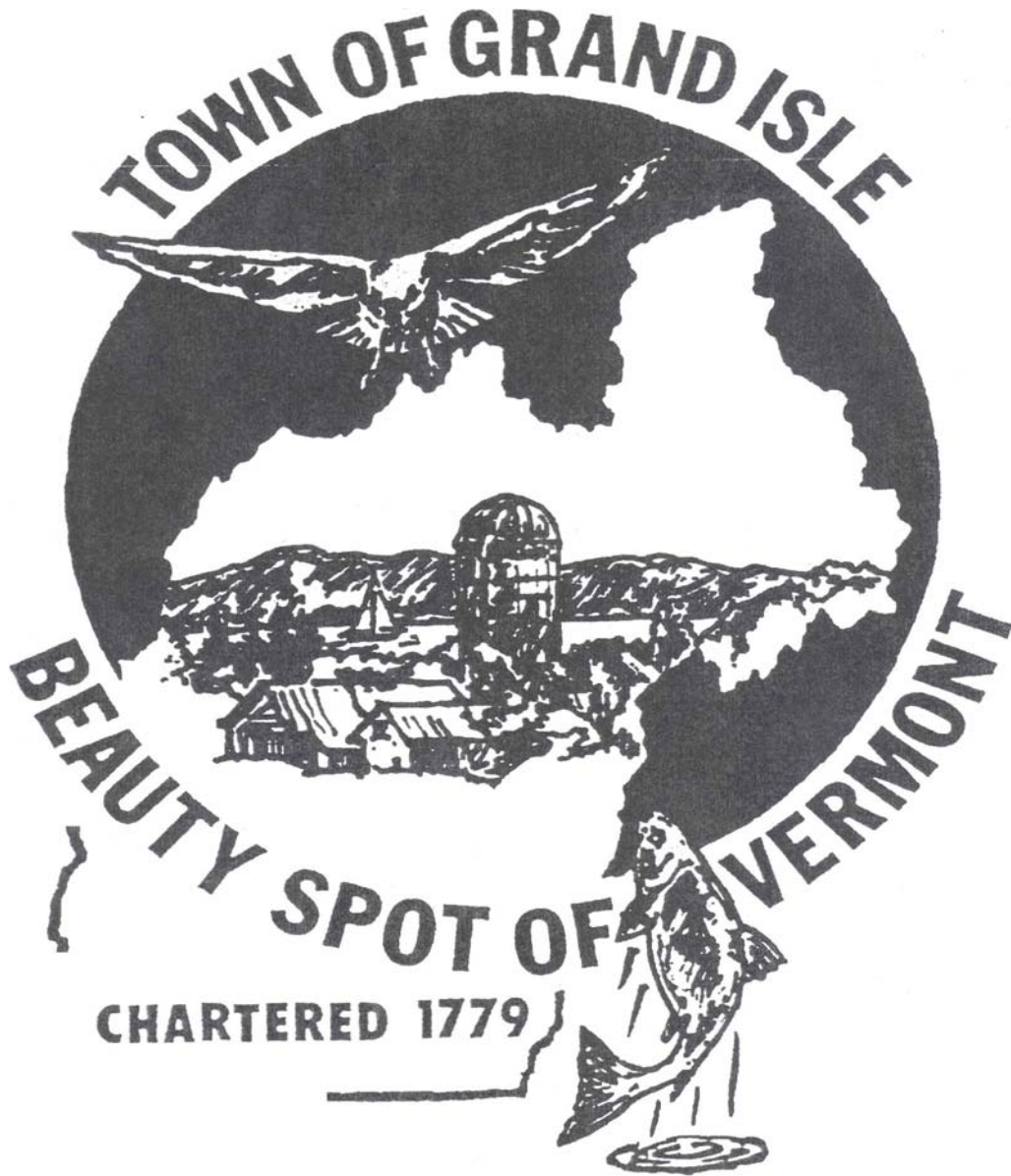


Grand Isle Town Plan



Adopted by the Grand Isle Select Board, February 5, 2007

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CHAPTER 1 INTRODUCTION

PURPOSE

The purpose of a municipal plan is to help guide decision-makers to chart the future of a community. A plan is the town's vision for the future. It states related goals and objectives based upon a brief reflection of the past and an analysis of existing conditions. A plan is developed from an established planning program. This planning program has involved the public in a variety of ways. Through this collective effort the vision and recommendations have developed with the best interests of the Town as a whole in mind.

If the recommendations of the plan are implemented, the quality of life in Grand Isle will be positively affected. The plan addresses inter-related topics including: land use patterns, population, housing, community facilities and services, transportation, education, natural resources features, historic, cultural and archaeological resources, telecommunications, energy and economic development.

Recommendations within the municipal plan are based on an analysis of current conditions, the input of many residents, projections of housing and population and development trends in the Town and surrounding region. Though the goals and recommendations of this plan are long-term, it is expected that Grand Isle will re-examine them periodically and amend the Plan as needed and as required by law.

Grand Isle Town officials engage in an ongoing planning program for additional reasons including:

- Providing additional information and data to guide decision-makers in developing new policies.
- Identifying areas where additional study is needed.
- Providing a foundation for amending the zoning and subdivision bylaws.

A Town Plan will help Grand Isle control its future by providing it with the means to guide change. A Town Plan does that by providing the community with a plan of action, or blueprint, which shows a community what it could be like in the future. A Town Plan shows a community what things are likely to stay the same and what things are probably going to change. It guides how those changes are going to happen, and how quickly, or slowly, they are going to take place.

Simply put, a Town Plan puts the community in the driver's seat. A Town Plan gives Grand Isle the power to guide change, and the pace at which change will occur, so that change does not control the town's future.

AUTHORITY

The Town of Grand Isle is authorized to prepare and adopt a Municipal Plan via Chapter 117, Title 24 of the VSA (Vermont Municipal and Regional Planning and Development Act). Section 4382 of the Act dictates what needs to be included in a plan. The intent of the law is to encourage a municipality to "engage in a continuing planning process that will further several stated goals." The Act further states that municipal plans shall be re-examined updated and re-adopted every five years. This process should be ongoing, whereby the Plan is continually reassessed and revised to meet the changing needs of the community. Consequently, there will be future opportunities to review and amend the plan. Residents, community groups or anyone with an interest in the town may have and are encouraged to provide input into this ever continuing process to the Grand Isle Town Planning Commission at any time.

ADOPTION PROCESS

The adoption of this Plan is in accordance with Sections 4385 and 4387 of Vermont's Planning and Development Act (24 VSA 117). Subsequent to no less than two public hearings, at least one held by the Planning Commission and one held by the Selectboard, the Plan has been adopted at a meeting by a majority of the members of the Selectboard.

Prior to submission to the legislative body (The Selectboard), the Planning Commission held at least one public hearing within the municipality after public notice on the amended Plan or each major draft thereof. At least 30 days prior to each public hearing, the Planning Commission delivered a copy of the amended Plan or draft thereof to: 1) the chair of the planning commission of each adjoining municipality; 2) the Executive Director of the Northwest Regional Planning Commission; 3) the Department of Housing and Community Affairs; 4) all town commissions, boards and committees for review and comment; and 5) any business, conservation or other interest groups that have requested a copy. Following adequate opportunity for the public to comment on the amended Plan or major draft thereof, the Planning Commission made desired changes and then filed a copy with the Town Clerk for public review, at the same time a copy was forwarded to the Legislative Body (Selectboard) for review. After the necessary hearing was held by the Selectboard, the plan was adopted at a meeting by a majority of the Selectboard members.

OVERVIEW OF THE PLANNING PROGRAM

Planning and zoning in Grand Isle began on June 28, 1966 with the adoption of a Zoning Ordinance. The first Town Plan was adopted on July 24, 1972. These "living" documents have and will continue to be updated many times since they were first initiated in the 60's and 70's as times and conditions change in Grand Isle. Listed below are dates that the Selectboard adopted a revised Zoning Bylaw or Town Plan.

Grand Isle Zoning Bylaw and Subdivision Regulation Revisions

June 28, 1966 (first Zoning Ordinance)
September 9, 1980 (included regulation of wastewater disposal systems)
March 2, 1982
November 7, 1989 (included first subdivision bylaw)
March 2, 1999
March 7, 2000
March 6, 2001
March 4, 2003
March 2, 2004
March 1, 2005

Grand Isle Town Plan Revisions

July 24, 1972 (first Town Plan)
August 25, 1980
July 13, 1987
June 3, 1996
January 28, 2002
Anticipated: January 2007

It is a goal of Grand Isle that public participation be encouraged at all levels of the planning process. All Selectboard, Planning Commission and other town meetings are open to the public. Residents are encouraged to attend to offer input and voice their opinions. In addition to regular meetings, public hearings and information sessions are utilized throughout the planning program to help encourage public participation. The Grand Isle Planning Commission has also sought public input on planning issues through two surveys (October, 2005 and April, 2006) sent to every resident of the Town. The results of the surveys are reflected in this Town Plan.

PREVIEW OF THE PLAN DOCUMENT

The 2006 Plan contains a vision of Grand Isle for the next fifteen years. It includes goals, objectives and recommendations to ensure that the vision of the Town is realized. The Plan describes Grand Isle's present and its future in a variety of areas including: land use; transportation; community facilities and services such as fire, rescue, law enforcement protection, water, waste disposal (solid waste, sewage, etc.) telecommunications and recreation improvements; educational facilities and services; significant natural features; historic, cultural and archaeological resources; and energy.

Chapter 10 contains a summary of the compatibility of Grand Isle's land and proposed land use areas with its adjoining communities (North Hero and South Hero). It is important to remember that the changes that occur over the next several years may have an impact on adjoining communities. Grand Isle is sensitive to its neighbors and committed to cooperation on regional planning issues.

The Plan presents a set of implementation strategies (Chapter 11) to ensure that the goals and vision of Grand Isle are reached. These strategies were based on the input of residents, various local interest groups, public officials, members of the Planning Commission and Selectboard, and staff of regional and state organizations.

Appended to the end of the document is a series of maps that graphically depict the information and discussion contained in the Plan, as well as numerous collections of data related to the plan topics. Also contained in the appendices is a list of the historic sites and structures recorded with the Division for Historic Preservation. It should be noted that the numerous resources were used to compile this Plan are on file in the Grand Isle Town Clerk's Office.

In summary, this Town Plan identifies actions that the Town can take to shape its future in accordance with its own vision and minimize the impact of the many factors influencing its future which are beyond its control. Such factors include the economy and state and federal regulations. Title 3 VSA Section 4020 states: "State agencies that have programs or take actions affecting land use shall engage in a continuing planning process to assure that those programs and actions are consistent with the goals established in 24 VSA Section 4302 and compatible with regional and approved municipal plans." By adopting and having this Plan regionally approved, the Town of Grand Isle will have more control over its future ensuring a greater chance that state plans and projects will reflect the Town's voice.

CHAPTER 2 EXPECTATIONS FOR THE FUTURE OF GRAND ISLE

Growth is destined to happen. How that growth evolves is the concern of every resident of Grand Isle. The following visions serve as guidelines for the future.

- The preservation of the character of Grand Isle and the protection of our natural assets will remain foremost in the plan for growth of our town.
- Our commitment to our children, families, land, water, and natural beauty will continue to make our town what it is, special and unique, to the year-round residents as well as our summer visitors.
- This uniqueness will be a factor in the businesses that look towards Grand Isle as not only a good location for their business, but also a quality way of life for their employees.
- Encouraging environmentally sound, clean businesses, new technology, home-based businesses, and enhancement of our tourist trade will lead to a more stable tax base and hopefully help in reducing the high property taxes we face at this time.
- Encouraging diverse agricultural practices will help maintain the rural landscape of the town and help the local economy.
- Our young people will have employment opportunities, a continuation of the way of life in which they grew up, and the ability to live near their families and strengthen the family unit.
- Growth in Grand Isle should occur at a rate which does not exceed the town's ability to accommodate the growth and provide essential services.

CHAPTER 3 TOWN HISTORY, CULTURAL AND HISTORIC RESOURCES

BRIEF HISTORY OF THE TOWN

On October 27, 1779, a charter for what are presently known as the towns of North Hero, Grand Isle and South Hero was granted by the Republic of Vermont to Ethan Allen, Samuel Herrick and 362 of their associates who had served in the American Revolutionary War. The charter was given under the name of Two Heroes and included all of the land on North and South Hero islands.

On October 21, 1788, Two Heroes was divided into two townships, North Hero and South Hero. On November 7, 1798, South Hero was divided into the two townships of Middle Hero and South Hero, with Middle Hero occupying the northern half of South Hero Island and South Hero occupying the southern half. On November 5, 1810, the name of Middle Hero was changed to Grand Isle.

The Town of Grand Isle has a rich history. The first recorded deed, dated January 18, 1783, was from William Williams to Capt. Jedediah Hyde. Capt. Hyde's son built a log cabin on the land. The Hyde Log Cabin survives today as the oldest cabin in Vermont and is operated as a museum by the Vermont Division for Historic Preservation and the Grand Isle Historical Society.

Alexander Gordon, who built on the very northern end of the island in 1783, is presumed to be the first settler. From that date forward settlement was rapid. Supported by rich agricultural soils, a thriving, diversified, self-sufficient agricultural economy was quickly established, with its own merchant, tavern keeper, blacksmith, tanner and carpenter. A cooperative creamery, established in January 1918 to serve farmers continued in operation until 1968, when it was bought by the St. Albans Cooperative Creamery Association.

By the early 1800's the town was well organized, holding town meetings, electing town officers, and delegating a representative to the legislature. A post office was established in 1810, and a rural free delivery route began in 1896- the second in the United States. The first church, a log cabin meeting house for settlers of the Quaker faith, was built in 1801.

Ferry service across Lake Champlain between Gordon's Landing in Vermont and Cumberland Head in New York State was chartered by the Vermont Legislature in 1798. The sandbar causeway bridge was constructed in 1853, providing much needed access to the mainland. The first bridge to North Hero Island was constructed in 1882. With the completion of the Rutland Railroad through the islands, travel by the lake diminished as the railroad became an important means of travel. With better roads and the advent of the trucking industry, use of the trains declined until in September of 1961 train service through the islands was discontinued.

Grand Isle's popularity as a summer vacation area began in the 1870's. Visitors were put up in boarding houses and summer hotels, the most famous of which was the 1903 Island Villa Hotel, now known as the Grand Isle Lake House, and before that as Camp Mary Crest. The lake and the town's rural agricultural character were the original attractions for camps and commercial recreation.

