; see forthcoming NHDES-NHARPC model ordinance	**USES**
	No disturbance - no structures, alteration of natural surface configuration, dredging, filling, draining, substantial clearing, salt storage, junkyards, hazardous waste facilities, bulk storage of regulated substances, snow dumps, underground storage tanks.
	SITING
	Minimum 100 ft. undisturbed buffer.
	CONSTRUCTION
	Erosion and sediment control plan for any disturbance within 100 ft. buffer zone. Use current best management practices to prevent erosion and remove sediment from runoff. Construction practices to minimize soil compaction and area of disturbance. Inspections paid by developer.
	WASTE DISPOSAL
	None within wetlands or buffer areas.
	ACCESS
	When necessary, minimize adverse impact on functions and values.
	POSTCONSTRUCTION
	Stormwater management plans for nearby uses should minimize impacts on wetlands by ensuring water receives treatment before reaching wetland.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Protect Lakes & Ponds	
UVLSRPC model shoreland ordinance for Lake Sunapee towns, 1990; LRPC shoreland protection ordinance, 1994; OSP model shoreland protection ordinance, 1996; see forthcoming NHDES-NHARPC model shoreline ordinance; CRJC homeowner guide; NHARPC-NHDES Permanent (Post-Construction) Stormwater Management model, 2006; NHARPC-NHDES erosion and sediment control model, forthcoming; LRPC stormwater management and erosion control model, 1994; NCC model stormwater management and erosion & sediment control ordinance, 1994; NH Association of Conservation Districts, model stormwater management and erosion control regulation, 1997.	**USES**
	Within, e.g., 250 ft., prohibit salt storage, snow dumping, bulk storage of regulated substances, junk yards, solid or hazardous waste facilities, excavations.
	Special considerations for water dependent uses.
	SITING
	Structures set back 100 ft., maintain 150 ft. natural vegetated buffer with well distributed stand of trees, saplings, shrubs and ground covers, selective cutting for filtered view, 4 ft. walkways.
	DESIGN
	Impervious surface limit, such as 20%, within, e.g., 250 ft.
	CONSTRUCTION
	Erosion and sedimentation control plan for activities within 250 feet. Use current best management practices to prevent erosion and remove sediment from runoff. Construction practices to minimize soil compaction and area of disturbance. Inspections paid by developer.
	WASTE DISPOSAL
	Homeowner Education
	Low density development where not sewered, e.g. via shore frontage requirements
	Soil-based Lot Sizing
	Increased setbacks - if downgradient soil is porous sand and gravel with percolation rate equal to or faster than 2 minutes per inch - 125 feet; for soils with restrictive layers within 18 inches of surface - 100 ft.; all others 75 ft.
	ACCESS
	Setbacks for roads and drives; erosion and sedimentation control plan for bridges and accessways for emergency vehicles and boats.
	POSTCONSTRUCTION
	Stormwater management plan for activities within 250 ft.; fertilizer use restricted, e.g. no fertilizer except limestone.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Protect Rivers & Streams	
UVLSRPC river protection model with DES, NCC, CRJC, 1994; LRPC shoreland protection model, 1994; NHDES-NHARPC shoreland model, forthcoming; NHARPC-NHDES Permanent (Post-Construction) Stormwater Management model, 2006; NHARPC-NHDES erosion and sediment control model, forthcoming; LRPC stormwater management and erosion control model, 1994; NCC model stormwater management and erosion and sediment control ordinance, 1994; NH Association of Conservation Districts, model stormwater management and erosion control regulation, 1997.	**USES**
	Within 250-500 ft. prohibit salt storage, snow dumping, bulk storage of regulated substances, junk yards, solid or hazardous waste facilities, excavations.
	SITING
	Structures set back 100 - 125 ft., maintain 150 ft. natural vegetated buffer with well distributed stand of trees, saplings, shrubs and ground covers, selective cutting for filtered view, 4 ft. walkways.
