Goshen Town Plan Goshen, Vermont



Adopted May 8, 2017

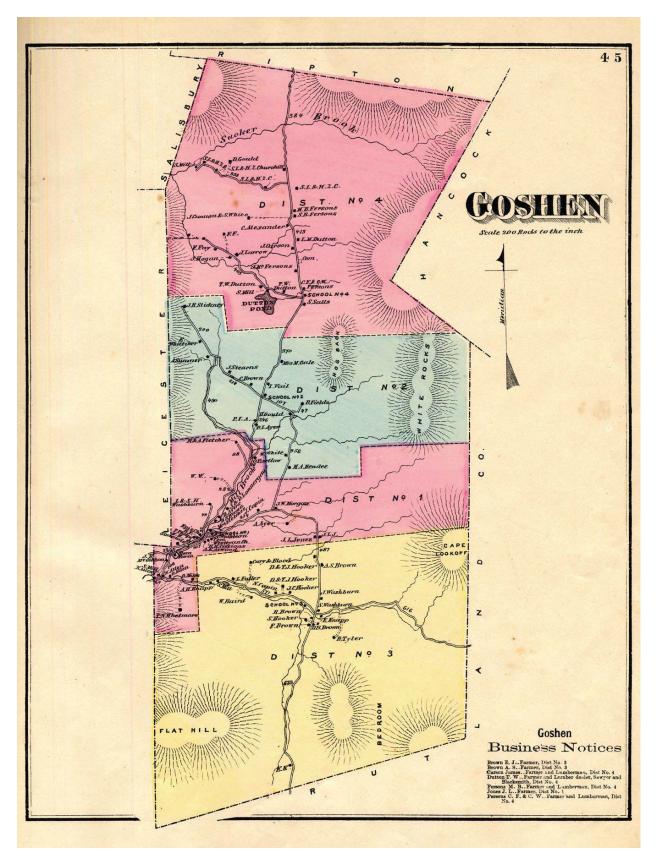
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Large scale reproductions of the maps represented in the Town Plan are available at the Town Office for public review and use.



Beers Map of Goshen, circa 1870's

1. INTRODUCTION

1.1 Vision for the Future of Goshen

The Town Plan expresses a vision for the future of Goshen. This is a reflection of the Town's history, the Town and the region as they are today and the aspirations of the residents for its future. The vision consists of community-wide goals and also recognizes special needs of the Town.

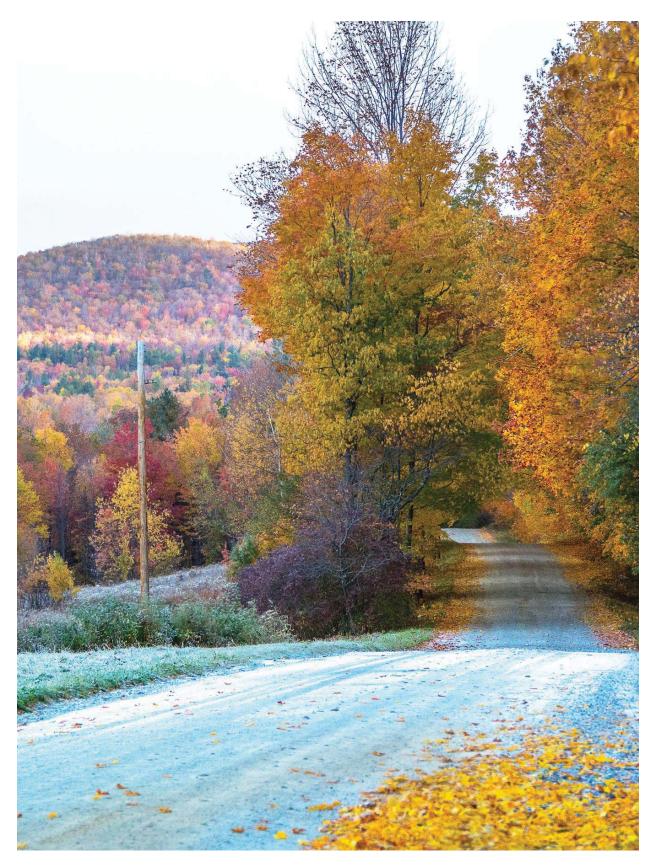
In its vision for the Town's future, the Goshen Town Plan builds on its most valuable characteristics: its rural landscape and environment; the diversity of its population; its small town character and history; and the active participation of its citizens. Essential components of this vision are:

- 1. To reinforce historic settlement patterns by focusing growth in the Town's center and promoting a town center;
- To maintain and enhance the scenic beauty and open land of the Town through protection of agricultural and silvicultural activities and the creation of conservation areas;
- 3. To recognize and preserve the Town's unique environmental and cultural resources through both regulatory and non-regulatory actions;
- 4. To promote social, economic, cultural and racial diversity and sense of community through actions that encourage affordable housing, enhance the agricultural and silvicultural economy, and enable environmentally sensitive rural, home-based enterprises;
- 5. To enable access and appropriate use of open land and recreational resources, both public and private;
- 6. To plan for capital improvements consistent with the fiscal ability of the Town;
- 7. To promote community interaction and spirit.

1.2 Use of the Town Plan

The plan is intended to be used as:

- 1. A vision for the future of the Town;
- 2. The basis for revisions to the Zoning and Subdivision Bylaws and for the adoption of an Official Town Map;
- 3. A guide for decision-making under the Zoning and Subdivision Bylaws;
- 4. The framework for the capital budget and programs;
- 5. A guide and a resource for community programs and decision-making;
- 6. A standard for review under the provisions of Title 24 Chapter 151 (Act 250);
- 7. A standard for review under the provisions of Title 24 Chapter 117 and Act 248;
- 8. A resource for the development of the Regional Plan and the plans of neighboring municipalities;
- A reference guide for all organizations involved with the planning and management of public lands held by the United States Forest Service (USFS), including the Moosalamoo National Recreation Area (MNRA);
- 10. A source of statistical and factual information about the Town.



Ripton Goshen Road

2. GOALS AND RECOMMENDED ACTIONS FOR THE FUTURE

2.1 Goal 1: Maintain and protect Goshen's rural character and heritage.

Recommended Actions:

- 1. Support and enhance a viable agriculture and silvaculture community within the Town of Goshen;
- 2. Preserve the quality of the landscape through the protection of open land, panoramic views, rivers and streams, the rural night sky, and other valuable natural resources;
- 3. Preserve the small town character in the village and rural area;
- 4. Promote social, economic, cultural and racial diversity;
- 5. Preserve historic structures;
- 6. Maintain and promote volunteer services;
- 7. Respect the rights of individual property owners while considering the public's values and interests.

2.2 Goal 2. Direct and manage growth in the Town.

Recommended Actions:

- 1. Provide for residential, business, and public uses that meet the needs of existing and projected populations while retaining the social and economic diversity of the Town;
- 2. Balance property owner's rights to use of their land with the need for preserving public health, safety and welfare;
- 3. Reinforce historic settlement patterns along traditional town roads and focus community growth in the village area;
- 4. Support affordable housing;
- 5. Manage growth and development that is in keeping with the rural character, historic pattern, and quality of settlement in the Town;
- 6. Publicize, administer, and enforce Town regulations for the control and management of growth;
- 7. Coordinate the plan with adjacent communities, adjacent regional planning commissions and the Addison County Regional Planning Commission (ACRPC);
- 8. Encourage citizen participation in the development, adoption, and implementation of the town plan and its by-laws.

2.3 Goal 3. Provide adequate and efficient governmental services.

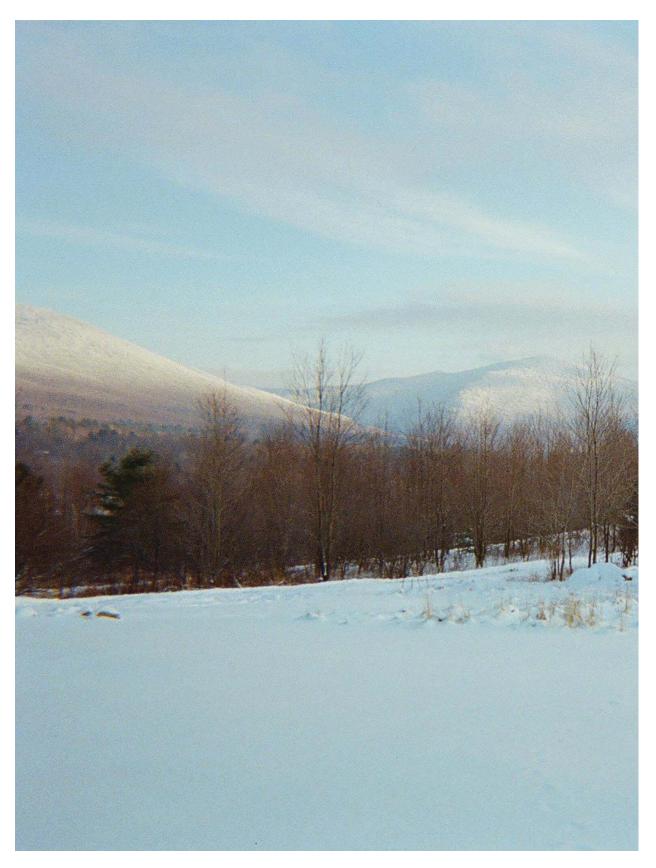
Recommended Actions:

- 1. Meet the needs of existing and projected populations while maintaining the rural character of the community;
- 2. Where possible, reduce fiscal burdens on the Town--associated burdens on residents-- and encourage fiscal responsibility;
- 3. Support strong and vital voluntary participation in local government.