A familiarity with and appreciation of Grand Isle's past will be helpful when we try to understand where the town is headed in the future. Appendix 2 contains data showing historical population trends and current growth indicators. Additionally, two informative town histories can be found in the town library. The Town Histories are:

- History of South Hero Island; Volumes I and II; by Allen Stratton; 1980
- A History of the Town of Grand Isle as Told by the People of the Town; edited by Jan Bender; 1991

CULTURAL AND HISTORIC RESOURCES

Historical cultural and archaeological resources are irreplaceable resources which provide a sense of continuity between the past and the present and help us identify who we are. It is important to preserve and promote these resources whenever possible.

Archaeological resources have been identified in Grand Isle, likely because of its extensive lakeshore. Most recently, an archaeological investigation in anticipation of the Grand Isle Fish Hatchery construction yielded a large number of artifacts.

Historic buildings are an integral part of a community's identity. The town has two state-owned historic buildings, the Hyde Log Cabin and the Block school house. The town also has a number of historic churches, homes, barns and other structures.

The Vermont Division for Historic Preservation has inventoried those buildings and other man-made structures in the Town of Grand Isle which it considers to be of historic importance. This inventory is a part of an official list known as the Vermont State Register of Historic Places. For a list of the Sites which are included in the State Register for the Town of Grand Isle, please refer to Appendix 4.

GOALS

1. Preserve Grand Isle's unique island setting.
2. Maintain the quality of Grand Isle's natural setting.
3. Preserve historic buildings, historic structures, and archaeological resources in Grand Isle.

OBJECTIVES

1. Make town residents aware of the Vermont State Register of Historic Places and whether or not a property they own is listed in the register.
2. Using the Vermont State Register of Historic Places Inventory as a reference guide, create a list of the town's historic sites. The Vermont Division for Historic Preservation can supply the town with the criteria for carrying out such an inventory. This inventory should include, but not be limited to, buildings, farm-scapes, archaeological and other historic sites, and any and all sites, structures and features which identify and contribute to the identity of the town and the broad patterns of its history. A local list might include local sites not deemed significant enough to be included in the State Inventory.

CHAPTER 4 LAND USE PLAN

EXISTING LAND USE

Land in Grand Isle is used primarily for agriculture or for single family residences, both year-round and seasonal. The availability of current and accurate land use/land cover data is limited. The best estimates are those from 1995 as reported in the 2002 Town Plan. According to this data, of the town's 9,740.75 acres, the number of acres in agricultural use is 2,789 acres, or 28% of the total (1995). The acreage in agricultural use has declined steadily in recent years. Several major farms have ceased active agricultural operations in the five years since the prior Town Plan was adopted. The number of acres of forest land is approximately 2,100 acres, or 2% of the total (1995). Except for those acres in active agricultural use, wetlands, shorelands and other unbuildable locations, the remaining acreage in the town is either used for residential purposes or is available for residential development. Residential use has increased approximately 66% since 1980. The need for more accurate land cover data at a scale that would be useful for planning in Grand Isle is evident.

Settlement in the town is typically spread out either along the existing roadways or along the shoreline. The overwhelming majority of development since 1980 has followed this pattern. Commercial development is sparse. A small number of individual enterprises are scattered throughout the town, and many home occupations are operating as well, although the exact number is unknown. The largest concentration of commercial development lies in the village area along U.S. Route 2,. Smaller clusters at the intersection of route 2 and 314 and in the "Grand Isle Station" area near the intersections of State Highway 314, Pearl Street, and Adams School Road are the only other notable concentrations of commercial activity.

The steady increase in residential use over the past decade is due primarily to the demand for new homes by Chittenden County commuters. Trends in land use in neighboring communities parallel those in Grand Isle, but the protection of large areas in South Hero through purchase of development rights by land trust organizations and various conservation easements has led to some increased pressure to develop housing in the Town of Grand Isle. The rate at which agricultural and forest lands are being developed appears to be closely related to employment growth in Chittenden County. Conversion of seasonal dwellings to year-round housing continues to occur, and has been one component of the population growth. The number of remaining seasonal dwellings that could be converted to year-round use is of some concern due to the potential of this producing a very rapid increase in the demand for town services. The close commuting distance coupled with Grand Isle's unique quality of life will continue to drive demands for residential growth in the future.

Several overriding goals for future land use and development are outlined below. Specific policies are contained within each section.

GOALS

1. To promote safe and healthful housing for all segments of the population.
2. To encourage replacement or renovation of structures that are beyond their useful life.
3. To strive for a diversified economy by promoting the development and expansion of appropriate commercial businesses, recreational businesses, and industries.
4. To encourage the continuation of agriculture and value added enterprises.
5. To enhance environmental quality, preserve the character of Grand Isle and protect its natural assets.
6. To establish public policies that balance development with the town's ability to provide services.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

The number of small-scale businesses in the community which provide goods and services to local residents is limited. This encourages residents to shop off-island, and discourages new businesses from opening. Grand Isle needs to broaden its tax base and expanded commercialism is one way to achieve this.

There are several ways to expand commercial enterprises within the town. The town has adopted amendments to the zoning bylaws to allow limited commercial uses in the agricultural and residential zones and the town has removed some restrictions on home occupations. Businesses which serve and employ town residents will add to the sense of community by limiting the need to travel outside of Grand Isle for basic necessities.

It is possible to encourage industrial and commercial growth without harming Grand Isle's quality of life by targeting environmentally sound industry. Tourism is a constantly growing industry in the Islands. Recent efforts in the tourism industry have included the concept of "Countryside Tourism." Countryside Tourism promotes the unique resources of a community as the main attractions. It is characterized by locally owned businesses, traditional patterns of development, utilization of existing vacant or under-utilized structures, and diversity and uniqueness. The Town of Grand Isle is an excellent example of where this type of tourism is already taking place and could become more prominent. Tourism is currently concentrated in the summer season, from mid-June until Labor Day. Increased emphasis on year-round tourism would enable more businesses to remain open year-round, including those providing services to residents.

It is important that the jobs created in tourism and other industries strive to provide a livable wage and consistent employment.

Future development should be planned to minimize uses that would impact smooth traffic flow on U.S. Route 2.

Businesses in Grand Isle should remain small-scale, in keeping with the community's rural character. Separate areas should be allocated for uses that are objectionable in residential areas.

Planned unit developments which combine the traditional mix of residential and commercial uses should be encouraged in the village, commercial, and shoreline districts.

GOALS

1. Encourage clean and environmentally sound commercial and/or light industrial development in appropriate areas in the town.
2. Continue economic planning for new locally owned and operated enterprises, and promote businesses which employ year-round and which utilize the local labor force.
3. Promote development within the village that reinforces the village's importance as the town's social and cultural center.
4. Promote the clustering of commercial activities and discourage suburban sprawl and strip development.
5. Encourage commercial development in areas other than the U.S. Route 2 corridor.

OBJECTIVES

1. Maintain zoning bylaws that encourage home occupations while still ensuring that residential character is preserved. Continue to limit exterior displays and storage and any other exterior indications of the home occupation.
2. Work with the Lake Champlain Islands Chamber of Commerce, and other tourism planning agencies to ensure that the needs of Grand Isle are met.
3. Implement zoning changes to direct commercial development into areas that are not directly adjacent to U.S. Route 2, including the creation of new commercial zones.
4. Establish a Light Industrial zone to accommodate uses inconsistent with residential use.
5. Work to bring better telecommunications technology to Grand Isle.

AGRICULTURAL DEVELOPMENT

Dairy farming, orchards, and truck farming are the primary agricultural activities still being practiced in the town. Prime agricultural soils are an important town resource. In Grand Isle, the number of acres in active agricultural uses is steadily declining, but with approximately 29% of the total in agricultural use, it remains much higher than nearby Chittenden County towns. Unfortunately, the development of existing farmland for residential use is currently more profitable for the individual land owners. This creates strong pressures for development, especially with the increasing popularity of Grand Isle. It is important to remember that agricultural and forestry landowners provide a public benefit by not developing their property, and cost the town little in terms of municipal services. From popular scenic vistas, to important wildlife habitat, these contributions to the well-being of the town cannot be overlooked.

The State of Vermont offers four programs which tax agricultural and forestry property according to its use value. The purpose of these four programs is to keep agricultural and forest land in production, and to slow development on these lands. In each program, the property must

remain in agricultural or forestry use in order to receive benefits. Property tax revenue lost to the town is reimbursed by the state. The four programs are administered by the Property Valuation and Review Division of the Vermont Department of Taxes: Agricultural Land Program, Forest Land Program, Farmland Program, and Working Farm Tax Abatement Program. These programs are traditionally under-funded by the state legislature.

GOALS

1. Protect and promote the continuation of agriculture in so far as possible.
2. Work with farmers to assist them in maintaining the agricultural atmosphere of the town wherever possible.
3. Support continuation of the use value taxation programs mentioned above.

LAND USE ZONING DISTRICTS

The zoning districts outlined below designate the direction of future land use within the Town. This is a modification from the 2002 Town Plan and the current zoning regulations. The Proposed Future Land Use Map shows the location of the proposed land use districts. The locations on the map are approximate; the specific detail of the districts boundaries will follow the guidelines of this map and will be determined when amending the bylaws.

Village District: Purpose and Policies

The purpose of the Village District is to support the role of the village as the focus of activity in the community and to provide for residential, commercial, and other compatible development to serve the needs of the residents. The Village District will help maintain the traditional social and physical character of the village including its historic and scenic resources.

The District boundaries will include the areas currently zoned as Village District, near the intersection of U.S. Route 2 and Hyde Road. In the future, it may be prudent to consider expanding this area to the west to accommodate further development.

Development in this area will be mixed use, including both commercial and residential. Development may be moderate to heavy, but will not exceed the capacity of the lands, waters, facilities or services located within the immediate area. Any new development shall be designed so as to preserve the historic, natural, and manmade character of the village and the areas surrounding commercial sites and to minimize curb cuts.

Medium-scale business will be encouraged in this area, and those should be compatible with mixed commercial/residential uses. Businesses that would increase our Towns' tax base, encourage tourism with low impact and high volume, and services and facilities utilized by the local townspeople in Grand Isle and surrounding communities, will be encouraged to expand in these areas.

Commercial and Light Industrial Districts: Purpose and Policies

In the current zoning there are two Commercial Districts:

1. At the intersection of State Highway 314 and U.S. Route 2. Commercial development in this district has been limited, consisting of a 10,000 sf excavation contractor, 5,000 sf chocolate factory and two 1,000 sf office suites.
2. Rt. 2 and Donaldson Rd. Currently no commercial uses exist in this district as it has limited development potential. Because of this, the designation of this site as a commercial district should be reconsidered when zoning is updated. This area should instead be zoned as rural residential as shown on the proposed future land use maps.

Development in this district will be mixed use, including both commercial and residential. Development may be moderate to heavy, but will not exceed the capacity of the lands, waters, facilities or services located within the immediate area. Any new development shall be designed so as to preserve the historic, natural, and manmade character of the village and the areas surrounding commercial sites and to minimize curb cuts.

Larger-scale business will be encouraged in these areas, and those should be compatible with mixed commercial/residential uses. Businesses that would increase our Towns' tax base, encourage tourism with low impact and high volume, and services and facilities utilized by the local townspeople in Grand Isle and surrounding communities, will be encouraged to expand in these areas. Businesses and uses that are not compatible with residential uses should be segregated in separate commercial or light industrial districts in areas without substantial existing residential development.

The existing commercial areas are both centered on Route 2, which makes it difficult to avoid additional curb cuts. Establishing commercial districts that are not on Route 2 will provide opportunities to accommodate commercial development without creating additional access points.

State Highway 314 provides an attractive alternative to commercial development along U.S. Route 2. There is good access to U.S. Route 2 in both directions, and also to the ferry to New York State. There is already substantial pre-existing commercial activity along this road and relatively sparse residential development.

Rural Residential and Agricultural District: Purpose and Policies

This is the largest town district, encompassing approximately 90% of the town. This agrarian image is an important resource to the towns' economy and should be encouraged, wherever and whenever possible. The purpose of this district is to recognize those lands with an economic capability for agriculture which are now essentially undeveloped. This district will also serve the needs of residents of the community by providing an area for residential growth where suitable. This district recognizes the current land use conditions- specifically that scattered small scale commercial growth exists throughout the district. Where appropriate, certain commercial uses

will be allowed on good roads within the district. The district boundaries will remain the same as with current zoning regulations.

It is a policy of the town that this district remain rural in nature, keeping high intensity uses in the Village and Commercial Districts. Through development patterns and site design, the least amount of land possible may be developed, and large contiguous expanses of agricultural, forestry, and other important open spaces may be protected. Public policy may promote residential development that would help maintain this image of a rural agricultural area, such as Planned Unit Developments and cluster housing.

The allowed uses will include agriculture, residential and small scale commercial development. This will help to address the needs of existing commercial enterprises and also allow development of businesses which could serve the agricultural community. Any commercial uses allowed in this district will require conditional use review and site plan approval. Given the ability to affect municipal expenses, special attention will be given to traffic estimates, especially when located on a town road. Commercial uses will not be allowed which will interfere with the residential and agricultural uses of the district. Specific standards and guidelines will be developed when amending the bylaws to control these uses.

Specific guidelines for determining allowed commercial uses within the district will include but not be limited to square footage, type of use, noise levels, estimated traffic, and potential future expansion. The definition of allowed uses will be an important consideration when amending the bylaws. Potential uses include small scale commerce and rural retail, bed and breakfast, riding stable, dog kennel, community facilities, and municipal facilities.

Small scale commerce is defined as being a personal service or business or professional office. Size limitations and traffic flow will have to be considered when definitions are revised in the Town Zoning Bylaws, so as not to adversely impact the character of the neighborhood.

Rural retail is defined as an establishment selling goods made primarily from products raised or made on the premises, including agricultural product, forestry products, and crafts. Rural retail also includes antique stores, nurseries and garden centers, art galleries, and shops associated with on-premises outdoor recreation.

Areas immediately adjacent to Route 2 may have special rules designed to limit the impact of development on the flow of traffic and the character of the town.

In addition to determining guidelines for allowed commercial uses, standards for reviewing each application will be developed. These standards will include, but not be limited to the following: commercial uses in this district will primarily provide for the needs of Grand Isle residents, residents of nearby communities, tourists, and special customers, but will not be regional facilities; the uses as designed and planned will be of a scale appropriate for a rural community and not out of character with the scale of other uses and buildings in the district.

When amending the bylaws, the town will consider zoning changes which allow for the re-use of abandoned barns, sheds or other agricultural outbuildings so that they do not become neglected.

