

Hinesburg Town Plan

Hinesburg, Vermont

Originally Adopted 1971
Most Recent Adoption June 13, 2005

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These maps were originally done in color, 11"x17" format. The full color versions can be viewed on the Planning/Zoning page of the Town web site (www.hinesburg.org). Larger poster size versions are also available for review at the Town Planning/Zoning Office.

1. INTRODUCTION TO THE PLAN

1.1 Purpose Of The Plan

The Hinesburg Town Plan serves as the framework for planning the future of the Town throughout the next five-year planning period, especially with regard to the decisions that will guide the Town's growth. It also seeks to achieve a longer-range planning horizon by looking into the future for twenty years or more. It describes the Town's history, the existing physical, social, and economic conditions of the Town, and establishes a vision for the Town's future. This vision is supported by a series of goals and objectives that are recommended in each section of this plan.

1.2 Use Of The Plan

The Plan is for the use of the Hinesburg Planning Commission, Board of Selectmen, Development Review Board, Conservation Commission, and regional and state agencies. It is also meant as a guide to individuals and other organizations for decisions affecting the Town. This plan is to be used as:

- a plan for the future growth and development of the Town;
- the basis for revisions to the zoning and subdivision regulations;
- the basis for planning and adopting a capital budget and plan;
- a source of recommendations for studies or programs to address specific community issues;
- a standard for review under local, regional and state regulatory proceedings; and
- a source of information about the Town.

1.3 Recent Town Plans And Adoption Process

The Hinesburg Planning Commission is responsible for the preparation of the municipal plan, as outlined in the Vermont Municipal and Regional Planning and Development Act. The Act stresses that the development of the plan should involve broad participation of citizens and community groups. Hinesburg's first Town Plan was adopted in 1971. Since that time, the plan has been re-adopted and amended as needed or as required by state statute. Currently, state statute requires Town Plans be evaluated every 5 years in order to be confirmed and recognized by the Regional Planning Commission and the State.

In 1989, in response to a very rapid growth rate in the 1980's, the Planning Commission initiated a State-funded citizen participation project to gain public input on planning issues facing the town. The project had 3 components: 1) a survey on planning issues; 2) a series of 4 community forums ("Mud Season Forums") on a wider range of issues; 3) the formation of 9 committees to investigate specific issue areas (e.g., village, natural resources, housing, etc.). The culmination of this process was a completely rewritten Town Plan, adopted in 1992.

The Town Plan was updated in 1997. Many of the improvements and services anticipated in the 1992 Town Plan had been implemented or were near completion. They included:

- renovated Town Hall and municipal offices
- establishment of a Town police department
- establishment of a recreation department
- sidewalk extension to the post office
- water system upgrade, and
- the new library.

After a five-year period of moderate growth, a purely statistical update to the Town Plan was completed in 2002. Significant activities during this time period included:

- construction of a new and enlarged post office
- increase in size of the fire station
- purchase of property adjoining the fire station for use by the police department
- purchase of the former Masonic Building for use by Hinesburg's Cooperative Nursery School
- Zoning Bylaw update to encourage home-based businesses while protecting adjoining properties from adverse impacts
- implementation of a plan for Geprags Park
- involvement in multi-town projects on identification and protection of wildlife habitat, wetlands and other natural resources
- establishment of a Development Review Board.

Shortly after adoption of the 2002 Town Plan, the Planning Commission began a significant public input process patterned after the successful survey and Mud Season Forums that culminated in the 1992 plan. The Planning Commission mailed a Community Survey to all Hinesburg residents in early 2003 seeking input on "Shaping the Future of Hinesburg". Approximately 344 survey responses were returned. A Municipal Planning Grant funded a series of four public forums in spring 2003 on the Village, Rural Areas, Managing Growth and Development, and Bringing it all Together. The Planning Commission spent the balance of 2003 reviewing public input and revisiting all aspects of previous plans. The Town Plan was rewritten with considerable citizen input via successive drafts. It was presented to citizens in a formal Planning Commission public hearing in August 2004, and forwarded to the Selectboard for a final public hearing and action.

1.4 Vision Statement

Hinesburg will plan its growth and manage its resources so that our town continues to be a desirable place to live and work. It will enhance the Village area, maintain its rural character and provide for environmental sustainability. These efforts will be guided by community input. It will strive to offer the highest quality social, educational, recreational and economic opportunities, and a variety of housing options.

1.5 Goals And Objectives

GOAL 1. To maintain and enhance the rural small town character and environment of Hinesburg.

Objectives:

- 1.1 To guide development into locations that reinforce the rural pattern of compact settlements surrounded by open lands.
- 1.2 To encourage the economic viability of agriculture and forestry uses.
- 1.3 To encourage the Town's continued vitality through a diversity of social and economic opportunities.
- 1.4 To preserve the historic structures and features that are an essential part of Hinesburg's character.
- 1.5 To promote the participation of a wide range of Hinesburg citizens in all aspects of community life.
- 1.6 To maintain diversity in Hinesburg's population.

GOAL 2. To guide the Town in appropriate well managed growth.

Objectives:

- 2.1 To encourage and support the development of a supply of safe, and affordable housing in a variety of types and price ranges.
- 2.2 To foster the preservation and rehabilitation of Hinesburg's existing stock of affordable housing.
- 2.3 To encourage industry and commerce of types that will be a physical and economic asset to the Town.
- 2.4 To promote the provision of local services and job opportunities.
- 2.5 To encourage environmentally conscious commercial, agricultural and industrial development.

GOAL 3. To provide and plan for efficient and adequate community facilities and services.

Objectives:

- 3.1 To broaden citizen participation in town government.
- 3.2 To balance growth with the Town's ability to pay for the provision of expanded services and facilities.
- 3.3 To provide services in locations and of types that reinforce the other goals of this Plan.
- 3.4 To strive for safe and well-designed transportation systems; to develop and expand a sidewalk network; and to encourage development of alternative systems such as trails, bikepaths and greenways.
- 3.5 To provide for the most efficient maintenance and use of Town facilities.
- 3.6 To ensure efficient and effective Town government.
- 3.7 To foster provision of quality educational opportunities.

GOAL 4. To preserve and protect the natural resources and special features of Hinesburg.

Objectives:

- 4.1 To enhance and protect the surface and groundwater resources of the Town.
- 4.2 To preserve significant natural areas such as wetlands, wildlife habitat, streams, and shorelines.
- 4.3 To restrict development in areas that would be detrimental to human health, safety and the public good.
- 4.4 To promote the wise use and conservation of natural resources.
- 4.5 To conserve viable agricultural and forestry lands in the rural regions of Hinesburg.
- 4.6 To encourage a pattern of development that maintains open spaces and scenic resources.
- 4.7 To encourage recycling, the use of renewable resources and the safe cost effective disposal of wastes.

GOAL 5. To work towards regional, state and national solutions to meet Hinesburg's goals.

Objectives:

- 5.1 To participate in discussions relating to policies that affect the viability of Hinesburg's agricultural and forestry operations.
- 5.2 To coordinate with other municipalities and agencies in meeting transportation needs.
- 5.3 To participate in regional and statewide solutions to waste disposal, resource protection and energy conservation.
- 5.4 To coordinate with other agencies and governmental units for provision of the social and economic needs of the community.

1.6 Relationship To Plans For Adjacent Towns And The Region

This Plan is generally compatible with both the Chittenden County Regional Plan (2001) as well as Town Plans from the surrounding municipalities.

Chittenden County Regional Plan (2001) – Hinesburg’s Plan embodies the same focus on village growth centers that is emphasized in the Regional Plan. It seeks to accommodate the Town’s fair share of residential and commercial growth, while recognizing that the core metro and transition areas will continue to be the primary focus for future development. It also recognizes and seeks to conserve the critical natural resources and open spaces that make Hinesburg an important part of the County’s rural landscape.

Shelburne (portion of northern border) – The Shelburne Plan emphasizes the rural and agricultural landscape in the area near its border with Hinesburg. Both the future land use and the overall goals and recommendations are compatible with Hinesburg’s vision for this area.

St. George (portion of northern border) – St. George identifies 3 different land use patterns (recreational, medium density, low density) along the Hinesburg border, with the lion’s share of the area in the low density use. These uses are largely compatible with Hinesburg’s emphasis on agricultural and forestry uses here with low to medium density residential uses where site constraints allow.

Williston (small portion of northern border near Lake Iroquois) – Williston’s goals for this area are similar to Hinesburg’s. Both communities highly value Lake Iroquois, and both communities provide special protections immediately around the lake, while identifying the surrounding area as rural residential.

Richmond (northeast border) – The Richmond Plan emphasizes the low density, rural landscape in this area, which is compatible with Hinesburg’s vision for this corner of the town.

Huntington (most of eastern border) – Huntington’s goals for this border area are very similar to those expressed in this Plan. Both towns classify the area as “rural residential” with special emphasis on the protection of important natural resources and rural character. Both towns encourage the forest conservation and development techniques that maximize open space conservation.

Starksboro (portion of southern border) – Starksboro places a high value on the agricultural and scenic lands along its portion of the Route 116 corridor. Adjacent forested areas, without easy access, are planned for forest and conservation uses. The Hollow Road vicinity is the only area along the Starksboro-Hinesburg border where residential development is Starksboro’s primary purpose. Along most of the border, the 2 Plans are compatible; however, this is not the case in the Route 116 vicinity. Rather than emphasizing agricultural and scenic resources, Hinesburg has designated a large portion of this area for industrial uses.

Monkton – (portion of southern border) – Monkton’s plan for this border area emphasizes low density rural residential uses with provisions to protect important natural resources. Although Monkton’s base density for this area is lower than what Hinesburg allows, the goals are comparable.

Charlotte – (all of western border) – The Charlotte Plan describes the border area as part of their rural district where protection of natural resources and land conservation is emphasized. These types of values are also embodied in Hinesburg’s vision for this rural agricultural region.

2. POPULATION AND HOUSING

2.1 Population

Past and projected population trends are a key element in planning for Hinesburg's future. Information about the numbers, ages and income levels of town residents serves as an important gauge for the future demands for housing, town services and facilities, and economic opportunities. Population and income data are also indicators of the diversity and character of town residents. Hinesburg's population diversity was cited time and again in survey and forum responses as one of the positive features of the Town that contributes to our small town character.

In the early 1800's, Hinesburg had a larger population than most of the towns in Chittenden County. In the year 1800, Hinesburg was even more populated than Burlington. The Town reached a peak of 1,834 residents in 1850, then slowly declined to 965 inhabitants in 1920. Throughout the early and mid 1900's the Town's population remained relatively static. This trend was consistent with much of Vermont due to the large out migration to the West and to more urban areas.

During the second half of the 20th century Hinesburg experienced a change in growth patterns and has seen some sharp increases in its population. Between 1960 and 2000, the Town's population grew by 267%. The Town grew steadily at a rate of 91.5 persons per year through the 1970s, slowed down somewhat during the early 1980s, and then resumed growth of 146 persons per year during the second half of the decade. The 1990 census puts Hinesburg's population at 3,780. The 1985 Town Plan projected that Hinesburg's population would increase 23.2% between 1980 and 1990, however the actual growth has been more rapid with a 40.5% increase. Hinesburg experienced the largest percentage growth in Chittenden County during the period 1980-1990. During the period of 1960-2000, Chittenden County's population nearly doubled.

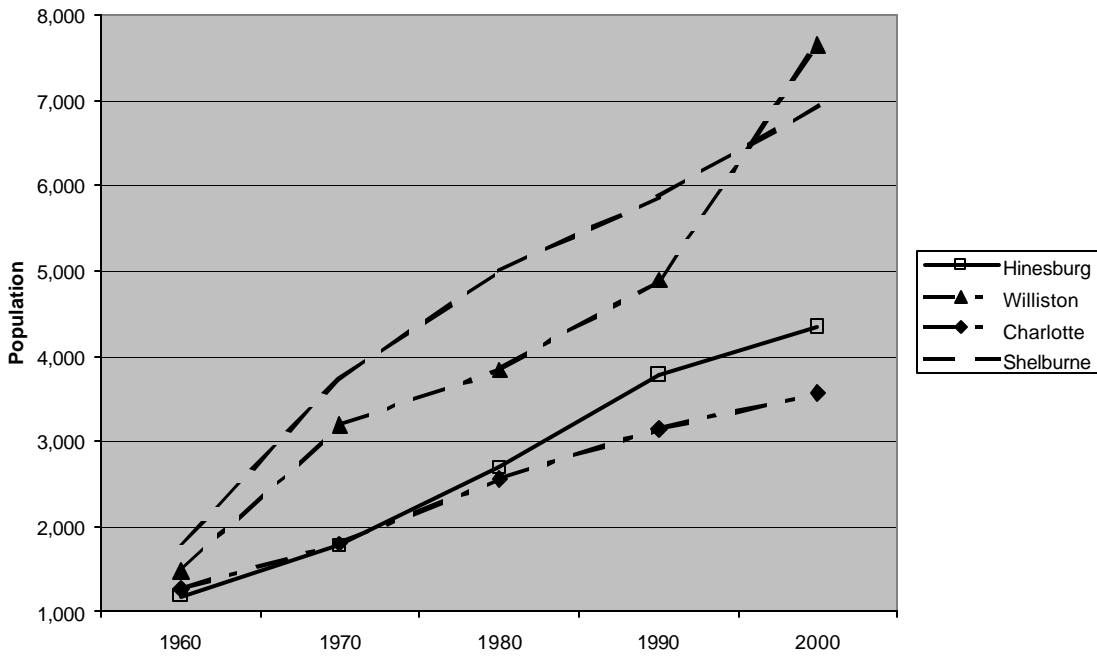
By 1995 population growth in Hinesburg slowed considerably. Between 1990 and 2000, population increased 14.8%. Growth in the neighboring town of Williston, increased 56.5% over the same decade. Hinesburg's growth rate between 1990 and 2000 was higher than the 11.2% growth rate for Chittenden County.

Figure 1 compares Hinesburg's growth with that of neighboring towns over most of the second half of the 20th century. Figure 2 provides an age distribution of Hinesburg's population between 1980 and 2000.

Projections vary for Hinesburg's growth over the next 20 years. A 2001 demographic forecast prepared for the Chittenden County Regional Planning Commission assumed relatively high annual growth rates of 1.5% for the overall county and 2.1% for Hinesburg and St. George. This forecast would produce a Hinesburg population of 7,297 in year 2025, an overall increase of 68.1% from the 2000 US Census count of 4,340. In contrast, a local demographer who prepares numerous school projections in Chittenden County projects no county-wide growth after year 2015 due to changes in age distribution.

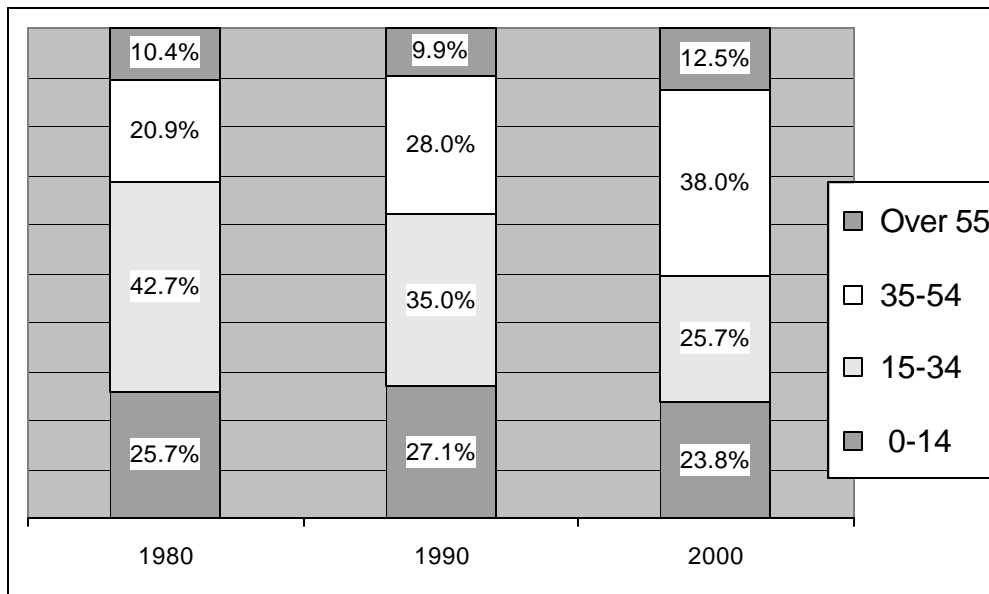
This plan assumes an annual 1.7% growth rate for Hinesburg population through year 2025 (Figure 3), above the growth rate of the 1990s but below that of the 1980s. This projection is based on anticipated availability of sewer allocation for residential growth in the Village and continued land availability in rural sections of Hinesburg. The trend towards an aging population is expected to continue. By year 2025, the percentage of the overall population in the 0-14 age group is projected to decline to 17.4% while the over 55 age group will increase to 26.7% (Figure 4).

Figure 1
Population Growth, 1960 – 2000
Hinesburg vs. Neighboring Towns



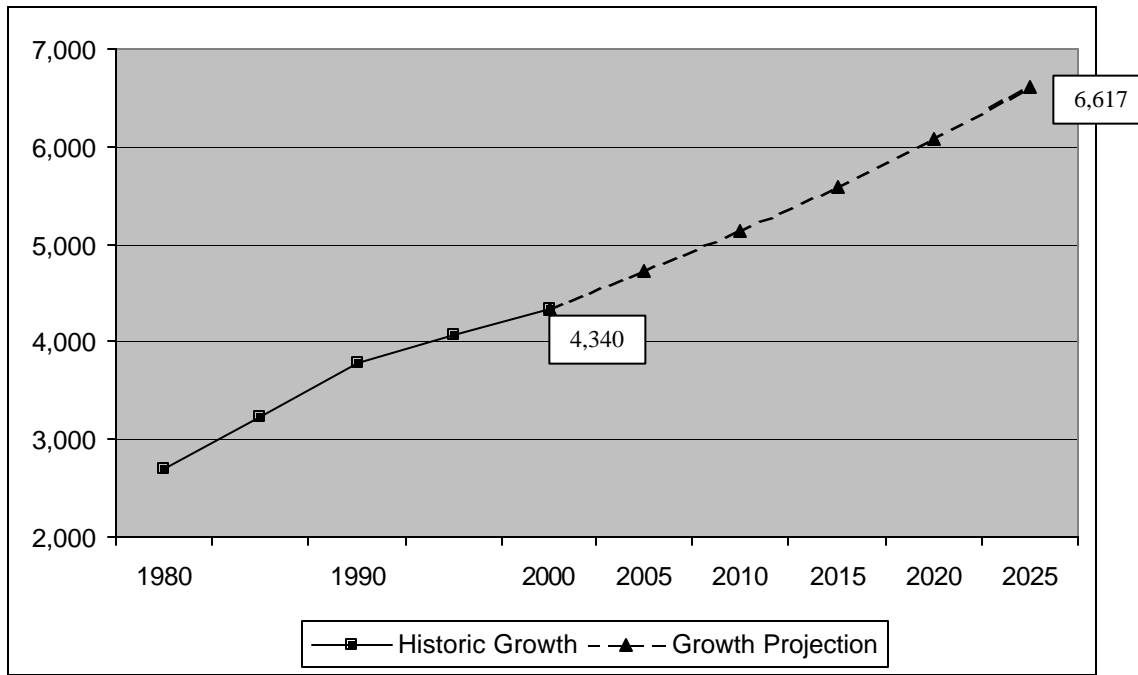
Source: US Census

Figure 2
Hinesburg Population Distribution by Age
1980 to 2000



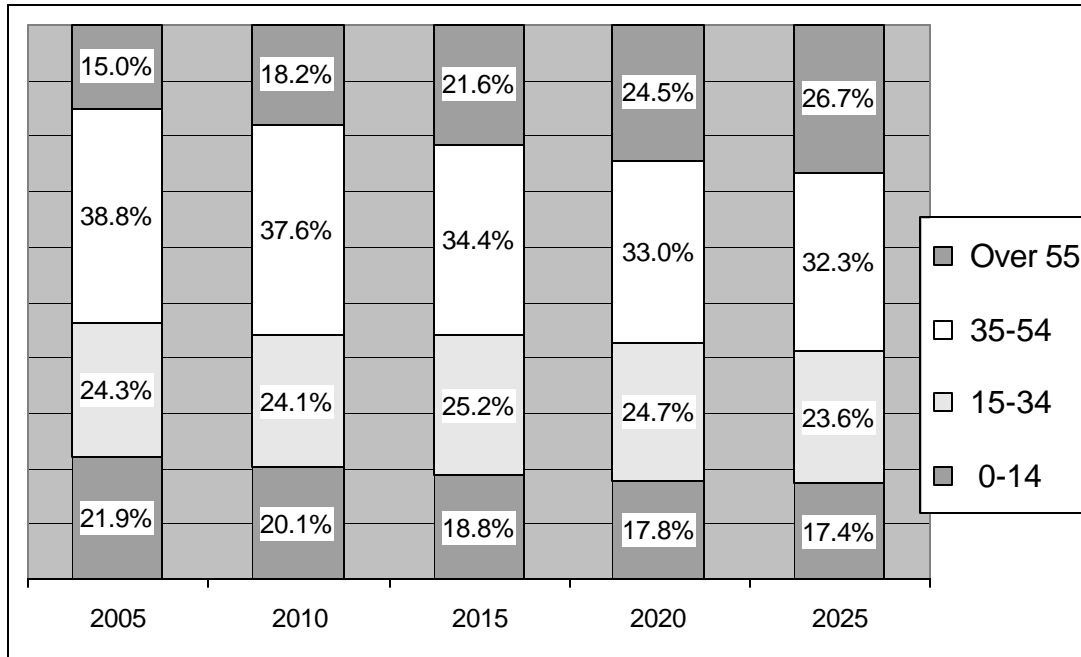
Source: US Census

Figure 3
Projected Hinesburg Population Growth, 2000 – 2025



Source: David Spitz, Planning Consultant. Analysis based on Economic & Policy Resources Chittenden County projections; historic US Census data; and projections from the Bill Smith Community Population Model

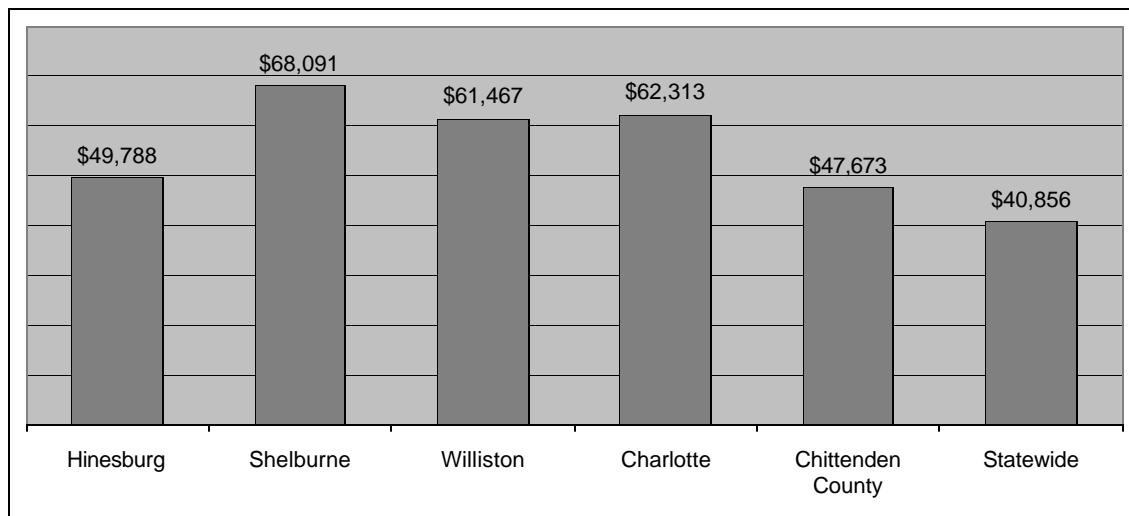
Figure 4
Hinesburg Population Distribution by Age
2005 to 2025



Source: David Spitz, Planning Consultant, based on Bill Smith's Community Population Model

According to the 2000 U.S. Census, the median household income for Hinesburg was \$49,788, slightly above the median for Chittenden County as a whole. As shown in Figure 5, the median household income of several adjacent towns was considerably above that of Hinesburg.