	DESIGN
	Limit impervious surfaces to e.g. 20%.
	CONSTRUCTION
	Erosion and sedimentation plan for any land disturbance within 250 ft. Use current best management practices to prevent erosion and remove sediment from runoff. Construction practices to minimize soil compaction and area of disturbance. Inspections paid by developer.
	WASTE DISPOSAL
	Homeowner Education
	Low density development where not sewered, e.g. via shore frontage requirements
	Soil-based Lot Sizing
	Minimum setback 75 ft.
	ACCESS
	Setbacks, erosion and sedimentation control for bridges and accessways for emergency vehicles and boats.
	POSTCONSTRUCTION
	Stormwater management plan for activities within 250 ft. Manage stormwater runoff to prevent associated increases in stream temperature, including by infiltration and underdrains to cool stormwater. Alterations of streams must have flood carrying capacity equal to the original segment and not result in any greater flood loss at other locations.

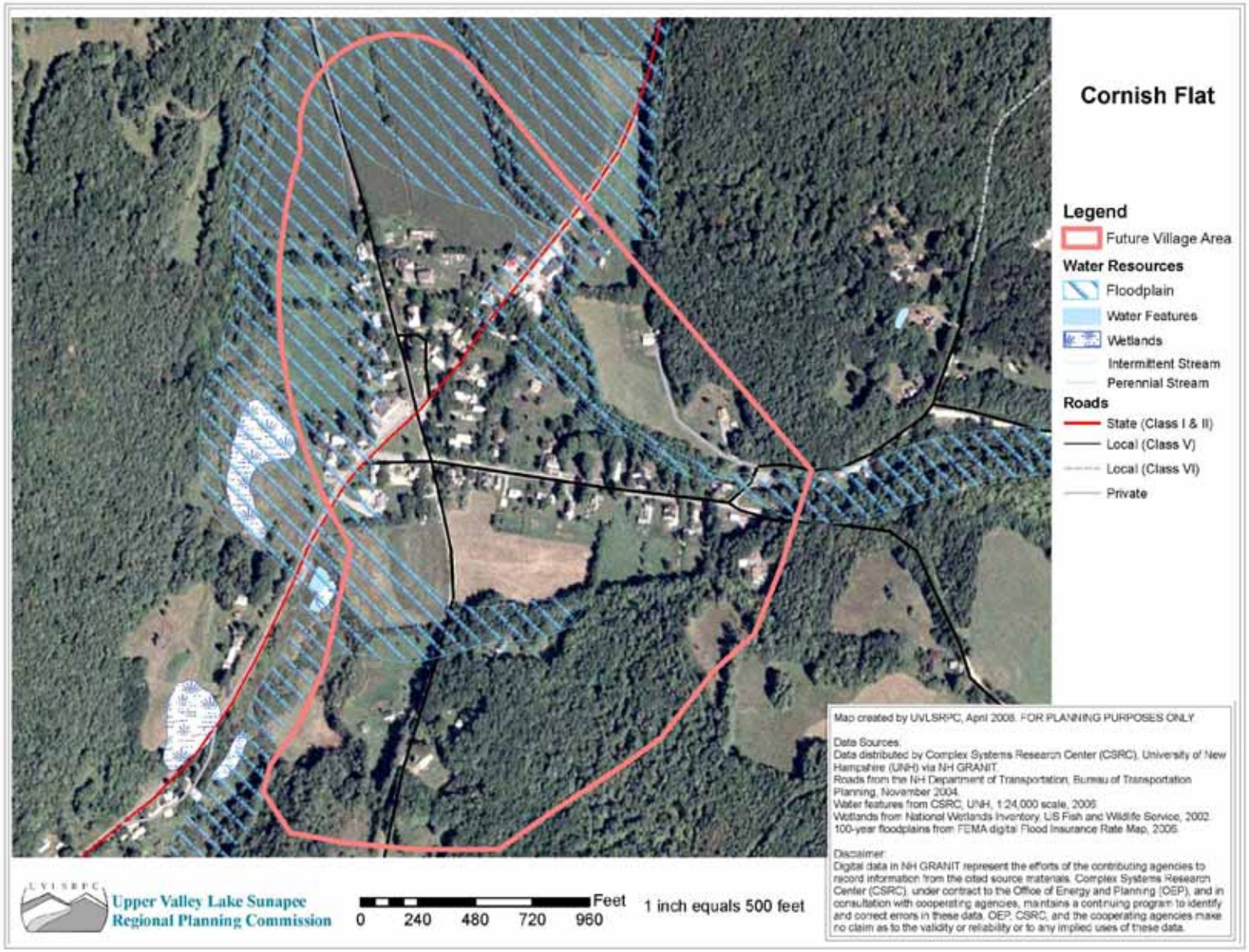
Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Protect Flood Storage Capacity and Prevent Flood Damage and Manmade Debris	
NHARPC-NHDES model floodplain ordinance, forthcoming; NH Floodplain Management Handbook 2006; Association of State Floodplain Managers - No Adverse Impact Toolkit	**USES**
	No new development or substantial expansion. If allow by special exception, require mitigation, e.g. compensatory storage or elevation of structures 1 foot above 100 year flood elevation, to achieve no adverse impact, i.e. no net loss of flood storage capacity or increased flood levels elsewhere.
	SITING
	Allow for margin of error by requiring setback from mapped floodplain.
	CONSTRUCTION
	FEMA floodproofing requirements for expansions of grandfathered buildings.
	WASTE DISPOSAL
	Floodproof water and sewer.
	POSTCONSTRUCTION
	Periodic inspections to ensure large objects or loose material not stored in floodplain, including e.g. vehicles, campers, picnic tables, unattached sheds or garages. No permanent storage of loose materials or equipment. No dumping or filling. No storage of highly volatile, explosive, toxic, or water-reactive materials. Require anchoring of preexisting sheds, detached garages, accessory buildings, liquid storage tanks.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Protect Groundwater Quality	