Flood Hazard Area District: Purpose and Policies

The Flood Hazard Area designation is required in order for a town to participate in the National Flood Insurance Program. Included in this district is all Lake Champlain shoreline up to and including the 102 foot high water mark, and certain other areas, such as swamps and small streams, which are indicated on the most recent Federal Emergency Management Federal Insurance Administration maps.

The purpose of the Flood Hazard Area District is to promote the public health, safety and general welfare, to prevent increases in flood damage caused by development on land within flood hazard areas, and to minimize public liability due to floods. Uses in flood hazard areas should be restricted to agriculture, conservation and outdoor recreation. The construction or use of any related structures or buildings, water or sewage facilities, roads, or land alteration within this District should be prohibited.

Roads may be constructed in these areas to provide for emergency services whenever and wherever necessary.

Shoreline Districts: Purposes and Policies

The Shoreline Districts described below include all of those areas along the Lake Champlain shoreline which are located between the 95.5 foot lake level and a line 500 feet back from the 95.5 foot lake level.

The purpose of the Residential Shoreline District is to provide for residential and other compatible uses, at a density which is appropriate to the physical capacity and capability of the land, and which is in keeping with the existing character of already developed areas or will enhance the character of the existing area. Future development in this District, including on-site sewage disposal systems, must be set back from the shoreline of Lake Champlain at a distance which is sufficient to prevent pollution of Lake Champlain waters. Lakeshore residential development should include a vegetated buffer and be planned in a manner which will have the least amount of impact possible on shoreland erosion and emphasize preservation of the natural features and rural character of the shoreline.

The purpose of the Commercial Recreation Shoreline District is to provide for commercial recreation and other compatible uses which require locations on or access to the public waters of Lake Champlain. The density of such development must be appropriate to the physical capacity and capability of the land, and which is in keeping with the existing character of already developed areas. Future development in this District must be compatible with the environment and be set back from the shoreline of Lake Champlain at a distance which is sufficient to maintain the lakeshore as a scenic and natural resource and to prevent pollution of Lake Champlain waters.

Small Off-Shore Islands District: Purpose and Policies

The purpose of the Small Off-Shore Islands District is to protect small islands which are

undeveloped or poorly suited for development. The islands within this District are recognized as scenic natural resources which provide irreplaceable habitats for wildlife. Low density agricultural, residential, recreational, conservation and wildlife management development and activities are permitted provided adequate drinking water, sub-surface sewage disposal and emergency service access is possible. Development that is permitted should maintain and enhance the existing natural environment. No development is permitted which in any way alters the existing topography or geology.

SITE DESIGN

Chapter 117, Section 4416 allows for site plan review to include "other matters as specified in the bylaws." The site plan provisions of the bylaws will be examined to identify any other matter which should be included in the review. At a minimum, the site plan provisions in the current bylaws will be maintained. Some specific site design policies are described below.

Signs will be attractive, of appropriate scale, will be in accordance with existing bylaws, will be well maintained, and will be located on-site.

Attractive landscaping will be encouraged in all districts, especially for commercial uses located adjacent to a residence. A primary goal is to retain natural vegetation wherever feasible and appropriate. Outside of the Village and Commercial Districts, development shall be carefully integrated into resource lands and be sited so as to retain the appearance of predominately open space.

The siting of buildings on parcels should minimize the appearance of strip development along roads; use the least amount of land possible to maximize the amount of contiguous resource lands. Grouping buildings together and/or near buildings on adjacent parcels is a suitable development option to protect resources.

Off-street parking will be provided in any district when any new use is established or when the present use is enlarged or changed. Shared parking for adjacent uses will be considered whenever feasible. Parking areas should be screened as much as possible from neighboring uses. Lighting will be only the minimum needed for safety, and high-pressure sodium lighting should be avoided. Consideration will be given to pedestrian as well as vehicular circulation in all site designs.

CHAPTER 5 PUBLIC FACILITIES AND SERVICES

All public facilities are impacted by continued growth and development within the town. To address the increased demand this creates for public services, this plan includes a goal of establishing public policies that balance development with the town's ability to provide services. These policies may include controlling the timing of development so that town services can keep pace.

EDUCATIONAL FACILITIES

The Grand Isle School is a focal point of educational and community activities. The school completed a major renovation and expansion project in 1992 raising the K-8 school's capacity to 300. Inspection and approval by the Vermont Board of Education were completed in January of 1993. The school has a record of high academic standards and possesses a dedicated faculty and staff. In addition to regular school activities, many of the facilities are used for a variety of purposes on a nightly basis by town residents and various groups and organizations. The current enrollment (2005-2006) is 206 students. The rate of town growth will be the greatest factor impacting educational costs and school population numbers. See Appendix Two for school enrollment figures.

As with most communities in Vermont, school funding continues to be an issue in Grand Isle. The maximum capacity of the Grand Isle school is not currently an issue. However, the cost of high school tuition, over which the town has no control, continues to be a major drain on Grand Isle taxpayers. Students in grades 9-12 attend the area high school of their choice with the tuition paid for by the town. The tuition rate for High School students was \$10,500 in 2006/2007 and this figure increases each year. For the past several years, the majority of the students have chosen to attend either South Burlington High School, which has provided daily bus service in the islands, or Essex High School, and an increasing number are choosing Colchester High School. We expect all five Grand Isle County school boards are to cooperate to investigate maximizing the use of current facilities and reducing operating expenses.

Continuing education for adults is generally available in St. Albans, Burlington or Plattsburgh. In St. Albans and Burlington, the Community College of Vermont offers courses and degree programs. Numerous colleges in the Burlington area include the University of Vermont, St. Michael's College, Champlain College, and Burlington College.

The school building also serves as the designated emergency shelter for the town, and has been equipped with a diesel generator to provide electric power during emergencies.

GOALS

1. To provide educational opportunities commensurate with the needs of the population.

2. To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of current and future residents.
3. To ensure that the ability to provide educational services keeps pace with the town growth.

OBJECTIVES

1. Work with the other towns in Grand Isle County to develop educational facilities and programs which can be shared or used jointly.
2. In conjunction with the other island towns, continue a nonpartisan committee to carry out a feasibility study of the pros and cons of sharing educational facilities, programs, and costs.
3. Work with the state as much as possible to explore alternative means of funding education and encourage property tax reform.
4. In order to more equitably fund the cost of an expanding school system, may consider adopting a plan which includes an educational component.
5. If a plan is in place, explore the idea of an Ordinance and/or amendments to the subdivision regulations that would require phasing of development. The purpose of these tools is to assure that the Town's facilities and services have sufficient capacity and quality to accommodate the rate of growth.

CHILDCARE

Finding high quality and affordable childcare is a growing concern for existing and prospective families. A 2005 Legislative Report from the Vermont Child Care Advisory Board reports that the average weekly cost for center-based care in Vermont is \$140.92 for infants and \$125.71 for pre-schoolers. Statewide, more than 27% of low-earning families spend more than one fifth of their income on child care.

Many child development experts believe that children often do not have the maturity and self-care skills to be left unsupervised until the age of 12. The 2000 U.S. Census indicates that there were 315 children under the age of 12 currently living in the Town of Grand Isle. This population increased slightly from 1990 to 2000.

According to state data, the Town of Grand Isle currently has 6 registered childcare homes and 1 childcare center, with a total capacity of 62 children. Data on other options, such as siblings, stay at home parents, family care providers, un-registered childcare homes or other opportunities are not available. Therefore, without additional data, including the vacancy rates of childcare facilities, as well as the quality and affordability of these services, it is difficult to assess the availability of childcare in our community.

Table 5.1. Number of Children in the Town of Grand Isle under the age of 12.

	1990	2000	% change
Under 1 year	28	20	-29%
1 and 2 years	45	41	-9%
3 and 4 years	60	52	-13%
5 years	28	17	-39%
6 years	19	30	58%
7 to 9 years	80	83	4%
10 and 11 years	48	72	50%

Source: US Census

It is also important to note that the childcare industry can contribute to the local economy by creating jobs and supporting a stable workforce. The accessibility, affordability and quality of health care may affect a parent’s ability to enter and remain in the workforce and to be a productive employee.

GOAL

1. Work to ensure that the regulation of land development in the Town of Grand Isle does not negatively impact the availability of safe and affordable childcare.

OBJECTIVE

1. Assess the need for and availability of childcare services.

POLICE PROTECTION

Limited police protection is provided by the Grand Isle County Sheriffs Department and the Vermont State Police. In 2006-2007 Grand Isle is responsible for contributing \$48,321.25 to support the Sheriffs Department. The Sheriff has hired additional staff in recent years, which has improved the coverage provided to the Town. There is no local police department, which often inhibits the ability to address small local incidents requiring law enforcement assistance.

GOAL

1. Work in the future to identify methods to fund and enhance the police protection in our community, especially increased hours of coverage.

FIRE PROTECTION

Fire protection is provided by the Grand Isle Volunteer Fire Department. The department has 6 officers, 13 fire fighters, and 5 cadets, along with an engineer, safety officer and 2 general members. The department is funded by a town appropriation, a state appropriation for the fish hatchery, and by donations. The department works closely with other towns to maximize

county-wide fire protection and water rescue.

The fire station is a town-owned building located on Hyde Road in the village district. The building is 80x40 feet, divided into five bays, with a 14x70 foot shed across the back containing a meeting room and some storage facilities. The fire station is not adequate for the present inventory of equipment and size of the roster. The steady population growth continues to put pressure on the department to expand.

The Grand Isle Volunteer Fire Department has been working to build a new fire station in the near future. Byron and Barbara Gordon of Grand Isle have donated land with frontage on US Route 2 for the project. The Town Highway Department has an interest in moving in to the existing fire station.

The current major pieces of fire fighting equipment are:

- 2002 Freightliner 3,000 gallon tanker
- 1972 Ford L900 pumper
- 2003 Chevrolet 4wd pick-up
- 1993 Freightliner FL080 pumper
- 1999 FL070 Heavy Rescue
- 19 foot Fire Rescue boat

The 1972 and the 1993 pumpers will need replacing in the next 5 to 10 years. The department anticipates purchasing one pumper to replace the both. All other equipment is in good shape for the next 5 to 10 years.

The number of calls per year has increased and the department now responds to approximately 150 calls per year. The water supply throughout the town is not designed to meet fire fighting standards and tankers are used to shuttle water to most fires. The town does not have a hydrant system.

GOALS

1. Continue to provide first-rate volunteer fire protection.
2. Prepare for a future where adequate fire protection coverage may over burden volunteer capacity.

OBJECTIVES

1. Identify equipment and facilities that need to be upgraded and develop methods of financing the replacement.
2. Continue to support the needs and acknowledge the efforts of the local volunteer firefighters.
3. Recruit new members.

AMBULANCE AND RESCUE SERVICES

Ambulance and rescue services are provided to the Town of Grand Isle and the Town of North Hero by Grand Isle Rescue, a nonprofit fully volunteer organization. Grand Isle Rescue relies on contributions from the town and private donations. The rescue squad facility on the corner of U.S. Rt. 2 and Faywood Road was built in 1993. The building provides two ambulance bays, a classroom for training and meetings, and space for storage and administrative functions. The rescue squad's two ambulances, purchased in 2000 and 2005, meet Vermont and federal emergency medical standards and regulations. Following disastrous Hurricane Katrina, Grand Isle Rescue generously donated a surplus ambulance to the Town of Grand Isle, Louisiana to assist with relief efforts. Grand Isle Rescue is also the parent organization of Grand Isle Heavy Rescue, a multi-town squad that is trained to handle specialized rescue needs including extrication, usually in severe trauma situations. In that role, Grand Isle Rescue provides the equipment, hydraulic and otherwise, which is used by the heavy rescue squad.

Grand Isle Rescue operates under medical direction from Fletcher Allen Health Care in Burlington, where most transported patients receive medical care. If requested, patients may also be taken to Northwest Medical Center in St. Albans.

In the 2005 fiscal year, the rescue squad responded to 339 calls. The total number of calls responded to each year are increasing as the towns grow and traffic increases. Calls are up 39 percent since 2000.

GOALS

1. Maintain the excellent service presently provided by the Grand Isle Rescue Squad.

OBJECTIVE

1. Obtain more volunteers and equipment as required to meet the needs of the community.

EMERGENCY PREPAREDNESS

The town has a designated Emergency Management Director/Coordinator in accordance with Vermont Statutes, Title 20, Part 1, Chapter 1, §6. The Town has signed the 2005 Grand Isle County Mutual Aid Agreement, which is a written agreement between the communities of Grand Isle County and neighboring municipalities, departments and agencies to assist each other, upon request, by furnishing personnel and equipment. As such, the Town is compliant with the National Incident Management System (NIMS); a framework for local, state and federal government to work together to respond to all hazard events. NIMS compliance will be required in order to receive federal preparedness dollars. The Grand Isle Fire Department, Grand Isle Rescue and Town of Grand Isle are members of the Grand Isle County Mutual Aid Association as well as the Local Emergency Planning Committee District 13 as required by Vermont Statute Title 20, Part 1, Chapter 1, §32. The Town has an adopted Emergency Operations Plan (2005) as well as an adopted Vermont Rapid Response Plan (2006). Both plans identify the Grand Isle Elementary School as a designated Red Cross community shelter. The school is equipped with a

diesel generator. The Town has a draft Pre Disaster Mitigation Plan (PDM) which will be a requirement of FEMA to receive federal mitigation funding. Two major emergencies have occurred in recent history: a propane tank fire at the fish hatchery and the January 1998 ice storm.

WATER SUPPLY

There are two public water systems in Grand Isle, the Grand Isle Consolidated Water District (GICWD), formed in the mid 1990's, and the Grand Isle Fire District Number 4. The GICWD has incorporated the former Grand Isle Fire Districts 1, 2, and 3 along with the Point Farm Water System and additional areas not previously served by municipal water systems. In addition, a number of small private water systems serve up to as many as fifteen homes each. The Town does not have a record of these systems.

Grand Isle Fire District #4 overcame limitations to their distributive system in the summer of 2003, when several improvements were completed, including extended lines and new filters. From April of 2000 to that summer, there was a moratorium on new connections to the system. When the improvements were completed in the summer of 2003, the moratorium expired and Fire District #4 now supplies quality water to the residents of Grand Isle and has sufficient capacity for new connections.

Lake water intakes are increasingly threatened by fouling with zebra mussels, even in portions of the lake not previously infested. The GICWD intakes at the Fish Hatchery and Fire District No. 4 have adopted treatments for dealing with zebra mussels. The GICWD intake at the Fish Hatchery "pigs" the line which has the effect of scouring the mussels and Fire District No. 4 chlorinates at the intake, which kills the zebra mussels. Private lake water systems must also deal with the problem of zebra mussels, as well as further filtration and sterilization to ensure potable water at the tap. Well water in Grand Isle often suffers from naturally occurring iron and sulfur compounds, which are difficult to remove and can make the water unpleasant to drink.