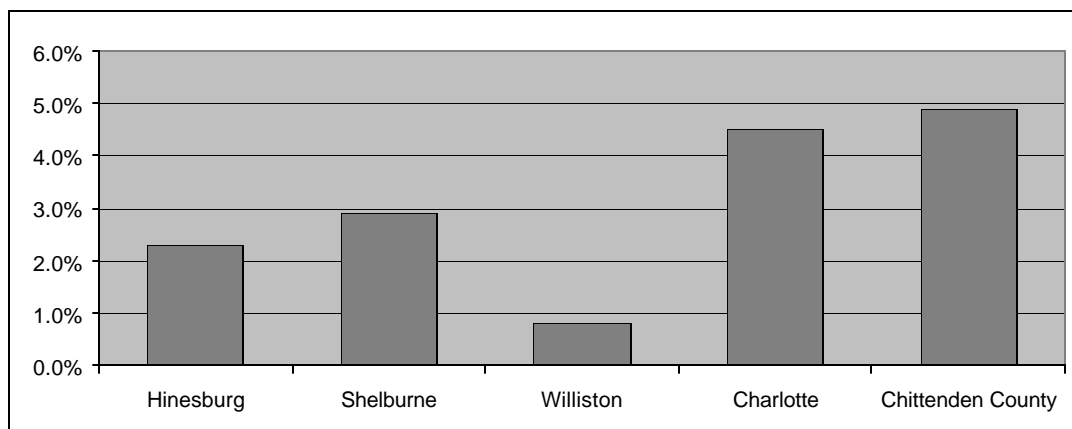
Figure 5
1999 Median Household Income



Source: 2000 U.S. Census

However, while Hinesburg’s median household income was relatively modest, its percentage of families below poverty level was relatively low (Figure 6). The US Census definition of “poverty” considers family income, the number of people in the family, and the number of children under 18 – all in relation to nationwide poverty thresholds.

Figure 6
1999 Families Below Poverty Level



Source: 2000 U.S. Census

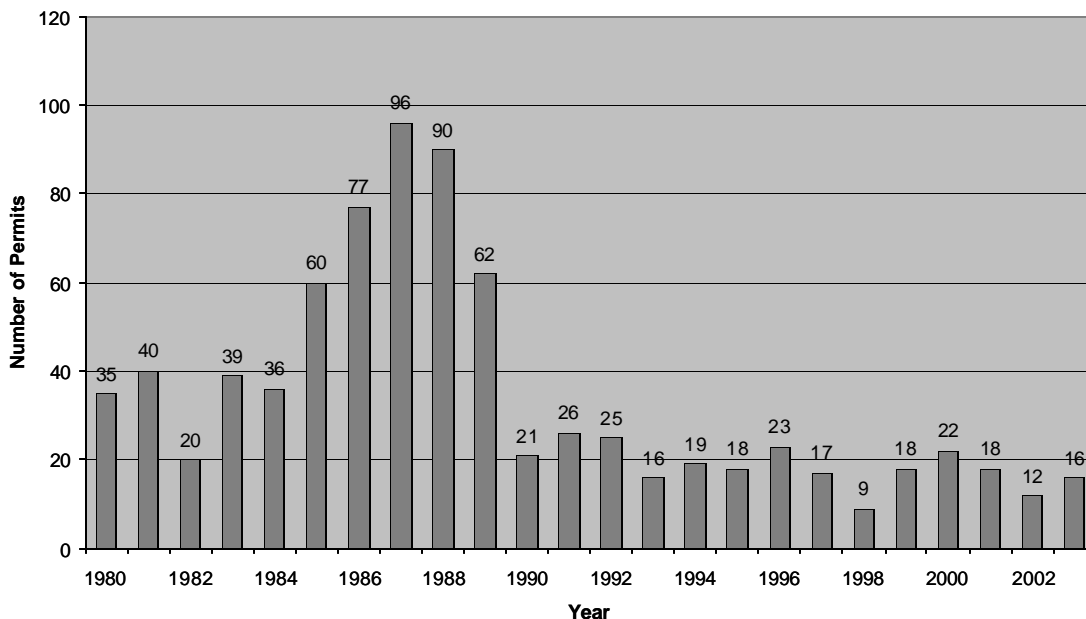
2.2 Housing

The makeup of Hinesburg's housing stock has a direct and highly visible impact on the type of town we are and will become in the future. Hinesburg has had a diversity of housing opportunities, a fact that is reflected in the wide social and economic range of its population. Housing trends in recent years, however, have begun to narrow the diversity of housing available, not only in Hinesburg but throughout the county. This trend can have a substantial impact on the diversity of the Town's population, the continuity of residents from one generation to the next, and the ability of local employees and employers to live and work in Hinesburg.

The dispersal of housing in Hinesburg reflects the Town's historical pattern of both small settlements clustered around the streams and ponds that provided the focus for the Town's early economic development and the scattered dwellings of the numerous farms. During the building boom of the last thirty years this pattern has begun to be replaced by a more suburban character of large lots spread widely through all parts of Town. This pattern is not only changing the Town's historic pattern of development but also the type and price range of housing available.

According to the 2000 Census, there were 1,693 housing units in town. This represents an increase of 206 units (14%) over the 1990 figure of 1,487. The earlier increase from 1980 to 1990 was 45%. Annual building permits issued for new housing units since 1980 are shown in Figure 7. The number of building permits peaked between 1985 and 1989 with an average of 77 dwelling units per year. The average since 1990 has been much lower at 19 dwelling units per year.

Figure 7
Building Permits For New Housing Units, 1980-2003



Source: Hinesburg Zoning Administrator

As described in the 2000 Census, housing units are owner or renter-occupied and are categorized as single-unit detached, attached and mobile home (Table 1). Note that owner-occupied attached units

generally are in condominium projects. Renter-occupied attached units may be in condominiums or apartment buildings.

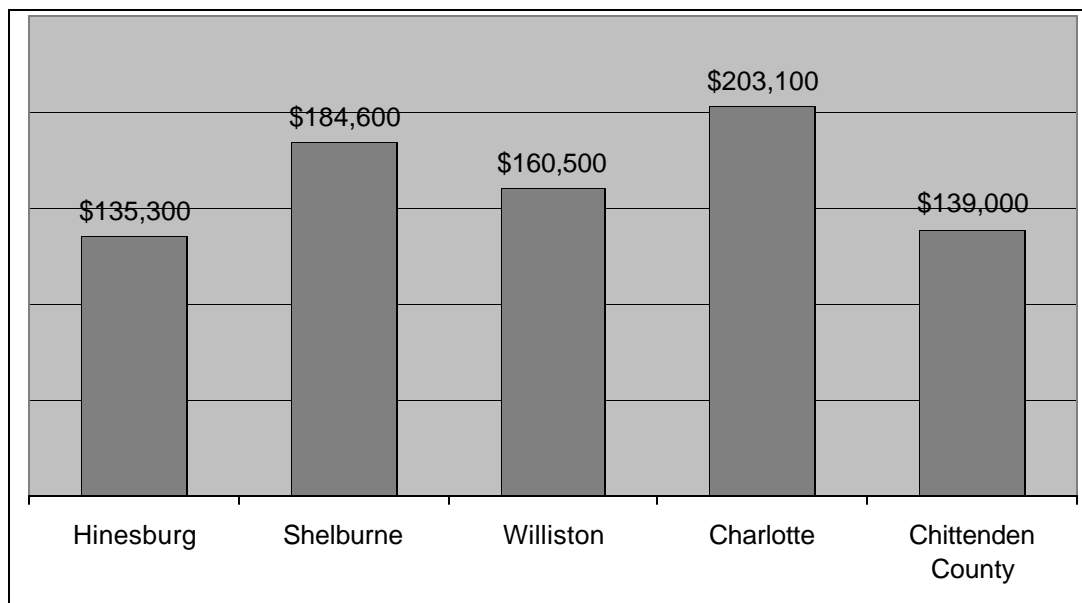
TABLE 1
Occupied Housing Units by Type

| | Owner-Occupied | Renter-Occupied | Total |
|----------------------|----------------|-----------------|-------------|
| Single-Unit Detached | 1033 | 82 | 1115 |
| Attached | 95 | 159 | 254 |
| Mobile Home | 174 | 56 | 230 |
| TOTAL | 1302 | 297 | 1599 |

Source: 2000 U.S. Census

Housing prices in Hinesburg reflect both the Town's desirability as a bedroom community of the Burlington area and the limitations of various site features. Poor soils for on site septic disposal, difficulty in finding water in some areas of Town, and a trend toward a large lot pattern of development contribute to the higher costs of housing. According to the U.S. Census, the median value of a home in Hinesburg in 2000 was \$135,300, up from \$107,500 in 1990. As shown in Figure 8, this price was similar to that of Chittenden County as a whole but well below median home values in neighboring communities.

Figure 8
Median Housing Unit Values

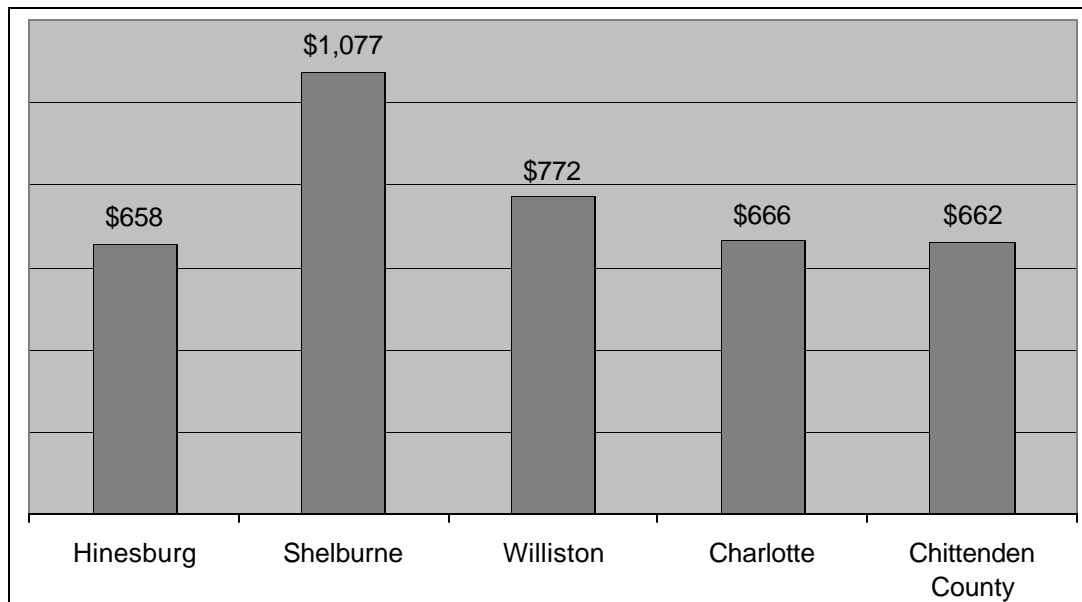


Source: 2000 U.S. Census

Rental units provide an alternative to owned housing for many people. According to 1990 Census figures, there were 227 renter occupied units in Hinesburg. That figure had risen to 294 units in 2000. Of these, the majority are apartments in complexes or accessory to a primary dwelling. The remainder are

single-family dwellings, condominiums, or mobile homes. Rental costs in Hinesburg generally follow the same pattern as housing values in comparison to neighboring towns (Figure 9).

Figure 9
Median Gross Rent



Source: 2000 U.S. Census

There is continuing concern in the State of Vermont about a growing gap between the amount that families can afford to pay for housing and the rising cost of housing construction along with the cost of rental or purchase of existing homes. According to the State of Vermont definition, housing is affordable when households with incomes at or below the county median pay no more than 30% of their gross income on housing costs (mortgage payments, including principal and interest, insurance and property taxes). For renters, costs include rent and utilities.

Although housing is becoming increasingly less affordable for those at lower income levels, the Town still has average prices below much of the county. A comparison of the average Multiple Listing Service sales for the 2-year period from February 2002 through February 2004 shows that the average sales price for all towns in Chittenden County was \$244,818 on 2078 single-family residential sales. During the same period, the average sales price in Hinesburg was \$210,510 on 61 single-family residential sales. Of the 61 sales during this period, only 5 were below \$100,000 and 23 fell between \$100,000 and \$200,000.

For lower-income families in Hinesburg, there is little available other than mobile homes, since there are few suitable rental units and no condominiums for families of four or more. The problem is compounded by the scarcity of additional sites for mobile homes within existing parks.

Groups throughout the county and state are involved in seeking solutions to housing shortages and the rising cost of housing. The Vermont Housing Council annually updates its publication "Between a Rock and a Hard Place: Housing and Wages in Vermont". Numerous housing statistics are available at the Vermont Housing Data website, www.housingdata.org. The Chittenden County Regional Planning Commission conducted a 2000 study of housing demand through year 2035.

Hinesburg planners recognize the need to provide reasonably priced housing in the town. A range of housing should be available to meet demand at all income levels, including those families earning below the county median income. The Town recognizes that there is a difference between “affordable housing” serving low income families under specific State and Federal criteria, and “reasonably priced housing” that serves all income levels. Currently, the Town defers to the State definitions of affordable housing, which are:

1. Owner-occupied – Housing owned by inhabitants whose gross annual household income does not exceed 80 percent of the state median income, as defined by the US Dept. of Housing and Urban Development (HUD), and the total annual cost of the housing, including principal, interest, taxes, and insurance, is not more than 30 percent of the household’s gross income.
2. Renter-occupied – Housing that is rented by its inhabitants whose gross annual household income does not exceed 65 percent of the state median income, as defined by HUD, and the total annual cost of the housing, including rent, utilities, and condominium association fees, is not more than 30 percent of the household’s gross income.

Provision for both reasonably priced and affordable housing are critical given the current housing crunch, and related rise in property values. The Town intends to examine zoning constraints and other factors that make housing more expensive.

Goals and Recommendations

2.2.1) To encourage affordable and reasonably priced housing.

- a) Support higher density housing, especially affordable and reasonably priced housing, in the village growth area.
- b) Encourage affordable and reasonably priced housing outside of the village growth area where suitable infrastructure exists or can be provided, while giving due consideration to important natural resources. Housing should not be encouraged in the Shoreline district due to its existing high residential density and environmental sensitivity.
- c) Facilitate public/private partnerships for the creation of affordable and reasonably priced housing, as well as the upgrading and rehabilitation of existing housing, through State and Federal grants, partnerships with non-profit organizations, or similar means.
- d) Consider establishing goals or targets for affordable and reasonably priced housing, especially where municipal services (e.g., water, sewer, etc.) make affordable housing projects easier to accomplish.

2.2.2) To encourage housing for the elderly and disabled.

- a) Provide higher densities for affordable housing designed for the elderly or disabled in the village growth area.
- b) Explore affordable elderly housing opportunities in areas surrounding the village growth area (e.g., portions of RR1, AG districts), with the exception of the Shoreline district, where suitable infrastructure exists or can be provided, and where compatible with important natural resources and existing uses.

2.2.3) To use infrastructure to encourage a mixture of housing types and mixed use development within the service area.

- a) Promote the establishment of affordable rental and owner-occupied housing within the village growth area through the Town sewer allocation policy.

- b) Use sewer and water allocations to encourage a mixture of housing types and mixed-use developments within the service area.

2.2.4) To encourage continued affordability and to improve livability in mobile home parks.

- a) Modify zoning regulations for existing mobile home parks by permitting density bonuses in consideration of corrections to long-term deficiencies.
- b) Consider whether similar modifications should apply to the creation of new mobile home parks.

2.2.5) To use zoning and development review to support housing goals.

- a) Review and implement means of streamlining the development review process as a way of reducing housing costs. Remove unnecessary barriers to well planned housing projects.
- b) Establish guidelines on the type and amount of amenities that must be provided in new housing developments to address quality of life issues.
- c) Encourage the maximum development of projects in the designated growth area.
- d) Continue to explore existing and innovative zoning techniques to allow greater flexibility in the configuration of developments, and to preserve scenic, agricultural, and other natural resources.
- e) Consider density bonuses as part of PRDs and PUDs as an effective tool to encourage the development of affordable and reasonably priced units. Open land should benefit the residents of the development, and also benefit the community at large. Ownership and design of PRD/PUD open land may be via any arrangement that ensures its important functions (e.g., farm land, forests, neighborhood or community facilities or use, etc.) are realized.
- f) Encourage housing developments that have a mix of market prices to create developments that serve a variety of income classes.

3. LAND USE

3.1 Pattern Of Development

Hinesburg's location at the juncture of the Champlain lowlands and the foothills of the Green Mountains has shaped its growth in the past and provides challenges for its future. The historical pattern of development in Hinesburg was a function of working with the natural resources and physical features of the Town to create a varied and thriving community. The diversity of Hinesburg's landscape and the patterns that developed from that landscape have been key to the Town's character. Townspeople's comments throughout the adoption of this plan point to the importance of maintaining this historical pattern of compact settlements and open space while planning for growth. Understanding the source of this development pattern and the changes that have been occurring will be critical to planning for the Town's future.

Hinesburg lies within a bedrock basin of the Champlain lowlands that extends northward from Monkton. The Hinesburg-Oak Hill Thrust, which runs roughly north and south through the Town, marks the boundary between the Champlain lowland and the Green Mountains. East of the thrust lies the first range of the mountains, which in Hinesburg is a series of hills from 1500 to 2000 feet in elevation. Slopes in this area regularly exceed 25%, a factor that restricts their use for development. Soils in this section of the town are shallow to bedrock, with many outcroppings. Although shallow, the soils do support dense and productive forested areas and have in the past been used in places for agriculture.

The western portion of Town, as part of the Champlain lowlands, contains surficial materials composed of sediments deposited during and following the last stage of the Great Ice Age. These sediments include till, outwash and recent alluvium. The silts and clays of the lowland are suitable for agriculture but have severe limitations for the development of septic systems using current technology.

The eastern portion of Town, which includes Lincoln, Hayden, and Texas Hills, saw very sparse and scattered development, until recently, because of its steep slopes and limited access. The sharp change in elevation between the eastern and western halves of town provided the water power that attracted many of Hinesburg's early industries and the attendant settlements. Settlements such as Mechanicsville and Rhode Island Corners were the sites of numerous businesses throughout much of Hinesburg's past and still show this historic pattern with the high concentration of houses in these areas. The western portion of the Town, with its relatively level bottom lands of the LaPlatte River and Lewis Creek, developed as a predominantly agricultural area with development largely concentrated around farmsteads.

The Village, located between the two topographic extremes, grew as a focus for the manufacturing, commercial and agricultural economies of the Town and has been the social and economic center for Hinesburg. Lot sizes are varied in the Village and create a diversity of densities in housing and commercial activities. The combination of residential and commercial in close proximity keeps the Village alive throughout the day and some of the night.

The shoreline of Lake Iroquois has also been the focus of another area of concentrated housing and activity throughout Hinesburg's history. The shoreline is almost completely lined with camps on lots of 1 acre or less. Development of the shoreline of Lake Sunset has been slower to occur and the shoreline still has stretches of undeveloped land. Because Sunset was impounded and drawn down periodically to supply water power to industries in Mechanicsville, the lake's level and use for recreation and camp lots had been secondary up until the 1950's.

The pattern and pace of development in Hinesburg were relatively static until the building boom of the second half of the 20th century. Along with the surge in growth came a marked shift in the pattern of buildings and house lots. Instead of a concentration of buildings in a few distinct areas, development

assumed a more suburban pattern of houses on large lots along road frontage or along lengthy private right of ways. Sparsely settled areas, especially the hill roads, experienced some of the most rapid growth. Roads that had been built and maintained primarily as farm or logging roads saw steadily increasing traffic.

The 1989 Growth Study plotted the location of new residential development in Hinesburg between 1974 and 1988. Other than 80 units built in two multi-family projects in the Village, almost all of the residential development that occurred was outside of the service area of town water and sewer. Residential development continues to be dispersed widely throughout Town without substantially greater concentration in the historically settled areas.

While residential development has become increasingly dispersed throughout the Town, a majority of the commercial and industrial development in the Town has been concentrated in the Village and districts surrounding it.

The shift in Hinesburg's pattern of residential development has many causes. The decline in the dairy industry and the strong market for rural lots in close proximity to Burlington led to increased development pressures in Hinesburg. Rural roads provided sufficient access for numerous lots. Prior to 2002 (when the State closed the 10 acre loophole for septic review), many of these lots were created with just over 10 acres to avoid state review of septic systems. The result frequently was arbitrary and haphazard lot placement.

A consistent concern expressed by citizens during Town Plan forums has been the threat to open space through the current trend of dispersed large lot subdivisions. Although the Town zoning bylaws contain provisions for techniques such as planned residential development that could conserve open space, this has not been widely used. A review of the Planning Commission's subdivision activity shows the distribution in size of the lots reviewed under the provisions of the Subdivision Regulations. Where Planning Commission review was part of the development process, the lots tended to be close in size to the zoning district minimum lot sizes in the 1980's. The proportion of 10 plus acre lots increased significantly in the 1990's. Close to half the lots created in Hinesburg during these decades were created without Subdivision Review.

TABLE 2
Number of Lots Approved By Planning Commission or DRB, By Size
1985-2003

| Lot Size | 1985-1990 | 1991-1996 | 1997-2003 |
|--|------------------|------------------|------------------|
| <1 acre | 30 | 3 | 7 |
| 1-3.9 acre | 82 | 19 | 33 |
| 4-9.9 acre | 34 | 6 | 18 |
| 10+ acres | 24 | 33 | 45 |
| Total lots approved under Subdivision Review | 170 | 61 | 103 |
| Total lots created without Subdivision Review | 140 | 51 | 5 |

Source: Hinesburg Planning & Zoning Records

Prior to October 1997 the subdivision regulations did not require Planning Commission review for the first three lots created and only minimal review for any lot accessed by a private right of way. In October

1997 the subdivision regulations were amended to establish a “minor subdivision” review process for any subdivision involving three lots or less.