NHDES-OEP model groundwater protection ordinance, 1999, revised 2006; UVLSRPC aquifer protection model with NHDES, NCC, CRJC, 1994; Southwest Region Planning Commission, Model Excavation Regulation, 1999	**USES**
	In recharge areas to important groundwater resources such as stratified drift aquifers, prohibit hazardous waste disposal facilities, solid waste landfills, outdoor storage of road salt or other de-icing chemicals, junkyards, snowdumps, wastewater or septage lagoons, bulk petroleum storage or handling, gas stations. Conditional uses - storage, handling, and use of 100 gal. or 800 lbs regulated substances; any use that will render impervious more than 2,500 sq. ft. (For certain other uses, require performance standards/inspection - see POSTCONSTRUCTION.)
	DESIGN
	WASTE DISPOSAL
	Homeowner Education
	Low density development where not sewered.
	Soil-based Lot Sizing
	ACCESS
	Alternative winter maintenance to reduce salt.
	POSTCONSTRUCTION
	BMPs for storage of manure, fertilizer, and compost. BMPs for regulated substances. For uses involving more than 100 gal or 800 lbs regulated substances - require stormwater management plan, BMPs, and spill prevention, control and countermeasure plan. For 2,500 sq. ft. impervious surface - require stormwater management plan including treatment of runoff to remove sediments, nutrients, chlorides, hydrocarbons, metals and pathogens. Maintenance requirements for BMPs filed with deed, routine inspections.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
Conserve groundwater quantity	**USES**
NHARPC-NHDES Permanent (Post-Construction) Stormwater Management model, 2006	
	DESIGN
	Landscaping Requirements
	Impervious Limit
	POSTCONSTRUCTION
	Manage stormwater on site; favor infiltration.
	WASTE DISPOSAL
	Community leaching field-type alternatives when individual septic systems inadequate.