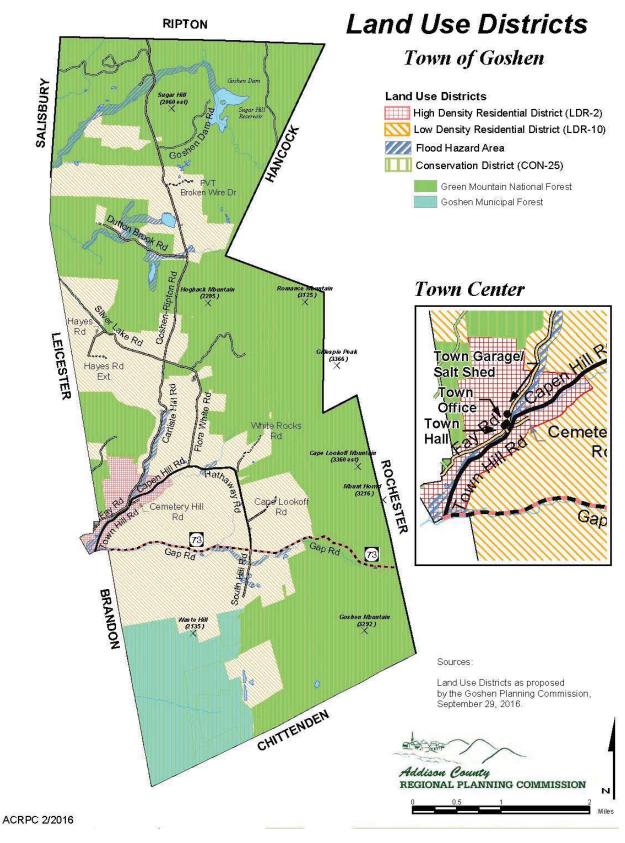
2.4 Goal 4. Encourage sound land and water conservation practices and provide a healthy environment for people, plants and animals.

Recommended Actions:

- 1. Protect and manage rivers and streams for their scenic beauty, unique character, and recreational and environmental value;
- 2. Protect valuable wildlife habitat, wetlands, productive or unique forest lands, and natural areas;
- 3. Provide reasonable access to public lands, bodies of water, and recreation areas for the enjoyment of dispersed, low intensity recreational activities;
- 4. Restrict development in areas where it may create hazards to public health and safety;
- 5. Manage development in areas of Town where significant environmental and natural resources are located and encourage development away from those areas;
- 6. Encourage continued work on development of a long-term strategy for the disposal of solid waste with the Addison County Solid Waste Management District (ACSWMD);
- 7. Encourage energy conservation and the development and use of renewable energy resources.



Brandon Gap



Land Use Districts - Map 3.1

3. LAND USE

3.1 Existing Land Use

Goshen is a sparsely populated residential settlement of 164 people occupying a small portion of the town's 15,040 acres. A large proportion of the town's land is forested. More than half of this forested land is federally owned and included within the Green Mountain National Forest (GMNF). 1,050 acres of additional forested land lies within the Goshen Town Forest.

The majority of the year-round dwellings in Goshen are located along town roads. The town center is the focal point of Goshen. The town office, town hall, town recycling center and old town cemetery are all located here. Two-acre lot sizes are permitted in the town center. Outside of the town center, minimum lot sizes must be at least ten acres.

The principal nonresidential land uses in Goshen are timber and forestry management, water storage for hydroelectric power generation, some agriculture including maple syrup production and outdoor recreation including hunting, fishing, ski touring, snowshoeing, snowmobiling, hiking, back packing, camping, horseback riding and mountain biking.

Operating farms in Goshen vanished by 1990. Some of the outbuildings of these farms remain, reminders of Goshen's agricultural past. Much of the pastureland and hay fields associated with these bygone farms also remains and continues to help define the rural character of Goshen. Preserving what is left of these open areas should be encouraged on privately held land and be maintained on those lands held by the town.

3.2 Proposed Land Use

Most Goshen residents wish to preserve the rural residential character of the town. They appreciate the sparse settlement pattern and the large land holdings supporting the forest and recreational uses noted above. Accordingly, future development of the town should be managed to maintain the existing character of the town and its landscape. In addition, future development should be controlled so as not to overburden the public infrastructure or local property tax base.

To provide continuity between Goshen's current land use patterns, the quality of life to which its residents are accustomed, and a future that meets the goals of all its citizens, Goshen needs to guide development through the Town Plan and Zoning Bylaws. Zoning provides the primary mechanism for implementing land use goals and policies, and helps ensure that residents have adequate access to municipal services at an affordable tax cost. The Town first adopted the Zoning Bylaws on July 21, 1972. These Bylaws were updated most recently on April 11, 2008.

Goshen's Zoning Bylaws encourage retention of a largely agricultural and forested landscape. By allowing smaller lot size requirements within the town center, Goshen's zoning supports a settlement pattern and density of residences that are consistent with the Town Plan, while ensuring that all residents have an adequate range of opportunities for property use.

3.3 Designated Districts

The Town supports Land Use Regulations that designate three zoning districts within the Town - High Density Residential, Low Density Residential and Conservation.

1. High Density Residential District -- includes areas in and immediately adjacent to the existing town center that are served by existing town roads. The purpose of this district is to guide higher density housing development close to existing town

facilities, to avoid the need for construction of new roads, and to utilize soils best suited to economic and environmentally desirable development. This district is based on and promotes a density of development that is greater than the surrounding districts. It creates a sense of community and public safety, and continues the existing development pattern of a compact village center.

Uses permitted in this district include one- and two-family dwellings, accessory buildings, daycare facilities, home occupations, and public buildings, as well as pasture land and domestically related agricultural uses. The minimum lot size in this district is two acres.

2. Low Density Residential District -- includes substantial areas suitable for development along town roads outside the town center area. The purposes of this district are to encourage development along existing town roads, especially where these roads form efficient loops, and to use soils most economic and satisfactory for development. This district encourages the siting of development so as to maintain open land and to blend structures into the natural surroundings, maintain scenic views, preserve agricultural and forestland for production of agricultural and forest products, enhance ease of access by encouraging development located near existing roads, and protect wetlands, water resources and wildlife habitat areas.

Uses permitted in this district include one- and two-family dwellings, accessory buildings, daycare facilities, home occupations, agriculture (land cultivation and pasturing), commercial forestry and camps. The minimum lot size in this district is 10 acres.

3. Conservation District -- is intended to limit development on lands remote from Class 2 or Class 3 roads and the town center. Most of these lands lie within the GMNF. Additionally, the Goshen Town Forest falls into this district. Uses in this district are limited to forestry, agriculture, and open land recreation. The construction of buildings is discouraged. If the United States Forest Service (USFS) or Town of Goshen should wish to sell any of its land in the future, it would be encouraged to sell minimum lot sizes of 25 acres.

3.4 Special Protection Areas

Two Special Protection Area Overlay Districts are named herein (See Land Use District Map 3.1 for Flood Hazard Area; see Transportation Map 4.1 for FEMA Flood Plain; and, see River Corridors & Floodplain with Community Facilities Map 7.6 for River Corridors and Floodplain.):

- 1. FEMA Floodplain Overlay Area limits development within river corridors to promote the public health, safety and general welfare, prevent increases in flooding caused by the uncontrolled development of lands in the floodplain, and minimize losses due to floods.
- 2. Riparian Habitat and River Corridor Overlay Area will promote the health, safety and welfare of the citizens of Goshen by allowing town rivers to move within their corridors; mitigate increases in downstream river erosion resulting from development; minimize property loss and damage due to river erosion; and limit land uses and development that may pose a danger to health and safety. The Area will also protect water quality, aquatic and terrestrial habitat, and maintain riverine wetlands.