A number of actions in recent years suggest that the pattern of subdivision of large, haphazard, rural lots can be changed:

- ?? The State now requires lots above 10 acres to be subject to the same wastewater regulations as smaller lots, thereby removing the previous artificial incentive to create large lots.
- ?? There is a renewed interest in creating housing opportunities in the Village District, including an attempt to increase available sewer capacity.
- ?? The Planning Commission has explored a number of zoning and subdivision techniques in rural districts to cluster homes and to preserve larger, contiguous open space parcels.

These actions are described in greater detail in the balance of the Land Use Chapter and elsewhere in this Plan.

3.2 The Village

Overview:

Hinesburg’s Village contributes greatly to the essential character of the Town. The Village we see today is a function of both the Town’s early history and the Town’s evolution over time. The Village serves as Hinesburg’s hub of community activity by providing a rich mix of residential, commercial, municipal, industrial uses. As such, it helps frame the character of the Town by defining a compact built landscape that stands in contrast to the surrounding rural landscape. It is Hinesburg’s primary growth center, where essential municipal infrastructure (e.g., sewer and water) are made available to both ensure the public’s welfare and to provide for mixed uses at higher densities than the rest of town.

The Village is currently comprised of a small historic “core”, developed without a town green, surrounded by a larger, but still defined, “greater village area”. The current Village core is centered on the Charlotte Road, VT Route 116 intersection where Lantman’s IGA and the historic Town Hall are located. Essentially it includes the current Village Zoning district, the Industrial 3&4 districts, and the Commerce Park portion of the Commercial district (see Map 2, Current Zoning). The greater village area extends primarily northward from the core to include the Library, a variety of commercial uses at the intersection of Route 116 and Shelburne Falls Road (Ballards Corner), CVU Road and CVU itself, and the historic Mechanicsville area just east of Mechanicsville Road on Pond Road.

The variety of residential types and businesses in the Village make it both a lively place and the economic, social and institutional center for the Town. The Village residents range in age and background, and it is this diversity that provides a rich source of community information, involvement, and participation. While several single-family homes remain, many of the larger homes have been divided into apartments and several businesses have created apartments in their buildings. The condominiums at Lyman Meadows made ownership possible with the affordable pricing available to a larger scale development. The apartments at Kelley’s Field offer safe and convenient elderly housing. Additionally, the Village is the location of the Town’s public institutions. Much of the vitality of the Village stems from the core of most town services, public institutions and commerce that are within walking distance for many Village residents.

There is very little land within the village core that is undeveloped. However, some parcels have remaining development potential under the existing zoning & subdivision regulations. In 2003, Chittenden County Regional Planning Commission (CCRPC) staff assisted the Town with build-out projections in order to evaluate potential wastewater service areas. These projections were based on a

comprehensive build-out model developed by the CCRPC using existing zoning parameters and site constraints. The residential side of the model was designed for single-family dwelling units only; therefore, the projections do not include multi-family dwellings, which are allowed in the Village area. The projections indicate the maximum possible build-out (i.e., if every lot were subdivided/developed), and are not linked to any time scale or specific period. Within the Village zoning district and the adjacent commercial/industrial districts (see Map 2, Current Zoning), the model build-out ranged from 60-117 new residential units and 487,897-790,733 square feet of new non-residential space (e.g., commercial, municipal, etc.). Within the overall sewer service area (see Map 10, Sewer & Water), which includes the greater village area and a small portion of the Richmond Road, the model build-out ranged from 204-261 new residential units and 469,109-871,998 square feet of new non-residential space. As a check on the model results, Town staff reviewed each parcel to come up with refined maximum build-out numbers, again based on the existing zoning. This local review estimated 89 and 228 new residential units respectively for the 2 model study areas, as well as 130,158 and 141,913 square feet of non-residential space respectively.

These numbers indicate that limited in-fill development is possible within the core and greater village growth center under existing zoning. Remember, however, that the actual build-out is likely to be far less than these theoretical maximums. Some landowners will choose not to subdivide their undeveloped property, and others may not want to increase the density on their partially developed lots. These are especially important considerations in the village core, where the desire for historic building and streetscape preservation will limit residential and larger scale commercial growth. On the other hand, with appropriate zoning changes and adequate sewer service, the greater village area (largely to the north of the village core, including Route 116 and Mechanicsville Road areas), has a lot of potential for additional growth and development.

Just as the current core and greater village areas have been defined by historical patterns of development, the future village area will continue to evolve with the Town's growth and development trends. This Plan formally recognizes a vision that has taken shape over the last 14 years for a denser and somewhat expanded Village. Planning to implement this vision still requires much hard work, careful consideration, and significant public input. However, we recognize that in order to serve as the Town's primary growth center now and in the future, the current Village also needs to grow. The challenge will be to integrate the new with what currently exists in such a way that the overall Town and Village character are preserved.

Enhancing and maintaining the various functions of the Village will be essential if its character is to be maintained. As the Town grows and demand for services increases several community facilities will need to be expanded or improved. The availability of municipal water and sewer will have a strong impact on the future direction of the Village's growth. The future location of facilities such as school, library, town offices and recreational facilities are also important considerations for the future of the Village. One noticeably absent feature in the existing Village is a sizable green or common. Such a community focal point would be a valuable addition to the Village by creating a public gathering space accessible and welcoming to all. Current recreation fields and the school playground in the Village serve specific user groups, but do not function as regular, day to day, community gathering places. Creation of a Village green may be problematic given the existing patterns of development, but possibilities exist and should be explored as part of the continuing planning process for the Village area.

Pedestrian access is fundamental to the sense of the Village. The proximity of a range of services makes the Village an especially appealing place for groups such as the elderly who have a more limited mobility. The density of the Village has reinforced the potential for pedestrian movement and future patterns of development in this area must be consistent with this. However, the volume of traffic through the Village has increased substantially and will undoubtedly continue to increase in the future. Along with increased traffic problems and safety hazards for pedestrians this increase has led to increased noise. To maintain

the Village's access by a variety of transportation modes and to distinguish this portion of Route 116 as Hinesburg's "Main Street", consideration of these issues will be crucial.

The Village benefits from many natural areas and the agricultural lands around it. The farmland to the west and north define the edge of the Village and serves as a visual corridor leading to the Town's center. Other natural features such as Patrick Brook, the LaPlatte River and the hills to the East serve as important focal points that help define both the core village and the greater village area. These lands are a source of recreational and work opportunities and provide contrast and balance to the dense Village core.

Studies and Reports

A variety of studies have been conducted that shed light on critical Village issues such as wetland and flood hazard area delineation, growth center concepts, and transportation. These studies include:

- ?? West Side Road Feasibility Study – 2003
- ?? Route 116 Hinesburg Village Scoping Study – 2002
- ?? USGS Flood Study for the LaPlatte River, Patrick Brook, and the Canal – 2003
- ?? UMASS Wetland Delineation – 1997 (based on 1993 aerial photography)
- ?? Village Wetlands Delineation Project - 1995
- ?? Growth Center Pilot Project – 1993

The West Side Road study examined the feasibility (pros, cons, major obstacles) of creating a new road along the West side of Route 116 from Charlotte Road to Shelburne Falls Road with a connection to Route 116 opposite Commerce Street. The purpose of such a road would be twofold: 1) to provide access to additional lands for higher density development in the greater village area; 2) to help alleviate traffic congestion and safety concerns throughout the Village (especially at the Route 116, Charlotte Road intersection) by providing alternate corridors for local traffic. The study mapped out a possible route and provided details on the likely hurdles for such a project.

The Route 116 Scoping study took a more comprehensive look at traffic and pedestrian needs through the Village from the Shelburne Falls Road to Buck Hill Road. It provides substantial information on the existing conditions together with a variety of improvement alternatives. The recommendations focus on 2 basic areas - overall corridor improvements and intersection improvements. Overall corridor recommendations seek to strike a better balance between arterial and local road functions, improve aesthetics and encourage the use of sidewalks, bikeways, and public or shared (i.e., park & rides) transportation. The report emphasized improved pedestrian and bicycle facilities as well as traffic calming in order to provide alternatives to the automobile for residents to access local business and community facilities. Intersection recommendations were made for all of the major Route 116 intersections in the Village area – Shelburne Falls Rd, Commerce St, Mechanicsville Rd, Charlotte Rd, Silver St. The study indicated that the Charlotte Road and Silver Street intersections are clearly the most problematic. Proposed intersection improvements are complicated by the interdependence of each intersection with regard to traffic flow. A holistic approach that addresses corridor deficiencies is needed rather than a single “silver bullet”.

The US Geological Service (USGS) Flood study was commissioned by the Federal Emergency Management Agency (FEMA) to improve floodplain and flood hazard area maps for the Village area, specifically with regard to the LaPlatte River, Patrick Brook, and the Canal. Existing FEMA maps are flawed in that no flood hazard area is shown for the lower portion of Patrick Brook, while an unusually large hazard area is shown around the Canal. Results from the USGS study should correct these errors and provide more accurate delineations and elevations for the flood hazard area in the Village area. The USGS maps depict the floodway along the LaPlatte River, as well as the 100 year and 500 year flood

prone areas. This data is extremely important in evaluating public safety issues as well as areas for possible village expansion.

The University of Massachusetts (UMASS) wetland delineation was commissioned by the Hinesburg Conservation Commission and completed in 1997. The project involved a detailed identification of wetlands in Hinesburg using 1993 color infrared aerial photography (1:40000 scale). Although by no means a map of all wetland areas, the result was a more comprehensive and detailed delineation than the National Wetland Inventory (NWI) data that is typically used to identify wetlands in other towns. Landowners, municipal boards and staff, and even State wetland permitting specialists now use the UMASS wetland map to identify areas for further investigation both in site planning and development review here in Hinesburg. It should be noted that State and Federal wetlands regulations are still based on the official NWI delineation and classification, supplemented by field observations.

The Village Wetlands Delineation Project (1995) created a detailed wetlands map in and around the Hinesburg village area. It was completed as phase 3 of the growth center pilot project (see below) to better define growth center boundaries and identify potential locations of future roads and other public investments. Although the delineation is now out of date, it does emphasize the importance of planning for wetlands in the possible growth area west of Route 116. Many of the wetlands in this area are not federally protected since they were previously converted to agricultural croplands. The study found that these wetlands likely fall under State jurisdiction, but large portions of this area could potentially be developed without undue adverse impact on protected wetland functions. Given the existing agricultural uses and modified drainage, the consultant found that many existing wetland functions and values could be significantly enhanced rather than adversely affected by careful site planning and development design.

The Growth Center Pilot Project (1993) studied how new development could be incorporated in and around the Village. Thanks to funding from the VT Department of Housing and Community Affairs, the Planning Commission was able to hire design consultants, produce detailed base maps and build out scenarios, and solicit public input. In many ways, this project was the catalyst that helped bring about many of the other studies listed above. The project resulted in a number of key recommendations that are still relevant today, and are largely embodied in the formal Village goals and recommendations in this Plan.

Goals and Recommendations:

3.2.1) Recognize the importance and complexity of Village area and growth center issues.

- a) Create a standing Village Steering Committee to be appointed by the Selectboard. The Steering Committee would work as a strong advocate on the goals above and other Village issues.
- b) Develop a Village Master Plan within 2 years for eventual incorporation into the next Town Plan.

3.2.2) To change the character of Route 116 to a "Main Street", and to create and reinforce "gateways" into the Village to give people a sense of arrival.

- a) Work aggressively with the CCMPO, CCRPC, VTrans, and Hinesburg's State Legislators to implement provisions of the Route 116 Hinesburg Village Corridor Study. Pay particular attention to intersection improvements at Silver Street, Charlotte Road, Mechanicsville Road, and Commerce Street.
- b) Redesign the main portion of Route 116 through the Village to make it safer, more pedestrian friendly, more efficient, and more attractive. Overall, the roadway (traveled area plus shoulders) should be narrowed to reduce speeding, eliminate passing on the right, and provide more room in the right-of-way for pedestrian infrastructure, street trees, etc. Additional features should include:

curbing, more sidewalks, street trees, improved lighting that is pedestrian friendly and attractive, and improved signage.

- c) Assess the pros and cons of the Town taking over the Village portion of Route 116 (e.g., Buck Hill Rd to Commerce St) from the State.

3.2.3) To create a truly "walkable" community by working toward safe and convenient pedestrian access to all portions of the Village.

- a) As soon as possible, improve the safety of existing crosswalks through additional signage, curbing, road striping, and even relocation if necessary.
- b) Create a plan and an official map for future sidewalks and paths to link all destinations in the Village as well as significant destinations outside the Village. Coordinate this with efforts to create a system of footpaths and trails in the rural areas of town (see section 6.7).
- c) Continue to make regular improvements to pedestrian infrastructure using Municipal, State, and Federal funds.
- d) Plan for and install sidewalks on both sides of Route 116 through the Village area.

3.2.4) To address the overall traffic flow and road network in the Village area to ease congestion, offer new development opportunities, and improve safety.

- a) Create a plan and an official map for future streets within the greater Village area.
- b) Continue to investigate the creation of a new road ("West Side Road) from the Charlotte Road to Route 116 at the Commerce Street intersection. Supplement the results of the feasibility study with a cost/benefit analysis based on short and long term traffic projections.
- c) Work with the CCMPO to track traffic count data in and around the Village area.
- d) Prioritize the enforcement of speed and other traffic laws in the Village to protect lives and promote Village character.

3.2.5) To guide growth and development so that the core and greater Village areas can serve as Hinesburg's primary growth center for residential and compatible non-residential uses.

- a) Explore a wide variety of options to create additional areas for mixed-use (residential and retail/commercial) development, including in-fill within the existing village core as well as expansions to the north via unique and carefully crafted new zoning districts. All of these options will require extensive further planning and public input to ensure that Hinesburg's rural village character is retained and that infrastructure needs can be addressed. Compact affordable housing is a central goal for all expansion areas. Mixed use (residential and retail/commercial) will also be a goal for expansions to the North along the West side of Route 116. The following recommendations should be given top priority:
 - ?? Consider expanding the Village District southward to Buck Hill Road, in part to shift the Village gateway or entrance toward Buck Hill Road to slow northbound traffic on Route 116 before reaching the Hinesburg Community School and the village core.
 - ?? Consider creating a unique and carefully crafted new zoning district northward on West side of Route 116 as far as Shelburne Falls Road. Focus on 4 basic objectives in this area:
 - 1) compact affordable housing within the Town sewer and water service area;
 - 2) increase

area available for retail and commercial opportunities via mixed-use (residential & commercial) development; 3) create a road network that would provide alternatives to Route 116 traffic and help mitigate traffic congestion; 4) new areas for municipal/community uses.

?? Explore utilizing the Mechanicsville Road corridor as part of the greater Village growth area. This area could provide pedestrian access to the existing village core, and would not be separated by a major State highway. Investigate the best means to accomplish growth in this area, either through expansion of the village district or the creation of a new district.

- b) Explore zoning changes that would encourage additional in-fill development in the Village core to better concentrate development within a 15-minute walk of Town Hall.
- c) Encourage the redevelopment of structures within the existing Village core that are underutilized. Facilitate landowner access and understanding of State, Federal, and non-governmental incentive programs for structural rehabilitation and historic preservation.
- d) Link zoning changes to sewer service area decisions and sewer capacity so that growth potential can be realized.
- e) Explore methods to prioritize Town sewer allocation within the village core and areas designated for expansion (see above). Consider revising the wastewater allocation ordinance so that a percentage of the residential and enterprise (i.e., commercial) allocation is reserved for development in these areas.

3.2.6) To ensure that allowed uses within the Village are compatible with existing uses, and to encourage a mixture of commercial, institutional, and residential uses within the Village district.

- a) Investigate the optimum balance/ratio of commercial, institutional, and residential uses in the Village area. Keep track of Village uses and research other towns to find comparable examples of ratios that work well.
- b) From time to time, reassess existing and allowed uses within the Village core and greater Village area to ensure future uses will be compatible.
- c) Encourage the preservation of existing streetscape patterns.

3.2.7) To maintain undeveloped areas (i.e., open spaces) within and adjacent to the Village, to maintain and preserve existing natural features (e.g., LaPlatte River) and a distinct Village edge.

- a) Consider modifying Village design standards in the Zoning Regulations to include open space preservation along the periphery of the village area.
- b) Explore the creation of a new zoning district around the Village with appropriate design standards and/or where innovation and clustering is encouraged in order to preserve open spaces.

3.2.8) To make available adequate community facilities and services to facilitate Village area goals.

- a) Continue to research ways to expand the capacity and efficiency of the Town's sewer treatment facility. Any future expansion should be of a size and scope to facilitate Village growth while preserving the ecological integrity of the LaPlatte River.
- b) Inventory and track (via GIS) the number and type of recreational facilities in the Village area. Town boards should work together to make sure adequate recreational opportunities will be available as the Village area population and usage grow.
- c) Explore possible locations for a Village common to serve as a community gathering space, including sites that may need redevelopment or redesign.
- d) Inventory and track (via GIS) the amount of undeveloped land (e.g., open spaces) in the Village area.
- e) Develop a plan for the linking and sharing of parking lots with access roads and sidewalks.
- f) Develop a comprehensive stormwater plan for the village growth area.

3.3 Commercial And Industrial

The diversity of Hinesburg's economy is a key indicator of the nature of the Town and its future. This diversity will be essential in maintaining the desired character of the Town and will be a major component in determining the future of town services. Availability of local services and job opportunities are important issues for town residents. The environmental and aesthetic impacts of the types, sizes and locations of commercial and industrial enterprises are other important issues facing the Town.

Historically, Hinesburg's economy was varied and included a sizeable industrial base. Throughout the 1900's, the decline of many of the local industries and the changes in the agricultural economy eroded the diversity of the economic base. Today, like many towns throughout the area, Hinesburg has moved toward becoming a bedroom community for commuters to the job centers of Chittenden County. 2000 Census figures show that 80% of the labor force living in Hinesburg commuted to work outside the Town. Of the out of town commuters, 72% commuted to the metro area – i.e., Burlington, Winooski, South Burlington, Williston, Essex.

Despite the high percentage of commuters, a number of employment opportunities remain within the Town. These places of employment represent not only local services and jobs for Hinesburg residents, but provide employment opportunities for students from the high school. Businesses with local employment also provide key personnel for municipal services, such as the volunteer Fire Department. Several firms based in Hinesburg serve a far broader base. The cheese factory has been one of the largest cheese producers in Vermont. It is a major industry for the State's agricultural economy. Nestech, a packaging machinery manufacturer; Iroquois Manufacturing, a manufacturer of truck bodies; NRG Systems, Inc., a developer and manufacturer of wind measuring instruments; the Champlain Valley Union High School and Hinesburg Community School provide products and services that reach many people beyond the Town's borders and draw employees to Hinesburg from the surrounding area. Hinesburg Sand and Gravel, one of the larger sand and gravel operations in the state, supplies many towns and businesses throughout the region. Clifford Lumber Company provides an important market for timber products. Other segments of the business community not only provide employment opportunities but offer goods and services. These include, grocery stores, automotive repair services, gasoline sales, auto parts, body shop, car sales, well drilling, hardware store, laundromat, restaurants, florist and gift shops, hair salons, health center, other health professionals, veterinary clinic, attorneys, etc. The future of these, and other local businesses and services, will have a direct impact on Hinesburg. Planning that affects many of these enterprises should also be considered for regional impacts as well.

One of the important parts of a small town economy is the home-based business. These businesses provide a wide variety of services and are a valuable source of primary and part-time employment for many residents. Home-based businesses, while providing a key element in the Town's economic makeup, must also be monitored carefully to avoid undue adverse impacts, such as traffic or noise, on other residences. Zoning amendments in 1996 and 2003 broadened the options for home-based businesses in Hinesburg. The Zoning regulations attempt to encourage the establishment of home occupations while reducing any negative impacts on surrounding properties.

The current location of the commercial and industrial districts in Hinesburg reflects the existing locations of the main businesses. The Industrial District I, located on the southern border of the Town, is the location of Hinesburg Sand and Gravel and Clifford Lumber. Industrial District II in Mechanicsville is the site of Iroquois Manufacturing. Industrial District III on Route 116 in the Village, is the location of the cheese factory. Industrial District IV, also on Route 116 in the Village, is the location of the Giroux Auto Body Shop. Industrial District V located on Route 116 just north of the Village and adjoining the Commercial District is the location of NRG Systems, Inc. One part of the Commercial District adjoins the village, and encompasses Commerce Park and a small adjacent area on the north side of Patrick Brook. The second part of the Commercial District encompasses the commercial area at the corner of Shelburne Falls Road and Route 116. Additionally, the Village provides a central location for many services and businesses.

The location and use of commercial and industrial areas has a major impact on the Town's environmental and aesthetic resources, as well as its economic well-being. Throughout the development of this plan residents have expressed the desire to see a diversity of local services and job opportunities but not at the expense of other town features. This is seen as essential if Hinesburg is to maintain its rural character and to avoid becoming solely a bedroom community of the Burlington area. It will be important to maintain a core of businesses in the Village and surrounding commercial areas as a means of continuing the historic pattern of the Town. Home-based opportunities should continue to be permitted throughout the Town as long as they do not adversely impact other properties. To meet these objectives it will be important to consider the ways that the Town can encourage and support a broad range of businesses while integrating growth into the existing pattern of the community.

Goals and Recommendations:

3.3.1 To provide suitable locations for commercial and industrial development.

- a) Review zoning districts and uses with a goal to foster the establishment of businesses that support the residential growth taking place in Hinesburg.
- b) Encourage commercial expansion in the core of economic activity within and surrounding the Village district.
- c) Analyze existing commercial and industrial districts for their sufficiency and determine the feasibility of possible expansion areas.
- d) Study and develop a proposed district on the west side of Route 116 that may encompass additional commercial, professional, municipal, and residential uses.

3.3.2 To provide for home-based and land-based businesses throughout the Town that will not adversely impact neighboring properties.

- a) Review zoning regulations with a goal to continue to encourage home-based and cottage businesses.
- b) Study and develop methods that will encourage and support businesses related to agriculture and forestry.

3.3.3 To provide necessary facilities and services to support commercial and industrial development.

- a) Improve pedestrian walkways and vehicular traffic flow to help current and future businesses attract and retain customers.
- b) Determine if there are ways the Town can encourage the provision of 3-phase power to the Industrial 1 zoning district.
- c) Allow mixed residential uses as a conditional use in the Industrial 1 zoning district.

3.4 Rural Regions

The regions of the Town of Hinesburg presently encompassed by the Rural Residential I, Rural Residential II and Agricultural Districts include most of the land area within the Town. During the past decade stresses on Hinesburg's rural and agricultural areas have paralleled those experienced in many northwestern Vermont towns. Those stresses include increased pressure for residential growth and increasing land valuations; higher traffic density on rural roadways as both Hinesburg and the surrounding towns continue to grow; and the decline of dairy farming that has served as the principal agricultural use within Hinesburg for a significant portion of the last century.