Protect Drinking Water Supplies	
NHDES-OEP Model Groundwater Protection Ordinance, 1999, revised 2006; NHARPC-NHDES water supply protection model, forthcoming; NHDES, Model Rule for the Protection of Water Supply Watersheds, 2000. (See also Groundwater; Lakes & Ponds; Rivers & Streams)	Increased setbacks, e.g. 300 feet between surface sources and structures, roads, septage, sludge, manure, fertilizer, livestock, storage, use or disposal of regulated substances, solid waste disposal, road salt storage, vehicle servicing, junk yards, impervious surface GT 2,500 ft., discharge of untreated stormwater. Careful monitoring of grandfathered potential contamination sources and enforcement of BMPs within wellhead protection area.
Protect Important Viewsheds - of and from the Lake	
Award-winning Green River Res. Overlay District, Hyde Park VT; NHDES-NHARPC model ridgeline ordinance, 2006	**SITING**
	Maintain tree-lines, site development so as to not extend past treeline into skyline.
	DESIGN
	Vegetation to buffer view of building; non-glare materials; height limits in shoreline areas.
	CONSTRUCTION
	Minimize cut and fill.
	ACCESS
	Follow natural contours; minimize cut and fill.
Encourage Working landscape	
See guides to best management practices (BMPs) available through UNH Cooperative Extension, NH DRED, NH Dept. of Agriculture, NRCS. Also UNH Cooperative Extension Guide to NH Timber Harvesting Laws, 2004.	Logging BMPs, wetlands permit, agriculture BMPs, vegetated buffer along surface water, animal manure, lime, wood ash.

Master Plan Objectives	Counter Measure/Mitigation Technique
See last page for list of abbreviations.	
BMP	Best Management Practices
CRJC	Connecticut River Joint Commissions
DRED	Department of Resources and Economic Development
FEMA	Federal Emergency Management Agency
LRPC	Lakes Region Planning Commission
NCC	North Country Council
NHDES	NH Department of Environmental Services
NHARPC	NH Association of Regional Planning Commissions
NRCS	Natural Resource Conservation Service (formerly SCS - Soil Conservation Service)
OEP	Office of Energy and Planning
OSP	Office of State Planning (now merged into OEP)
SPR	site plan review regulations
SUB	subdivision regulations
UVHHWC	Upper Valley Household Hazardous Waste Committee
ZON	zoning ordinance

Appendix F: Detail Maps of Cornish Flat


Cornish Flat
Legend
Future Village Area
Water Resources
Floodplain
Water Features
Wetlands
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
Local (Class VI)
Private
Map created by UVLSRPC, April 2008. FOR PLANNING PURPOSES ONLY
Data Sources:
Data distributed by Complex Systems Research Center (CSRC), University of New Hampshire (UNH) via NH GRANIT.
Roads from the NH Department of Transportation, Bureau of Transportation Planning, November 2004.
Water features from CSRC, UNH, 1:24,000 scale, 2005.
Wetlands from National Wetlands Inventory, US Fish and Wildlife Service, 2002.
100-year floodplains from FEMA digital Flood Insurance Rate Map, 2005.