3.5 Goals

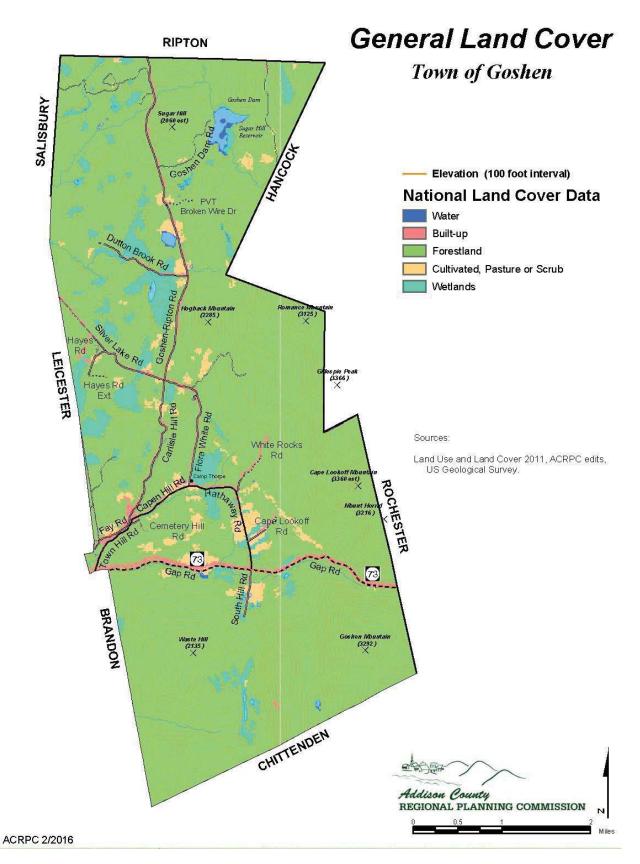
1. Promote the health, safety and welfare of the citizens of Goshen.

- 2. Permit land uses that enhance and maintain Goshen's rural residential character, preserve the historic identity of Goshen's town center, and make Goshen a special place to live.
- 3. Maintain the qualities of a working landscape and rural character valued by Goshen residents.
- 4. Protect the Town's view-sheds, including, but not limited to: rural/agricultural landscapes, views of undeveloped forests and forested ridgelines, and dark skies at night.

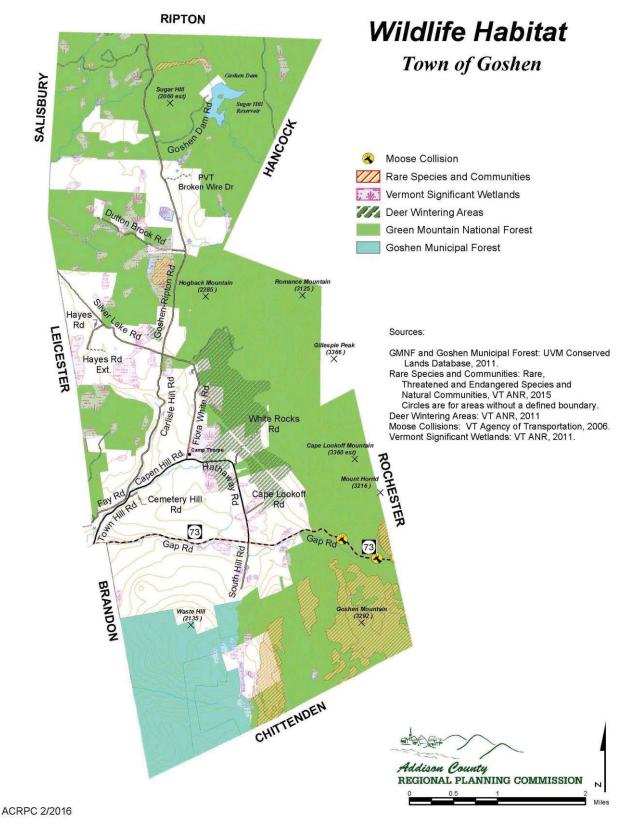
3.6 Recommended Actions

- 1. Restrain rapid and inappropriate growth that could create an adverse impact on Goshen's rural character and environment.
- 2. Provide careful scrutiny of any development that might substantially increase traffic on town roads.
- 3. Control the rate of new development so as not to overburden the public infrastructure or local property tax base.
- 4. Guide development toward the town center and to land parcels with Class 1, 2, or 3 road frontage, and with soil conditions suitable for development and slope less than 15 percent, and away from land that is remote from the town center or without Class 1, 2 or 3 road frontage or with soil conditions unsuitable to development or slopes greater than 15 percent.
- 5. Development of land at or above 2,000 feet must be done in a manner that protects the fragile environment and highland ridgeline views.
- 6. Require that all new non-residential development be considered a "conditional use."
- 7. Discourage development in areas where adequate drainage, snowplowing, emergency vehicle access and similar services are not available.
- Discourage car-oriented strip development where development occurs in a continuous linear path along a right-of-way, restricting visual and physical access to interior land
- 9. Discourage large-scale tract housing development.
- 10. Require landowners to maintain a functional wastewater system and potable water supply that meets State standards.
- 11. Protect the quality and availability of clean air, water, soil, native plants, fish and wildlife, and other natural resources, by prohibiting land uses which in any way harm, or make susceptible to harm, the natural resources, and/or agricultural and forested lands of the Town of Goshen.
- 12. Encourage development designs that minimize the number of access points on public rights of way and maximize open land.
- Prohibit land development and the storage of toxic, buoyant or unsecured items or materials in the Special Protection Areas unless state and federal standards are fully met.
- 14. Continue a policy of modest public development and expenditures consistent with low intensity land use.
- 15. Protect property values while permitting an adequate range of opportunities for property use.

- 16. Encourage the establishment of home occupations and small businesses that are compatible with the surrounding rural character and land use, and are beneficial to the town.
- 17. Encourage the development of affordable housing whenever feasible. Permit property owners to create accessory apartments within or adjacent to their primary dwellings. Appropriate restrictions on the size and capacity of such affordable, accessory dwelling units should be established.
- 18. Encourage preservation of the town's largely forested nature through the use of Planned Unit Development (PUD) and Planned Residential Development (PRD) techniques and enrollment in the Current Use Program.
- 19. Encourage participation in the Current Use program.
- 20. Encourage small-scale agricultural activities.
- 21. Support forest stewardship and industries.
- 22. Encourage the restoration, rehabilitation and adaptive reuse of historical structures.
- 23. Retain or restore cleared fields because of their importance in providing landscape diversity and defining the rural character of Goshen.
- 24. Support Conservation Commission and State efforts to identify, protect and conserve important natural, historic, scenic and recreational resources.



General Land Cover - Map 3.2



Wildlife Habitat - Map 3.3

3.7 Green Mountain National Forest/Moosalamoo National Recreation Area

A significant amount of the land in the Town of Goshen lies within the GMNF. Of the town's 15,040 acres, the USFS owns more than half. These holdings are dispersed throughout the town. In 1996, the USFS purchased an additional 1,375 acres from Central Vermont Public Service. From time to time the USFS purchases additional private land. Another 1,050 acres in the southern part of the town are managed as Goshen's Town Forest. Taken in total, this amount of conserved forestland significantly increases the property tax burden of those who own developed or developable land in Goshen.

The extensive land holdings of the USFS impacts Goshen in several important ways:

- 1. The town loses significant property tax revenues. Currently, the USFS pays Goshen seventy-two cents per acre annually for its land in the form of a Payment in Lieu of Taxes (PILT). In contrast, the same land owned privately and assessed as developable land, would generate approximately \$14.00 per acre annually.
- 2. The Town's environment is impacted by the vast land holdings of the USFS. The USFS periodically harvests timber in select portions of their forests and routinely burns land in the blueberry management area. These practices can have adverse impacts affecting Goshen's resources and infrastructure if not carried out properly.
- 3. In 2006 the GMNF property located within the Town of Goshen became part of the newly designated MNRA. There is considerable visitor traffic on town roads throughout much of the year because of the recreational infrastructure (Trails, campgrounds, parking areas, access roads, etc.) within the GMNF. The formation of the MNRA only exacerbates this. A higher traffic volume on town roads creates two problems. It destroys the rural quality that town residents value so much, and it increases the rate of wear on gravel road surfaces. Under the right circumstances this rate of wear can be as much as three-quarter of an inch per year. (See Section 4, Transportation Plan)

The Town requests the USFS to consider Goshen's land use concerns when developing their management plans. The Town values the preservation of open areas. A number of the open areas in Goshen are within the GMNF. The Town would like to see these areas remain open.

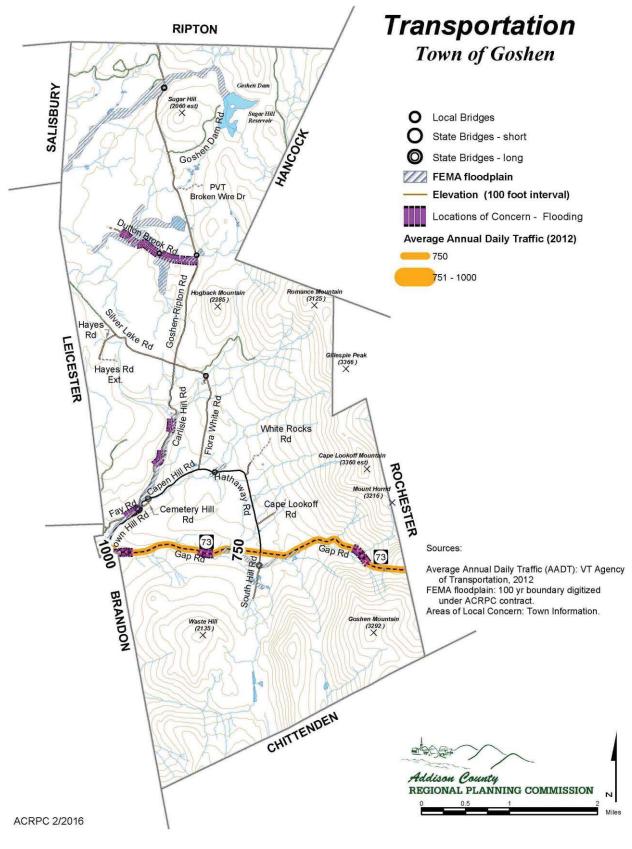
Access to a number of the recreational opportunities within the MNRA requires visitors to drive through residential sections of Goshen. The Town would like the USFS to develop the MNRA in ways that minimize traffic increases in these areas. Finally, since traffic generated by visitors to the MNRA increases the need for road maintenance, the Town would like the USFS to consider making additional contributions to the Town's road budget.