GOAL

1. Encourage consolidation of small systems into the municipal systems.

OBJECTIVES

1. Develop a long-range plan which expands municipal water into those areas of the town where no community water services or fire districts currently exist, and which, ultimately, would solidify all municipal and private water systems into a one or two consolidated water districts.
2. Where feasible, encourage new developments be added to the existing municipal water systems.
3. Encourage resident participation in the administration of the municipal water systems.

WASTE WATER DISPOSAL

The proper disposal of sewage is crucial to the health and well-being of the community. Sewage disposal systems which do not function properly may pollute groundwater, contaminate drinking water sources, provide breeding grounds for disease, cause noxious odors, and lead to contamination of Lake Champlain.

There are no municipal waste water treatment systems in the town. Waste water disposal is handled on an individual on-site basis. The fish hatchery maintains a specialized waste water system to treat the water from their operations. All wastewater should be discharged into a properly designed and constructed disposal system or properly constructed alternative facility in accordance with the Wastewater System and Potable Water Supply Rules, dated August 16, 2002 and as revised from time to time by the Vermont Department of Environmental Conservation. After July 2007, all disposal system work must receive a Wastewater System and Potable Water Supply Permit from the above mentioned office.

Deep or adequately drained soils which could potentially accommodate high capacity sewage disposal systems occur only in small, scattered locations. Given these conditions, the development of small lots is limited. In order to accommodate both a primary and a replacement waste water disposal field, individual building lots are, typically, larger than the minimum acreage required in the Zoning Bylaws.

An analysis of the soils potential for on-site sewage was completed by Bruce Watson, a certified soil scientist in October, 1995. This report noted that a very low percentage of soils in Grand Isle meet the requirements of the Vermont Small Scale Wastewater Treatment and Disposal Rules, which form the basis for Grand Isle's regulations. The Rules have since been amended to allow for innovative systems, effective August 16, 2002 and amended in 2005. It can be assumed that a higher percentage of sites will meet requirements under these rules; however, no specific analysis has been completed. Watson's report, entitled "Soil Potential for On-Site Sewage Systems, Grand Isle Town, Vermont," is herein incorporated by reference.

If one of the goals of this Town Plan is to maintain the town's rural agrarian image of undeveloped, open land, the only practical way to accomplish this goal is to promote the clustering of buildings within developments so that individual buildings can be sited closer together and can share waste water disposal systems. The village is a prime candidate for such development. Promoting development in the immediate vicinity of the village would, over the long term, make a municipal waste water treatment system for the village financially feasible.

GOALS

1. In order to maintain the town's agrarian image of undeveloped open land, promote clustered developments which share waste water disposal systems.
2. Promote the use of alternative treatment systems for both primary and replacement service in order to allow for the safe disposal of waste water on existing lots with

- substandard or inadequate site conditions.
3. Ensure that Lake Champlain and other local waters are not further polluted by malfunctioning or improperly operated waste water disposal systems by vigorously enforcing regulations for waste water disposal systems.
 4. Any public investment in wastewater disposal should be planned to minimize development pressure on agricultural and forestry lands.

OBJECTIVE

1. Encourage developers to investigate the feasibility of using community waste water disposal systems within a development.

SOLID WASTE DISPOSAL

The Town Dump was closed in 1981. Currently, refuse is hauled to the Waste USA Highgate Transfer facility run by Casella Waste Management. Grand Isle is a member of the Northwest Vermont Solid Waste Management District and has a certified solid waste plan. Recycling has been mandatory since March 1993 and is encouraged by economic incentives since recycling is accepted free of charge from Grand Isle residents.

GOALS

1. Continue membership with the Northwest Vermont Solid Waste Management District.
2. Encourage increased utilization of the central recycling facility operated by the Town.
3. Maintain a central transfer station and recycling facility operated by the Town.
4. Prohibit and prevent the improper storage and disposal of hazardous wastes in the town.
5. Work with the Northwest Vermont Solid Waste Management District to expand opportunities for recycled materials.

TELECOMMUNICATIONS

Access to high speed internet and cellular phone service are important not only to the quality of life for residents of Grand Isle, but for economic development as well. Currently DSL is available in some areas of town and residents on the western shore are able to connect to wireless service from New York. An antenna has also been mounted on the Bell Hill water tower, which is owned by the Grand Isle Water District, which should deliver wireless broadband to a large area of town in the near future. This project was the work of the Grand Isle Broadband Project, a group of citizens in South Hero and Grand Isle, which applied for and received one of the first Broadband grants offered by the Vermont Department of Economic Development to bring wireless technology to rural areas of Vermont. The two towns of South Hero and Grand Isle are both parties to the management of the site. There are now 100+ wireless customers in the two towns. The technology, known as WiMAX, is new and the equipment has not been tested to be sufficiently reliable. There are several test sites in the Islands, on Kibbe Point Road in South Hero and in North Hero Village, which are working well.

The availability and reliability of cell phone service is also limited on the Islands. While future infrastructure upgrades are encouraged, these improvements should be consistent with the character of the town.

GOALS

1. Achieve full broadband access town-wide.
2. Achieve full, uninterrupted cell phone service throughout town.

TOWN OFFICE AND TOWN GARAGE

The Town Office is a 30 by 54 foot building which contains two 10 by 14 foot vaults, office space for the Town Clerk and Assistant Town Clerk, a computer room, a meeting room, a bathroom, and 820 square feet of basement storage. Built in 1967, the building was enlarged to its current size in 1984 and has adequate storage space for approximately 15 more years. Public meetings which cannot be accommodated in the meeting room are held at the Grand Isle Elementary School.

The Town Garage is a heated 28 by 50 foot building with a heated 14 by 28 foot shed addition across the back and an open, unheated 24 by 50 foot storage shed along the west side. The 28 by 50 foot part of the building has one overhead door and is used primarily for vehicle repairs. The rear shed addition contains an office and storage space.

Current major pieces of town road equipment are:

- 1974 Fiat-Allis road grader
- 1987 Mack 8-yard dump truck
- 1990 Autocar 16-yard roll-off dump truck
- 1992 John Deere 6200 4WD tractor with loader and Alamo mower
- 1997 Mack 14-yard dump truck
- 2001 John Deere 544H loader
- 2005 Chevrolet 1 ton dump truck

GOAL

1. Encourage the mutually beneficial shared use of equipment with surrounding towns.

OBJECTIVES

1. Consider building an enclosed storage shed for road salt and concrete bunker for road sand, or adapting existing structures for these uses.
2. Further inventory road and office equipment to determine necessary future expenditures and upgrades.
3. Develop strategies for the eventual replacement, retrofit, or upgrade of municipal facilities.

PUBLIC LIBRARY

The Grand Isle Free Library is a historic, two room, 900 ft² brick building located in the center of Grand Isle across from the Town Office. The library contains approximately seven thousand books and is certified by the Vermont Department of Libraries as meeting the 1998 standards. The library has very limited space, which is making the expansion of services difficult. The library is interested in adding display space for artwork, additional technology facilities for public use, and additional public information resources. The library is also seeking to expand services to children and improve the catalog and increase meeting and performance space.

The library participates in the Inter-Library Loan System and is staffed four days a week by a salaried librarian. The library is open for a total of 20 hours per week. The library receives the majority of its funding from the town.

GOALS

1. Maintain the library as efficiently and economically as possible.
2. Provide library services which meet the needs of the community.
3. Provide larger facilities for the library.

OBJECTIVES

1. Obtain additional space for the library.
2. Expand the pool of certified library personnel available to staff the library.
3. Increase library hours to resources allow.
4. Continue implementing the technology plan.
5. Complete ongoing efforts to fully comply with state and federal health, fire, and accessibility standards.
6. Complete automation of the library.

RECREATION

The town owns or leases the following recreational facilities: those at Grand Isle School, a baseball field and playground at the former Grand Isle School Annex building, the town beach on East Shore Road North, a boat launch ramp at the end of Folsom Harbor Road, and the Grand Isle Recreation Park on Donaldson Road. Recreation in Grand Isle is supported by a combination of user fees, local fund raising, grants, and town appropriations.

The Grand Isle Recreation Park is located on Donaldson Road on 25 acres of property owned by the State of Vermont but long-term leased by the town. The site has been developed with limited facilities including picnic tables, restrooms, two little league baseball and softball fields, a basketball court, an ice-rink and a children's play area.

State owned recreation facilities in the town include the following:

- Grand Isle State Park: 226.57 acres, operated by the Vermont Department of Forests, Parks and Recreation

- Young Island: 7 acres, operated by the Vermont Department of Forests, Parks and Recreation
- Vantine's Access Area: .61 acres on West Shore Road, operated by the Vermont Department of Forests, Parks and Recreation
- Grand Isle Fish Hatchery: includes 1,000 feet of lake frontage, a visitor center, and a developing archaeological exhibit; owned by the Vermont Buildings Division but operated by the Department of fish and Wildlife
- Hyde Log Cabin: owned and operated as a museum by the Vermont Division for Historic Preservation

Recreational facilities are an important aspect of community life. Facilities can range from a town beach and fishing access, to hiking trails and bike paths, to a baseball diamond and skating rink. As the town's population increases, it becomes necessary to provide more sites for recreation and to protect future recreation sites.

A great deal of effort and tax dollars have been focused on maintaining and improving the water quality of Lake Champlain. Access to the lake need to be increased. Lake Champlain is the town's most valuable resource. The lake provides almost unlimited recreational opportunities for both residents and tourists. Capitalizing on the lake's recreational potential by increasing public access areas and developing recreational activities which relate to tourism will benefit everyone both economically and recreationally.

GOALS

1. Provide more town owned recreational facilities for the use and enjoyment of area residents and visitors.
2. Encourage recreational uses of the land and shoreline at the Grand Isle Fish Hatchery.
3. Investigate ways to increase public use of town lake front and beach area.

OBJECTIVES

1. The Town Recreation Committee will work in conjunction with the Town Planning Commission and Town Selectboard on any combined recreational/commercial issues which may arise.
2. Work to achieve goals of the Recreation Committee including: identification and/or creation of a community recreation center, including Recreation office space; continued improvement of playground and ball fields; make and post cross country ski trails; increase summer recreation programs for adult and youth; increase cooperation with other recreation entities in Grand Isle County to provide year-round programs; control vandalism at the park.
3. Identify and promote the development of recreational and tourist activities, services and facilities placing emphasis on the use of natural and existing man-made resources and on development which does not contribute to pollution of the lake.
4. Investigate the possibility of utilizing the Grand Isle State Park for recreational purposes during those months of the year that the park is closed and not operated by the state.
5. Investigate alternative funding options for recreation

CHAPTER 6 ENERGY CONSERVATION

Grand Isle serves primarily as a bedroom community, with most residents commuting elsewhere to work. Located on an island in the middle of Lake Champlain, the town's relatively flat terrain is wind-swept much of the year. Because of these two factors, energy conservation is an important step in developing a comprehensive energy plan for the future of Grand Isle.

The town is not involved in providing electrical service, gas service or other fuel supply for its residents. Energy needs for the town are provided by private utility companies and suppliers based primarily off-island. Currently there are no locally identified unmet needs or scarcities associated with energy resources; however, prices of petroleum based products are approaching all time highs and are very unstable and the cost of electricity (provided by Vermont Electric Cooperative) has been an increasing concern in recent years. Local data on energy costs and uses are limited; future plan updates should strive to include more detailed information.

According to the 2000 census, fuel oil and kerosene are the most popular home heating fuels (482 units). Bottled, tank, or LP gas are second with 174 units; wood and electricity follow with 63 and 48 units respectively. The remainder of the households heat with other fuels. There are also a small number of homes known to use solar heat.

Energy Conservation and Efficiency

Energy conservation is an important community goal, which can significantly reduce energy costs. At the local level, energy conservation concerns generally fall into four categories: energy efficiency of town-owned or town-maintained buildings; promotion of energy conservation techniques for residences and businesses, efficient development patterns; and energy used for transportation.

As customers of the Vermont Electric Coop, Grand Isle residents and businesses are eligible to participate in energy efficiency programs available through Efficiency Vermont. Efficiency Vermont has developed "Energy Savings Calculators" that allow homeowners to identify opportunities for conservation. They also provide information on efficiency upgrades and building practices, as well as offering rebates for the purchase of efficient lighting and appliances. Low income residents may also be eligible for free weatherization services available through the Champlain Valley Weatherization Service. Efficiency Vermont also offers conservation services to businesses and dairy farms.

Grand Isle is in the position to take the lead in promoting energy conservation. Making municipal buildings more energy efficient can save the municipality money in heating and lighting while helping to protect the environment. In 1993, the Town replaced the oil heating system at the Grand Isle School with a woodchip fired heating system, which is a local, low cost and maintenance heating fuel option. Subdivisions and developments in the Town that come under Act 250 review are required "to reflect the principles of energy conservation and incorporate the best available technology for efficient use or recovery of energy." The Town does not currently have a building code and does not currently plan to adopt one, however new

construction is expected to meet state energy requirements. Site plan review under the zoning regulations does enable the Development Review Board to impose conditions regarding the utilization of renewable energy resources.

Energy efficient development means more than just well-constructed buildings utilizing the best technology. For example, development which is clustered together provides for greater efficiency. Fewer miles of road are needed to connect the homes or commercial buildings, school buses and snow plows travel smaller distances, and electric utility lines need not extend as far. In addition, other public services such as fire and ambulance, as well as sewage and water are all made more efficient by "well planned" new development. Carefully considered placement of a building on a lot adds to the efficiency of any new development by increasing passive solar gain and decreasing wind pressures.

While the clustering of development helps decrease transportation costs, it is not the only answer. Most Island residents travel to Chittenden or Franklin Counties for employment, entertainment, medical needs, or supplies. Car pooling is beneficial for these residents not only because it conserves fuel, but also because it reduces wear and tear and maintenance costs on individual vehicles and roads. As shown in figure 6.1, fourteen percent of Grand Isle’s workforce carpooled to work in 2000.

Table 6.1

Means of Transportation to Work		
	Number	Percentage
Drove Alone	798	78.2
Carpooled	143	14
Public Transportation	2	0.2
Walked	19	1.9
Other Means	10	1
Worked at Home	48	4.7
Workers 16 and over	1,020	100

Data Source: U.S. Census 2000

One important component of any car-pooling program is the provision of a location where carpoolers can leave their vehicles. Currently, there is no formal designated park and ride lot in Grand Isle County. The closest lot designated by the State of Vermont, near exit 17 on 1-89, is often very full, even with the recent improvements. This makes it necessary to either develop a new formal park and ride lot, or encourage the formation of informal park and ride lots. These are parking lots at locations such as churches, where the mostly weekday park and ride needs do not conflict with the parking needs of the particular location.