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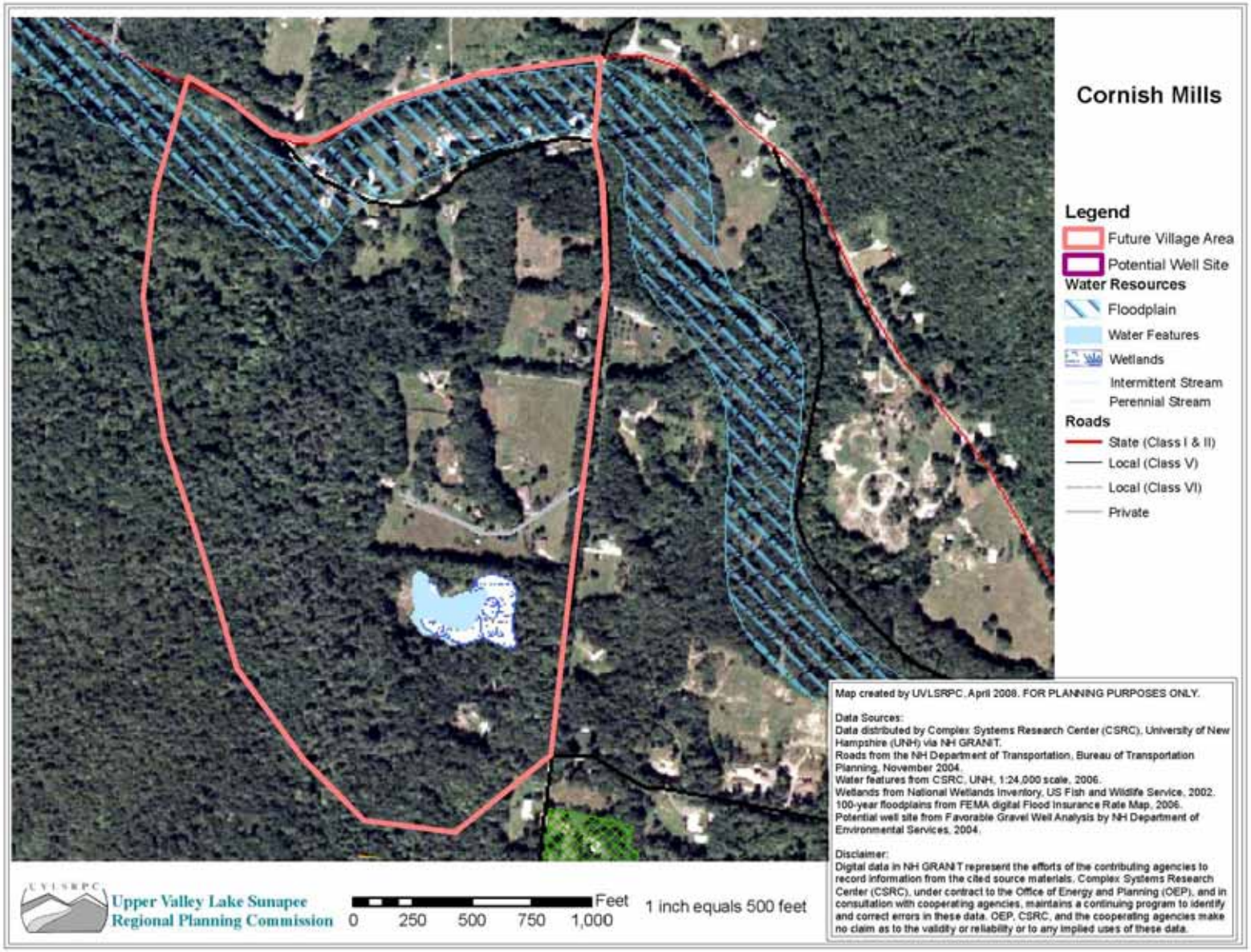
Upper Valley Lake Sunapee
Regional Planning Commission
0
240
480
720
960
Feet
1 inch equals 500 feet


Cornish Mills
Legend
Future Village Area
Potential Well Site
Water Resources
Floodplain
Water Features
Wetlands
Intermittent Stream
Perennial Stream
Roads
State (Class I & II)
Local (Class V)
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Wetlands from National Wetlands Inventory, US Fish and Wildlife Service, 2002.
100-year floodplains from FEMA digital Flood Insurance Rate Map, 2006.
Potential well site from Favorable Gravel Well Analysis by NH Department of Environmental Services, 2004.
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UVLSRPC
Upper Valley Lake Sunapee
Regional Planning Commission
0
250
500
750
1,000
Feet
1 inch equals 500 feet