3.8 Goal for GMNF/MNRA

1. Manage the impact of the USFS and MNRA on the Town.

3.9 Recommended Actions for GMNF/MNRA

- 1. Pursue ways of reducing the loss of tax revenues.
- Review of the Schedule of Proposed Actions (SOPA) on a regular basis to monitor USFS activities, including but not limited to, timber harvests, proscribed burns, trail construction and road construction.
- 3. Measure traffic volumes and traffic patterns on roadways.
- 4. Maintain close contact with USFS decision makers.



Transportation - Map 4.1

4. TRANSPORTATION

4.1 Existing Transportation

Vermont State Highway 73, running easterly from Orwell through Goshen and ending at Vermont State Highway 100 in Rochester, serves as the major access road to Goshen. The Addison County Regional Transportation Plan designates Route 73 as a Regional Collector, a highway serving both the internal needs of traffic in a town and connecting roads that move traffic on an intra-and inter-regional level. Town Collector roads include Town Highway 1 (Town Hill, Capen Hill and Hathaway Road), Town Highway 2 (Carlisle Hill and Goshen-Ripton Road), and Town Highway 5 (Flora White Road).

Town Highway 1 is designated by the State of Vermont as a Class 2 Town Highway entitling the Town to increased state assistance for maintenance. Town Highway 1 is 2.91 miles long, of which 1.8 miles is paved.

The remaining 10.97 miles of the Town roads, with two exceptions, are designated as Class 3 Town Highways. The exceptions are 0.1 mile of Town Highway 3 (Dutton Brook Road) and 1.47 miles of Town Highway 15 (South Hill Road) that are designated as Class 4 Town Highways. Decisions to pave Class 3 roads are based on an analysis of cost, safety, ease of maintenance, and the increasing difficulty in obtaining adequate gravel for re-surfacing of these roads. Paving is desirable in that subsequent maintenance costs are significantly reduced, but initial cost outlays are significant. Repaving of paved surfaces is required every 5-8 years. With 3.2 miles of paved road in Goshen, an average of 0.5 miles must be re-paved annually in order to maintain road quality. Future decisions to pave additional road sections must include a consideration of the impact such paving will have on the rural character of the area.

In the past, Goshen was fortunate to have access to the USFS gravel pit. At one time, the pit provided a good, reliable supply of gravel for road resurfacing and sand for use on winter road surfaces. The resources of the gravel pit are now exhausted, requiring the Town to buy gravel from more distant, and therefore more costly, locations. Use of the GMNF lands by the public, for logging and recreation, especially the recreational use of Silver Lake, the Blueberry Management Area, Sugarhill Reservoir, Moosalamoo Campgrounds, and Voter Brook Overlook, places an increased burden on Town roads, requiring vigilance and additional maintenance. While the USFS provides some financial assistance to the town for road maintenance, (in the most recent fiscal cycle, 2010, that amount was \$2,832) this assistance does not cover the true costs to the town. Gravel costs and public use of Town roads are increasing faster than the financial assistance received from the USFS. This places additional financial burdens upon town taxpayers.

The classification of Town Highway 2 (Carlisle Hill Road and Goshen-Ripton Road) continues to require study. The increased use of this arterial route between Goshen and Ripton as a major connector road, essentially providing Goshen residents with easy access to the rest of Addison County via Route 125 west, may necessitate more serious consideration of upgrading the classification of this road from Class 3 to Class 2. Such a classification upgrade would produce the immediate benefit of greater financial assistance from the State for road maintenance.

Safety on Town roads remains a primary concern of local residents and Town officers. The Select Board has adopted a town-wide speed limit (35 miles per hour) and ordinances to enforce this limit. The Town should continue the practice of regular mowing and brush cutting along roadside rights-of-ways. It should also limit the number of new curb-cuts (driveway access) on Town roads in order to enhance and maintain the safest possible public road system in Goshen. Recreational biking, walking and jogging on Town roads are increasing, and the Town should encourage this. But this presents added road safety concerns. Vigilance by the Town highway department regarding maintenance and improvement of road surfaces, shoulders, lines-of-sight, and rights-of-way is required.

Names for Town roads have been officially adopted and road signs posted in compliance with statewide 911 initiatives. Speed limit signs have been placed at strategic locations. Increased signage on Town roads, while in some cases required and in other cases imposed for safety reasons, does detract from the natural, rural character of the Town and additional sign placement should only be accomplished after thoughtful consideration and public debate.

4.2 Town Bridges

The Town has the responsibility of maintaining six bridges:

- 1. Bridge B-9 on South Hill Road. This is an older, wooden bridge;
- 2. Bridge B-18 on the Goshen-Ripton Road at Sucker Brook of concrete and wood construction;
- 3. Bridge B-16 on the Carlisle Hill Road of concrete and steel construction;
- Bridge B-1 on the Capen Hill Road of multi-plate galvanized steel culvert construction (Camp Thorpe Culvert);
- 5. Bridge B-4 on the Flora White Road of similar construction;
- 6. Bridge B-5 on the Goshen-Ripton Road, also of similar construction (Blueberry Hill Inn Culvert).

Substantial repairs or replacements of the town bridges are a joint state and local government effort, often with input and financial assistance from the federal government. In addition, the Town has the responsibility of maintaining numerous culverts under town roadbeds. Maintenance and repair of culverts and routine maintenance of bridges is the responsibility of the Town Highway Department.

The obligation of the Town to keep bridges and culverts in good and safe repair should be addressed in a master plan that can be updated periodically. The Select Board, working in conjunction with the Town Highway Department, should be partners in the development of such a plan.

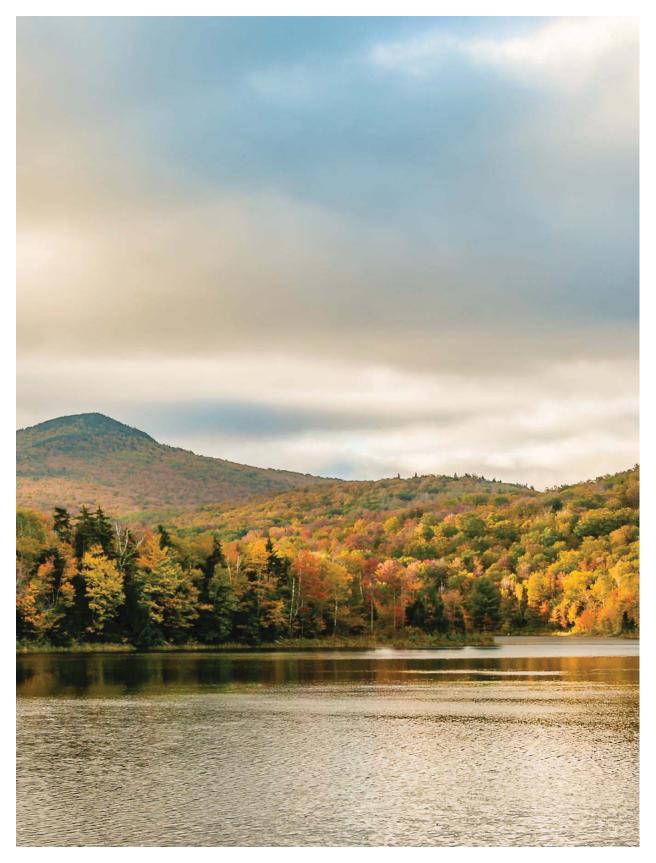
4.3 Goal

1. Provide safe and affordable roads that preserve the rural character desired by the community.

4.4 Recommended Actions

- 1. Maintain all current Class 2 and Class 3 roads, bridges, and related facilities, as necessary to ensure the current levels of safety and service.
- 2. Encourage practices consistent with the recommendations of the Vermont Better Backroads Program that eliminate erosion and sedimentation.
- Encourage practices that maintain and emphasize the scenic quality of Goshen's roadways. Maintaining scenic roadways is both aesthetically and economically important to the town.
- 4. Limit the number of new curb-cuts (driveway access) on Town roads in order to enhance and maintain the safest possible public road system

- 5. Carry out additional paving only where it is needed to rectify special maintenance problems or eliminate hazards. If improvements are needed to accommodate increased traffic, it is important to consider the rural character of the road in relationship to the surrounding landscape.
- 6. Encourage road design and construction that considers all users and creates a safe environment for travel by foot, bicycle, horseback, as well as by motor vehicles.
- 7. Given the community's interest in and benefits from recreational activities, the town should give consideration to downgrading Class 4 roads to Trail status for recreational use, thus retaining the Town's jurisdictional interest in them.
- 8. Prior to adopting a new road, a private road or upgrading an existing Class 4 road, the Town shall require abutting property owners to bear the cost of improving and/or building the road to meet Vermont Agency of Transportation Guidelines for Class 2 and Class 3 Town Highways, Town Road Standards, and any scenic preservation standards set by the Town.