Alternative Energy Development

Locally generated power from alternative sources, including but not limited to solar, wind, biomass, and methane, can provide cost saving and environmental benefits for Vermont municipalities. The more power produced locally (on a household or community basis), the less dependent communities, and the state as a whole, are on purchasing non-renewable and/or non-locally produced power. This in turn reduces the impact of volatile electric and heating fuel costs on the community and the state as a whole. Net-metering locally generated power back into the grid provides an opportunity to offset some costs and potentially generate revenue. Net-metering power requires a Certificate of Public Good under Act 248 and is exempt from local zoning, though the Public Service Board usually considers local town plans and regulations in the review. Locally generated power that does not connect to the grid is subject to local zoning. While Grand Isle encourages alternative energies as clean, renewable sources of power, the development and operation of power generation facilities should not place an undue burden on

wildlife, ecological systems, water and/or air quality, scenic qualities and views, and cultural features in town. In addition, measures should be taken to minimize or eliminate significant noise impacts resulting from the construction or operation of facilities. With appropriate and careful review, the development of alternative power generation facilities will help diversify and strengthen Grand Isle's energy portfolio.

GOALS

1. Encourage energy efficiency by making available information regarding groups and organizations in the state which can provide consumers with information on how to become more energy efficient.
2. Promote car-pooling among area residents; encourage the use of informal park and ride lots where possible.
3. Encourage public transportation.
4. Make town owned buildings as energy efficient as possible.
5. To help conserve public resources, encourage clustered development wherever possible, and encourage energy efficient site design.
6. Encourage the development of alternative and renewable energy resources.

OBJECTIVES

1. Work with the surrounding towns and the Regional Planning Commission to encourage the VT Agency of Transportation to investigate the creation of commuter parking lots in Grand Isle County.
2. Review town energy costs on a regular basis to identify any areas for potential cost savings.
3. Participate in Public Service Board proceedings where appropriate to help ensure utility costs remain affordable for residents and businesses and that new infrastructure is in conformance with the Grand Isle Town Plan.
4. Develop standards of review for power generation facilities, including wind turbines, in the Grand Isle Zoning Regulations.

CHAPTER 7 HOUSING

The 2000 census showed a total of 1,047 total housing units in Grand Isle. Of these units, 632 were owner-occupied, 140 were renter-occupied year-round housing, 240 were seasonal or recreational housing units, and 35 were vacant housing units. Total housing units increased by over 7 percent from 1990 to 2000, while population increased at a much higher rate of close to 20 percent. More information regarding land transfers and zoning permits are contained in Appendix Two.

Figure 7.1

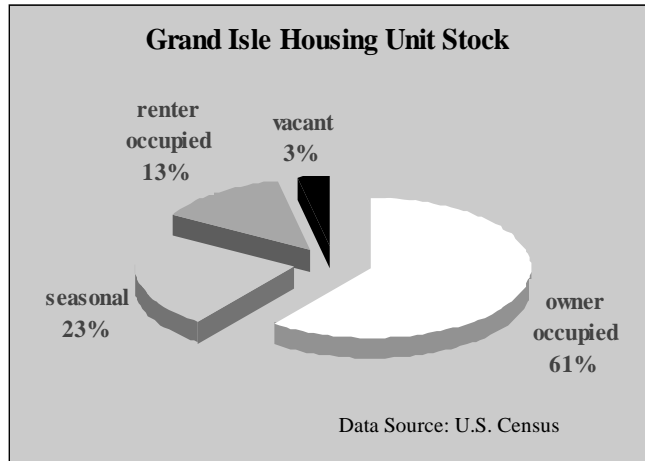


Table 7.1

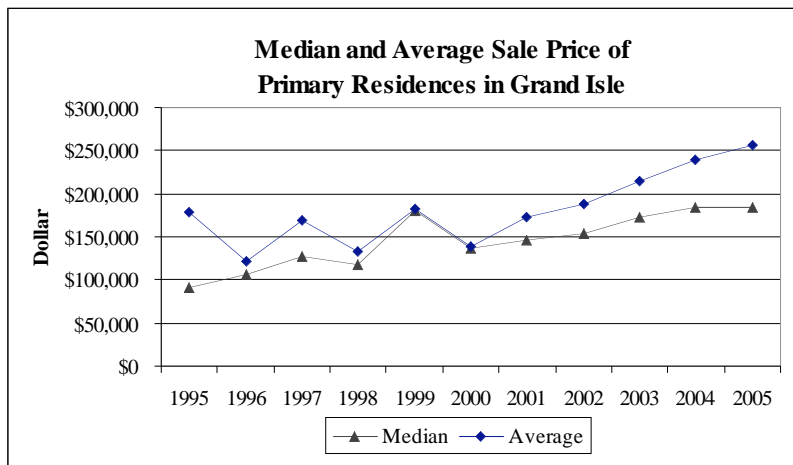
Percent Housing Units by Number of Bedrooms in Grand Isle Town

	0-1 Bedrooms	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 > Bedrooms
Owner	3.2%	26.5%	47.9%	18.7%	3.8%
Renter	29.1%	44.0%	22.0%	3.5%	1.4%

Data Source: U.S. Census 2000

The majority of Grand Isle households are families (74 percent) and the average household size was 2.91 people in 2000 (down from 2.97 in 1990). The largest age-group of Grand Isle’s population is from age 35 to 49 (see population pyramid in Appendix 2), which will typically range from families with school age to high school age children in need of larger homes to “empty nesters” who are ready to downsize to smaller homes or condominiums. In addition, the senior population is increasing and is expected to continue increasing as people in their thirties and forties age. This larger population of seniors will need a variety of senior housing and assisted living arrangements. Senior housing opportunities in Grand Isle are discussed later in the chapter. The best available data from the 2000 U.S. Census indicates that there is currently a diversity of homes (both for ownership and

Figure 7.2



for rent) of all different sizes in the Town of Grand Isle to meet the needs of families and non-families of different sizes and types; however this data does not take into account affordability.

Housing availability in Grand Isle is not a problem for those in the upper levels of income; however, the supply of affordable housing is increasingly becoming an issue for households earning the median income and lower. While adequate numbers of existing homes in higher price ranges routinely are available for sale, affordable housing can be difficult to find due to a number of factors. Housing shortages in neighboring Chittenden and Franklin Counties cause the workforce in those two counties to seek housing on the Islands and the resultant increase in demand continues to push up the price of housing, as do increasing construction and development costs. At the same time, income has failed to keep pace with the rising costs of housing.

Figure 7.2 above shows the average and median sale prices for primary residences in Grand Isle Town. In 2005, the median sale price for primary residences was \$185,000, a 35% increase since 2000, while the average sale price was \$257,045, an 85% increase since 2000. The gap between the median and the average sale price has been increasing each year since 2000, indicating that the range in sale price is increasing; in particular, prices on the high end are rising.

The state defines "affordable housing" as housing that consumes no more than 30% of a household income earning no more than 80% of the county median or metropolitan statistical area (MSA) median income, if it applies. Housing costs include not only the mortgage, but taxes and insurance, as well, for owner-occupied units. In the case of rental units, the cost is defined as rent plus utilities. All of Franklin and Grand Isle County have recently been added to the Burlington-South Burlington MSA; however, data has not been updated to include the two counties and therefore affordability analysis uses the Grand Isle County median income. Further, using the MSA income will skew affordability analysis in Grand Isle Town due the much higher median income in Chittenden County.

In 2000, the U.S. census determined median family income in the town of Grand Isle to be \$48,594 vs. \$43,033 in Grand Isle County as a whole. Low income households are those in which income is 80% of the median, while very low incomes are those at or below 50% of the median. According to the 2000 census, approximately 163 households in Grand Isle were considered as below median income but not low income; an additional 236 were low income; and of those 154 were very low income. A total of 81 individuals were under the poverty level.

Using the state definition of affordable housing outlined above, the following two tables illustrate the income available for homeownership and for rent each month for each of these groups, median sale price for year-round primary dwellings or median gross rent, and the difference between the two, known as the affordability gap. The maximum affordable mortgage for the median income is close to \$40,000 less than the median price of homes sold in Grand Isle during 2005, while for lower incomes the gap gets even larger. Rental housing in Grand Isle appears to be more affordable for median and low incomes, while very low incomes have a gap of 24 dollars.

	Med. County HH Income (1999)	30% of Income Per Month	Taxes & Insurance	Income Available for Housing per Month	5% Down Payment	Maximum Affordable Mortgage	Median Sale Price Primary Residences (2005)	Owner Affordability Gap
Median	43,033	1,076	240	836	\$7,005	147,111	185,000	(37,889)
Low (80%)	34,426	861	240	621	\$5,202	109,239	185,000	(75,761)
Very Low (50%)	21,517	538	240	298	\$2,497	52,437	185,000	(132,563)

Data Source: Median Household Income (2000 U.S. Census); median home sale price (Vermont Housing Data); taxes and insurance (NRPC estimate); all other figures computed by NRPC

There is currently one development of subsidized low-income housing in Grand Isle at Island Housing on 25 Hyde Road. The development provides 16 apartments (5 one bedroom, 8 two bedroom, and 3 three bedroom), one of which is market rate and the other 15 of which are available to families making 50 to 60 percent of the median income. As the disparity between the median income and the median sale price increases, the need for more affordable housing will likely rise.

	Income Available for Rent/ Month	Median Gross Rent (2000)	Rental Affordability Gap
Median	1,076	562	514
Low (50 - 80%)	538 - 861	562	(24) - 299
VeryLow ($\geq 50\%$)	538	562	(24)

Data Source: U.S. Census

There are at present, 24 units of subsidized elderly and disabled housing in Grand Isle at the Round Barn Homestead on Faywood Road. These units were built in 1980, and are consistently at 100% occupancy. CIDER, Champlain Islanders Developing Essential Resources, is an organization working in Grand Isle County to help support the needs of elderly residents. CIDER has identified a need for additional elderly housing in the county, and is working with several regional partners, including United Way, Lake Champlain Housing Development Corporation, and the Lake Champlain Islands Chamber of Commerce, to assess the need for an assisted living facility in the Islands. CIDER intends to complete a marketing and feasibility study to further assess the type of facility, best location, and other details before seeking out funds and developers for the project.

The Town recognizes that there is a need for affordable housing for low and moderate income households. The topography of the town and its limited septic capacity makes it difficult to plan land use that supports traditional affordable housing. When possible to develop affordable and elderly housing, it should be located conveniently near community services and the village area to make it easier for residents to access needed services without a vehicle. In addition, changes in Chapter 117 have required towns to allow for limited size accessory apartments in single family dwellings and enables towns to be less restrictive of this issue. The Grand Isle Bylaws have been amended to allow the owner of the property to live in either the primary dwelling or the accessory dwelling. By applying a less restrictive standard, accessory apartments can

provide a viable and affordable option for low income residents and for elderly residents to remain in town on a commonly fixed income.

GOAL

1. Encourage the development of safe and affordable housing of a variety of types that meet the needs of diverse social and income groups in Grand Isle.
2. Support affordable and suitable housing development for households and individuals with special housing needs, including the elderly, those with physical or mental disabilities, single parent households, and low and moderate income households.
3. Support housing agencies, private lenders, developers, realtors, and builders in providing safe, affordable housing.

OBJECTIVES

1. Support innovative approaches for affordable housing.
2. Encourage cost effective land use patterns.
3. Promote mixed income/mixed use development, including planned unit developments.
4. Encourage siting of new housing development to preserve the greatest amount of open space and blend harmoniously with the natural environment.
5. New housing should be encouraged conveniently near the village area and community services.
6. Sites for multi-family and manufactured homes should be readily available in locations similar to those generally used for single-family dwellings.
7. Encourage accessory apartments within or attached to single family residences.

CHAPTER 8 TRANSPORTATION PLAN

The town's transportation plan outlines how existing forms of transportation should be maintained and improved and how new forms of transportation should be developed. The transportation plan is multi-modal, examining all forms of transportation: walking, ferry service, bicycles, cars, etc. Transportation is inter-related with many other sections of this plan, including land use, energy, recreation, and housing. Because of the high number of commuters in Grand Isle, the roadways continue to be the area of most concern when planning for transportation.

TOWN ROAD SYSTEM

The Town of Grand Isle has a town road system made up of 38.855 miles of State Highways and Class 2, 3 and 4 Town Highways as shown on the Transportation Map. The town road system provides good circulation and is reasonably well maintained. In addition to the town roads, a federal and a state highway pass through Grand Isle. U.S. Route 2 serves as the main North/South route, and VT Route 314 provides access to the Grand Isle Ferry and many residences. The federal and state roads are generally well maintained also, although increases in bicycle and truck traffic have made the narrow shoulders an increasing concern in recent years.

The drawbridge connecting Grand Isle to North Hero is showing signs of age. The state AOT is evaluating options for repairing or replacing the drawbridge. The town currently has no prioritized plan for improvements to town roadways, but is working to systematically pave all town roads.

<i>State/Federal Highways:</i>	
U.S. Rt. 2	6.274 miles
Vt. Rt. 314	3.901 miles
<i>Town Highways:</i>	
Class 1	0.000 miles
Class 2	9.310 miles
Class 3	18.230 miles
Class 4	1.140 miles

Most of the roadways through Grand Isle offer scenic views along their entire length, although the town has not officially recognized any areas of scenic value. The VT Agency of Transportation received a federal grant to conduct a scenic byway study around Lake Champlain. In northwestern Vermont, the effort focused on Grand Isle County. An application for byway designation is currently under consideration by state officials, with formal designation expected in 2007.

As discussed in the Energy Chapter, there is currently no official park and ride lot in Grand Isle County. According to the 2000 US Census, 746 Grand Isle residents commuted to work outside of Grand Isle County. Of these commuters, 28 traveled to Franklin County and 649 traveled to Chittenden County. In addition, 83 residents commuted to other Island towns, while 191 worked within Grand Isle. Only approximately 143 (14%) of the total commuter trips made by Grand Isle residents were by car pool or van pool. This small number is a function of people's reliance on the automobile, but it also may be related to the lack of commuter facilities in the Islands.