In the next decade the accelerated growth being experienced by Chittenden County and northwestern Vermont as a whole is expected to continue. Hinesburg will continue to be challenged to accommodate the increasing pressure for residential development within rural and agricultural areas while encouraging the use and viability of traditional, small scale, and hybrid agricultural, forestry and rural character /open-space-based enterprise uses within these regions. The character of the Town of Hinesburg and the identification of Hinesburg's Village as a distinct commercial center depend on the sense of separation provided by open spaces and rural vistas within the town. In order to preserve this character, particular attention should be paid to balancing growth pressures with preservation of rural vistas as well as the working forested and agricultural landscape. The permanently conserved private and public farmland and forests are important assets to the Town for their capacity to support a local economy and as natural infrastructure for ensuring water and air quality, recreation, and education. In addition to planning efforts targeting residential, agricultural and natural resource issues within the town, future planning should also consider the identification and preservation of wildlife corridors and habitat which contribute to both the rural character and recreation opportunities within the town as well as the preservation and restoration of the town's wetlands, streams, surface waters and ground waters.

In 2001, Hinesburg received a Municipal Planning Grant from the Vermont Department of Housing and Community Affairs to explore techniques for preserving the Town's rural character. Some of the identified types of regulations were "open space" subdivision regulations, zoning overlay districts, use and density standards, design review, Planned Residential Developments and similar clustering techniques, Transfer of Development Rights, and Right to Farm provisions. The Planning Commission intends to conduct a comprehensive review of the existing zoning and subdivision regulations with these techniques in mind. This review will include consideration of the location of various resources, particularly agricultural land, in relation to district boundaries and regulations. Revisions to the existing bylaws will also consider the creation of one or more overlay districts. The regulations and zoning boundaries will be modified to ensure that they are consistent with the location of the Town's agricultural, forestry, and natural resources.

A review of the regulations will also include an assessment of environmental constraints on the growth potential of each district so that allowed densities and uses are realistic and appropriate. It is anticipated that this review will immediately follow adoption of this Town Plan.

Other measures to manage and support agricultural, forestry and conservation uses are described in Chapter 4.

Goals and Recommendations:

3.4.1) To guide residential development into locations and groupings which preserve the sense of open space as well as the agricultural and forestry usefulness of the rural areas.

- a) Incorporate practices for area-based zoning, transfer-of-development rights and clustering into Hinesburg's zoning and subdivision regulations to encourage residential clustering, protection for access to and utilization of natural resources, and protection of rural vistas, VT wildlife management areas, and wildlife corridors.
- b) Implement PRD and subdivision policies that encourage the creation of mixed lot sizes in a single development as well as the preservation of medium and larger size parcels for active forestry and agriculture as well as small to medium scale agricultural uses.
- c) Redefine Hinesburg's current rural residential districts to more closely represent desired patterns of growth within the town, availability of sewer and the suitability of soils.
- d) Update the town's soil maps to more accurately define regions of good septic soils necessary for increased housing density.

3.4.2) To guide development at the village – rural edge in order to preserve rural small town character and provide for open spaces adjacent to the village center

- a) Research the creation of a village-edge zoning district or village-edge overlay to steer development through the use of clustering, area based zoning and transfer of development rights.

3.4.3) To develop policies throughout the rural areas that preserve agricultural uses.

- a) Examine density in agricultural areas (e.g., AG district) for compatibility with the conservation of agricultural lands. Implement zoning using a form of area-based density for this district, which may consider changing the overall density.
- b) Implement or strengthen techniques that allow flexibility and conservation of agricultural lands. Encourage Planned Residential Developments (PRD's), which allow a greater density on one portion of a site while maintaining another portion as undeveloped land. Revise PRD regulations to include guidelines specifying the location and amount of open space to be provided in a subdivision. Require methods for the long-term protection of open space as part of any PRD proposal. Use density bonuses as an incentive for planning that preserves viable agricultural land where appropriate.
- c) Establish criteria for the placement of house lots, roads and utilities that will preserve a greater amount of usable agricultural land.
- d) Promote development in areas that are least disruptive of agricultural operations, maintain lands' eligibility for tax abatement programs and reduce conflicts between agricultural operations and residential areas.
- e) Examine uses in the agricultural district with the goal of recognizing non-traditional uses that may or may not be agriculturally related but that allow the land to remain open, used and available for future agricultural endeavors
- f) Recognize open land that is not being currently used for traditional agricultural purposes and propose methods of enabling that land to remain open.
- g) Study methods of transferring development rights and determine if any of those methods are appropriate for Hinesburg.

3.4.4) To develop policies throughout the rural areas that preserve forestry uses.

- a) Examine density in forested areas (e.g., RR1 & RR2 districts) for compatibility with the conservation of forest lands. Implement zoning using a form of area-based density for these districts, which may consider changing the overall density.
- b) Develop zoning techniques for the preservation of Hinesburg's forest resources. The techniques may include a separate forestry district, overlay districts for important forest land or other development and management standards specific to forest preservation.
- c) Direct development in areas with forest resources to land that is less suitable for active timber management because of poor soils, existing forest conditions or size and location of the parcel.
- d) Give strong consideration to preservation of wildlife corridors, viable wildlife habitat, groundwater recharge areas, and ridgelines in planning any development of lands with forest resources.
- e) Establish guidelines for placement of roads, utilities, and house lots in locations that do not disrupt the forestry or natural resource potential of a parcel.
- f) Site new development to minimize fragmentation of forest lands and to maintain access to forest lands
- g) Require development plans to preserve productive forestland in a size and shape that maintains its viability and eligibility for tax abatement programs.
- h) Ensure access and proper right of ways.

3.4.5) To develop policies throughout the rural areas that preserve conservation lands for their ecological, recreational, and traditional uses.

- a) Revise zoning bylaws to create one or more conservation districts. Lands to be included within this district may include the Town Forest, Fred Johnson Wildlife Management Area, and other publicly owned lands to be protected from development or inappropriate use.
- b) Within conservation districts, permit only those uses that will preserve the natural and aesthetic values of these lands.
- c) Permit structures, roads and parking areas that further the recreational and education use of these lands only if their placement does not adversely impact sensitive areas.
- d) Ensure access and proper right of ways.

3.4.6) To incorporate the preservation of Hinesburg's rural character within future development guidelines.

- a) Encourage the master planning of existing larger parcels prior to subdivision through town planning assistance and policies, which provide density bonus incentives.
- b) Develop zoning policies and bylaws which encourage land-based enterprises such as community farms, farm-based Bed & Breakfasts and event-hosting facilities, cross-country ski facilities, game preserves or similar businesses.
- c) Develop zoning bylaws for communications towers and wind driven power generation systems.

3.4.7) To guide development within Hinesburg's rural areas while preserving natural and wildlife systems.

- a) Complete natural resource and wildlife habitat inventories for use by the public, the planning commission and the DRB in creating and evaluating master plans, subdivisions and PRDs.
- b) Establish overlay districts in both the agricultural and rural residential districts, which protect town infrastructure, adjoining properties, natural resources, natural systems, and rural vistas.

3.4.8) To establish processes and methods for monitoring the progress of the town in implementing the rural development recommendations within this plan.

- a) Develop and maintain a set of indicators that may include rural lot sizes, clustered vs. traditional subdivision approvals or other statistics as a yearly measure of rural development directions.
- b) Implement an annual review of Hinesburg's development activity with the Development Review Board to assess the practical implementation of updated zoning bylaws and address any inadequacies or misinterpretations in an effort to tune zoning bylaws to Hinesburg's planning goals.

4. NATURAL RESOURCES

Hinesburg's natural resources are varied and abundant. Land resources, notably agriculture and forestry, contribute to the Town's economic vitality; but they are equally valued for their aesthetic qualities and for their support of wildlife habitat. Water resources, including surface waters and groundwater, must be protected for human health as well as wildlife habitat. Wetlands, flood hazard areas, wildlife corridors, natural areas, hills and ridgelines, and similar natural resources provide wide-ranging contributions to the Town's rural character, to townspeople's enjoyment of their natural surroundings and to the economic vitality of the community. Consideration for natural resources is essential for basic human health and safety. Natural resources are irreplaceable and damage to them irreversible.

This chapter includes descriptions of various natural resource categories followed by recommendations in each section. Often, natural resource values are overlapping and complementary. Similar recommendations may occur in more than one section. The overall objective of these recommendations is to protect the town's natural resources with special concern for the biological diversity and natural processes that sustain life.

4.1 Forestry

Hinesburg has abundant forest cover throughout the Town and particularly east of North Road and Hinesburg Richmond Road. Hinesburg has over 4,000 acres of productive forestland growing lumber to meet our future needs (based on forest lands enrolled in the State's current use program). Hinesburg has favorable climate and soil to grow quality hardwoods and the topography makes for easy access to many forested lands. Many productive forest parcels encompass hundreds of acres, a fact that makes them desirable for long-term timber management. Proximity to sawmills also makes for economical logging operations. A large portion of Hinesburg forestland is under supervised forest management plans that are designed to promote growth of valuable merchantable timber.

Continued management of these woodlands is an important community goal. Forest land and its traditional uses (timber extraction, wildlife habitat, recreation, scenic resources, etc.) help define the rural character of the Town. The viability of our working forests is tied inextricably to adequate access and overall land base. Indiscriminate subdivision and development has the potential to fragment large blocks of forest land into smaller ownerships making long-term timber management more difficult. More importantly, even if large forest parcels are maintained, development along Town roads must be carefully planned to avoid isolating interior forest lands. Given low profit margins and site-specific constraints, working forests require suitable access for equipment and timber harvesting.

Most of the Town's forest resources are managed by private landowners. However, a small percentage is in public ownership (both Town and State). These lands include the Town Forest, the Fred Johnson Wildlife Management Area, and other streambank lands owned by the State along Lewis Creek (Map 11, Town Facilities & Conserved Lands). Timber management on these lands is used as a tool to implement the primary goals of providing wildlife habitat (State lands & Town Forest) and recreational opportunities (Town Forest). The continued protection of these parcels is important in that they serve as anchors for the extensive forest land in the eastern portion of Town, and the Lewis Creek corridor.

Planning for all of Hinesburg's forest resources could be improved through a more thorough evaluation of site-specific potential and value to the community. Frequently, during local development review, town boards find it difficult to assess the value of a particular area for residential development versus timber production versus conservation. Given the wealth of GIS data available, it may be possible to develop a system or model that better establishes the value of a particular area for a number of competing values.

Goals & Recommendations

Included at end of section 4.2 (Agriculture). Related land use goals and recommendations also included in section 3.4 (Rural Region land use).

4.2 Agriculture

Agriculture is a significant contributor to the character of the Town. The farmer is the one who has the ability to produce an income from the land and keep it open. However, the farmer is under constant pressure to sell or develop the land due to the discrepancy between income from production and what he or she could expect from real estate development. Once the land has been developed for nonagricultural purposes, it is forever lost to agriculture. Preserving agricultural land while maintaining the landowner's equity in that land is one of the foremost planning challenges facing the Town.

The importance of agriculture to Hinesburg's character is evident from discussions in Town Plan forums. Agriculture produces one of the most visible patterns on the land and can define the nature of a town. During the preparation of the Town Plan, participants have identified ways that agriculture contributes to the Town economically, socially and environmentally.

Economic Benefits:

- ☞☞ Property taxes paid and fewer services demanded.
- ☞☞ Provides jobs and housing for employees.
- ☞☞ Sale of agricultural products.
- ☞☞ Local jobs and services for businesses and industries.
- ☞☞ Helps to slow the development of farmland.
- ☞☞ Ready food supply.
- ☞☞ Direct and indirect contribution to the regional and state economy.

Social Benefits:

- ☞☞ Space for recreation.
- ☞☞ Educational opportunities.
- ☞☞ Scenic views.
- ☞☞ Makes Hinesburg an attractive place to live and work.
- ☞☞ Cultural Diversity.
- ☞☞ Retention of town heritage and rural character.

Environmental Benefits:

- ☞☞ Cultivation of open land.
- ☞☞ Helps water recharge areas.
- ☞☞ Helps to maintain healthy forests.
- ☞☞ Provides wildlife habitat.

The Soil Conservation Service (SCS) has mapped and ranked soils in Hinesburg. 8,154 acres, or approximately 32% of the Town, are ranked as prime or statewide soils, compared to only 20% in the state as a whole¹. These two highest categories are considered well suited for agriculture. Of this, 1,148 acres are prime soils. These are suitable for almost any type of farming operation and are essential for

¹ Prime and statewide are terms used by the Soil Conservation Service to designate the two most productive soil types. These two rankings qualify as prime agricultural soils for Act 250 review purposes.

intensive agriculture. Statewide soils, and some of the lesser-ranked soils that have been improved with drainage, are well suited for grazing and production of hay and forage crops. These soils comprise the bulk of the land that supports Hinesburg's dairy operations. The majority of Hinesburg's good agricultural soils are located west of Route. 116, a fact that is evident in the existing pattern of land use in Town and by this area's designation as an agricultural zoning district.

One indicator of current use and commitment to future use of land for agriculture and forestry is enrollment in an agricultural or forestland tax abatement program. Of the approximately 26,640 acres in the town, 9,588 acres were under state or local farm use contracts and 3,139 acres were under state forest use contracts in 1989. There were 2,389 acres being actively used for agriculture that were not under any contract. This is a total of approximately 15,116 acres or 56% of the land in Hinesburg that is in some manner connected to forestry or agricultural use. By 2002, the number of acres enrolled in an agricultural or forest land tax abatement program had dropped by nearly ten percent to 8,530 acres, representing 32% of the Towns total acreage.

Agriculture in Hinesburg, consistent with most of the state, is primarily focused on dairy. However, there has been diversification in recent years, and the Town has a variety of agricultural operations. In keeping with trends throughout Chittenden County, the number of farming operations declined from 1989 to 1997 and again to 2004 in almost every category.

TABLE 3
Types of Farming Operations

| Type of Operation | No. of operators | | |
|---|------------------|-----------|-----------|
| | 1989 | 1997 | 2004 |
| Dairy | 11 | 8 | 3 |
| Horses | 9 | 8 | 5 |
| Hay and forage | 8 | 6 | 6 |
| Beef | 6 | 3 | 2 |
| Dairy replacements | 5 | 3 | 1 |
| Sheep | 5 | 3 | 1 |
| Nursery/Horticulture | 5 | 4 | 3 |
| Christmas trees | 5 | 3 | 1 |
| Maple sugaring | 4 | 7 | 7 |
| Hogs | 2 | 2 | 0 |
| Vegetable and fruits | 2 | 1 | 1 |
| Diversified (beef, poultry, hogs, horses, hay, heifers, or combination) | | | 2 |
| Other animals (Elk) | | | 1 |
| Total | 62 | 48 | 33 |

Sources: Estimates by Holly Russell, Jean Isham, Marshall Delaire, and Wayne Bissonette (1997 and 2004)

Agricultural support businesses are a key component not only to the overall economic sector of Hinesburg but also to the continued vitality of the agricultural operations. Lack of ready access to equipment, supplies and repair services has hampered farmers in many rural communities. Although many of these problems are a factor for Hinesburg's farmers as well, the Town does have a variety of services available such as machinery repair, equipment sales, and heavy equipment operators. Additionally, Clifford Lumber and the Cheese Company provide two of the larger markets for local agricultural and forest products.

Goals and Recommendations (also see section 3.4)

4.2.1) To better assess the value of land for forest and agricultural uses.

- a) A land evaluation and site assessment system (such as LESA or FLESA) will be developed which will rank the importance and viability of agricultural, forestry, and natural resource lands in Hinesburg.
- b) Finite natural resources should be managed and used in a way that ensures their long-term availability.
- c) Adopt a method of assessing the agricultural value of the land which shall include soil type, and size of parcel needed for viable agricultural use. The assessment should recognize differences in agricultural soils and the type of agricultural uses they support.

4.2.2) To ensure that growth and development doesn't negatively impact the viability of forest and agricultural uses.

- a) A committee should be established to work with existing agricultural and forest land owners to help with future planning of their land. This group would assist landowners in creating an orderly plan for any potential future development of their land and would also assist with the development of management plans.
- b) Development planning should preserve the Town's valuable agricultural, forest and natural resources by directing growth to locations that do not impact these resources. Provisions will be made, through zoning techniques or voluntary preservation means, to preserve agricultural and forestry resources on land located outside of the agricultural and forestry zoning districts.
- c) Minimizing conflicts between residential and agricultural or forestry uses of land will be essential in maintaining these operations. The Town will adopt policies such as "Right to Farm" to address these issues for both agricultural and forestry uses.
- d) Ensure access and proper right of ways.

4.2.3) To support the working forest and agricultural landscape in Hinesburg's rural regions, and provide incentives for uses that keep these lands open and viable.

- a) Promotion of local agricultural and forest products and marketing of value added products will be encouraged as a means of fostering the economic vitality of local farms and woodlands.
- b) The Town of Hinesburg shall be encouraged to continue to offer a tax abatement program over and above the State of Vermont contract.
- c) The Town will consider establishing a fund to preserve priority resource land by promoting the use of the Town's Land Preservation Reserve Fund.
- d) The Town will work with the Hinesburg and Vermont Land Trusts, or other appropriate non-profit organizations, to encourage the voluntary protection of productive agricultural and forest lands. Techniques such as conservation easements or donation of land with retained timber rights will be explored as possible options.

4.3 Surface Waters

The topographic changes between the Champlain lowlands and Green Mountains have shaped the drainage patterns in Hinesburg. Lewis Creek drains a large area east and west of Hogback Mountain. Hollow Brook, a tributary of Lewis Creek, drains the deep, steep sided Hollow Valley and is thought to be the pre-glacial drainage of the Huntington River. The LaPlatte River drains the course of a deep pre-glacial valley now filled with glacial sediments, gravel, silts and clay. A tributary, Patrick Brook, drains

the Lake Iroquois-Lower Pond basin. In addition to these named streams there are numerous unnamed streams. Although these are low volume or intermittent in nature, they serve important functions as seasonal drainage ways.

Lake Iroquois and Lake Sunset, also called the Lower Pond, are valuable water resources. Lake Iroquois straddles the boundary of Richmond, Williston and Hinesburg. The lake's surface area covers 244 acres, of which roughly half is located within Hinesburg. Lake Sunset's surface area is 61 acres. The combined watershed of both lakes encompasses several thousand acres, both in Hinesburg and in surrounding towns. Both lakes are impounded by controlled dams. Lake Iroquois has a small natural lake while Sunset has no natural lake. Both lakes contribute to the recreational resources of the town. The northern shore of Iroquois is the site of the public beach and also the site of a state managed boat access. Currently, these are the only public access areas available.

Because of historical patterns of development and the current 1 acre zoning both lakes' shorelines have a greater density than many other areas of Town. Although both lakes' shorelines have been primarily seasonal communities in the past, there has been an increasing trend toward conversion from seasonal to year round homes in recent years. This, coupled with the fact that all of the homes around both lakes are served by on site septic systems, has raised concerns for the water quality of the lakes. The beach has been closed on occasion because of water pollution and water quality problems from erosion and runoff have also been experienced.

Hinesburg participated in a program to correct pollution problems in Lake Iroquois stemming from erosion and runoff. The Lake Iroquois Watershed Project, funded by an Environmental Protection Agency grant, also focused on educating watershed property owners about sources of pollution and the ways in which they can be avoided. Another source of concern for the long term health of both lakes is the presence of Eurasian water milfoil. Milfoil has been established in Lake Sunset and has recently been sighted in Iroquois. This highly invasive aquatic plant can severely impair the recreational use of the lakes if it spreads beyond the current level of infestation.

The rivers, streams and lakes in Hinesburg have great value aesthetically, as wildlife habitat and corridors and for recreation. All of these waterways drain to Lake Champlain, which is an important natural, cultural, and economic resource for Hinesburg residents and the State at large. Access to these waterways is an important part of the enjoyment of the Town's rural setting. The use or misuse of surface waters also have an impact on all communities within a drainage basin. Recognizing the unique opportunity to plan for such regional resources, the non-profit Lewis Creek Association seeks to plan and identify important characteristics of the river. The group is comprised of townspeople from several communities. The LaPlatte River is the largest watershed draining into Shelburne Bay. Drinking water for over 65,000 residents and businesses of Chittenden County is supplied by the Champlain Water District from the water supply intake pipe located in Shelburne Bay.

Water Quality & Stormwater

Surface waters are subject to many of the same sources of pollution as groundwater. These are generally divided into point and non-point designations. Point sources are those for which there is a clearly defined source, such as a malfunctioning septic system. Non-point sources are those for which there is no clearly recognizable source. Non-point sources, such as storm water runoff from roads or parking lots, are far more difficult to locate and control although their potential for damage is great. Agricultural practices can have a significant impact on water quality of surface water. This is an important issue for a town such as Hinesburg where the two main watercourses, Lewis Creek and the LaPlatte River, as well as both lakes, have predominantly agricultural areas within their watersheds.

Surface waters are also subject to damage from erosion of stream banks and siltation. Current regulations attempt to mitigate these potential damages by requiring a 75' setback of all principal structures from

named streams and bodies of water. Riparian, or riverbank, forests and vegetation can contribute to the stabilization of stream banks, but riparian forest areas are few in Hinesburg and there are no requirements for maintaining vegetated buffer strips around water bodies. The adequacy of the current regulations for both erosion and pollution control is a question to be addressed in planning for the protection of surface waters.

Depending on soil characteristics and the type of ground cover, the earth has a varying capacity to absorb water. When precipitation accumulates on the ground surface faster than it can be absorbed into the earth, the excess water becomes stormwater runoff. Particularly during major storms, the intensity and duration of rainfall can exceed the earth's capacity to absorb water. Impervious and hardened surfaces (such as rooftops, streets, and parking lots) totally prevent or greatly hinder water from percolating into the ground.

Stormwater runoff flowing across the earth's surface absorbs chemicals and physically propels undissolved particles and other suspended material. Increased volumes of runoff tend to transport more absorbed chemicals and suspended material. Steep slopes and hardened surfaces with less friction increase the velocity of the runoff and the speed that it accumulates into greater volumes. Increased stormwater volume and velocity enable runoff to scour larger particles and to transport them downstream. Vegetative groundcover and reduced slopes slow runoff, diminishing its ability to transport materials.

Goals and Recommendations

4.3.1) To protect, enhance, and restore the town's surface water resources.

- a) Require adequate vegetative buffers and erosion control along rivers, streams, and lakes to protect water quality, allow natural channel modification, and protect buildings. Consider differentiating buffers based on land use.
- b) Consider revising the zoning regulations to discourage new structures and the excessive enlargement of existing development in the shoreline district.
- c) Maintain stringent camp conversion oversight pertaining to septic performance and stormwater in the shoreline district.
- d) In coordination with local and regional groups, and the towns of Williston and St. George, develop a plan to regularly monitor water quality in Lake Iroquois and Sunset Lake, report the findings, and take action to reduce pollution from point and nonpoint sources.
- e) Conduct geomorphological studies of Lewis Creek and the LaPlatte River to determine site-specific vegetated buffer and setback requirements. Encourage reforestation of native plants where appropriate along the riverbanks. For tributaries and creeks, maintain the 75' setbacks, and encourage preservation of existing vegetative buffers and reforestation of riparian buffers.
- f) Educate landowners about the value and fragility of vernal pools, how to identify them, and how to protect them.
- g) Continue as an active participant on watershed protection associations.