Sugar Hill Reservoir

5. UTILITY AND ENERGY

5.1 Historic Background

In 1915 the development of the Silver Lake complex started. Actual generation at Silver Lake station began in 1917. In our Town this was the beginning of construction of Goshen Dam or Sugar Hill Reservoir in 1922/1923. Due to financial constraints Hortonia Power was unable to complete the work and it was finally completed in 1931/1932 by Central Vermont Public Service Corp (CVPS) who absorbed Hortonia Power Co. CVPS raised the original dam to what it is today. The reservoir has an approximate surface area of 66+ acres (depending on pond level) with a drainage area of 2.3 square miles. Its purpose is to gather water off the adjacent hillsides and Sucker Brook. This water is then released through an outlet structure into Sucker Brook to Sucker Brook Diversion Dam (this dam collects water from Sucker Brook and Dutton Brook) and then by penstock to Silver Lake where it is used to run Silver Lake Station. Water level in the reservoir is continually monitored thru a telecommunication system by the system dispatchers in Rutland. Saunders Engineering from Portland Maine did the original construction work.

At the same time the power house and Goshen Dam were being constructed, the Silver Lake to Rochester 44KV transmission line was constructed which in a way bisects the Town. The transmission line has a right of way of 150 feet. The purpose of this line at the time of construction was to transmit power from Silver Lake Station and Salisbury Station to Rochester, Vermont, and other areas where it was stepped down to distribution voltage levels.

At the beginning of the dam's completion in 1931/1932, under CVPS ownership a telephone line was installed to the superintendent's construction shack from the Rutland Office allowing the Superintendent to communicate with CVPS engineers. The original access road and telephone line went thru privately owned land. In later years this access was abandoned due to several wet areas and was relocated to where it is today. As late as the early 1990's parts of the telephone line, original construction building and horse barn could still be found. The lands for the dam and surrounding area belonged to Richard Trombley, Fay and Laura Chamberlain and Middlebury College. Two other reservoirs were planned on either side of the Dutton Brook Road but due to economic reasons were never constructed.

The first electricity in Town for household use was along the old Goshen road in 1931. The original line started in Forestdale and went along what is now State Route 73. Throughout the early 1930s and into the early 1940s the rest of the town was slowly electrified. As time went on the distribution line poles and lines were upgraded. New residences often required a line extension. About 15 years ago part of the original distribution line was relocated to the edge of the Flora White road so as to make it more accessible for storm repairs.

5.2 Communications

1. Telephone and Internet Service

Currently Goshen's land-line and high speed internet services are provided by Fairpoint. The quality of cell phone service in Goshen is very haphazard depending upon location.

Like many rural areas, Goshen's residents see an ever increasing need to have up to date communication technology. While some residents may be content to remain without high speed internet or cable television, many people desire these technologies for daily communications, news and information. Increasingly these services are also vital to the economic vitality of businesses based out of the home.

In many instances the availability of access depends on the location and how much a resident is willing to spend.

Given this situation, there are a number of Federal and State initiatives underway that will help to address securing these services. The Vermont Public Service Board is the State's clearing house for further information on this topic. The Vermont Public Service Board website (<u>http://psb.vermont.gov</u>) is available for more information. Also Broadband Vermont, a State-sponsored initiative, has a goal that all Vermonters eventually have access to the internet. More information can be found on this subject at www.broadbandvt.org

2. Telecommunications Infrastructure

At the present time there are no public wireless telecommunications facilities in the Town of Goshen. While such facilities if installed would not be town owned, they must undergo town review and approval prior to their construction or installation. Cellular phone towers and other wireless telecommunication facilities also fall under the jurisdiction of the federal government (Federal Communications Commission and Federal Aviation Administration) as well as the jurisdiction of the state (Public Service Board and Act 250 Board). The requirement to undergo such scrutiny and receive approval from several federal, state and local officials and panels is essential to ensure that such facilities serve the public good and are located and constructed so as to do the least harm and be the least intrusive. This is especially important in rural and remote communities such as Goshen. Town zoning bylaws should provide that wherever possible, communication towers, antennae and other facilities make use of existing structures and be constructed to blend with existing surroundings. Bylaw language should also require that towers, antennae, and facilities be constructed to limit any negative aesthetic impact on ridgelines and open countryside, i.e., that they be camouflaged to the greatest extent possible.

5.3 Communications Goals

- 1. Provide state of the art communication technology to Goshen residents and businesses.
- 2. Provide wireless telecommunications facilities and infrastructure that blend in with the local environment and do not compromise Goshen's scenic landscape.
- 3. Recommended Action:
- 4. Support provision of cellular phone service, DSL or other high-speed internet access throughout Goshen.
- 5. Wireless telecommunications facilities should be constructed in a manner that limits negative aesthetic impact to ridgelines and the open countryside. They should be concealed or camouflaged to the greatest extent possible.
- 6. Ensure that new infrastructure blends into its surroundings by developing regulations that require utilization of existing structures rather than the construction of new towers where possible.

5.4 Energy

With the increased use of the automobile and gas-powered engines, people in Goshen began to rely heavily on petroleum products to run their vehicles, heat their homes, manufacture and transport the produce and products necessary for their use and wellbeing. At the same time, the availability and use of electricity increased rapidly as distribution lines were strung and modern electric appliances became common in residents' homes. As employment opportunities increased beyond the Town's borders, and as the ease and speed of commuting increased, Middlebury and other economic centers in the region became resident's primary sources of income. Goshen experienced a shift in its settlement pattern from a forest and agricultural based economy to a bedroom community.

1. Electricity

Electricity is supplied to the Town of Goshen by Green Mountain Power (GMP). GMP obtains power from such sources as Hydro Quebec and Granite Wind. GMP also has significant shares of the output of other commercial wind projects, obtains power from hydro and solar projects and continues to consider developing new generation resources within Vermont. GMP also solicits supply commitments as needed and the company's power portfolio appears to be sufficient to meet customer demand in the region.

2. Net Metering

Net metering is another advancing alternative technology to power residences. Net metering involves the installation of grid-connected, on-site renewable electric generation. Net-metering customers purchase power from the grid when needed, and export power to the grid when output of their on-site generation exceeds their demand, resulting in a credit against charges for purchased power.

Construction and installation costs of installing a net metering system are exempt from Vermont's sales tax.

5.5 Alternative Energy Sources

Local hydropower, solar, geothermal, wind and biomass are all alternative energy sources being used in Vermont. This plan supports the use of such technologies to lower energy costs to home owners, and decrease environmental impacts associated with burning of fossil fuels.

1. Hydroelectric Power Generation

There are no hydroelectric power generation plants in the Town of Goshen. However water is stored behind Goshen Dam in the Sugar Hill Reservoir for use at the Silver Lake and Salisbury hydroelectric generating stations. These plants are now owned and operated by GMP who does not generate power from the plants regularly. The amount of power the plants can generate at a given time varies seasonally with the amount of water available to run the turbines and they are operated when GMP feels it is economically advantageous to produce this power instead of buying electricity on the spot market.

2. Solar

The simplest use of sunlight is passive use for lighting and heating. Properly insulated buildings oriented so that their long axis is within 30 degrees of true south with unobstructed south facing windows can offset their space heating costs. Floors and walls can be built of materials that will capture and store warmth from the sun. In many cases, passive solar buildings can be constructed at little or no extra cost, providing free heat and light - and substantial energy cost savings - for the life of the building.

Solar water heating is another cost-effective solar application. Water heating is one of the largest energy costs for the Town's households. A water heating system that utilizes solar energy can reduce energy costs but cannot generally supply all the hot water needed year round because of the climate and weather, so a back-up system

is typically required. Consumers currently heating their domestic hot water with electricity would see the largest energy cost savings.

New developments in photovoltaic cell (PV) technology, which converts solar energy into electricity, has led to PVs that are smaller, less expensive and more consumer-friendly. These trends should continue into the future. Photovoltaic cells come in a wide range of sizes and applications, from large collectors for utility-sized power plants to tiny cells built into consumer appliances.

3. Heat Pumps

A heat pump is a device that provides heat energy from a source of heat to a destination called a "heat sink". Heat pumps are designed to move thermal energy opposite to the direction of spontaneous heat flow by absorbing heat from a cold space and releasing it to a warmer one. A heat pump uses some amount of external power to accomplish the work of transferring energy from the heat source to the heat sink.