Place of Commute	Number	Percentage
Grand Isle Town	191	19%
Burlington City	195	19%
Essex	135	13%
South Burlington	112	11%
Other Grand Isle County	83	8%
Colchester	75	7%
Williston	68	7%
Other Chittenden County	64	6%
Out of state	39	4%
Franklin County	28	3%
Washington County	18	2%
Addison County	6	1%
Other	6	1%
Total Workforce	1,020	100%
Data Source: U.S. Census 2000		

GRAND ISLE FERRY

The Grand Isle Ferry is privately owned by the Lake Champlain Transportation Company. The ferry provides a vital transportation and economic link between the states of Vermont and New York. The Grand Isle Ferry is the only ferry across Lake Champlain which operates year-round. In 1999, the ferry also began 24-hour operations. Without the ferry, travelers needing to cross the lake would need to travel to the Crown Point Bridge to the south, or Rouse's Point Bridge to the north, adding many miles onto the trip. However, the ferry contributes substantial additional auto and truck traffic to Route 2 and 314.

PUBLIC TRANSPORTATION

There is currently limited bus service between communities in the Champlain Islands and communities on the Vermont or New York mainland. The Northwest Vermont Public Transit Network is a non-profit organization working in Franklin and Grand Isle Counties to help establish public transportation in the region. The Network initiated a Job Access Reverse Commute (JARC) service in 2000, which travels along a route from Swanton through Alburgh, North Hero, Grand Isle, and South Hero and then meets up with the Link Express bus at the Exit 17 park and ride, which travels to Essex and Burlington. In addition, the ongoing need for bus service for senior citizens and the disabled is currently being provided with van service by the Champlain Islanders Developing Essential Resources (CIDER).

The nearest airport to Grand Isle with passenger service is the Burlington International Airport. Additional air service is available in Plattsburg, NY and the Franklin County Airport. Rail service through the Islands was discontinued in 1961. Passenger rail connections are available in St. Albans and Essex Junction.

WALKING BIKING AND OTHER TRANSPORTATION

There is a need to expand the town's recreational facilities with a system of walking paths and hiking trails. Currently, a great deal of biking and walking activity takes place along the roadways. For example, Lake Champlain Bikeways is an organization that has designated an on-road bike path around Lake Champlain. A portion of that route travels through Grand Isle. Several organizations are actively examining additional bike routes that would include segments in Grand Isle. All bicycle traffic in the town currently travels on roads also open to automobile and truck travel. This potential increase in bicycle use could magnify existing roadway user conflicts.

The Northwest Regional Planning Commission, through the Vermont Agency of Transportation (VTRANS) works on transportation issues in the region. The Commission's Transportation Advisory Committee examines issues of local and regional importance and identifies transportation improvement priorities for submission to VTRANS. These priorities are then considered for state and federal funding. Grand Isle participates in this program with a representative on the Transportation Advisory Committee, and will continue to participate in the identification of local priorities which can be considered regional projects. Currently the Grand Isle- N. Hero Drawbridge is considered a high priority and a project of regional significance.

THE GRAND ISLE ROAD ORDINANCE AND GRAND ISLE PRIVATE ROAD ORDINANCE

The Town of Grand Isle road ordinance, adopted in 1987 and most recently updated in 2005, regulates the specifications of new development roads. The Grand Isle private road ordinance was adopted in 2005. All new development roads constructed as part of a subdivision or other development must adhere to these standards. The Town of Grand Isle is under no obligation to accept any new roads.

Transportation studies, such as *Safety Effectiveness of Highway Design Features* (1992, Federal Highway Administration), have shown that the number of accidents increase on a roadway as access points increase. Roadways in rural areas with no access control have over twice the number of accidents per vehicle mile traveled as rural roadways with full access control. Even partial access control can reduce accidents by one third.

New development within the town shall be designed in such a manner as to eliminate the need for unnecessary curb cuts or access driveways off state or town roadways.

It is recognized that cul-de-sacs provide for a type of residential development enjoyed by some residents, and at times may be necessary to avoid impact on resources. However as Grand Isle grows, it is important to ensure that development takes place efficiently. Subdivisions designed with cul-de-sacs or dead end roads must show right-of-way access to adjacent parcels for use as a future trail or roadway connection.

EXIT 17 INTERCHANGE CONCERNS

The primary access point for traffic to and from Grand Isle is the Exit 17 interchange in Colchester between Route 2 and Interstate 89. Tourists (other than from Canada) and residents who commute to jobs in Chittenden County must pass through this interchange. The Chittenden County regional plan and the Colchester Town Plan call for increased development near this interchange, including medium-density residential and retail commercial uses. This interchange is currently at capacity during morning and evening peak periods, and during popular tourist periods. Increased traffic at this interchange consistently "bottles up" access to and from Grand Isle and the other island towns. The 2025 Chittenden County Metropolitan Transportation Plan has identified this Exit as in need of safety enhancements to improve accessibility; however, there is no proposed project on the table to date.

GOALS

1. Maintain a functional, economic, scenic, well laid out network of roads.
2. Establish a system of walking trails, hiking paths and recreation paths.
3. Work with the organizations conducting studies or projects within the town to ensure the town's voice is part of any final product. These include: Lake Champlain Scenic Byways, the Northwest Regional Planning Commission, Lake Champlain Bikeways, and the Northwest Vermont Public Transit Network.
4. Pursue scenic byways designation in cooperation with the other towns of Grand Isle County.
5. Reduce air pollution by encouraging public transit and carpooling.

OBJECTIVES

1. Work in conjunction with the Recreation Committee and other committees to study the feasibility of establishing a system of walking paths, hiking trails, and recreation paths.
2. Continue to examine the possibility of a recreation path connecting the towns of Alburgh, Isle La Motte, North Hero, Grand Isle and South Hero to provide not only an invaluable recreational facility but also a much needed alternate transportation route for both residents and tourists.
3. Determine whether existing van service is adequate for the current needs of senior citizens.
4. Explore the need for and feasibility of a commuter Park and Ride lot.
5. Require developers and property owners to provide new or expanded roads which meet town standards, are appropriate in design to the project or development they serve.
6. Maintain a road maintenance and improvement program for the repair and/or rebuilding of the existing road network in an orderly cycle.
7. Maintain existing roads and public rights-of-way along the lakeshore. The location of these roads and rights-of-way along the lakeshore is an integral part of the town's unique island character.
8. Work with the Regional Planning Commission and the VT Agency of Transportation to

ensure needed improvements to Route 314 and Route 2 .

9. Explore transportation options for school children, including the Safe Routes to School Program.
10. Continue to lobby VTRANS and the Chittenden County Metropolitan Planning Organization to ensure safe and adequate traffic flow in and out of the county.

CHAPTER 9 PRESERVATION PLAN

Grand Isle is located in a unique setting. It is one of Vermont's few island towns. Grand Isle is situated in the middle of the largest freshwater body in New England, and the sixth largest freshwater body in the United States. The natural beauty which surrounds the town is an integral part of the town's very identity and is a breath-taking, irreplaceable resource. This setting has been the town's chief calling card for settlement since 1779. It remains so today.

The preservation of this unique setting is of vital importance to the community. This is not intended to mean that this preservation should be at the expense of other equally important goals. Rather, it is meant to be a goal which should be balanced with other goals in the plan.

It is important to consider all of Grand Isle's resources, for they make up the character and identity of the community. Some of Grand Isle's resources are the earth and water and other things that make up the landscape of the town. Other town resources are the homes and businesses, the community groups and volunteers. A major resource of Grand Isle is its people.

Development poses the greatest threat to these resources. As more land is developed for residential use, wildlife habitats become smaller and the town's historic character is lost. As more and more people commute to other communities for employment, their connection to Grand Isle diminishes. This chapter will focus on the natural, cultural and historic resources which are important to the residents of Grand Isle, and help to define the community.

CONSERVATION PLANNING

Lake Champlain, fertile soils, wildlife and scenic views are but a few of the town's irreplaceable natural resources integral to our rural character. Fields and woodlands, marshes, wetlands and streams, rocky shoreline and small islands provide a wide variety of habitats for a diversity of wildlife. The natural environment provides recreation and promotes tourism.

Large areas of land remain undeveloped in the town, including a total of approximately 1,138 acres of public and conserved land (VT Conserved Land Database 2004). As more land is developed, the impact of this development on the natural environment becomes a matter of real concern. This impact should be monitored and interpreted. To do that, information should be gathered periodically and policies reevaluated based on the information gathered and specified criteria.

Residents depend on lake water and the ecology of the islands for their livelihood and well-being; maintaining the quality of the natural environment is crucial.

LAKE CHAMPLAIN

Lake Champlain is Grand Isle's principal natural resource (the lake's importance for recreation and transportation is noted in other chapters). The lake is the town's main source of drinking water, as well as the town's principal attraction for private, public and commercial recreation. The lake is also a source of visual and aesthetic enjoyment.

Much of the shoreline of Lake Champlain is experiencing erosion due to clearing of surface vegetation, uncontrolled surface run-off and increased development along the lakeshore. In addition, loss of vegetation due to the 1998 ice storm has in some cases accelerated this erosion. Many sheltered shoreline areas are experiencing an increase in weed and algae growth. This increase in weed and algae growth is due to many causes including some development and agricultural practices, pollution caused by failing septic systems, and storm water runoff. Some of these causes can and should be managed and controlled at the local level through planning and zoning practices.

Several efforts are underway to address water quality in Lake Champlain which will have an impact on water quality along Grand Isle's shorelines. Vermont has adopted, along with Quebec and New York, a plan for reducing phosphorus in Lake Champlain. In addition, the Department of Environmental Conservation is in the midst of a watershed planning effort for Northern Lake Champlain that should result in a plan for the watershed in the next year. Efforts are also underway to restore some of the natural flow to Lake Champlain by removing causeways, such as the Carry Bay causeway in North Hero.

The Lake Champlain Basin Study identifies Young and Bixby islands, commonly known as The Sisters, as important wildlife habitats, particularly for waterfowl and other birds. Accessible only by boat and therefore isolated from the impact of development, The Sisters provide essentially undisturbed sanctuaries for wildlife, however in recent years the cormorant colonies have displaced native species.

Savage Island is approximately 207 acres in size and remains currently under single ownership. Current use is as a single family residence and a sheep farm. Areas which are not in agricultural use provide important wildlife habitats. Current use of the island is an excellent example of the harmonious balance that can exist between limited development and wildlife.

MARSHES, SWAMPS, WETLANDS, WILDLIFE AND FISH HABITAT

Wetlands regulate stream discharge and are crucial to maintaining an even surface water discharge. Wetlands store large quantities of water during periods of high run-off and gradually release water during periods of low-flow. Loss of this storage capacity will affect stream behavior by increasing the potential for flooding during rainy periods and reducing stream flow during periods of drought.

Wetland areas are also important in the maintenance of water quality. Biological activity in wetland areas absorbs and assimilates nutrients and helps purify the water which is discharged. Marshy areas such as the Pearl Swamp provide important wildlife habitats.

The Vermont Significant Wetland Inventory (VSWI) Map identifies a number of Class 2 Wetlands throughout the town. These wetlands are regulated by the Vermont Agency of Natural Resources and the Army Corps of Engineers.

In 1992 and 1993, Elizabeth Thompson, a biologist hired by the Non-game and Natural Heritage Program of the Vermont Department of Fish and Wildlife, conducted a study and inventory of wetland areas in the Town of Grand Isle. Three sites were found to have State-wide significance and were recorded in a report entitled *Ecologically Significant Wetlands of Grand Isle County*. The three sites are:

1. Site No. 076 - Nichols Point Wetland
2. Site No. 080 - Wetland West of Hyde Point
3. Site No. 092 - Pearl Swamp

Each of these sites is privately owned. There is no access to the sites without the permission of the landowners.

Nine other sites were found to have local significance. Each site was recorded on a Non-game and Natural Heritage Program Site Survey Summary form. The nine sites are:

1. Site No. 081 - Pearl Bay Wetlands
2. Site No. 083 - Hyde Road Swamp
3. Site No. 085 - Railroad Grade Swamp
4. Site No. 086 - Grand Isle Cemetery Swamp
5. Site No. 089 - Folsom Bay Wetland
6. Site No. 091 - Powerline Swamp
7. Site No. 094 - Grand Isle State Park Swamp
8. Site No. 121 - Simms Point Swamp
9. Site No. 126 - Hyde Point Bay Wetlands

Each of these sites is privately owned, except for the State Park Swamp, which is owned by the State of Vermont,

In addition to the report by Elizabeth Thompson, Bruce Watson, a certified professional soil scientist has prepared an October 1995 report entitled "Wetlands and Hydric Soils, Grand Isle Town, Vermont." This report compared the NWI map to the US Department of Agriculture soil survey to identify potential areas of hydric soils. This is meant to be used as a planning tool when examining potential development impacts.

The reports entitled "Ecologically Significant Wetlands of Grand Isle County" and the Non-game and Natural Heritage Program's *Site Survey Summary* forms for the Town of Grand Isle, and "Wetlands and Hydric Soils, Grand Isle Town, Vermont" are hereby incorporated into the Grand Isle Town Plan by reference.

The wetland areas identified by Elizabeth Thompson and Bruce Watson may more accurately

identify certain of the town's swamp, marsh and wetland resources than those areas identified on the VSWI Map. If the Town believes that these areas identified are more accurate, the Town should contact the Vermont Department of Environmental Conservation to discuss amending the VSWI Map.

Development in any Class I or II wetland must be reviewed by the Vermont Agency of Natural Resources.

AGRICULTURAL SOILS

Grand Isle County has the highest percentage of prime agricultural soil (approximately 13 percent) than any county in the state. A soil survey conducted by the U.S. Soil Conservation Service in 1959 shows that soils in the county have a high natural fertility. Approximately 13 percent of Grand Isle Town's soils are considered prime agricultural. Prime agricultural soils have high fertility retention, high organic matter content, and high available moisture content. Together with an open terrain and a longer growing season due to the proximity of Lake Champlain, the ideal use for these soils is agriculture, not development.

Knowledge of the types of soils common to the town is essential to any understanding of how to best use and preserve them. A list of soil types can be found in the Appendices.

WOODLAND

Forests are a renewable resource. Conservation of woodlands is important for wildlife habitat, stream bank and lakeshore erosion protection, and many other benefits. Proper forestry management is important to protect the resource, as wood and wood products are increasingly becoming valuable commodities. Forestry practices are generally exempt from any state or local regulations. Currently, Grand Isle has not formally identified and/or designated any forest lands.

MINERALS AND OTHER DEPOSITS

The excavation of minerals and other deposits can be not only a potential economic benefit to the town but also a potential environmental liability. If erosion is not controlled during excavation, and if the landscape is not restored after excavation has ended, the ecology of the surrounding area may be irreparably damaged. Any potential excavation proposals within Grand Isle will be carefully reviewed according to local bylaws.