4.3.2) To control impacts from storm water runoff.

- a) Insure clean and healthy surface water by making sure that storm water runoff doesn't adversely affect streams and rivers, and does not exceed their carrying capacity.
- b) Study the current and future impacts of storm water runoff on the town's surface waters, and consider writing tighter provisions in the regulations. Consider innovative and "low impact development" techniques that help minimize stormwater runoff.
- c) Consider establishing a storm water utility responsible for a town-wide systematic approach to storm water management.
- d) Study and address the contribution of town roads to storm water runoff.

4.3.3) To serve as a component of a greenway network.

- a) Use inventories of the Lewis Creek and LaPlatte River corridors to identify existing features that would contribute to a greenway network. Ensure that greenways providing wildlife habitat connectivity are not adversely impacted by improvements or use related to human activity (e.g., trails).

4.4 Groundwater

Groundwater is any subsurface water found in porous rock strata and soils. As the source of most of our drinking water, it is an essential resource. Groundwater is continually being recharged by precipitation seeping or percolating through the soil to the aquifers beneath the surface. The aquifers are the geologic formations that store, transmit and yield useful quantities of water to a well. While all land is part of the groundwater recharge system, certain areas characterized by shallow, sandy or gravelly soils, or rock outcroppings, are the most porous and conductive of water, and therefore are the most significant aquifer recharge areas for a community.

Recharge areas serve either “public” or “general” water supplies. Public water supplies are considered those that serve 10 or more connections or 25 or more users. These aquifers are referred to as Source Water Protection Areas (SWPA). The Vermont Agency of Natural Resources has mapped the SWPAs in Hinesburg. See Map 8, Water Supply.

- ?? Hinesburg Water Department #1 (behind Town Hall)
- ?? Hinesburg Water Department #3 (behind Town Hall)
- ?? Orchard Commons
- ?? Lyman Meadows Condominiums
- ?? Saputo Cheese USA, Inc. – West Well

Additionally, there are portions of 2 SWPAs in Hinesburg for wells located in an adjacent town.

- ?? Lazy Brook Trailer Park
- ?? Farmer-in-the-Dell

A three-zone source water protection area was delineated for Town wells #1 and #3 in 1997. The new SWPA is more extensive than the previously defined areas, showing the well’s recharge areas. The bedrock hills immediately east and southwest of the village are in “Zone 2,” aquifer recharge areas where contamination is most likely to affect the groundwater feeding the Town wells (see Map 8, Water Supply).

Aquifer recharge areas are particularly sensitive to contamination because they allow toxic substances from the surface to quickly, and in a relatively undiluted form, reach the aquifers, and thus our drinking water. Once the groundwater is contaminated, it is impossible to restore to its original state. Although some harmful contamination occurs naturally, by far the vast majority results from human activity. Many potential sources of contamination exist. Landfills, poorly functioning septic systems, road salt, underground fuel storage tanks, agricultural and industrial chemicals, waste byproducts of some businesses and household hazardous wastes can all contribute to pollution of groundwater supplies. Understanding the potential sources of contamination and the location of Hinesburg’s aquifers will be essential if future growth is to occur in locations and ways that do not harm groundwater sources.

Quantity of water is also an important consideration. Previous planning efforts used well drillers’ reports to map low yield areas (see Map 8, Water Supply). The map shows an area roughly bounded by

Mechanicsville Road, Richmond Road, Buck Hill Road, and North Road in which well yields have consistently been low. This area, which is partially beyond the current service area of the municipal water supply, has seen substantial growth in the past. Four of the SWPAs are also located in this low yield area. Accommodating the existing development and potential future development of this and other low yield areas will be another important issue in planning the protection and best use of Hinesburg's groundwater resources.

The 2 primary wells serving the Town water system are nearing their permitted capacity/withdrawal. The public works department is currently working with the State to increase the permitted capacity from these wells. The true maximum capacity of these 2 wells is likely far greater than what is currently being used. Future water needs will be addressed as listed below:

1. Make use of unused capacity of the existing Town well at Lyman Meadows that currently only serves that development.
2. Develop the requisite pre-treatment and distribution infrastructure to make use of the inactive Town well at Geprags Park.
3. Explore other potential sources.
4. Research increasing permitted capacity of the 2 primary Town wells now in use, considering such factors as contamination, etc.
5. Research drilling a new well near the 2 primary Town wells now in use, considering such factors as contamination, etc.

Goals and Recommendations

4.4.1) To protect the town's groundwater resources.

- a) Create a groundwater conservation overlay district that includes source water protection areas. Development in these areas should receive a higher level of scrutiny. Review the data already collected and supplement with field studies, if needed.
- b) Decide how best to provide information about low-yield well areas to the DRB: either review town-wide well-log data to update information about low-yield areas, or require developers to provide such information at sketch plan review.
- c) Expand the capacity of the Town water supply via the options listed above. Finance these expansions via impact fees or other comparable mechanisms.
- d) Consider establishing a source water protection area around the inactive Town well at Geprags Park, to ensure that it remains a viable source for future water needs in the municipal water supply area.
- e) Encourage water conservation.

4.5 Wetlands

Wetlands are defined as areas inundated by surface or ground water with a frequency to support significant vegetation or aquatic life. Wetlands can include marshes, swamps, bogs, wet meadows, and river or lake overflows. The wetlands of Hinesburg are perhaps the most underestimated resource we have. Wetlands have many important functions. They provide a measure of flood control, remove toxins in the water, provide important wildlife habitat and remove excess nutrients, which is particularly important in an agricultural community such as Hinesburg. For these reasons, it would be appropriate for the Town to initiate a wetland restoration program with willing landowners of drainage altered farm land.

Both the Conservation Commission and the committee studying natural resources for the Town Plan began identifying the significant wetlands in Hinesburg. In 1997 the Conservation Commission

completed a town wide wetlands mapping project that involved identifying wetlands through interpretation of aerial color infrared photos and field-checking the major wetlands.

Wetlands can be threatened or destroyed by filling and draining. They are also damaged by runoff and pollution from surrounding land. Until recently an accurate and readily understandable map of wetland locations has been lacking. This, coupled with the fact that the current town regulations contain no specific regulations for protection of wetlands, has left Hinesburg's wetland resources vulnerable. While the Vermont Wetlands Rules protect the so-called "Class Two" wetlands as shown on the National Wetland Inventory (NWI) maps, little or no protection is provided for the "Class Three" wetlands. The need for education about the benefits of wetlands, as well as the threats to this resource, is a key issue in formulating a protection strategy.

The 1997 UMASS wetland study and the 1995 Village Wetland project (see Village section details of both studies) provide Hinesburg with better wetland information for town-wide planning than many communities. The Vermont Advanced Wetlands Planning and Protection Project Report of 2000, by the VT Dept. of Environmental Conservation, provides more detailed information on 5 priority wetland complexes that have a high functional significance and a moderate to high threat of future degradation. These wetlands include: Horse Farm Swamp, Upper LaPlatte Floodplain Forest, Carse Beaver Pond, Bissonette Swamp, and the Lewis Creek Corridor complex. In conjunction with the NWI wetlands used for State and Federal regulatory processes, the above datasets help identify areas where further on-site delineations are necessary. Although these datasets are extremely helpful for broad scale planning, wetland delineations in the field are still critical in the evaluation and planning for specific conservation and development projects.

Goals and Recommendations

4.5.1) To preserve wetlands within the town.

- a) Abide by existing or develop regulations to protect town wetlands that are essential for treating storm water runoff and protecting surface water quality and providing habitat.
- b) Continue to work to clarify the location of wetlands in Hinesburg. Utilize the UMASS and NWI wetland locations (Map 7, Wetlands & Floodplains), or more detailed site specific studies if available, for planning and development review with appropriate field delineation as needed.
- c) Conduct field studies to identify and better understand priority wetlands.
- d) Continue to strive to insure that wetlands are not adversely impacted by development or alteration to lands around them.
- e) Consider acquiring easements to, or acquiring outright, priority wetlands that are particularly vulnerable.
- f) Restore wetlands in a public/private partnership to improve water quality, habitat, and facilitate stormwater management.

4.5.2) To serve as a component of a greenway network.

- a) Include wetlands as a component of a greenway network. Separate greenway features that connect wetlands and areas for wildlife habitat from trails and other human activities.

4.6 Flood Hazard Areas

Flood hazard areas are areas likely to be inundated by flood waters. Most attention is given to those areas prone to flooding at least once every 100 years. These flood hazard areas in Hinesburg are primarily associated with watercourses and have been mapped by the Federal Emergency Management Agency (FEMA), see Map 7 (Wetlands & Floodplains). Protection of floodplains is important to minimize

property loss and for the protection of human life and health. Floodplains also provide corridors for wildlife throughout Town and link upland habitats to rivers, wetlands and water bodies. Because floodplains serve as an integral part of the overall natural resource pattern of the Town it is important to maintain them in an unobstructed state.

Current town regulations allow development in flood hazard areas if drainage courses are conserved and if there is no impact that would divert flood waters or increase flood hazards. The regulations have been developed based on recommended language for communities enrolled in the National Flood Insurance Program.

As mentioned in the Village section (3.2), existing FEMA maps are flawed in that no flood hazard area is shown for the lower portion of Patrick Brook, while an unusually large hazard area is shown around the Canal. A USGS Flood study conducted in 2003 has provided more accurate delineations and elevations for the flood hazard area in the Village area. FEMA is currently in the process of updating the official flood hazard maps for Hinesburg to make the necessary corrections.

Goals and Recommendations

4.6.1) Develop river corridor plans to meet the requirements of pre-disaster mitigation.

4.7 Wildlife Habitat

Wildlife habitat contributes to the rural character of Hinesburg and reflects the diversity of the Town's natural landscape. All wildlife species require three elements for viable habitat - food, water and cover. Even with these elements, viable habitat for many species is dependent on contiguous tracts of undisturbed land to serve as reservoirs for diverse species. Smaller tracts can serve as habitat if corridors connecting smaller and larger areas are preserved. Fragmenting habitat areas and the connecting corridors limits the availability and diversity of life supporting elements. As areas become isolated, species diversity diminishes or disappears. The status of viable and varied wildlife habitat is an important barometer of the Town's ability to maintain its rural landscape while accommodating growth.

Given the vast array of wildlife species, from butterflies to salamanders to black bears, nearly every parcel of land in Hinesburg provides habitat to one or more wildlife species. As noted above, overall species or habitat diversity is one important component of the Town's rural landscape. Critical wildlife habitat is another important piece of this equation. For the purposes of this Plan, "critical wildlife habitat" refers to those areas that provide habitat to species or suites of species of special importance to the Town. These areas include: 1) large tracts of forest with few, if any, roads or house sites – i.e., forest interior habitat; 2) large tracts of open fields; 3) early successional or transition shrub/forest areas; 4) wetlands and riparian areas(i.e., stream areas); 5) unique habitat related to rare, threatened, or endangered species (see section 4.8). These critical habitats are discussed below.

Hinesburg's abundant forests contribute significantly to its wildlife habitat. The hilly eastern portion of Town contains the large tracts of unbroken forests that harbor many species. The Fred Johnson Wildlife Management Area, encompassing 800 acres in Hinesburg and 200 in adjacent Starksboro and the Hinesburg Town Forest of approximately 800 acres, together with private holdings, provide a continuous forest approximately 3,000 acres in size. This significant tract is almost entirely unbroken by roads or house sites. This area of Town has been identified by the State Fish and Wildlife Department as black bear habitat, the site of several deer yards, and is rich with non-game animal & plant species. Minimizing forest fragmentation by road building and development will be important if the rich diversity of this area is to be maintained.

The lowlands of the western portion of Town serve as a different type of habitat. This area is best described as a mosaic of different land uses. Forested areas range from many small woodlots to a few large areas of contiguous forest. The forests on these soils harbor some of the richest assemblages of plant species in all of New England and represent islands of high diversity amid the agricultural land. The variety of open field, early successional or transition shrub/forest, and forest habitat provides important habitat for certain game species, such as deer, grouse and wild turkey, as well as many nongame species. Although mixed habitat types are beneficial to some species, large tracts of open fields are also critical to a number of declining species. These species (e.g., Bobolinks) are declining regionally as more and more open field and transition shrub/forest habitat reverts to forest. Because this area of Town has also experienced development pressures, providing for the integration of continued growth and open space areas for habitat will be necessary if the area is to maintain its wildlife diversity.

Surface waters, wetlands and floodplains provide some of the richest habitat opportunities in Hinesburg. Some, such as the Carse beaver pond and the wetland forest along the LaPlatte, have been identified by the Natural Heritage Program as regionally significant natural areas. Wetland and riparian areas throughout Town are important both locally and for adjoining towns as corridors for wildlife movement. These areas also merit protection for other reasons such as open space, water quality protection and recreation. A thorough look at the patterns of development, the potential impacts and the possibilities for preserving the multiple values of these areas will benefit wildlife habitat as well.

Goals and Recommendations

4.7.1) To protect important natural areas, critical wildlife habitat and overall biodiversity, with the help of landowners.

- a) Conduct and maintain inventories of natural areas and wildlife habitat, with the help of landowners.
- b) Protect areas of sufficient size and character to support continued preservation of critical wildlife habitat and hunting through mechanisms like landowner covenants, conservation easements, etc.
- c) When reviewing new development, encourage the preservation of small and large blocks of forest.

4.7.2) To provide connectivity among natural areas and critical wildlife habitat.

- a) Identify connections that would enhance existing wildlife habitat.
- b) When reviewing new development, encourage areas separate from housing sites to provide connectivity between forest blocks, riparian corridors, and wetlands.
- c) Develop a greenway network with wildlife habitat corridors separate from trails and human movement. Consider protection of these corridors via lower levels of development (also see sections 3.4.5 and 4.9 for related recommendations).

4.8 Sensitive Areas

Natural Areas

Natural areas are areas of land or water that retain their natural character and contain unusual or significant flora, fauna, geological or similar features. These areas are the best examples of the various biological communities that presently or historically existed in town. The Vermont Natural Heritage Program identifies natural areas within Hinesburg that are of statewide or regional significance. Currently these include:

1. Goldie's Colluvium. Northern hardwoods natural community and large population of two uncommon fern species.
2. High Rock. Cliff natural community and large population of uncommon smooth-stemmed cliffbrake.
3. Hinesburg Limey Cobbles and Swamp. Series of dolomite hills with good examples of northern hardwood forests and several uncommon plant species. Also a large wetland complex and site of an endangered species, bog wintergreen.
4. Lincoln Hill. Old growth red oak, cliff and outcrop natural communities and red pine woodlands.
5. Porcupine Hill. Very good example of an uncommon mature red pine woodland.
6. Upper LaPlatte Floodplain Forest. Unusual bur oak-green ash floodplain forest and population of rare nodding trillium.

Natural areas contain some of the most significant and irreplaceable natural resources of a town. These areas are particularly vulnerable to the impacts of development or misuse. Ideally these areas should be large enough to act as biological refuges where human disturbance is kept to a minimum and should represent the diversity of Hinesburg's natural features. Planning for their protection, while accommodating landowners' needs, will be one of the main issues in planning for the protection of the Town's natural resources. See section 4.9 for specific recommendations.

Hills and Ridgelines

A ridgeline is defined as a line marking or following a ridge, top of a hill or ledged area, behind which is open space or horizon. Ridgeline development creates highly visible structures that become prominent features on the landscape, detracting from the natural beauty and nature of Vermont and rural Hinesburg. If the development is visible from a large area, it intrudes upon the rural contours and disrupts the natural environment.

The eastern portion of Town, with its higher elevations, contains the most visible of the Town's ridgelines. Although topography is not as dramatic on the western side of Town the hillsides are visually important because of their contrast to the surrounding lowland. A third area of importance is the land around both Lake Iroquois and Lake Sunset. The slopes rising from the lake shores contribute to the beauty of the settings for both lakes.

The hill areas of Hinesburg are important features for the Town for a variety of reasons covered throughout this plan. Their importance as natural areas and for the scenic values of their ridgelines should be considered as well. Uncontrolled or improperly planned development threatens the environment of hills and ridgelines. Wind energy and telecommunication towers, while supported elsewhere in this plan, require special attention if they are proposed on hillsides and ridgelines.

Goals and Recommendations

4.8.1 To protect ridgelines and hillsides from improperly planned development.

- a) Delineate ridgelines and hillsides requiring protection.
- b) Develop strategies, including development review standards in zoning and subdivision regulations, to protect ridgelines and hillsides.

Scenic Areas

The scenic resources of Hinesburg are numerous and varied - including steep wooded hillsides, streams and lakes, and vast stretches of mowed fields. Together these elements form a pattern that we see everyday and have come to associate with Hinesburg's character. These areas also form the impression

others have of Hinesburg and affect the way the Town is seen as a place to visit, work or live. Generally, changes to the scenic character of the Town happen incrementally. Although each change is small in itself, the cumulative impact over time is large.

An essential first step in protecting Hinesburg's scenic qualities is to identify those areas that are integral to the scenic landscape. Views from points along streets and highways, from public recreation areas and trails, from shorelines and watercourses, and from other areas where public access is available are a priority in a plan to preserve scenic resources in Hinesburg. An inventory should consider topographic variety, diversity of the landscape features and the length of the view as criteria in assessing priority scenic areas.

4.9 Open Space Mapping

The location and approximate boundaries of a variety of natural resources have been mapped by local, regional or State sources. With most of these mapped resources available as data layers in the Vermont Geographic Information System (GIS), they can be viewed collectively for any parcel or area within the Town. This system permits cohesive open space planning and gives Town officials the ability to protect significant natural resources both in the preparation of zoning regulations and during review of proposals for development.

Open space planning and related natural resource overlay districts are distinct from the preservation of conservation lands mentioned in section 3.4.5 (rural regions). Open space planning takes a more comprehensive look at the entire town and adjoining towns to identify important land and natural resources and connectivity that allows for continued ecological function and value to the Town. High priority areas may receive special protections that seek to accommodate landowner uses while conserving the important functions these areas contribute to the community (e.g., flood control, improving water quality, open land for agricultural or timber production, critical wildlife habitat, etc.). Such lands and resources may become priorities for preservation via fee-simple purchase or the purchase of conservation easements, and as a result may end up as conservation lands like those envisioned in section 3.4.5.

Goals and Recommendations

4.9.1) To develop an open space plan for the Town.

- a) Identify and map priority natural resources and include them as overlay districts within the zoning regulations. The overlay districts will provide more specific guidelines for the protection of certain resources, including agricultural land, regardless of the zoning district within which they are found.
- b) Develop an open space plan. This plan will include information on the location of significant agricultural and natural resources, high priority scenic areas, potential greenways, environmentally sensitive lands and water resources. The purpose of this plan will not be to exclude all development from these lands but to serve as a framework for prioritizing and developing a network of interconnected open space.
- c) Develop a program for the protection of significant features identified in the open space plan. This program will include means of protecting priority areas and may include conservation easements, purchase of development rights or acquisition of priority sites. The open space plan and conservation program will identify sites that are most vulnerable and that are not adequately protected through other regulatory or voluntary means so that conservation efforts and funds may be focused where need is greatest.
- d) Consider migrating the Town's Geographic Information System (GIS) to a geodatabase.
- e) Consider developing a method to assess the relative value of lands for agricultural, forestry, and natural resource preservation purposes. This method will be built upon local knowledge, local

values, and GIS data. Both the Planning Commission and the Development Review Board may use its results in their deliberations.

4.10 Geological Resources

Geological resources consist of raw materials like gravel, sand, and stone. These materials are finite commodities that are absolutely essential for our roads, schools, houses, etc. Although extraction can pose challenges due to pollution issues and impact on the surrounding environment, it is important that critical supplies of these resources be available for use.

Goals and Recommendations

4.10.1 Ensure that known areas of quality sand, gravel, and stone are protected for current or future use.

- a. Review zoning regulations to ensure the protection of these natural resources.
- b. Review zoning regulations to ensure appropriate and well planned extraction of these resources is possible in appropriate areas.

5. COMMUNITY FACILITIES AND SERVICES

Proper management of community facilities and services is critical to the day-to-day functioning of the Town and its fiscal health. Meeting townspeople's needs at a cost that they can afford is dependent on a thorough inventory of the present facilities and services, a review of future needs and a plan for meeting those needs in a fiscally balanced manner. Community services also include non-governmental activities.

5.1 Roads (also see section 6, Transportation)

Roads are the second largest Town expenditure after schools. The Town maintained 21 miles of class 2 roads and 32 miles of class 3 roads in 2004, about the same as in 1990. Additionally the Town has approximately 5 miles of class 4 roads that are not maintained; some are privately maintained to support residential development, some are open as trails, and some are impassable. As of 2004 the Town employs 4 full time Highway crew members, owns 4 dump trucks, a 1-ton pickup, a grader, a bucket loader, a rubber tired excavator, a road-side mowing tractor, and many smaller pieces of equipment. The Town Garage, built in the early 1970's and expanded in 1985, is inadequate for the projected future needs. The Town is investigating the construction of a new garage. The Town also owns its own gravel pit on North Road, which contains an estimated amount of sand and gravel to meet the Town's needs until 2030.

Summer and winter road maintenance costs have remained relatively constant at about \$500,000/year for the past several years. Increased development, particularly on the hill roads, has increased maintenance for gravel surfaces and has necessitated additional paving for more heavily traveled roads. Generally, when roads begin to serve 40-50 dwellings, paving may become more cost effective than maintaining a gravel road. Several of the hill roads are at, or nearing, this level. The Town recognizes the concerns of some residents that gravel roads help define the rural character of these areas. Furthermore, the Town recognizes that comprehensive cost/benefit analyses have not been done to fully understand the financial and environmental (e.g., stormwater runoff) ramifications of paving the hill roads. Community dialogue on these issues remains important.

In addition to the wear generated by increased residential development, truck traffic contributes to the increased costs of maintaining the Town's roads. Because of local industries and because Hinesburg's roads are a primary north-south route, the Town experiences a high volume of truck traffic. The Town has recently stepped up its efforts to enforce weight limits, and adopted a policy designed to channel heavy truck traffic on Route 116, particularly during the spring, when roads are susceptible to even greater damage.

Ditching, shoulder maintenance, and reconstruction of road bases have been identified as areas that would contribute significantly to better long term maintenance of the Town's roads. Attention to these and similar maintenance issues should prove cost-effective in the long term. In support of this philosophy, the Selectboard and the Road Foreman have established a road improvements schedule that is part of the capital program. Furthermore, the Town continues to review its long standing, but incomplete road standards in an effort to ensure new public and private roads are designed and constructed for the long term.

5.2 Water and Wastewater

As of 2004, the municipal water system served 421 hookups and was supplied by 2 wells that have adequate capacity for current demands. A bond passed in 1995 was used to upgrade the system, including construction of a storage facility and extension of the water service as far as the Mountain View Mobile Home Park on North Road. The extension of the water line represented a significant public investment in the Mechanicsville/North Road areas, where over 200 of Hinesburg's residences are located.

As of 2004, the municipal wastewater system served 348 hookups. Saputo Cheese is the largest wastewater user with an allocation of 120,000 gallons per day or 48% of the Town's permitted capacity of

250,000 gallons per day. Currently, Saputo would like an increased allocation to 140-150,000 gallons per day. Current wastewater system reserve capacity is approximately 80,000 gallons per day. Of this total, 44,000 gallons per day have been allocated to future projects, leaving an unallocated reserve of approximately 36,000 gallons per day.