Heat pump installations may be installed alongside an auxiliary conventional heat source such as electrical resistance heaters, or oil or gas combustion. The auxiliary source is installed to meet peak heating loads, or to provide a back-up system.

4. Wind

Wind power can be harnessed for both large and small-scale power generation. In recent years, several studies have shown that Vermont's wind resource is abundant enough to meet a significant portion of the state's electric energy needs. Ridgelines generally provide the best location for wind generation facilities with the only likely locations for large-scale wind generation being within the Green Mountain National Forest.

While large-scale generation is unlikely to be located in Goshen, residential wind turbines are possible. Small wind turbines, designed for residential use, usually generate under 15 kW. This technology is developing rapidly and over the next decade it is expected that wind turbines are likely to become smaller, more efficient and affordable.

The Town should encourage development of small-scale alternative sources of energy generation and supports development of privately owned and operated residential wind turbines. Wind turbines for the purpose of residential electrical generation must be sited and constructed so as to have the least adverse environmental and aesthetic impact.

Because of negative environmental and aesthetic impacts the Plan does not support commercial wind development on Goshen's ridge lines, commercial wind development at elevations over 2,000 feet, and developments that are in conflict with valued recreational resources such as the Long Trail, Joseph Battell Wilderness Area and Moosalamoo National Recreation Area.

5. Biomass

Biomass consists of renewable organic materials, including forestry and agricultural crops and residues, wood, agricultural and food processing wastes, and municipal solid waste. All these products or waste products can be used as energy sources. The benefits of these resources are that they are local, sustainable and often waste materials. Some biomass materials, such as wood, have been traditionally burned to provide heat. However, these materials can also be used in more efficient ways, such as producing gas that can then be burned to generate heat or power. Goshen's potential source of biomass includes both USFS and privately managed forests.

It should be noted that Act 248 governs all energy generation and distribution including permitting of residential and commercial wind towers. Act 250 addresses different development concerns than Act 248 and does not have any jurisdiction regarding energy generation and transmission.

5.6 Energy Use

The challenge for the future will be to reduce our overall energy consumption and to shift demand towards energy sources that are renewable and have an overall low environmental impact.

1. Residential

Household energy use represents approximately 30 percent of total statewide energy consumption. Almost 80 percent of domestic demand is for space heating and domestic hot water. The remaining 20 percent runs miscellaneous appliances, lighting, cooking, drying and air conditioning. Space heating and hot water heating are affected by building design and construction. Other energy uses are affected primarily by personal choices and habits. The most common sources of heat in Goshen homes are fuel oil, propane and wood.

2. Transportation

34 percent of Vermont's energy use is for transportation, 29 percent is for residential uses, and the remaining 37 percent is for commercial and industrial uses. The vast majority of Goshen's residents travel to work outside of town - many to Middlebury and Rutland. Most residents drive their car every day to get to work, school and for recreational purposes. With the cost of gasoline continuing to rise, commuting can cause significant financial burdens on many households.

5.7 Energy Conservation

While energy policy and fuel prices often seem abstract or completely beyond the control of local government and consumers, energy conservation is the simplest way for individuals to take action. If the potential of energy conservation were fully realized, it would go a long way towards solving our nation's energy problems.

Homeowners can reduce the energy consumed in their homes in a variety of ways. Basic, inexpensive measures such as turning off lights in empty rooms or replacing light bulbs with new, more efficient bulbs can substantially reduce energy usage. Using timers to regulate lighting, heating or cooling in a home can also significantly decrease energy consumption.

Energy-efficient construction methods, materials, fixtures and appliances can substantially reduce the energy consumption of buildings. Energy efficiency can be built into new structures and older buildings can be retrofit to reduce the energy needed to heat them. Goshen's homeowners can take steps to weatherize their homes or to replace older, inefficient appliances or mechanical systems that can result in significant reductions in energy use and expense for heating and cooling.

Efficiency Vermont offers programs including: energy audits; incentives for Home Performance with Energy Star; information on appliances and compact fluorescent bulbs; building an Energy Star home; home heating help; rebate information; and, other reference information.

The Champlain Valley Office of Economic Opportunity (CVOEO) provides free weatherization services. Due to high fuel costs, demand for this service is high. Qualifying households may have to wait a year or more for it once they have signed up. NeighborWorks of Western Vermont also offers affordable weatherization options for eligible households. The Addison County Regional Planning Commission has funding to run energy audits on town-owned buildings in order to identify ways to cut down on energy costs.

5.8 PACE

For many, the lack of upfront capital makes the incorporation of energy-efficient retrofits, or new sustainable building projects unattainable. In response to this, Efficiency Vermont created the Property Assessed Clean Energy (PACE) program. PACE enables property owners to enter into an assessment contract with their municipality. The municipality will advance the cost (from a loan source secured by Efficiency Vermont) of the improvements to the contractor upon completion of the work and place an assessment lien on the taxpayer's property. The property owner then repays the municipality for the improvements as an assessment on his/her property tax bill over a 10, 15, or 20 year period. The municipality can choose to administer PACE projects, or they can be administered by Efficiency Vermont. As of March of 2012, 35 Vermont Towns have designated themselves as PACE districts, including six Addison County Towns - Cornwall, Ferrisburgh, Middlebury, Monkton, Ripton and Weybridge. More information on PACE can be found at: www.efficiencyvermont.org.

In 2012 some townspeople reviewed the PACE program. At that time those individuals did not pursue implementation of the PACE program by the Town.

5.9 Energy Plan

The Goshen Town Plan encourages residents to take the necessary steps toward creating more energy efficient and sustainable homes and lifestyles. Residents should carefully considered placement of buildings on lots to increase passive solar gain and decrease wind exposure. The Plan supports zoning bylaws that will allow for home business opportunities and the installation of residential alternative energy projects. The Plan supports implementation of the Vermont State Energy Code for the construction of new homes, and encourages all home owners to use Efficiency Vermont as a resource for rebates on electric appliances, and to build new homes to a five star energy efficiency standard. The Plan also supports the use of alternative technologies such as small-scale wind turbines, geothermal heating and solar technologies in order to create clean, affordable, and local sources of energy.

All energy related projects should consider the impacts to our natural and scenic, historic and agricultural resources, protecting and conserving them for the future. These projects should be created so that they are not detrimental to these important resources.

Energy conservation is an essential element of Goshen's Town Plan. Wise energy use, a strategy to save energy, and a plan for future energy resource management are both personal and community responsibilities. The cost and environmental implications of heating fuels, gasoline, diesel fuel, wood and electrical energy generation and distribution make it important for the local community and its governing bodies to establish and maintain policies for energy consumption, conservation, generation and distribution.

The Town Plan encourages personal energy conservation and expects that the Town of Goshen will take appropriate steps to ensure that the Town's use of fossil fuels is as efficient as possible. Whenever possible, the Plan encourages that residents and Town officials look for more efficient and/or alternative methods of energy consumption for heating of homes and Town buildings, fueling of vehicles, and powering of equipment. Examples include small scale wind or solar that is connected by net-metering to the grid, ground or air source heat pumps, wood or bio-mass pellet stoves and boilers.

The Town of Goshen can play an important role in energy conservation by establishing policies that implement, among other things:

- 1. Educational and informational programs;
- 2. Land use and land development practices;
- 3. Homeowner assistance programs;
- 4. Waste management and recycling programs;
- 5. Siting of new construction to take advantage of solar orientation;
- 6. Energy audits.

Such programs and practices can and should be established in conformance with and with the support of county, state, and federal governing bodies and agencies. These can take the form of stand-alone projects undertaken by Town governing bodies, committees, and volunteer organizations. The Town-wide recycling program is one such example of an energy conservation program with wide support, use, and effect.

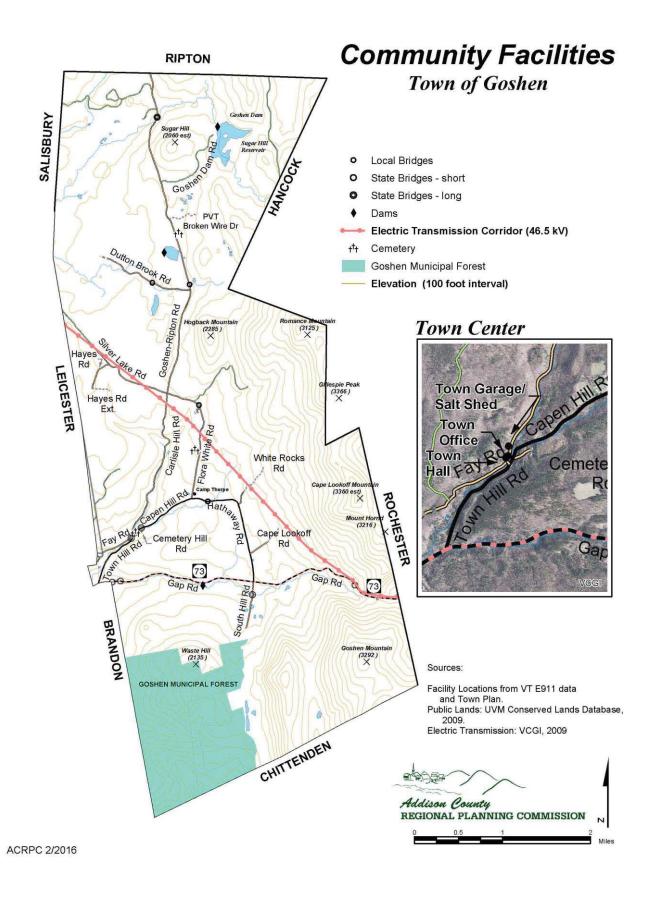
Energy efficient standards for renovation of existing homes or construction of new homes are one such area of inter-governmental and non-profit cooperation with proven energy conservation results. Home weatherization programs offered by local non-profits such as Addison County Community Action Group and Champlain Valley Office of Economic Opportunity are good examples of how such cooperative effort can help achieve wise energy use and conservation.