NATURAL AREAS AND FEATURES, WILDLIFE HABITAT

Natural areas and features have educational, scientific, or recreational value to present and future residents and visitors to Grand Isle. These may include wilderness or semi-wilderness areas, areas with unique or unusual ecologies or topographies, unique or unusual formations, and areas or features which possess scenic or recreational value. Although Grand Isle has not formally designated any local natural areas within the town, there are many areas which contribute to the island ecosystem, some of which have received statewide designation, such as the Grand Isle State Park

Diversified wildlife helps maintain the balance of nature and plays a key role in agriculture, private recreation and tourism. In order to maintain wildlife diversity, conservation of necessary habitat must take place. Deeryards and other designated wildlife areas should be avoided when planning new development in order to avoid adverse impacts on the natural balance of the habitat.

SCENIC VIEWS, VISTAS AND ROADS

Scenic views and vistas provide aesthetic pleasure to both residents and visitors. They are valuable resources which are linked to our personal well-being and the Vermont economy and are an irreplaceable part of a community's identity.

It is important to locally identify scenic views and vistas. Whenever and wherever possible these views and vistas should be visible from areas where public access is available and utilized, such as roadways, town and state-owned properties, and the shoreline. Development in or near a scenic view or vista should be in such a way as to preserve and maintain the value of the view or vista.

GOALS

1. Preserve Grand Isle's unique island setting.
2. Maintain the quality of Grand Isle's natural setting.
3. Work with state officials and local residents to continue protection of Lake Champlain shorelines, water quality, and overall well-being.
4. Maintain the integrity of Grand Isle's important wetlands.
5. Preserve the natural and manmade environment, including lake waters and lakeshore, streams and wetlands, fields and woodlands, wildlife and natural habitats, natural features and landscapes, scenic views and vistas.

OBJECTIVES

1. Encourage development within a designated natural area or in the proximity of a designated natural feature to occur in such a way as to preserve and maintain the value of the area or feature for education, science, research, aesthetics and recreation.
2. Encourage proper forestry management throughout the Town of Grand Isle.
3. Regulate the excavation of minerals and other deposits to ensure continuous erosion control during excavation operations; complete restoration of the landscape to its original condition, with appropriate contouring, site drainage and replanting.
4. Encourage development designs that do not adversely impact the natural ecological balance of wildlife habitats.
5. Encourage sound agricultural and forestry practices which minimize impacts on the environment.
6. Work with the State of Vermont Agency of Natural Resources and appropriate federal agencies to prohibit the introduction or addition of any substance to a marsh or wetland area which is likely to increase a concentration of material which is beyond the capacity of the marsh or wetland to assimilate.

7. Support federal, state, and local efforts to control harmful and undesirable algae and other lake plants and zebra mussels.
8. Discourage uses which either contribute to the erosion of the shoreline or increase the growth of lake weeds and algae.

CHAPTER 10 NEIGHBORING COMMUNITIES AND THE REGION

The town of Grand Isle is a community on Lake Champlain within the County of Grand Isle, which was recently recognized as the fastest growing county in the state. Grand Isle shares "land border" with the town of South Hero to the south, and a drawbridge connection with the town of North Hero, located to the north.

To the west of the town, across what is commonly referred to as the "broad lake" part of Lake Champlain, lies the state of New York. The town of Grand Isle shares a ferry connection across the broad lake with the City of Plattsburgh, New York. To the east, across what is commonly referred to as the "inland sea" or the "inner lake" part of Lake Champlain, lies the mainland of Vermont and the towns of Milton, Georgia and St. Albans. The town of Grand Isle shares no physical land-based or water-based transportation connection with any of these mainland towns. Their only connection is a shared concern for the preservation and enjoyment of the waters of Lake Champlain.

Grand Isle and its adjacent island communities have experienced a substantial degree of growth since 1980. As shown in Tables 10.1 and 10.2, Grand Isle has a relatively high percentage of growth in terms of population and number of housing units among selected Island towns.

Table 10.1 Population Totals from the US Census

Town	1980	1990	2000	% change, 1980-2000
Grand Isle	1238	1642	1955	+57.9%
North Hero	442	502	810	+83.3%
South Hero	1188	1404	1696	+42.8%
Grand Isle County	4613	5318	6901	+49.6%

Table 10.2 Housing Totals from the US Census, including seasonal units

Town	1980	1990	2000	% change, 1980-2000
Grand Isle	723	997	1047	+44.8%
North Hero	734	743	907	+23.6%
South Hero	832	958	1036	+24.5%

A COMPARISON WITH THE TOWN OF NORTH HERO

The goals and policies outlined in North Hero's Town Plan, adopted in 2003, are similar to those outlined in the Grand Isle Town Plan, even though specifics vary and some emphasis is different. The basic goals of the North Hero Town Plan are "to preserve the unique rural and small town character of North Hero;" "to protect the quality of the environment and the lake;" "to maintain the visual character and aesthetic setting of North Hero;" "to maintain the community and to enhance the sense of community in North Hero;" "to foster quality growth and controlled development in North Hero;" "to engage in a continued, coordinated and comprehensive planning process and to encourage active citizen participation throughout the process;" "to assure the safe and efficient use of both town and state road networks;" "to maintain a comprehensive mapping system of North Hero;" "to regularly review public and private incentives, grants, and other incentives as tools to promote Town goals and address local needs;" "to promote safe, healthy, and affordable housing located conveniently to employment, services, retail centers, and educational and recreational facilities as well as park and ride;" and "to promote increased awareness and use of renewable energy resources as well as the conservation of existing energy resources."

The North Hero Town Plan sites the environment as the "single most important factor in the quality life in North Hero." The Town Plan also states that "the quality of the lake must be considered in every aspect of town planning." The Town Plan goes on to state that Lake Champlain is an important resource which "is being adversely affected by run-off from agriculture, the discharge of effluents from wastewater disposal systems, and increased recreational use." The "scenic beauty of the shore lands" is also cited as being in danger from erosion and the indiscriminate clearing of vegetation.

North Hero has had modest growth compared to Grand Isle. Most residential development has taken place along the lakeshore. Like Grand Isle, agriculture and tourism, including seasonal homes, continue to be the town's two most important economic bases. U.S. Rt. 2 is the only arterial corridor which links North Hero with the rest of Vermont.

The Town Plan designates the following Land Use Districts: Village, Rural Lands I, Rural Lands II, Shorelands, and Off Islands.

North Hero adopted Zoning By-Laws in November of 1990. In the revised November 2002 Zoning By-Laws, the Village, Shorelands and Off Islands districts each have a minimum lot size of 2 acres, with a minimum density of 1 acre. Rural Lands I has only conditionally permitted residential or commercial uses and a minimum lot size of 10 acres. Rural Lands II has a minimum lot size of 3 acres, with a minimum density of 1 ½ acres.

A COMPARISON WITH THE TOWN OF SOUTH HERO

The goals and policies outlined in South Hero's Town Plan, adopted in 2004, are similar to those outlined in the Grand Isle Town Plan, even though specifics vary and some emphasis is different. Some basic goals of the South Hero Town Plan are to "allow South Hero to grow in a responsible way, with respect for its unique characteristics, natural beauty and rural

environment;” “provide for the compatible coexistence of development with major ecologically sensitive areas, such as wetlands, natural areas, and Lake Champlain; scenic views; open agricultural land; and historic sites;” “preserve South Hero as a peaceful, thriving rural community that prides itself on cooperation, participation, and sharing;” “actively encourage commercial and small, light industrial enterprises in and near the villages, in suitable locations on major roads, and in small, mixed use homesteads;” and “find new ways to finance and provide town services to offset property tax burdens.”

The Town Plan states that it should “increase public awareness of the unique characteristics of South Hero in an effort to help preserve those characteristics for future generations.” The Town Plan defines these characteristics as the broad scenic views of farm fields, the lake, the Adirondack Mountains to the west and the Green Mountains to the east; broad wetlands; natural areas, particularly fossil sites; wildlife habitat; the lake shoreline; and the outer islands.” The Town Plan also puts a lot of emphasis on recreation, and the need to expand present facilities and add new facilities such as walking trails and recreation paths. The Town Plan also sites traffic as a growing concern, and the need for alternate forms of transportation.

During the nineties, South Hero experienced more rapid growth than Grand Isle but less growth than North Hero. The highest concentration of residential development has taken place around Keeler Bay and along South Street to Allen Point. The West Shore has also been developed but more sparsely. So, like Grand Isle, agriculture and tourism, including seasonal homes, continue to be the town's two most important economic bases. Unlike both North Hero and Grand Isle, South Hero has a direct land-based link, via U.S. Rt. 2 and the Sandbar Causeway, to the mainland of Vermont.

The South Hero Town Plan addresses pollution of Lake Champlain, stating that “water quality is threatened by failing septic systems, agricultural runoff, residential and commercial property maintenance, soil erosion, boating discharges, and spills.” It further states that “for existing situations, such as improperly installed or failing septic systems and agricultural runoff, it is difficult to address problems without additional public education or new regulations.” The Town Plan requires that, like Grand Isle, “all residences and businesses must comply with state and local zoning regulations when installing their systems.”

South Hero adopted Zoning By-Laws in July of 1972. In the revised June 2004 Zoning Bylaws, the Land Use, or Zoning Districts include: Rural Residential Area, Conservation Area, Shoreland Area, and Flood Hazard Area. The Rural Residential Area, Shoreland Area, and Flood Hazard Area each have one acre zoning. The Conservation Area has 25 acre zoning.

NORTHWEST REGIONAL PLANNING COMMISSION

The town of Grand Isle participates in the Northwest Regional Planning Commission to deal with all problems of a regional nature. All municipalities in Franklin and Grand Isle Counties are members of the Commission and have representation on the Board of Commissioners. Grand Isle is regularly represented at all Board meetings, and participates in many of the planning efforts taking place in the region.

The regional plan has been updated and adopted, and is currently in effect. If Grand Isle requests

and receives regional approval of the Town Plan before adoption of the Regional Plan, the Regional Plan must be compatible with the Town Plan.

Based on this and other analysis, none of the goals, objectives or recommendations in the Grand Isle Town Plan will adversely affect the plans or development trends of the neighboring communities or the region. Grand Isle will continue to work with neighboring municipalities when implementing this plan.

CHAPTER 11 RECOMMENDATIONS FOR IMPLEMENTING THE PLAN

In order to have an effective town plan, it is essential that the recommendations contained within it are implemented. Implementation takes many forms, from amending bylaws and town ordinances to working with community groups and organizations on new projects. It is important to periodically review the plan to prioritize implementation steps and to ensure that all recommendations are being considered. In addition, the town should work to develop a time line for implementing the goals of the plan. Although the plan is set in a five-year time frame, many of the goals are long-term, and require continuous effort.

ZONING BYLAWS AND SUBDIVISION REGULATIONS

The Grand Isle Zoning By-laws were first adopted on June 28, 1966, and the Grand Isle Subdivision Regulations were adopted on November 7, 1989. There have been subsequent revisions in both Zoning By-laws and Subdivision Regulations adopted March 1999, March 2000, March 2001, and March 2005. It is important to review these regulations in light of the goals, objectives and recommendations in this plan. Many suggested changes have been outlined. The Planning Commission will need to work with the Selectboard and town residents to ensure that these changes are made in a manner that is acceptable to the town as a whole.

Because of the considerable amount of work involved in local planning and zoning, the town has established a Development Review Board to handle applications for permits. This allows the planning commission to work on planning issues that might previously have often been put aside because of the heavy workload.

RECOMMENDATIONS

1. Continue to review, revise and update the Grand Isle Zoning Bylaws and the Grand Isle Subdivision Regulations to bring them into conformity with all Vermont State Statutes, and to reflect current conditions and circumstances, and to include all applicable policies contained in this Town Plan.
2. Continue to review the commercial uses allowed as conditional uses in the Zoning Bylaws and Subdivision Regulations.
3. Consider future adoption of the Municipal Administrative Procedures.

PUBLIC FUNDS

The rate of growth in Grand Isle should not exceed the ability of the community to provide services. Several chapters in the plan note the increasing need to provide more public services to a growing community. The town needs to control the rising cost of facilities and services due to growth and the impact of such growth.

RECOMMENDATIONS

1. Review the Community Facility and Services Plan periodically to assess progress on the recommendations within the chapter.
2. Encourage phasing of projects which, in the judgment of the Development Review Board, could have a significant effect on the provision of municipal services.

FUTURE STUDIES AND OTHER ACTIONS

Implementing the plan takes many forms in addition to revising and establishing regulations and programs. For example, several studies have been recommended throughout this plan. Different groups within the town will need to take responsibility for these studies to ensure their completion. Specific studies recommended include:

- Create a list of town historic sites including, but not limited to buildings, farm-scapes, archaeological and other historic sites and features which contribute to the identity of the town and the broad patterns of its history (Chapter 3).

This plan also recommends the participation in many organizations, programs and studies which will benefit the town. The Planning Commission will work with the Selectboard to determine how the town should best participate.

Recommended participation includes:

1. Continue to participate in regional planning efforts including transportation planning.
2. Continue to coordinate with the Lake Champlain Bikeways project.
3. Participate in the Lake Champlain Scenic Byways project as it develops.
4. Continue to work with neighboring communities throughout plan implementation.
5. Continue to work with Lake Champlain Housing Development Corporation.
6. Continue to coordinate with Northwest Vermont Public Transit Network.
7. Continue to coordinate with CIDER to ensure transportation options for senior citizens and the disabled.
8. Continued involvement in the Northern Lake Champlain Advisory Committee
9. Continued representation on the Northwest Regional Planning Commission's Transportation Advisory Committee (TAC).
10. Coordinate activities with the Champlain Islands Chamber of Commerce.

The goals, policies and other information contained in this plan will also be used to participate in statewide regulatory proceedings such as Act 250 and Public Service Board (Section 248) applications.

CHAPTER 12 APPENDICES

APPENDIX ONE: POPULATION TRENDS

Grand Isle's population was 851 in 1900, and fluctuated around 857 through 1930. By 1960, according to the 1960 U.S. census, the town's year-round population had declined to 624. Since 1960, the town has experienced steady population growth.

Figure 12.1 and 12.2, Table 12.1 and 12.2 show population growth data for the Town of Grand Isle from 1950 to 2000, with an estimate for 2004 and projections through 2020. Figure 12.1 shows that the population of Grand Isle has been experiencing steady and rapid growth for the last quarter century and the best available estimate suggests this trend will continue at an increasing rate. However, the best available projection suggests growth will continue at a lesser rate.