In 1989, the Town initiated the 1st wastewater allocation ordinance that apportioned the remaining capacity by the following uses: Residential – 45%; Enterprise (commercial/industrial) – 32%; Institutional – 23%. In 2004, the Selectboard adopted a revised Wastewater Allocation Ordinance that better defines the Wastewater Service Area (see Map 10, Sewer & Water). This area creates the geographic limits of the wastewater system, and helps to establish necessary capacity in conjunction with build-out analyses and growth considerations. Because of the limits on discharge into the LaPlatte River, wastewater capacity is a finite and valuable resource for the Town. Maintaining the remaining capacity for use in the village and commercial/industrial core is important for the continued vitality and growth of these areas. Periodic review of the allocation policy will be important to ensure that the Town's growth objectives are being met.

Historically, activity at the cheese plant has been the primary component of Village wastewater usage. Wastewater flows were lowest from 1997 to 1999 when the cheese plant was not in full operation. A breakdown of cheese plant vs. other town usage is not readily available prior to year 2000. Since 2000, cheese plant usage has been relatively steady but rising. In April 2000, the Selectboard authorized an increase in cheese plant daily flow from 100,000 to 120,000 gallons per day. Actual cheese plant usage in 2003 is 125,000 gpd.

Town usage has been more variable with higher flows in years 2000 (88,000 gpd) and 2001 (68,000 gpd) and lower flows in years 2002 and 2003 (44,000 gpd). Some of this difference may be explained by wet vs. dry years and infiltration into sewer mains.

The history of wastewater flows suggests that Hinesburg is not in imminent danger of reaching the plant capacity of 250,000 gallons per day (or 0.250 mgd). Actual usage exceeded 80% of plant capacity only in 1995 and 1996, presumably due to high flows from the cheese plant. With greater control of cheese plant flows since 2000, total usage has been around 70% of plant capacity.

If the Town does not change the cheese plant's current allocation, 130,000 gallons per day are available for other Village usage. Of that total, current usage is measured at only 44,000 gpd; although usage was inexplicably higher in 2000 and 2001. The lack of increase in Village usage (outside the cheese plant) can largely be explained by two factors: (1) the Selectboard permitted few residential allocations prior to recent ordinance revisions and the recapture of unused allocation and (2) demand for commercial use is relatively modest.

Other than the cheese plant, it is unlikely that demand for non-residential sewer usage will increase significantly in the near future. The total reserve capacity and available balance in the enterprise and institutional categories are more than sufficient for many years to come.

In contrast, residential sewer usage is likely to increase. However, it will take several years for the housing market to absorb the available capacity. At an average rate of 210 gpd per 3-bedroom home, the total current reserve capacity of 36,000 gpd would serve 171 new dwelling units. Given that residential allocations are only allotted 45% of the reserve in any given year, actual residential capacity is somewhat lower than 171 new dwelling units (e.g., approx. 60 units for the current year).

Decisions relating to both the water and wastewater systems are made by the Selectboard. Currently, the Selectboard and the Public Works Director are exploring a possible upgrade to the wastewater treatment plant in order to keep the greater village area a viable growth center. However, the systems are supported

by user fees. This fact makes extensive and expensive work on the systems difficult, since it must be supported by a relatively small user base. These systems benefit the community at large in a number of ways. First and foremost, they make the services and amenities in the Village possible. Without a municipal sewer system, we would not have a grocery store, restaurants, car wash, and potentially our community school. Secondly, this system makes local employment opportunities possible at businesses like the Saputo Cheese Factory, NRG Systems, Iroquois Manufacturing, Lantman's IGA, etc. Finally, this system contributes to the rural character throughout the rest of Hinesburg by making a concentrated village growth center possible. Without these municipal services, development pressure would be even greater in the rural areas where open space, agricultural and forestry uses, and natural resource conservation are paramount. Clearly, all residents have a stake in the continuation of these services.

5.3 Public Safety: Police, Fire, Rescue

The Town currently relies on three full time officers and several part time police officers who between them account for an additional 40 hours per week. The Hinesburg Police Department operates three police vehicles and, in 2001, started using a renovated residence on Route 116 as its office. The Hinesburg Volunteer Fire Department provides fire protection for the Town. The fire station was built in 1972 and expanded in 2000. As of 2002, the Department operates two Class A attack pumpers, one tanker, one heavy rescue, one mini attack pumper (for bad driveways), and one medical response unit.

Rescue service for Hinesburg is provided by Hinesburg's First Responders, a corp of volunteers and Fire Department members. Ambulance service is provided by Richmond, Charlotte and St. Michael's Rescue and other area rescue squads. Hinesburg coordinates its overall public safety at the regional level via pre-disaster mitigation planning that deals with natural or man-made disasters and the necessary emergency response.

5.4 Culture and Recreation

Culture

The Town of Hinesburg has an active cultural scene. Listings of cultural events appear in every issue of the Hinesburg Record, the Town's newspaper that is issued ten times per year. The Hinesburg Artist Series provides concerts of choral, orchestral, or band music. The Summer Concert Series, held at the Wainer Community Park, is a pleasant way to picnic and hear local musical groups. Good Times Café also provides a venue for live music. The Town is also becoming known for the number of resident artists that include landscape and portrait painters as well as photographers. Many Hinesburg artists open their studios in May during Vermont's annual Open Studio Weekend.

The Carpenter Carse Library hosts many programs in the community room including art exhibits, hand-made quilt, rug, and other craft displays, as well as programs for adults, families, and children. The Library also sponsors a book discussion group.

Both CVU and the Hinesburg Community School produce well-done plays and musicals. The Performing Arts of Hinesburg group has also produced very enjoyable theater.

Hinesburg Village's historic "Main Street" encompasses the section of Route 116 running generally from Mechanicsville Road to Silver Street. This area represents an important cultural resource for the Town, and presents an opportunity for the Town to help landowners preserve or refurbish historic structures.

Library

The Carpenter-Carse Library is administered by an elected Board and receives a significant portion of its funding from the Town. In 2002, the Library's collection numbered 15,772 books, 685 videos, and 570 audio materials. This collection drew 15,637 patron visits with a circulation of 27,988 volumes per year.

The Library Committee and Board converted the former hardware store in Ballard's Corners area into a new library. This facility provides the Library with much needed space, as well as accessibility to people with disabilities and sufficient parking. Locating the library at the Ballard's Corners area increases the area's prominence in the Town and suggests that pedestrian facilities and other public improvements be considered for the area in the future.

Recreation

With the Town's population in 2004 above 4,000 people, the need for more recreational facilities and programs is becoming increasingly apparent. Currently the Town has two active recreation parks. Lyman Park behind Lantman's Store provides a combination soccer field and baseball diamond. The Wainer Community Park and Playground behind the Hinesburg Community School provides a playground, a combination soccer field and baseball diamond, a pavilion where summer concerts are held, two tennis courts, a basketball court, an outdoor ice rink that doubles as a skate board park in the summer, and a walking trail. Both parks are within the village. The need for park facilities in other parts of the Town should be evaluated.

A part time recreation director was hired in 1995, establishing the Hinesburg Recreation Department. The Department now offers a wide range of recreational programs for children and adults, making full use of Town facilities. Outdoor field space is especially in demand. The availability of field space at both the Elementary School and Champlain Valley Union High School is limited. The Recreation Commission is seeking to locate available space for at least two more playing fields within the next five years.

The Town owns two significant areas of land suitable for passive recreation. The 800-acre Town Forest on the eastern side of the Town, while largely undeveloped, has the beginnings of a trail system. As the Town's population increases, the Town Forest has the potential of serving as an important conservation and recreational resource. The Geprags Park, just west of Ballards Corners, provides trails for walking, areas for picnicking and conservation education opportunities in close proximity to the Village and schools. The Conservation Commission has the responsibility for developing the facilities and managing the park. A long-term master plan is needed for the park to evaluate its features and how it can best meet the Town's conservation and recreational needs.

The State-owned Wildlife Management Areas with over 1,500 acres of land and several miles of river serve not only Hinesburg residents but are also a resource for the greater region for hunting, fishing, and other recreational uses.

The Town jointly manages the Lake Iroquois public beach with several other communities – Williston, St. George and Richmond.

A multi-use path is proposed to link the Village to Ballards Corners by way of Mechanicsville Road and CVU HS. This project was selected for funding by the State in 1993. The final design and right of way negotiations should be completed in 2004 with construction anticipated to begin in 2005.

Through surveys and at public forums, Hinesburg residents have often expressed the desire to have a town common that can serve as a visual and social center for the community. While Lyman Park has been suggested as one possible candidate for a Town Common, it is currently in use as a playing field, both for the elementary school and for the Town's recreation programs. When evaluating the recreational

facilities of the Town, a suitable location for a Town Common should also be considered (see section 3.2 and 3.2.8).

Goals and Recommendations

5.4.1) To optimize management and use of existing Town recreational facilities and programs.

- a) Continue to work with St. George, Williston and Richmond to manage the Lake Iroquois public beach, and continue to support productive efforts to manage non-native species.
- b) Maintain ownership and control of the Town Forest and the Geprags Park areas. Balance recreational use of the Town Forest with the protection of its natural resources. Explore improved mapping of the recreational access to these areas.
- c) Investigate posting or other measures to reduce the adverse impacts of ATVs, mountain bikes and similar recreational uses in the Town Forest during periods of thaw and heavy rain.
- d) Explore creation of an Official Map and/or Capital Program that includes present and desired future recreation areas and facilities.
- e) Evaluate Town recreational needs in cooperation with the school to allow for joint use whenever possible.
- f) Offer a range of recreational opportunities through programs, the arts, and sports to serve all ages in the community.
- g) Make Recreational activities easily accessible to pedestrians by linking the resources of the Town Hall, playing fields, schools, parks, and the Library.
- h) Maintain existing facilities including the skate park – ice rink, tennis courts, basketball courts, and playing fields.
- i) Recognize that class 3&4 dirt roads are used extensively for recreational activities such as walking, biking, and horseback riding. Ensure that these uses are considered when road improvements are made. Maintain public access to all town road corridors, active or inactive.
- j) Work with the VT Department of Fish and Wildlife to facilitate use of state-owned land for recreation and hunting.
- k) Develop a trail system connecting all public lands.

5.4.2) To seek additional recreational facilities to serve Town residents.

- a) Pursue opportunities for valuable lake and stream access as they arise.
- b) Conduct a study of current and future recreational needs and identify locations for parks and other facilities, paying particular attention to high density residential areas. Coordinate with willing landowners to explore recreational uses on privately conserved lands (e.g., land trust holdings).
- c) Identify and plan for recreational paths that link residential areas to the Village (see also 6.7).
- d) Keep recreational offerings and facilities at pace with growth in population.
- e) Support recreational and cultural programming that provides entertainment in the performing arts.

5.5 General Government

General government services include those provided by the Town Clerk's office, Town Administrator, Planning and Zoning and Listers. Town employees in these departments include the Town Clerk, Assistant Town Clerk, the Town Administrator, Zoning Administrator, part time Planner, and a full-time employee who serves as assistant for Planning, Zoning and the Listers. The Selectboard, Planning Commission, and Development Review Board are all volunteers, while the Listers are paid an hourly rate. In 1990 the Town contracted with a professional appraiser for a town wide reappraisal which was completed in 1992 and is updated yearly. Due to skyrocketing real estate values across the region in the last 4-5 years, Hinesburg's overall grand list (total value of all property) is nearing 70% of actual fair market value. In light of the wide discrepancy, and negative implications related to the statewide property

tax, the Listers have again contracted with a professional appraisal service to complete another town wide reappraisal by 2006.

As the Town continues to grow, additional public infrastructure and services will be needed to ensure the public's health and welfare, and to ensure a vibrant, active, and connected community. Capital budgeting and planning is one way to delineate future infrastructure and service needs while including cost estimates for these projects. Long term operating and maintenance costs are generally the responsibility of the Town as a whole, but the initial cost of construction should be partially borne by those creating the additional demand that necessitates the improvements. Towns can pay for these large capital expenditures in a variety of ways, one of which is through the creation of impact fees. These fees are typically levied on new development, and fees are structured to be proportional to the development's expected impact on the capital improvement in question (e.g., new roads, intersection improvements, sidewalks, recreation facilities, community centers, etc.).

The Town Hall was built in 1901 and contains 6,000 square feet of space. In the main floor is a large general meeting hall. The historic Town Hall was renovated in 1993 to correct structural problems, improve accessibility and modernize facilities. The renovation appears adequate to meet the Town's general government needs for the foreseeable future. Additional facilities for the Police Department were provided in 2001 with the purchase and renovation of property adjoining the Fire Department. The Town purchased the Miner property adjoining the Town Hall property in 1996. Renovations of the Miner house were not feasible, and it was removed to allow for improvements to the Route 116/Charlotte Road intersection. It is anticipated that future Town Hall expansion would be accommodated by the property.

Goals and Recommendations

5.5.1) Develop a capital budget and plan, and consider implementing impact fees or other comparable mechanisms to recoup a reasonable proportion of the cost of capital improvements from new development.

5.5.2) Schedule an annual meeting with the Selectboard, Planning Commission, Development Review Board, Conservation Commission, Recreation Commission, and any other Town boards, to discuss general concerns, share information, and assess staffing needs.

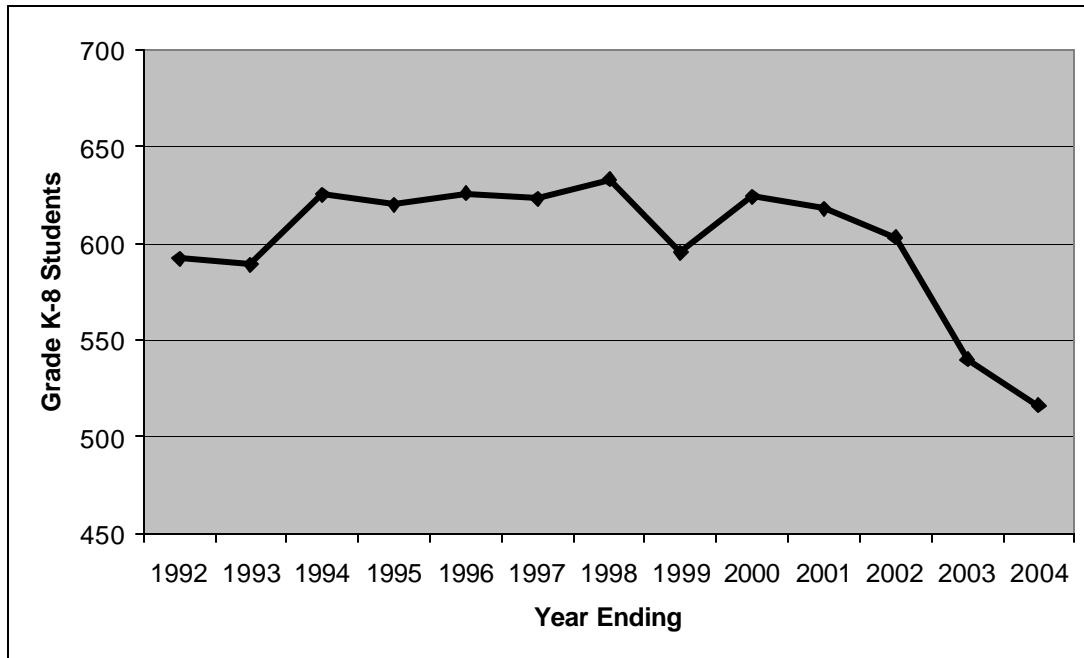
5.5.3) Create a volunteer or self-funded (via grant overhead/administration budgets) grant coordinator position to lower the tax burden for existing projects as well as new projects that benefit the community.

5.6 Schools

Hinesburg residents are served by the Hinesburg Community School (K-8) and Champlain Valley Union High School. The community school was expanded in 1985 in response to the rapid housing and population growth of the early 1980s. As Shown in Figure 10, enrollment at the facility continued to grow, though more slowly, until reaching a high of 633 students in 1997-98. At that time, town boards were very concerned about continued residential growth. The Planning Commission maintained a strict residential phasing policy, and the Selectboard was reluctant to grant additional sewer allocations for residential development. A task force in 2000-2001 included a modeling effort by a CVU teacher to determine the impact of housing starts and other factors on the growth of school enrollments. The model's surprising conclusion was that an aging population (see Chapter 2) would lead to fewer school-age children unless there was a dramatic increase in housing construction. The model, in fact, predicted the sharp decline in K-8 students that occurred between 2002 and 2004. The 2003-2004 school population of 516 students is the lowest in over a decade.

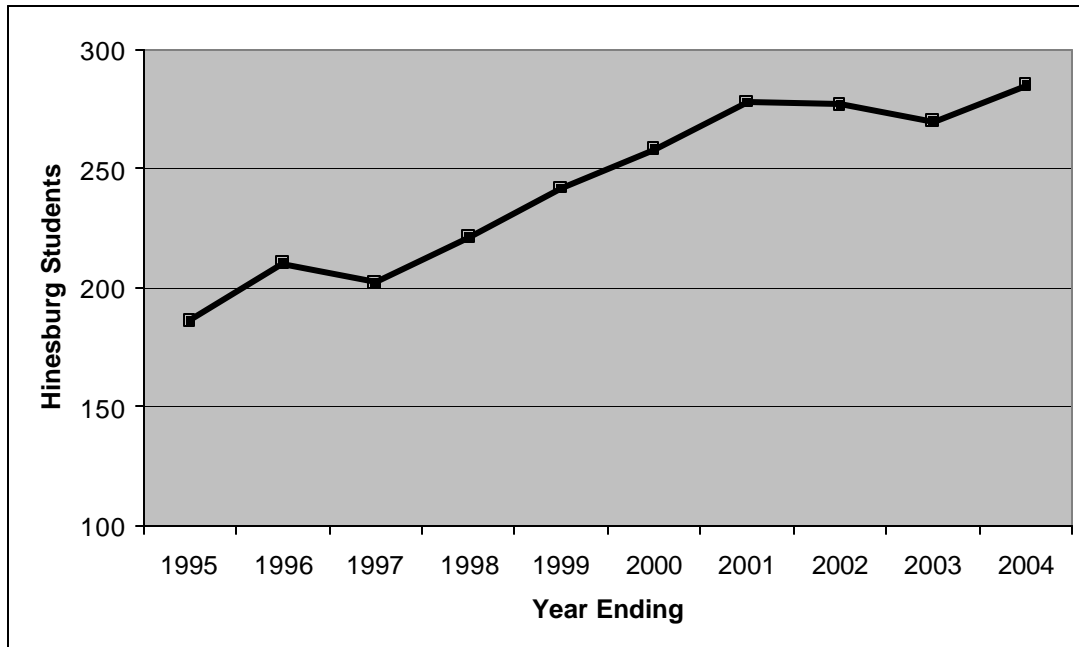
The high school completed an expansion in 1994 which provided both classroom space and support facilities for anticipated enrollments over the short term future. In addition, the Carpenter-Carse Library provides space for the Life Program, an alternative educational program for high-school aged students. High school enrollments increased to a high of 285 Hinesburg students in the 2003-2004 school year (Figure 11), but the same demographic factors that led to declining K-8 enrollments will also affect the high school in the near future.

Figure 10
Hinesburg Community School Enrollment



Source: Hinesburg Community School

Figure 11
CVU High School Enrollment



Source: Chittenden South Supervisory District

Goals and Recommendations

5.6.1 To encourage cooperation between town and school officials in the planning and use of school facilities and programs.

- a) Encourage the continued use of school facilities as focal points for a wide range of community activities.
- b) Work with the schools to monitor growth and its impact on school facilities and services. Include capital expenditures for schools in a capital budget and plan.

5.7 Child Care

In addition to school-aged education, child care and early childhood education are important components of the overall Hinesburg community and its future. Ensuring accessible, affordable, quality child care is integral to the community's success and its economic development. Child care is an issue of statewide and national importance as evidenced by the Vermont Legislature's decision in 2003 to add it as the 13th goal to be addressed by local, regional, and statewide planning efforts.

The Vermont workforce includes approximately 37,500 working parents who rely on the availability of affordable and reliable child care. Currently there are approximately 40,000 children (birth through age 12) receiving child care in Vermont. Furthermore, child care is the seventh largest occupation in Vermont, employing 5,000 state-regulated child care providers. As of the 2000 Census, Hinesburg had 390 children under the age of 6, approximately 67% (261) of which had all parents in the labor force. Similarly, Hinesburg had 560 children between the ages of 6-12, approximately 67-75% (375-420) of which had all parents in the labor force.

As of February of 2004, data from the Child Care Resource of Chittenden County indicated that Hinesburg has 10 family or home-based child care programs with a total of 83 slots. Of these 83 slots, 21 are for infants with 6 vacancies, 38 are for preschoolers with 14 vacancies, and 24 are for school-aged children with 4 vacancies. A total of 36 families are using home-based child care in Hinesburg, 56% (20) of which are Hinesburg families. Currently 32 of the 51 children enrolled in home-based care are from Hinesburg.

Annette's Playschool is Hinesburg's largest child care center. It is a large, licensed center with a capacity of 106 children, which offers full-day care for children ages birth to 5 as well as after-school care. As of February 2004, it has: 6 infant slots with 1 vacancy; 10 toddler slots with 1 vacancy; 62 preschool slots with 2 vacancies; 21 full-day kindergarten slots with no vacancies; 35 after-school slots with 2 vacancies. Annette's serves a total of 85 families, 82% (70) of which are from Hinesburg. Currently 75 of the 102 children enrolled are from Hinesburg. The Hinesburg Nursery School is the only other child care center. It operates from 9-12 and has part-week and full-week options. It has a capacity of 15 preschoolers, and currently has 1 vacancy. The Nursery School serves 27 families, 93% (25) of which are from Hinesburg. Currently 27 of the 29 children enrolled are from Hinesburg.

After-school care for Hinesburg children is also provided by the Hinesburg Community School. The school's after school program has 50 slots that currently serves 14 children from 11 families. Based on the above numbers for home-based, center-based, and school-based care, there are approximately 68 children enrolled in some sort of after-school care. Child care during the summer months is supplemented by a YMCA (Y's Guys) program run out of the Community School, and a number of summer camps offering part-day opportunities. Throughout the year, the Town's Recreation Department also provides a wide variety of programs for younger children. Although not child care in the traditional sense, these activities represent part of the Town's investment in the enrichment, care, and education of children.

Overall, Hinesburg has an adequate supply of child care facilities and openings to meet the present demand. As indicated in the section 2.1 (Population), Hinesburg's overall population should continue to grow, but the relative proportion of children is on the decline. Furthermore, recent trends indicate that enrollment in home-based facilities is declining, while enrollment in center-based facilities is on the rise. Although home-based care will continue to fill an important niche for certain families, attention should be paid to future needs for additional center-based care.

Goals and Recommendations

5.7.1) To help address difficulties in child care financing.