5.10 Goals

- 1. Reduce overall energy consumption and dependence on fossil fuels for home heating and electrical generation.
- 2. Encourage small scale energy generation and support residential scale renewable energy sources.
- 3. Ensure more Goshen buildings are energy efficient.

5.11 Recommended Actions

- Encourage replacement of old appliances with new Energy Star rated appliances, and old lighting with new energy efficient lamps. Support residents and Town officials in securing energy efficiency rebates from Efficiency Vermont and other organizations.
- 2. Encourage replacement of older inefficient woodstoves with new efficient EPA certified woodstoves. Support residents in securing rebates from the State.
- 3. Support residents and Town officials in obtaining energy audits and in making recommended comprehensive retrofit modifications in homes and Town buildings.
- 4. Encourage installation of residential photovoltaic systems, solar hot water systems, wind turbines and other residential scale renewable energy sources.
- 5. Support the design, construction and renovation of buildings and structures that incorporate energy-efficient building practices based on the Vermont Residential Energy Code.
- 6. Support educational efforts that increase public awareness and use of energy conservation practices.



Community Facilities - Map 6.1

6. TOWN FACILITIES, COMMUNITY SERVICES AND RESOURCES

6.1 Town Facilities

Facilities owned by the Town of Goshen provide a real benefit to its residents and property owners. They are important to the functioning of the community. In a town as small as Goshen, it is difficult to justify expenditures on, or for, elaborate community buildings and facilities, yet certain basics structures are necessary and must be maintained and improved upon when necessary and as required.

Goshen possesses a limited number of community facilities. These include the new town sand/salt shed, the town garage/recycling center, the community church (town hall), and the old schoolhouse that serves as the Goshen Town Office. The old schoolhouse and the community church are of significant, historical value. The town should do all it can to preserve and maintain these historical treasures. In 2005 volunteer workers renovated the Town Office to add a handicap accessible bathroom. The town can be proud of this accomplishment. The hard work and effort of these volunteer workers is laudable and should be acknowledged. A small town such as Goshen, with such limited resources, must rely upon its citizens for much of the work necessary to maintain a viable infrastructure. Goshen is fortunate to have such a store of committed and reliable citizens.

The annual town budget delineates, in detail, the expenditures for its community facilities. In addition to maintenance expenses, replacement expenses must be planned for and budgeted. Equipment for the Highway Department, Town Office equipment, and the sometimes unforeseen requirement to replace building equipment such as a furnace or oil tank requires fiscal restraint, responsibility, and saving. To this end the town annually sets aside an amount deemed sufficient to cover these anticipated as well as unexpected expenses. Currently approximately \$4,000.00 is set aside each year. This is placed in an interest bearing account. When replacement expenditures are needed, the town should utilize competitive bids, used equipment auctions, and other resources available to insure that the town receives the best value possible for its purchases.

6.2 Capital Spending

The Town recently purchased a 2012 International plow-truck, a small utility dump truck and a used road grader that can also be used to wing snow. There are no near-term plans for the purchase of any additional equipment.

Each year the Town sets aside approximately \$4,000.00 in an equipment replacement fund. Whenever equipment is purchased, the cost is offset by monies from this fund, from the trade-in value of existing equipment, and through loans from area banks.

Additionally, each year the Town budget sets aside between \$5,000.00 and \$10,000.00 for the resurfacing of blacktopped roads. The Town only repaves existing paved surfaces and does not anticipate that any unpaved roads will be paved in the near future.

Repairs to Town buildings are done on an as-needed basis. It is the policy of the Town of Goshen to seek grants whenever possible to accomplish needed repairs. In recent years, monies have been expended for a new Recycling Center, a new sand/salt shed and for required repairs to the Town Clerk's Office resulting from a heating oil spill and federally mandated requirement for a handicap accessible bathroom. In 2004-2005, significant historical restoration work was done on the Goshen Town Hall. Additional repairs and accessibility upgrades were completed by 2007.

Since Goshen has no schools, no library or other town-owned public buildings, no monies need be appropriated or spent in these areas. Goshen school-aged residents attend Neshobe Elementary, Otter Valley Union High, and other public schools. Since

school tuition includes the cost of busing students to these schools, the Town does not expend additional monies to own or lease school buses.

6.3 Community Services

1. Public Protection, Health and Safety

Like other small towns in Vermont, Goshen's limited residential tax base dictates what community facilities it can provide. Goshen has no industrial or retail tax base, and a very limited business tax base to reduce the tax burden on residential property owners or to add to the tax revenues that would allow the town to fund additional community facilities. As a result, Goshen must depend upon the community services available in adjacent and larger communities for its residents. Health care facilities, schools, libraries, rescue services, etc., are all available to Goshen residents only by utilization of those facilities available in neighboring communities.

A fundamental government responsibility is to provide fire protection and rescue services for its citizens. Goshen has no first response capabilities. Presently, the neighboring Town of Brandon performs this function. The costs associated with such protection are based upon an hourly rate for manpower and equipment set by the Brandon Volunteer Fire Department. The Town of Goshen appreciates that the Town of Brandon, to the extent possible, has set reasonable and modest rates for these services.

Two important health care facilities in the area that serve Goshen residents are Rutland Regional Medical Center in Rutland and Porter Hospital in Middlebury. Other health care organizations serving Goshen are the Counseling Service of Addison County and Addison County Home Health and Hospice of Addison County. Goshen residents may also subscribe to emergency services provided by the Brandon Area Rescue Service.

Because of its small size and population, Goshen has no police force. As with other small, rural communities Goshen relies upon the services of the State Police, currently stationed in barracks located in New Haven, and the District Game Warden. The Town of Goshen does employ, on a limited basis, two town Constables whose authority and jurisdiction in public safety matters is limited. Enforcement officers assigned to the Green Mountain National Forest do random town visits, primarily for the purpose of United States Forest Service law enforcement. In addition, the USFS contracts with the Addison County Sheriff's Department for random drive-troughs, primarily during summer weekends.

Goshen's remote and somewhat isolated location, coupled with its small size and population means the town cannot afford its own police force. This makes providing adequate police protection for the life and property in Goshen residents something of a problem. Robberies, vandalism, disputes, etc. must await response from police authorities, located some distance away, whose own resources are limited and often stretched thin. Often the officer or trooper responding is unfamiliar with Goshen, further complicating and delaying the response time. Discussion regarding cooperation with other, nearby towns in similar situations, towns such as Lincoln, Ripton, Starksboro, etc., in the formation of a mutually funded and manned police force to address this problem has been raised in the past as a possible solution to this problem. Efforts to seek such a solution should not be abandoned. In the meantime, it is likely that public safety and police protection in Goshen will continue to be provided in the same manner as in the recent past. 2. Recycling and Solid Waste Disposal

Because trash disposal and recycling is mandated by the state, town employees, using a town truck pick up household garbage and recycling on a weekly basis.

Household hazardous waste disposal is provided daily by the Addison County Waste Management District transfer station located on Route 7 in Middlebury. County residents are allowed to bring waste oil, scrap metals, batteries, paints, and construction and demolition waste to the Transfer Station for disposal. Household refuse and other solid wastes are trucked to the Transfer Station by licensed haulers. Currently, all of Goshen's solid waste ends up at the Transfer Station in Middlebury.

The Town's yearly solid waste disposal cost is approximately \$15,000.00. Annual deliveries of solid waste to the Transfer Station average 45 to 50 tons. The costs to the town are determined by use and the fees set by the Solid Waste Management Board of Supervisors upon recommendation of the Board's Executive Committee. These fees are adjusted annually. Each member town of the Solid Waste Management District has one sitting and one alternate member on the Board of Supervisors. This is a volunteer position and requires attending a monthly meeting of the Board usually held in Middlebury. Because of the high and ever-increasing costs of the proper disposal of solid and hazardous wastes, each household in Goshen should make every effort possible to recycle and reduce the amount of disposable waste it generates. The Solid Waste Management District has an educational program that includes mailing of monthly newsletters, creation and distribution of pamphlets and brochures, and on-site educational training programs aimed at providing households the educational tools to assist them in the reduction of the amount of solid wastes generated. All households should avail themselves of these tools. The Town's Annual Report details the past year's trash tonnage deposited at the Transfer Station.