Figure 12.2 shows that population growth in Grand Isle over the last three decades has consisted of a high percentage of migration into Town and a smaller percentage of natural increase. The makeup of growth has not changed significantly since 1970, but absolute numbers have been decreasing overall.

Figure 12. 1

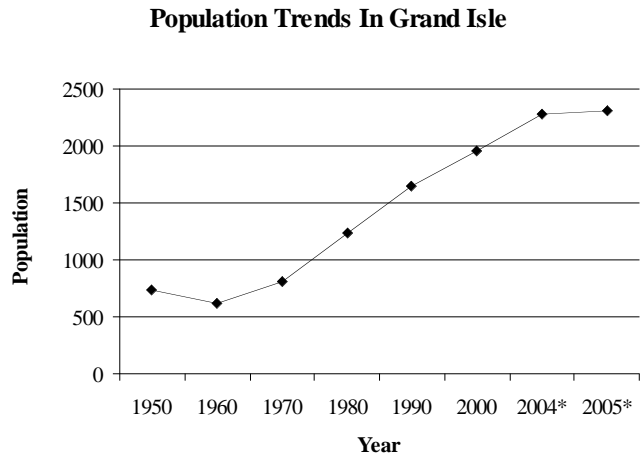


Figure 12. 2

Grand Isle Net Migration and Natural Increase

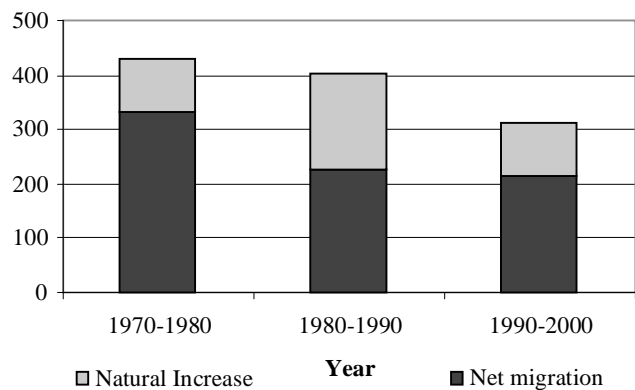


Table 12.1		Population Trends In Grand Isle						
Year	1950	1960	1970	1980	1990	2000	2004*	2005*
Population	735	624	809	1,238	1,642	1,955	2,276	2,110
Absolute Change	x	-111	185	429	404	313	321	155
Sources: Population 1950-2000: US Census. * Estimate								

As Table 12.1 indicates, the Town has been growing by about 30-40 people per year over the last few decades, while the 2004 population estimate indicates the population has increased by around 80 people per year since 2000. This is in conflict with the best available 2010 population projection, which projects a much lower 10 year average of around 15 people per year from 2000 to 2010. While both of these figures are credible, they are based on two different methodologies. Population estimate methodology uses vital statistics at the county level and distributes the population numbers amongst towns based on perceived annual changes in housing units. Projection methodology breaks towns up into 5-year cohorts and uses common demographic modeling to project population out from Census 2000. In the case of the 2004 estimate, it can be assumed that recent housing construction in Grand Isle is increasing the figure; however, building permit trends for residential dwellings (see Table 12.6) do not seem to correlate with such a high growth rate. Other factors that may support such a high 2004 estimate include a decreasing vacancy rate (from 4% in 1990 to 3% in 2000) and seasonal to year-round conversions (seasonal housing decreased from 30% in 1990 to 23% in 2000, and an additional 17 units were converted to year round use between 2000 and 2006). The 2004 population estimate makes Grand Isle Town the fastest growing community in the Grand Isle County since 2000 and one of the fastest in the region.

Figure 12. 4

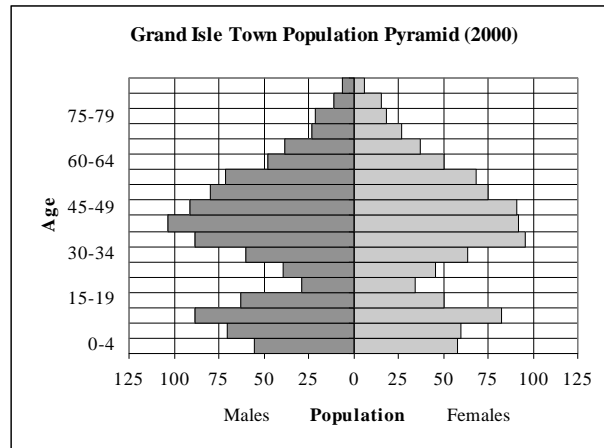
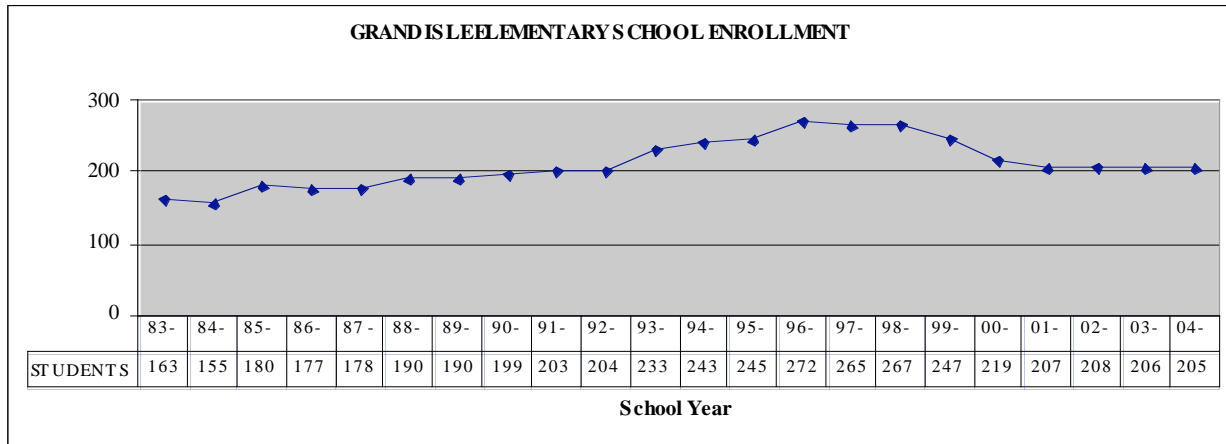


Table 12.2 Comparison of Growth in Grand Isle and other Towns in the County						
Town	Pop. 1990	Pop. 2000	Est. Pop. 2004	Change 1990-2000	% Change 1990-2000	% Change 2000-2004
Grand Isle	1,642	1,955	2,276	+313	+19.1%	+16.4%
Alburgh	1,362	1,952	2,080	+590	+43.3%	+6.6%
Isle La Motte	408	488	519	+80	+ 19.6%	+6.4%
North Hero	502	810	898	+308	+61.4%	+10.9%
South Hero	1,404	1,696	1,870	+292	+20.8%	+10.3%

Sources: Population 1990-2000: US Census. Projection to 2010: MISER Population Projections for Vermont, 2000-2020

Table 12.3



Tables 12.3 and 12.4 illustrate the steady increase in school enrollments until 1999. Since 1999, there has been a modest reduction in school enrollments. Despite this decrease, a greater proportion of the enrolled students have been high school students, with resulting higher impacts on school budgets.

Will this pattern of growth continue? The best available projections suggest that it will. Further, various indicators of growth indicate that from 1992 to the present, the growth patterns have not much changed (see Tables 12.4 through 12.6). Thus the Town Plan must be formulated on the assumption that the growth pressures in Grand Isle will continue over the next five years, and the Plan must be attentive to the impacts of growth.

Table 12.4:		Land Transfers													
Type of Transfer	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Residential	26	48	43	45	40	50	48	55	60	74	63	49	52	69	
Mobile Home	4	17	5	4	13	3	5	6	14	20	13	16	9	14	
Camp	18	22	8	12	14	16	18	20	11	22	18	18	35	21	
Commercial	2	1	0	1	1	2	1	0	0	2	1	0	1	2	
Land	25	25	25	25	27	50	25	22	50	44	55	46	46	36	
Total	75	113	81	87	95	121	97	103	135	162	150	129	143	142	

Source: Town Reports and Town Records

Type of Permit	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Subdivision	n/a	n/a	12	16	11	8	3	3	5	6	2	7	2	4
Dwelling	12	4	6	18	14	6	17	18	25	17	19	11	13	13
Mobile Homes	9	1	10	7	13	1	6	7	11	1	3	2	3	4
Sewage	44	28	22	41	40	32	32	31	38	30	45	38	46	26
Total	65	33	50	82	78	47	58	59	79	54	69	58	64	47

Source: Town Reports and Town Records

Type of Property	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Residential	508	518	523	489	509	517	522	523	558	618	598	633	650	668
Mobile	204	207	207	211	115	124	124	227	235	219	211	214	196	193
Vacation	133	133	133	175	168	166	258	180	156	122	159	135	128	123

Source: Town Reports and Town Records

Town	Median Household Income 1999	% Receiving Public Assistance 2000	Median Home Value 2000	% Working Out of Town 2000
Grand Isle	\$48,594	2.9%	\$139,900	81.3%
Alburgh	\$33,148	6.9%	\$84,400	70.2%
Isle La Motte	\$36,125	3.7%	\$103,100	82.3%
North Hero	\$45,577	2.7%	\$159,000	77.4%
South Hero	\$52,344	1.5%	\$163,200	75.9%

Source: U.S. Census 2000

Table 12.7 compares some economic indicators for Grand Isle with those of other towns in the county. Of special interest for the Town Plan is the fact that over 80% of the Town finds work elsewhere. This suggests two factors are critical to the economic viability of the community. First, many people choose to live in Grand Isle even though they work elsewhere. The Town should strive to maintain the quality of life that makes it such a desirable location. Second, these figures suggest that employment opportunities within the Town could be enhanced. In particular, the Town should look towards encouraging home-based businesses and other sources of employment consistent with the high quality of life in Grand Isle. In addition to a steadily

increasing year-round population, the popularity of Lake Champlain and easy access to the greater Burlington, Vermont metropolitan area have resulted in a summer population estimated to be almost twice that of the year-round population.

APPENDIX TWO: MUNICIPAL FIRE DISTRICTS & PRIVATE WATER SYSTEMS

The following is a list of the municipal water systems, known as fire districts, and private water systems serving more than two buildings in the town. Included for each district or system are the number of buildings or people served.

1. Grand Isle Consolidated Water District
Buildings Served: approximately 540
2. Fire District No. 4
Buildings Served: approximately 250
3. Fish Hatchery System
Buildings Served: 1 [not for drinking water]

A list of all private water systems serving more than two buildings was not available at time of printing.

APPENDIX THREE: HISTORIC SITES

The Historic Sites listed below are listed in the Vermont State Register of Historic Places for the Town of Grand Isle. The Hyde Log Cabin, Site No. 0702-17, and the Harness House, Site No. 0702-23, are also listed in the National Register of Historic Places.

Name of Site	Site No.	Name of Site	Site No.
Round Barn Farm	0702-01	Depot Gallery	0702-02
Mead Property	0702-03	Hazen House	0702-04
Dodge Farm	0702-05	Camp Marycrest	0702-06
Horican Barn	0702-07	Norton House	0702-09
Point Farms, Inc.	0702-10	Point Farms, Inc.	0702-11
Morris House	0702-12	Smith House	0702-13
Perkins House	0702-14	PTO Benefit Shop	0702-15
Morway House	0702-16	Hyde Log Cabin	0702-17
Poquette House	0702-18	St. Joseph's Church	0702-19
Watson House	0702-20	Rowen House	0702-21
Bean House	0702-22	Harness House	0702-23
Robyor House	0702-25	Powell House	0702-27
Gordon-Center House	0702-29	Lipsett House	0702-30
More House	0702-31	Starbuck House	0702-32
Hoag House	0702-34	Westerly Camp District	0702-35
Richardson House	0702-36	Macomers Cottage	0702-37
Brown House	0702-38	Norris/Kech/Sheldon House	0702-39
Church House	0702-40	Stegner House	0702-41
Sartore House	0702-42	Scholtz House	0702-44
Guibord House	0702-45	Piter Poel House	0702-46
Barrett House	0702-47	Reigelman Cabin	0702-48
Cassidy House	0702-49	Shaw House	0702-50
Griswold House	0702-51	Caswell Property	0702-52
Johnson House	0702-53	Sylvester House	0702-54
Paradee House	0702-55	Silver House	0702-56
Santor House	0702-57	Poquette House	0702-58
Parizo House	0702-59	Picard House	0702-60
Gordon House	0702-61	Paradee House	0702-62
DeMars House	070263	Hanson Property	0702-64
Trombley Property	0702-65	Hock House	0702-66
Dubuques House	0702-67	Dubuque House	0702-68
Boudreau House	0702-69	Cootware House	0702-70
DuBuque House	0702-71	Oviatt House	0702-72
Morway Farm Complex	0702-73	Yurdin House	0702-74
Gomez House	0702-75	Pelkey House	0702-76
Pearl House	0702-77	Miller House	0702-78
Prouty House	0702-79	Union Church	0702-80
Town Garage	0702-81	Grand Isle Free Library	0702-82
LaMotte Property	0702-83	Cross Property	0702-85
J Poquette House	0702-86	School District Property	0702-87
Marycrest House	0702-88		

APPENDIX FOUR: MAPS

The following maps are included in this town plan as required by statute:

- Utilities and Facilities/Educational Facilities

This map shows the general location of municipal facilities and other points of interest. State owned lands, as well as lands which are conserved through the Nature Conservancy and the VT Land Trust, are shown. The VELCO PV 20 transmission line is shown in the southwest corner of the town.

Educational facilities including the Grand Isle School and the school soccer fields are shown on the Utilities and Facilities Map.

- Transportation

The transportation map depicts the location of state and local roads within Grand Isle. The functional class of state roads and the class of local roads are shown. Needed improvements will be identified on the map in future updates once they are determined by the town.

- Natural Areas

This map depicts the general location of natural areas, including agricultural soils, critical areas and wetlands, that have been identified within the town boundaries. Specific boundaries must be determined from official maps and/or field observations.

- Existing Zoning

This map shows the areas of allowed uses in the current zoning. Existing land use within the town generally follows the same pattern, with the exception of the commercial district at the intersection of Rt 2 and Donaldson Rd. Recreation areas, State owned lands, and other protected properties are shown on the Utilities and facilities map. A detailed description of existing land use is contained in Chapter 4.

- Proposed Future Land Use

This map depicts the general areas where specific uses will be allowed in the future. This map will serve as the basis for a zoning map when the bylaws are updated to reflect this plan.

(The maps contained in this plan are for planning purposes only.)