- a) Participate in local and regional forums to explore ways the Town can assist child care providers.
- b) Encourage the continued use of "Average Daily Membership" State education funds to help pay for preschool child care in qualified home-based and center-based facilities.

5.7.2) To ensure that adequate opportunities exist for the creation and maintenance of child care infrastructure.

- a) Review the Town's Zoning and Subdivision Regulations for barriers to both center-based and home-based care facilities. Consider making child care centers a permitted use in the Village District, and review other districts as necessary.
- b) Encourage the continued use of municipal and school facilities for private and public child care opportunities.

- c) Work with developers of major subdivisions and residential developments on child care issues and possibilities (e.g., allowing home-based child care businesses). In the greater village area, encourage major developments to include community facilities that could be used for child care.
- d) Work with the schools, the Town Library, the Town Recreation Department to ensure quality after-school programs are available.

5.7.3) To ensure the provision of quality child care via appropriate business assistance and work force development.

- a) Consider participating in the annual kindergarten readiness survey conducted by the Vermont Department of Education.
- b) Assist child care providers by developing local referral system or supporting existing regional referral systems and agencies.
- c) Include child care referral information, agency links, and training opportunities on the Town's web site.
- d) Promote accreditation and child development credentials, particularly for home-based care providers, by providing facilities and logistical support for training opportunities.

5.8 Services for the Elderly and Disabled

Hinesburg's population of adults over the age of 55 is growing. (See Figure 4) It is important that the community support older adults in their wish to remain healthy and independent by ensuring that older and disabled residents have access to programs and services in Hinesburg that promotes their quality of life.

The Town currently has Kelly's Field, an elderly housing community with 24 dwelling units in the center of the Village. Food services include Meals on Wheels, a hot lunch program delivered by volunteers, and a weekly senior lunch held at the United Church, both sponsored by the Champlain Valley Agency on Aging. The Hinesburg Community Resource Center offers a weekly Food Shelf to those who have a need as well as transportation to medical appointments. The Visiting Nurses Association, and Home Health Care Aids provide services and contact to those who are home bound.

As more residents get older demands for convenient access to health care, more housing for the elderly, and a senior center to enhance that population's health and social well being will grow. Hinesburg needs to plan for this.

Goals and Recommendations

5.8.1) Explore infrastructure needs and additional services to address the elderly and disabled population.

- a) Create a task force to study the needs for and then implement ways to deliver services to the Town's growing elderly and disabled population. Needs to be considered may include a senior center, additional health care centers or some combination, as well as additional housing for the elderly. Planning for safe and easy mobility for seniors is also important.
- b) Work with the Hinesburg Community Resource Center to enable additional programs and services to the disadvantaged and elderly.

5.8.2) Promote healthy living and active participation in the community.

- a) Promote healthy living efforts and education among the elderly to delay the onset of chronic conditions and /or disease related complications such as hypertension and diabetes by providing regular exercise and weight management programs as well as convenient access to health care.
- b) To encourage active participation by seniors in the community.

5.9 Solid Waste

In 1992, the Town completed the closure of its long-time landfill, located northwest of the Town Garage off of North Road. As part of the post closure plan the Town monitors and analyzes several test wells, two stream locations and several nearby residential wells twice yearly for twenty years.

Hinesburg is a member of the Chittenden Solid Waste District (CSWD). CSWD is the regional authority responsible for the oversight and regulation of solid waste generated by its members pursuant to the District's Charter which was enacted by the Vermont legislature on March 3, 1987. Its authority and responsibilities are described in the District's current Solid Waste Management Plan. CSWD's solid waste management system is based on the following hierarchical priorities: 1) reduction of the toxicity of the waste stream, 2) reduction of the volume of the waste stream, 3) reuse, 4) recycling and composting, and 5) disposal. Membership in CSWD satisfies the municipal solid waste planning requirements of 24 V.S.A., 2202a.

The Chittenden Solid Waste District operates a full-service transfer station near the Town Garage (Map 11, Town Facilities & Conserved Lands). Household solid waste, recyclables and some hazardous wastes are collected weekly at this facility and transferred to district facilities for disposal and/or further processing. As an alternative, many residents contract with private haulers for solid waste disposal.

5.9.1) Retain the CSWD drop off center in Hinesburg.

5.10 Utilities

Electrical service for Hinesburg is provided both by Green Mountain Power, west of Rt. 116, and Vermont Electric Co-op for the remainder of the town. The town is traversed by a major Vermont Electric (VELCO) transmission line, running west of Rt. 116 from north to south. Waitsfield Champlain Valley Telecom provides telephone service to the entire town and offers DSL (broadband or high speed internet) service to most residents. Cable television service also is available to parts of the town.

5.10.1) Promote the installation of DSL, or other high speed internet connections, to all sections of town in order to encourage efficient home businesses in all areas of Hinesburg.

6. TRANSPORTATION

Throughout much of Hinesburg's history, the transportation network has served to integrate the town into a self-sustaining entity; connecting historic town centers of Mechanicsville, Rhode Island Corners and the lower village, the agricultural areas to the west and south of the village, and the hill regions on the town's eastern flanks. In the more than 240 years since Hinesburg was chartered, the town's transportation network has evolved from sparsely marked trails into more than 100 miles of automotive thoroughfares and numerous sections of sidewalks, trails and informal footpaths. Transportation infrastructure within the town of Hinesburg varies from high-use public roadways such as Vermont Route 116 to privately maintained cul-de-sacs. The transportation network may be roughly classified into seven categories:

Arterial Highways: Route 116 is the only arterial highway in the town of Hinesburg and serves not only as a conduit for traffic commuting between central Vermont and the Burlington area, but also as our Village main street and central connector for many lesser town roads.

Local Arteries: Many of Hinesburg's secondary roads serve not only to connect the town's outlying areas to the village, but also serve as connectors to the neighboring towns of Shelburne, Charlotte, Monkton, Huntington and Williston. Many, but not all, of these local arteries are presently classified as class II roads and many link with Route 116 at or near the village center.

Village Roads: Village roads include non-arterial corridors within, or proximate to, the village center, which serves residential, commercial, industrial and institutional uses.

Rural Town Roads: The majority of roads in the town's inventory are rural town roads that serve the agricultural and outlying residential areas of the town. For the most part, these thoroughfares are currently classified as class III and class IV roads.

Private Roads: Many of the town's newest roads are privately owned and maintained thoroughfares permitted by the town and required to be built to town standards. Within the last decade, all transportation development within the town has been accomplished with private roads.

Sidewalks and Bike Lanes: Within and proximate to the village area, sidewalks and bike lanes provide alternate transportation options between the village and commercial centers, creating a friendly, walkable community.

Rural Footpaths: Outside the village areas, both formal and informal networks of trails exist within both state and locally conserved parcels and between village and rural residential centers. One important component of these networks is the VAST (VT Assoc. of Snow Travelers) trail system for snowmobilers.

In the past decade Hinesburg and many adjoining towns in both Chittenden and Addison County have experienced significant growth. Additionally, they have shifted from being predominately self-sustaining communities to being, at least in part, satellite communities of greater-Burlington. As a result, the town's transportation infrastructure, which once served primarily as a connection to Hinesburg's village center now serves as a major commuter conduit to Burlington, Essex and Williston. Commuters include not only Hinesburg's residents, but an increasing number of residents in adjoining southern Chittenden County and Northern Addison County towns.

As development continues, multiple stresses on Hinesburg's transportation infrastructure are becoming evident. Peak traffic and increasing average speeds have increased on Route 116, creating safety hazards within and proximate to the Village center. As an increasing number of Hinesburg residents and residents of adjoining towns commute through Hinesburg, pressure mounts on our local arteries. Traffic

congestion at the Silver Street, Charlotte Road, Mechanicsville Road and Shelburne Falls Road intersections with Route 116 has become a serious problem as documented in the most recent Route 116 scoping study. Additional pressure on Route 116 has been generated by the lack of local transportation infrastructure within the Village district. This lack of infrastructure not only adds to arterial congestion, but limits residential and commercial possibilities within the village.

Development pressures, which contribute to arterial congestion, are also taxing Hinesburg's rural roads. With increased residential development on our class III and class IV roads, road maintenance becomes more costly. Despite increasing usage on many of our rural roads, which increases maintenance costs, discussions in recent public meetings indicate little consensus on whether to preserve the character of our rural road network or to begin paving of the most troublesome sections of highway.

To some extent, development pressure on town roads and on the town road budget has been offset by the proliferation of private roads throughout the Town. Private roads place the burden of transportation development on the developer. However, they also serve as a barrier to strategic transportation planning at the town level and further compartmentalize Hinesburg's transportation infrastructure due to their planned lack of connectivity.

While the majority of transportation concerns challenging Hinesburg are due to motor vehicle traffic, alternative transportation networks such as sidewalks, bike paths, footpaths and trails also must be addressed to create a more walkable, friendly community.

Attention to Hinesburg's transportation infrastructure is critical in improving the viability of a self-sustaining town and village center, as well as in encouraging a greater density of development within the village district. This town plan seeks to outline transportation and policy directions that allow for town growth, improve the safety and serviceability of our transportation network, and strike a balance between automotive and alternative transportation to build a system for the people of Hinesburg, not just their automobiles.

Goals and Recommendations

6.1) To update and develop transportation policies and plans which align with Hinesburg's village and rural development directions.

- a) Develop a comprehensive road plan for the Town that recognizes the existing multi-use functions of roads, build out analysis for Hinesburg and the surrounding towns and projected changes in Hinesburg's zoning districts to guide and complement future development.
- b) Coordinate changes to the transportation infrastructure within the village to properly stage improvements at the Silver Street, Charlotte Road, Mechanicsville Road, Commerce Street and Ballard's Corners Intersections.
- c) Update the road standards to improve differentiation between the different types of roads in the town (arterial, local arterial, rural residential, private) and to allow for different widths, turning radius, etc. in an effort to not over-design rural roads.
- d) Explore revising right-of-way/road width requirements to allow for updated utilities and flexibility in road improvement.
- e) Update lighting on Route 116 and significant village roads to conform to scoping study recommendations and provide aesthetic value. Lighting should not contribute to light pollution.
- f) Enforce policies that discourage lighting on rural roads for both new and existing development.
- g) Find ways to promote car-pooling such as metering of traffic into the town of Hinesburg, giveaways, etc.
- h) Minimize speeding through speed enforcement, and seek lower speed limits in densely settled areas.

- i) Recognize the adopted “Policy for the consideration of new Town roads.”
- 6.2) To drive the improvement of Hinesburg’s arterial highways, insuring the safety and efficiency of both vehicular and pedestrian traffic throughout the town and particularly, inside the village.**
- a) Work with the State to Implement the Route 116 Scoping Study Recommendations for Route 116 from Buck Hill through to Silver Street, as well as curbing, roadcut limitations, sidewalks, parking, utility and street tree recommendations throughout Hinesburg Village. These recommendations address traffic calming through street and intersection narrowing, environmental factors and intersection modification.
 - b) Work with the State to Update Route 116 Scoping Study for Shelburne Falls Road to include turning lanes and lights for Route 116 N and S bound.
 - c) Work with the Vermont Agency of Transportation to analyze the effect of closing the present Charlotte Road entry to Route 116 and diverting all flow to a signalized intersection at the alignment of Charlotte Road with Commerce Street
 - d) Work with the State to implement scoping study recommendations for Mechanicsville Road.
 - e) Investigate the addition of park and ride facilities on Route 116 in South Hinesburg to stem increased commuter congestion from southern towns.
 - f) Prioritize enforcement of zoning permits, which include the installation and upkeep of vegetation barriers along village and rural roadways to aid in traffic calming.
 - g) Support the installation of street trees for traffic calming by investigating the possibility of town support for interim watering systems for new vegetation.
- 6.3) To guide the maintenance and improvement of Hinesburg’s rural arteries to mitigate increasing traffic congestion and reduce pressure on arterial highways.**
- a) Investigate efficacy of locating park and ride facilities in neighboring town centers, at or near the town edge and near the village center. Implement park and rides as appropriate, working with the state where necessary.
 - b) Encourage master planning of undeveloped lands along local arteries to limit road cuts, maximize roadcut visibility / safety and implement appropriate signage.
- 6.4) To guide improvements to the village transportation infrastructure which encourage a more pedestrian and business-friendly community while improving the efficiency of vehicular traffic flow.**
- a) Petition the state department of transportation to reduce the speed limit on Route 116 within the village to 30 M.P.H.
 - b) Implement the West Side Road as the new Charlotte Road South of Commerce if Cheese Factory site constraints can be overcome and funding can be obtained.
 - c) Plan for implementation of the new West Side Road North of Commerce Street
 - d) Investigate connectivity between VT Route 116 south of the village and Mechanicsville Road to provide the village East Side connectivity.
 - e) Correct deficiencies in business curb cuts in proximity to the Commerce Street intersection, which affect traffic flow at this intersection.
 - f) Implement suggestions from the Route 116 scoping study for the village to create a walkable community
 - g) Investigate providing additional crosswalks, cross walk markers / signage at the town hall, and other points.
 - h) Implement current plans for bike paths between Commerce Street and Ballard’s Corners.

- i) Develop a sidewalk or recreation path system along Richmond Road from CVU to Texas Hill Road to connect existing high density residential areas to village infrastructure.

6.5) To develop policies that solicit community input on maintenance and improvement of Hinesburg's rural roads, balance rural transportation improvements with Hinesburg's rural planning goals and augment Hinesburg's arterial highways and rural arteries.

- a) Begin holding public meetings to review significant proposed changes or improvements to class III roads prior to their inclusion in the town budget.
- b) Consider reopening significant class III road projects already budgeted to the new public meeting process.
- c) Investigate more cost effective methods of maintaining dirt and gravel roads and reducing run-off
- d) Link planning for future road improvements with build-out analyses.
- e) Implement a new classification system for the town's rural roads which allows for classification as a function of use, traffic density, terrain, rural character and the areas significant features and update the town's road standards accordingly.
- f) Consider upgrading class IV roads to class III roads to benefit town connectivity and create alternate transportation paths between arterial highways and rural arteries

6.6) To improve the quality of Hinesburg's private roads and encourage transportation connectivity throughout the town.

- a) Develop policies and incentives, which encourage developers to plan for and create interconnected transportation networks as part of future development. Incentives such as town assumption or maintenance of privately developed roads should be considered.
- b) Adopt a uniform set of standards for private roads with town enforcement

6.7) To encourage the development and use of alternative transportation networks throughout the rural areas of Hinesburg.

- a) Coordinate the formation of a system of footpaths and trails throughout the town in conjunction with the rural development portions of this plan.
- b) Include provisions in the Subdivision and Zoning Regulations to protect or conserve right of ways for current or future trail connections identified as important by the Town. Develop a map of current and desired future trail networks with substantial public input to aid this process.

7. ENERGY

As the population of Hinesburg grows, so will the Town's energy needs. Non-renewable fossil fuels are currently the primary source of energy for transportation, electricity, heating, and cooling. The reliance on imported fuels negatively affects the local economy. Foreign fuel sources are insecure, unstable, and supplies are shrinking. Rising fuel costs, the finite quantity of these fuels, and the adverse impacts on human health and the environment are concerns.

Currently, Hinesburg's local electric distribution is provided by Green Mountain Power and the Vermont Electric Cooperative. The Town's Subdivision Regulations require that new lines to end users be underground. Although substantially more expensive to install, underground utility lines make sense given the community's interest in maintaining the Town's rural character and aesthetics. The Vermont Electric Power Company (VELCO) also maintains a high voltage (115kV) transmission line running north/south on the western side of the town. This line is part of VELCO's statewide network of transmission lines that serve to bring electrical power into the state and to distribute it. Although VELCO has no immediate plans to upgrade this line, it will require re-examination in approximately 7-8 years (2012) if the demand for electricity continues to grow at the current rates. The Town has a stake in future improvements to the VELCO line, especially given that much of the transmission line is located in the rural agricultural portion of Hinesburg.

Goals and Recommendations

7.1) To reduce energy use by Town residents.

- a) Transportation: Encourage compact development within the village area with appropriate sidewalks and paths, with bicycle parking racks where appropriate, that allow non-motorized travel to jobs, services, and recreation. A dynamic village center increases the potential for mass transit options to and from larger nearby commercial and employment centers. Park and ride areas should be built to promote car and van pooling.
- b) Residential, commercial, and municipal space heating and cooling: Promote building practices that use energy efficient materials and heating systems, solar orientation, and alternative or renewable energy systems.
- c) Residential, institutional, and commercial energy use: Promote the use of energy efficient lighting, appliances, and practices. Replacing incandescent lights with compact fluorescent bulbs is one of the most effective and easy actions possible to save energy.
- d) Facilitate and promote the services of Efficiency Vermont, which analyzes homes and businesses in order to recommend energy efficiency measures.

7.2) To support the development of alternative energy sources and business opportunities that benefit the Town.

- a) Work with energy professionals to find suitable sites for wind generators that do not obstruct scenic views or cause non-reparable damage to the land.
- b) Encourage methane recovery from manure on farms for use on site.
- c) Promote the use of alternative fuel or hybrid design vehicles that are very energy efficient..
- d) Encourage the use of photovoltaics and fuel cells for generation of electricity for use on site or to add to the power grid.
- e) Explore Town offered tax incentives to encourage the use of renewable energy systems by residents and businesses.
- f) Encourage the use of locally grown and processed wood as fuel for heat and hot water.

7.3) To preserve any existing or potential renewable or solar energy resource.

- a) Explore amending zoning and subdivision regulations to protect open areas on a building's southern exposure to make sure landscaping and new structures do not interfere with valuable solar gain or access to the wind.
- b) Encourage plantings that both allow for solar heating in the winter and provide shade in the summer.

7.4) To support the implementation of the plan by the Alliance for Climate Action to reduce greenhouse gas emissions by 10 percent by 2010.

- a) Identify strategies appropriate for the Town that will reduce green house gas emissions in a systematic manner.
- b) Develop a public education campaign that would demonstrate community commitment to energy efficiency programs.

7.5) To encourage a balanced approach between the placement of utility services and the character of the rural and village areas.

- a) Continue to require new utility lines serving end users be underground, barring site limitations that make underground lines impossible. Seek to relocate existing above ground lines underground within the village core, especially along the "main street" portion of Route 116 from Mechanicsville Road to Friendship Lane.
- b) Participate in public review processes (e.g., via the Public Service Board) related to any substantial improvements to VELCO's transmission lines. Seek to preserve the Town's rural character while recognizing the important function these transmission lines serve.

8. OTHER RESOURCES/ISSUES

8.1 Historic Resources

The Vermont Division of Historic Preservation's Historic Sites and Structures inventory for Hinesburg reflects the early commercial and residential pattern of development in the town. This list, as well as maps showing the locations of these structures, may be found in the Chittenden County Regional Plan. Two areas, Mechanicsville and the Village, contain the highest concentration of historic buildings with Silver Street being the site of several historic structures as well. Outside of these areas most of the historic buildings are farmhouses dating from the mid 19th century.

A study conducted in 1990 inventoried changes to the historic structures throughout Hinesburg and found that 66% of the buildings had been changed between 1977 (when the State's historic buildings register was compiled) and 1989. Although many of these changes, such as siding, windows, porches and decks, were minor in themselves the study pointed out that the overall impact was large. Of equal, or greater, impact to these historic structures is the changing context in which they exist. This impact has been especially noticeable as the Town moves from its past pattern of development to a more suburban look. Construction in fields surrounding the Village and in outlying areas, new housing complexes and industrial development, and the demolition of historic structures all contribute to the change in context that erode the historic resources of the Town. Because most of these impacts affect more than historic structures, meeting the social, economic and environmental goals of this Plan will help preserve the Town's historic resources as well.

An inventory of the Town's archeological resources has not been conducted. Generally, archeologically sensitive sites may be identified by certain environmental settings, particularly areas along watercourses and lakes. When these sites are identified, either through a town wide inventory or individual development reviews, they may be managed by leaving the area undisturbed or by conducting an archeological survey to pinpoint and assess the resource.

8.2 Noise/Light

Goals and Recommendations

8.2.1) Explore options (e.g., ordinance, zoning, etc.) to control excessive noise at unreasonable hours.

8.2.2) The Town recognizes the value of the night sky, and feels it is important to ensure light pollution doesn't unnecessarily impact this resource. Furthermore, the Town recognizes the importance of personal privacy with regard to excessive light from adjacent properties. The Town should explore ways to minimize light pollution that also maintain public and private safety and convenience with regard to outdoor lighting.

8.3 Wind Energy/Telecommunications Towers

The Town should enable economic opportunities through the use of telecommunications and wind energy technologies, and support the enhancement and expansion of such technologies and networks when such facilities do not have significant adverse environmental, health, or aesthetic impacts.

Goals and Recommendations

8.3.1) The Town should develop tower regulations that distinguish between wind energy and telecommunications towers, since these are very distinct uses that present different issues and challenges.

8.3.2) The Town should explore zoning regulation modifications that specifically address wind energy towers/devices for private use (e.g., single windmills serving individual properties).

9. IMPLEMENTATION

A Town Plan, by nature, offers wide-ranging recommendations on a variety of issues affecting a town. Without specific implementation efforts, these recommendations may remain no more than well-intentioned general goals. This chapter of the plan suggests specific actions, responsible parties, and timelines for many of the goals and recommendations from earlier chapters. These lists are not intended to cover all possible actions by the town. However, it does offer some of the more important steps that may be taken to implement this plan.

Top 10 Priority Goals & Recommendations

1. Create a standing Village Steering Committee and develop a Village Master Plan (3.2.1a,b)
?? *Timeline: 3 months (Steering Committee); 2 years (Master Plan)*
?? *Responsible Parties: Selectboard, Village Steering Committee, Planning Commission*
2. Minimize speeding through speed enforcement (6.1h)
?? *Timeline: 1 year*
?? *Responsible Parties: Selectboard & Police Department*
3. Follow through on Route 116 Hinesburg Village Corridor Scoping Study by securing funding and beginning improvements in this corridor (3.2.4a,b & 6.2a,d)
?? *Timeline: 3 years*
?? *Responsible Parties: Selectboard, CCMPO, VT Agency of Transportation*
4. Create a truly walkable Village by improving crosswalks as well as adding and improving sidewalks (3.2.3 & 6.4f,g)
?? *Timeline: Crosswalks - 1 year; Sidewalks - 2-3 years*
?? *Responsible Parties: Selectboard, Village Steering Committee, VT Agency of Transportation*
5. Modify existing zoning districts to create additional areas for higher density mixed-use development in the Village growth area. Consider all options including: in-fill within existing village core; West Side area; Mechanicsville Road area (3.2.5a,b)
?? *Timeline: 1-2 years*
?? *Responsible Parties: Planning Commission, Village Steering Committee, Selectboard*
6. Implement a form of area-based zoning/density to encourage residential clustering and better protect natural resources in the rural areas (3.4.1a, 3.4.3a, 3.4.4a)
?? *Timeline: 1-2 years*
?? *Responsible Parties: Planning Commission & Selectboard*
7. Develop priority natural resource overlay districts for inclusion in the zoning regulations. Utilize these overlay districts to add more clarity and specificity to the development review process regarding the protection of critical natural resources (4.9.1a)
?? *Timeline: 2-3 years*
?? *Responsible Parties: Planning Commission & Conservation Commission*
8. Develop an open space plan to assist in the creation of a network of interconnected open space (4.9.1b,c)
?? *Timeline: 3 years*

?? *Responsible Parties: Conservation Commission, Planning Commission, Recreation Commission, CCRPC*

9. Plan for the formation of a system of trails throughout the rural areas with connections to residential developments, the Village, and public lands throughout town (6.7a)

?? *Timeline: 3 years*

?? *Responsible Parties: Recreation Commission, Planning Commission, Conservation Commission*

10. Explore methods to mitigate the adverse impacts of stormwater runoff and improve surface water quality (4.3.1a,e & 4.3.2)

?? *Timeline: 4 years*

?? *Responsible Parties: Conservation Commission, Planning Commission, Selectboard*

Overall Implementation Strategy

| Actions, Responsible Parties, and Timeline | Goals and Recommendations to be Addressed |
|---|---|
| Update Zoning and Subdivision Regulations; Planning Commission with subsequent review by Selectboard; 1 to 2 years from adoption. | 2.2.1.a) Support higher density housing, especially affordable housing, in the village growth area. |
| | 2.2.2.a) Provide higher densities for affordable housing designed for the elderly or disabled in the village growth area. |
| | 2.2.4.a) Modify zoning regulations for existing mobile home parks by permitting density bonuses in consideration of corrections to long-term deficiencies. |
| | 2.2.5.d) Continue to explore existing and innovative zoning techniques to allow greater flexibility in the configuration of developments, and to preserve scenic, agricultural, and other natural resources. |
| | 2.2.5.e) Consider density bonuses as part of PRDs and PUDs as an effective tool to encourage the development of affordable units. |
| | 3.2.5.a) Explore a wide variety of options to create additional areas for mixed-use (residential and retail/commercial) development, including in-fill within the existing village core as well as expansions to the north via unique and carefully crafted new zoning districts. |
| | 3.2.7.a) Consider modifying Village design standards in the Zoning Regulations to include open space preservation along the periphery of the village area. |
| | 3.2.7.b) Explore the creation of a new zoning district around the Village with appropriate design standards and/or where innovation and clustering is encouraged in order to preserve open spaces. |
| | 3.3.1.a) Review zoning districts and uses with a goal to foster the establishment of businesses that support the residential growth taking place in Hinesburg. Also see recommendations b-d) under 3.3.1. |
| | 3.3.2.a) Review zoning regulations with a goal to continue to encourage home-based and cottage businesses. |
| | 3.4.1.a) Incorporate practices for area-based zoning, transfer-of-development rights and clustering into Hinesburg's zoning and subdivision regulations to encourage residential clustering, protection for access to and utilization of natural resources, and protection of rural vistas and wildlife corridors. Also see recommendations b-c) under 3.4.1. |
| | 3.4.2.a) Research the creation of a village-edge zoning district or village-edge overlay to steer development through the use of clustering, area based zoning and transfer or purchase of development rights. |

Overall Implementation Strategy (cont'd)

| | |
|---|---|
| <p>(Continued) Update Zoning and Subdivision Regulations; Planning Commission with subsequent review by Selectboard; 1 to 2 years from adoption.</p> | <p>3.4.3.a) Examine density in agricultural areas (e.g., AG district) for compatibility with the conservation of agricultural lands. Implement zoning using a form of area-based density for this district, which may consider changing the overall density. Also see recommendations (b-g) under 3.4.3.</p> |
| | <p>3.4.4.a) Examine density in forested areas (e.g., RR1 & RR2 districts) for compatibility with the conservation of forest lands. Implement zoning using a form of area-based density for these districts, which may consider changing the overall density.</p> |
| | <p>3.4.4.b) Develop zoning techniques for the preservation of Hinesburg's forest resources. The techniques may include a separate forestry district, overlay districts for important forest land or other development and management standards specific to forest preservation.</p> |
| | <p>3.4.5.a) Revise zoning bylaws to create one or more conservation districts. Lands to be included within this district may include the Town Forest, Fred Johnson Wildlife Management Area, and other publicly owned lands to be protected from development or inappropriate use. Also see recommendations b-c) under 3.4.5.</p> |
| | <p>3.4.6.b) Develop zoning policies and bylaws which encourage open-spaced enterprises such as community farms, farm-based Bed & Breakfasts and event-hosting facilities, cross-country ski facilities, game preserves or similar businesses.</p> |
| | <p>4.3.1.a) Require adequate vegetative buffers and erosion control along rivers, streams, and lakes to protect water quality, allow natural channel modification, and protect buildings. Consider differentiating buffers based on land use. Also see 4.3.1.b.</p> |
| | <p>4.8.1.b) Develop strategies, including development review standards in zoning and subdivision regulations, to protect ridgelines and hillsides.</p> |
| | <p>4.9.1.a) Identify and map priority natural resources and include them as overlay districts within the zoning regulations. The overlay districts will provide more specific guidelines for the protection of certain resources, including agricultural land, regardless of the zoning district within which they are found.</p> |
| | <p>5.7.2 a) Review the Town's Zoning and Subdivision Regulations for barriers to both center-based and home-based care facilities. Consider making child care centers a permitted use in the Village District, and review other districts as necessary</p> |
| | <p>7.3.a) Explore amending zoning and subdivision regulations to protect open areas on a building's southern exposure to make sure landscaping does not interfere with valuable solar gain.</p> |
| <p>8.3.2 Explore zoning regulation modifications that specifically address wind energy towers/devices for private use (e.g., single windmills serving individual properties).</p> | |

Overall Implementation Strategy (cont'd)

| Actions, Responsible Parties, and Time line | Goals and Recommendations to be Addressed |
|---|---|
| Apply development review standards; Development Review Board; ongoing. | 3.4.1.b) Implement PRD and subdivision policies that encourage the creation of mixed lot sizes in a single development as well as the preservation of medium and larger size parcels for active forestry and agriculture, as well as small to medium scale agricultural uses. |
| | 3.4.3.d) Promote development in areas that are least disruptive of agricultural operations, maintain lands' eligibility for tax abatement programs and reduce conflicts between agricultural operations and residential areas. |
| | 3.4.4.c) Direct development involving forest resources to land that is not suitable for active timber management because of poor soils, existing forest conditions or size and location of the parcel. Also see recommendations d-e) under 3.4.4. |
| | 4.3.2.a) Insure clean and healthy surface water by making sure that storm water runoff doesn't adversely affect streams and rivers, and does not exceed their carrying capacity. |
| | 4.7.1.c) When reviewing new development, encourage the preservation of small and large blocks of forest. |
| | 4.7.2.b) When reviewing new development, encourage areas separate from housing sites to provide connectivity between forest blocks, riparian corridors, and wetlands. |
| | 4.8.1.b) Develop strategies, including development review standards in zoning and subdivision regulations, to protect ridgelines and hillsides. |
| | 6.3.b) Encourage master planning of undeveloped lands along local arteries to limit road cuts, maximize roadcut visibility / safety and implement appropriate signage. |
| | 6.6.a) Develop policies and incentives, which encourage developers to plan for and create interconnected transportation networks as part of future development. Incentives such as town assumption or maintenance of privately developed roads should be considered. |
| Create a Village Steering Committee (3 months) and a Village Master Plan (2 years). | 3.2.1.a) Create a standing Village Steering Committee to be appointed by Selectboard. The Steering Committee would work as a strong advocate on the goals above and other Village issues. |
| | 3.2.1.b) Develop a Village Master Plan within 2 years for eventual incorporation into the next Town Plan. |

Overall Implementation Strategy (cont'd)

| Actions, Responsible Parties, and Timeline | Goals and Recommendations to be Addressed |
|---|---|
| Amend Sewer Allocation Policy; Selectboard based on land use recommendations from the Planning Commission and/or Village Steering Committee; 6 months to 2 years. | 2.2.3.a) Promote the establishment of affordable rental and owner-occupied housing within the village growth area through the Town sewer allocation policy. |
| | 2.2.3.b) Use sewer and water allocations to encourage a mixture of housing types and mixed-use developments within the service area. |
| | 3.2.5.e) Explore methods to prioritize Town sewer allocation within the village core and areas designated for expansion (see above). Consider revising the wastewater allocation ordinance so that a percentage of the residential and enterprise (i.e., commercial) allocation is reserved for development in these areas. |
| | 3.2.8.a) Continue to research ways to expand the capacity and efficiency of the Town's sewer treatment facility. Any future expansion should be of a size and scope to facilitate Village growth while preserving the ecological integrity of the LaPlatte River. |
| Determine Transportation Improvements and Obtain Funding; Selectboard working with Chittenden County MPO and VT Agency of Transportation; 1 to 5 years. | 3.2.2.a) Work aggressively with the CCMPO, CCRPC, VTrans, and Hinesburg's State Legislators to implement provisions of the Route 116 Hinesburg Village Corridor Study. Pay particular attention to intersection improvements at Silver Street, Charlotte Road, and Commerce Street. |
| | 3.2.2.b) Redesign the main portion of Route 116 through the Village to make it safer, more pedestrian friendly, more efficient, and more attractive. Overall, the roadway (traveled area plus shoulders) should be narrowed to reduce speeding, eliminate passing on the right, and provide more room in the right-of-way for pedestrian infrastructure, street trees, etc. Additional features to be considered should include: curbing, more sidewalks, street trees, improved lighting that is pedestrian friendly and attractive, improved signage. |
| | 3.2.4.b) Continue to investigate the creation of a new road ("West Side Road) from the Charlotte Road to Route 116 at the Commerce Street intersection. Supplement the results of the feasibility study with a cost/benefit analysis based on short and long term traffic projections. |
| | 3.2.3) Create a truly "walkable" community by working toward safe and convenient pedestrian access to all portions of the Village. Also see recommendations a-d) under 3.2.6. |
| | 3.3.3.a) Improve pedestrian walkways and vehicular traffic flow to help current and future businesses attract and retain customers. |
| | 6.2.a) Work with the State to Implement the Route 116 Scoping Study Recommendations for Route 116 from Buck Hill through to Silver Street, as well as curbing, roadcut limitations, sidewalks, parking, utility and street tree recommendations throughout Hinesburg Village. These recommendations address traffic calming through street and intersection narrowing, environmental factors and intersection modification. Also see recommendations b-e) under 6.2. |
| | 6.4.b) Implement the West Side Bypass as the new Charlotte Road South of Commerce. |

Overall Implementation Strategy (cont'd)

| | |
|---|---|
| Prioritize Town Expenditures for New or Upgraded Services/Facilities; Selectboard; ongoing | 3.2.2.c) Assess the pros and cons of the Town taking over the Village portion of Route 116 (e.g., Buck Hill Rd to Commerce St) from the State. |
| | 3.2.3.c) Continue to make regular improvements to pedestrian infrastructure using Municipal, State, and Federal funds. Also see a) and d) under 3.2.6. |
| | 4.3.2.c) Consider establishing a storm water utility responsible for a town-wide systematic approach to storm water management. |
| | 5.4.2.b) Conduct a study of current and future recreational needs and identify locations for parks and other facilities. |
| Prepare natural resource inventories and an open space master plan; initiated by Conservation Commission; 1 to 2 years. | 3.4.7.a) Complete natural resource and wildlife habitat inventories for use by the public, the planning commission and the DRB in creating and evaluating master plans, subdivisions and PRDs. |
| | 4.3.3.a) Use inventories of the Lewis Creek and LaPlatte River corridors to identify existing features that would contribute to a greenway network. Separate greenway features that provide connectivity for wildlife habitat from trails and other human movement. |
| | 4.4.1.a) Create a groundwater conservation overlay district that includes source water protection areas. Development in these areas should receive a higher level of scrutiny. Review the data already collected and supplement with field studies, if needed. |
| | 4.5.2.a) Include wetlands as a component of a greenway network. Separate greenway features that connect wetlands and areas for wildlife habitat from trails and other human movement. |
| | 4.7.2.c) Develop a greenway network with wildlife habitat corridors separate from trails and human movement. |
| | 4.9.1) Develop an open space plan for the town. Also see recommendations a-e) under 4.9.1. |

APPENDIX A: TOWN HISTORY

Hinesburg was granted a town charter on June 24, 1762, by Benning Wentworth, Esq., Governor of New Hampshire, to 65 persons, most of whom were from New Milford, Connecticut. One of these was Abel Hine who acted as proprietor's clerk for many years and in whose honor the name "Hinesburgh" was derived. The Town of Hinesburgh formed a perfect square enclosing a tract of 36 square miles. The town was divided between the low flat lands of the western portion and the eastern hill section.

Before the Revolution the town was occupied only by the Isaac Lawrence and Abner Chaffee families. After the war, Mr. Lawrence was quoted as stating that "for one season the only food to eat was dried pumpkins with a little mouldy flour that the children scraped from inside of a wet barrel." They sold out to Epaphras Hull and moved to Canada. By 1785 a fifth family, Mr. and Mrs. George McEuen, moved to Hinesburg on an ox-drawn sled. There were very few roads to the area. Much of the time they followed marked trees and had to clear trails. For lack of a local doctor, Mrs. McEuen acted as midwife to the first child born in Hinesburg. The boy was Hine Meacham.

Ebenezer Bostwick opened a pottery shop in 1790. This was the beginning of a long history of small industries in Hinesburg. There were at various times saw mills, woolen mills, creameries, cheese factories, grist mills, cabinet makers, carding and clothing mills, distilleries, an ashery, an iron foundry, a starch factory, box making factories, excelsior manufacturing, blacksmith shops, wagon shops, etc. The site of the present International Cheese Company has previously served as a grist mill and skating rink. In 1858 there was a stove and tin shop where the old fire station now stands. The present Lantman's IGA Store, built in 1860 by Elijah Peck, was originally the first tavern in town. Some of the industries collapsed, a few burned, one stopped because of the 1837 financial crash, and many frequently changed ownership.

Most of the industries made use of the vital water power chiefly afforded by the Pond Brook which ran down from Upper Pond, or Hinesburg Pond, now called Lake Iroquois. Early in the Town's history a dam was built at the outlet of Hinesburg Pond to provide water power for a saw mill below it. Before the present dam was built the water area was smaller and island larger. In 1867 the saw mill moved down just below the Reservoir, now named Lake Sunset, and a dam was built there. The area previously was covered with forest growth. In 1882 it is recorded that Spruce Island, lying near the eastern side of Pond Brook, was quite a resort for picnic parties. The brook joins the LaPlatte River in Hinesburg which empties into Lake Champlain at Shelburne. Baldwin's Brook, a stream located about one and a half miles southeast of the Lower Village, was named for Edmund and Orange Baldwin, who in 1798 built a successful saw mill on the second of three high falls in the brook.

The prospering town emerged in roughly three individual sections. "Mechanicsville" formed the northern part of Hinesburg on Pond Brook. It was the setting for many mills, factories, shops, and about 28 homes in the late 1800's. Formerly it was called Patrick and Murray Corners, after Orrin Murray and John S. Patrick who formed a partnership and built, bought, rebuilt, and sold various mills, factories, and shops from 1823 to 1857. At various times it was also called Factory Corners, Factory Village, and Upper Village. One church and six homes made up the northeastern section of Hinesburg called "Rhode Island Corners" because those originally settling there were from Rhode Island. The "Center Village", or Lower Village, held many shops and stores, the Masonic Hall, a high school, about 400 inhabitants, and four churches.

The Hinesburg Congregational Society, located in the Village, was organized by Rev. Nathan Perkins of West Hartford, Connecticut, May 20, 1789, with eleven members. Their first church was built of wood in 1800 and replaced with a brick church in 1839. In 1930 it was given to Patriot Lodge and remodeled for a lodge and dining room. In 1950 it burned and was replaced by the present Masonic Temple in 1954. The Baptist Church of Hinesburg was organized in the Village on May 30, 1810, by Pastor S. Churchill and eight members. The wooden church was built in 1826 and outlasted two other churches later built of

brick. A Free Will Baptist Church was formed in 1817 with 19 members, all from Rhode Island Corners. A church was built in their neighborhood in 1859, to which Moses Dow financially contributed a substantial amount. Nearby Dow Hill is named for him. The Methodist Episcopal Church was organized by Rev. Noah Levens in 1831 with ten members. The church was built in 1857 on the site of the present Community Park and burned down in the early 1900's. The Christian Advent Church organized by Rev. A.A. Hoyt on August 3, 1874 started with ten members. St. Jude's Parish was organized in 1944, with the members meeting in Woodman's Hall until a church was built in 1948. That building was replaced by the current church in 1990. The church's first settled priest was Rev. John Mahoney, who arrived in 1946. In 1915 the Congregationalists, Methodists, and Baptists formed a federation and met in the Baptist Church, currently the United Church of Hinesburg.

In 1800, thirteen common schools having three male and sixteen female teachers and 327 pupils existed in Hinesburg. Mr. C.G. Peck was superintendent. In addition, the Hinesburg Academy was established on November 12, 1824. It was housed in a two-story structure in the center of the Village. Noted for its mineralogical collection and reference library, it was attended by people from all over Vermont. In 1871 the Academy became the town high school until it was removed and used as a garage when a new high school was built in 1915; that high school building is currently part of the elementary school. In 1947 the Sarah Carpenter Memorial Library was erected on the former Academy site. In 1810 a literary society was formed in the town. It greatly encouraged debates, lectures, and essays on topics of science, literature, politics, history, and religion. Its functions were absorbed by the Academy around 1860.

In 1803 the first official post office emerged. The mail was delivered on foot. Before the coming of automobiles, a horse-drawn stage carried mail and express to and from Burlington once a day. For many years a half-mile horse-racing track was maintained at Lower Village. In the winter this sport was enjoyed on the Reservoir and Hinesburg Pond. Other entertainment was provided by the 12 piece Hinesburg Cornet Band which rehearsed every Saturday in the Town Hall beginning in 1863. On the corner of Main Street and Friendship Avenue (now Route 116) was the Whipping Post used before prisons were built and when courts met infrequently. It was also used as a bulletin board. A debtor's jail was across the street. The most notable crime in Hinesburg occurred on October 3, 1868, when Henry Welcome murdered Perry Russell. After admitting guilt, he was hanged at Windsor, Vermont. The first hard surfaced road was made through part of the main village in 1890. In 1901, the big event was the raising of the present Town Hall.

In 1790 the population of Hinesburg was 454, and in 1800 it was 1330. For this period Hinesburg can boast a higher population than existed in Burlington. In 1850 the population reached its peak with 1834 residents, but declined to 954 in 1925. In the 1800's, Hinesburg was depicted as a very pleasant town with neat shops and homes, plank and gravel sidewalks with railings, many maple and locust trees, and very cordial inhabitants.

GLOSSARY

Act 250: Vermont Land Use and Development Law 10 V.S.A. Ch 151; the state environmental review process conducted by a District Environmental Commission to consider a proposed development's impact using 10 established criteria.

Affordable housing:

(A) Housing that is owned by its inhabitants whose gross annual household income does not exceed 80 percent of the county median income, or 80 percent of the standard metropolitan statistical area income if the municipality is located in such an area, as defined by the United States Department of Housing and Urban Development, and the total annual cost of the housing, including principal, interest, taxes, insurance, and condominium association fees is not more than 30 percent of the household's gross annual income; or

(B) Housing that is rented by its inhabitants whose gross annual household income does not exceed 80 percent of the county median income, or 80 percent of the standard metropolitan statistical area income if the municipality is located in such an area, as defined by the United States Department of Housing and Urban Development, and the total annual cost of the housing, including rent, utilities, and condominium association fees, is not more than 30 percent of the household's gross annual income.

Building envelope: A specific area on a lot, delineated on a survey or plan, within which some or all structures shall be located.

Build-Out Analysis: A study that examines an area's capacity for development.

Cluster Development: A development design technique that concentrates buildings in specific areas on the site to allow the remaining land to be used for other purposes (e.g., recreation, common open space, and preservation of environmentally sensitive features, community facilities); often associated with planned residential development (PRD) or planned unit development (PUD).

Cottage Business/Industry: A commercial, manufacturing, or light industrial use such as a woodworking shop, arts/crafts studio, food processing kitchen, or computer service shop, that operates on the same scale and intensity as a home occupation but is a principal use on the lot. See Zoning Regulations for a more detailed description.

Flood Fringe Area: Areas within the Flood Hazard Area, but outside of the Floodway.

Flood Hazard Area: The land in the flood plain within a community subject to a one percent (1%) or greater chance of flooding in a given year. These areas are mapped and designated by the Federal Emergency Management Agency (FEMA).

Floodplain: The land area lying between the accepted low water mark of a lake, river, or stream and the high-water mark of the historic flood of record, or the maximum regional flood as such boundaries would be established by a hydrologist study or engineering survey.

Floodway: The channel of a river and or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 1 foot.

Geographical Information Systems (GIS): A computerized mapping system utilizing datasets that have geographic location information.

Growth Center: An area providing for a concentration of housing, commercial services, employment opportunities and government uses, and served by basic infrastructure.

Home Occupation: A home-based business that does not change the character of the neighborhood. See Zoning Regulations for a more detailed description.

In-fill: New development that increases the density within partially built up areas; typically on vacant parcels or unused portions of other parcels.

Mixed-Use: A mixture of residential and non-residential uses within a given development, parcel, or area.

NWI Wetlands: Wetlands delineated via aerial photography interpretation through the National Wetland Inventory (NWI) by the U.S. Fish and Wildlife Service. Generally, this delineation is the basis for State and Federal wetlands regulations. However, these wetland locations are for general planning purposes only, and are not suitable for site-specific design or planning, which requires on-the-ground wetland delineation.

Overlay District: A zoning district that is superimposed on other zoning districts, typically due to its town-wide extent. Often used to identify natural features that are not restricted to a single location or area.

Planned Residential Development (PRD): A method of innovative land development defined in the Hinesburg Zoning Regulations for residential use. A PRD allows a different arrangement and/or density of housing units than otherwise possible under the Zoning Regulations. See Zoning Regulations for a more detailed description.

Planned Unit Development (PUD): A method of innovative land development defined in the Hinesburg Zoning Regulations for non-residential or mixed (residential & non-residential) uses. A PUD allows a different arrangement and/or density of housing units than otherwise possible under the Zoning Regulations. See Zoning Regulations for a more detailed description.

Plat: Otherwise known as a survey. The plat represents the final drawings on which subdivisions are presented to the Development Review Board for approval and which, if approved, shall be filed for record with the Town Clerk.

Riparian: Of, pertaining to, or situated on, the edge of the bank of a river or other body of water.

Transfer of Development Rights (TDR): The transfer of the right to develop or build, expressed in dwelling units per acre, from land in one district to land in another district; a relatively new land development tool used to preserve open space by shifting development to areas better suited for growth.

UMASS Wetlands: Wetlands delineated by the University of Massachusetts via a project commissioned by the Hinesburg Conservation Commission in 1997. This delineation was done using 1993 aerial photography, and provides a more comprehensive and detailed wetland delineation than the National Wetland Inventory data provided by the federal government. These wetland locations are for general planning purposes only, and are not suitable for site-specific design or planning, which requires on-the-ground wetland delineation.

Watershed: An area of land that drains water, sediment, and dissolved material to a common outlet at some point along a stream channel or water body.