6.4 Community Resources

1. Goshen Municipal Forest

The Goshen Municipal Forest constitutes a 1,050 acre tract of land located along the southern boundary of the Town. The Town acquired the land in late 1979 and 1980 through the efforts of two former listers, George Brush and David Gale. These listers determined that the Town of Brandon was not managing the land in accordance with best management practices nor in accordance with the terms of the Shirley Farr deed. After a successful court challenge the Goshen Select Board put that portion of the Shirley Farr land located in Goshen into a trust.

The Goshen Municipal Forest Trust Board was created to manage the forest and included four members, three of whom have professional forest and wildlife management backgrounds while the fourth is a resident of the Town. The Goshen Municipal Forest Trust Board set as the highest priority the provision of a multi-resource forest management plan with a view towards enhancing the future value of the area for the general public.

The forest management plan developed by the Goshen Municipal Forest Trust Board set out certain long-range goals. These goals are as follows:

- 1. To perpetuate oak for wildlife species that use acorns for food.
- 2. To salvage dying groups of aspen which woodcock and ruffed grouse use for protection from hawks.
- 3. To create variations in the age of the forest as a whole.
- 4. To provide habitat for a wide range of bird and animal species.

- 5. To open the land to the public for certain kinds of recreation activities such as fishing, hiking, skiing, snowmobiling, hunting and horseback riding.
- 6. To provide a developed road and trail system that meets the needs of recreational users.

In early 1997, by special act of the Vermont State Legislature, a bill was introduced and passed to dissolve the Goshen Municipal Forest Trust and put the lands in municipal ownership under the control of the Select Board. The individuals responsible for creating and passage of this bill were Tom Bahre, Peg Flory Esq., Bob Wood and Fred Peet Esq.

After transfer of the land to municipal ownership, the Goshen Select Board appointed the Goshen Forest Management Board to ensure and oversee continuation of forest and wildlife management practices in the forest. Forest management practices are now carried out by the Goshen Forest Management Board and it has remained the policy of the Town of Goshen to continue the management practices originally developed by the Goshen Municipal Forest Trust Board in the care and protection of this valuable town asset. As stated in the original terms of the Shirley Farr will, the property must be used "under good forestry and husbandry practices forever".

The purpose of the Goshen Municipal Forest is to serve as an area where up-to-date forest management activities are implemented to produce forest products, maintain or improve wildlife habitats and provide recreation opportunities to benefit the residents and visitors to the Town of Goshen. The Goshen Forest Management Board periodically reevaluates long-range goals and readjusts them to incorporate state-of-the-art changes in forest ecosystem management. Strategic goals seek the development of a good, sustainable population of deer, bear, grouse, woodcocks, rabbits and other, small game animals in ecological balance with a well-managed, regenerating forest with clean water sources. The Goshen Municipal Forest provides an ideal habitat for many different plant and animal species. It offers opportunities for town residents and the general public to enjoy a variety of dispersed, low intensity recreational actives and contributes added funds to the Town through forest timber sales.

Proceeds from Goshen Municipal Forest timber sales are deposited in the Goshen Municipal Forest accounts. Incomes from these accounts are used for forest management activities as well as for specific town projects identified annually by the Select Board. Voters must approve the town projects on Town Meeting Day.

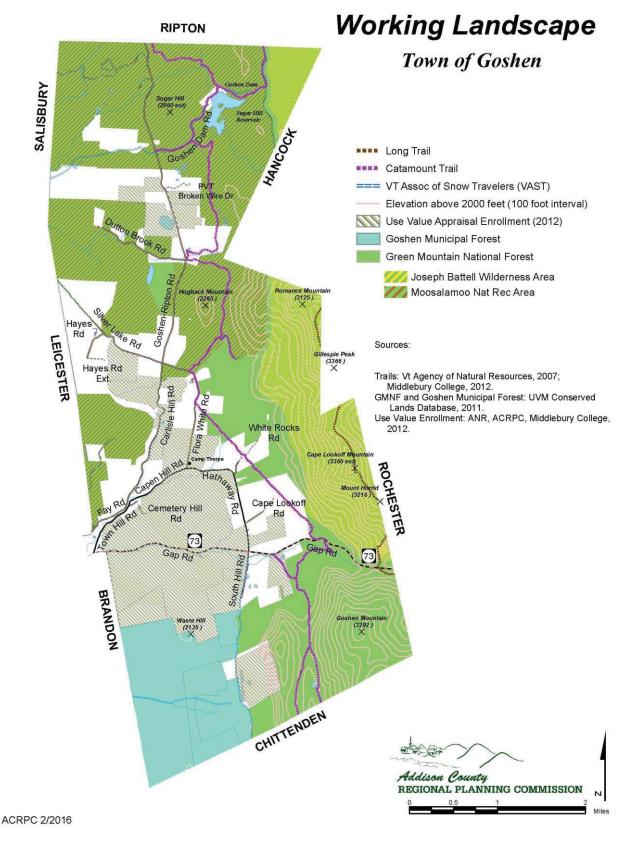
In addition, the Town can borrow principal from the Goshen Municipal Forest accounts in lieu of borrowing from a commercial lender. Funds are loaned to the town at interest rates below the prevailing commercial level, but above the rate paid by Certificates of Deposits where the funds would normally be invested. Through this arrangement both the town and the Goshen Municipal Forest Accounts benefit.

6.5 Goals

- 1. Provide for public safety and police protection.
- 2. Improve law enforcement coverage within the community.
- 3. Maintain and protect the Goshen Municipal Forest as a resource for the community.

6.6 Recommended Actions

- 1. Address police protection by seeking cooperation with adjoining towns in similar situations, such as Ripton, Leister and Salisbury.
- 2. Maintain current arrangements for Fire and Rescue services.
- 3. Cooperate with USFS Law Enforcement to identify and address public safety concerns.
- 4. Periodically reevaluate Goshen Municipal Forest long-range goals and management practices to ensure good forestry and husbandry practices continue in perpetuity.



Working Landscape - Map 7.1

7. HISTORIC, SCENIC AND NATURAL RESOURCES

7.1 Historic Structures and Sites

Eight of Goshen's original homes were built between 1835 and 1875 and are of historic significance. The Vermont State Register of Historic places and The Historic Architecture of Addison County published in 1922 and later revised in 1992 lists them in the section on Goshen.

Currently there are four structures, seven residences, two barns, a blacksmith shop, the Community Church (Town Hall), and the Blueberry Hill Farm House (The old Bailey Farm) that are significant and worthy of preservation. This Plan supports and encourages efforts by the current owners to preserve them for future generations to see. These historic structures are symbolic of the rich cultural and economic history of Goshen that once existed in this small isolated mountain town.

Scattered throughout the town are many cellar holes, stone barn foundations and old walls giving evidence of an earlier civilization that once existed here. These remains can be found on private land as well as USFS lands. The owners of these remains are encouraged to allow them to remain intact as signs of the past.

The reader is encouraged to view the circa1870's Beers Map of Goshen (Section 1, Introduction) that shows the roads and house locations at that time.

7.2 Goal for Historic Structures

1. Encourage and support the preservation of historic structures and structural remains found in Goshen.

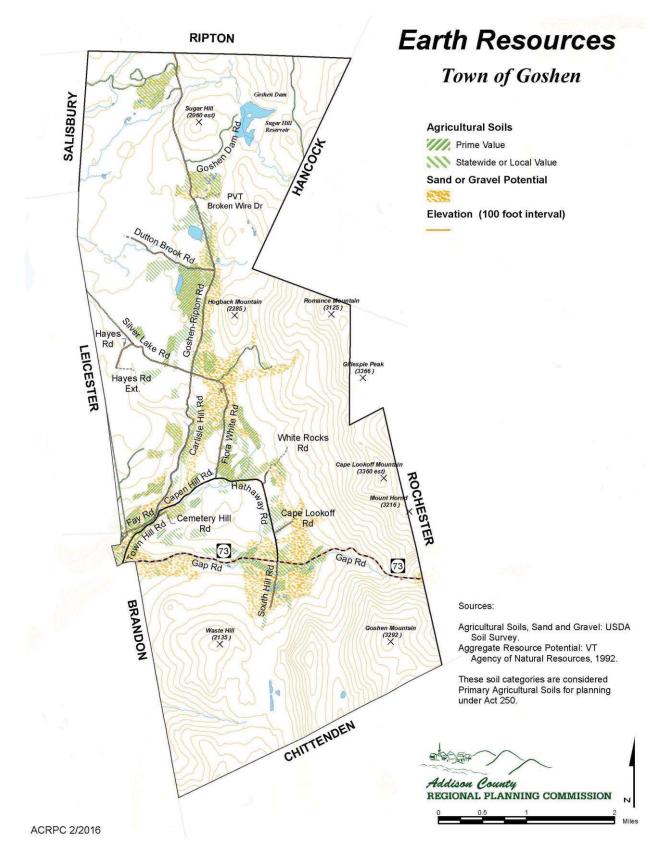
7.3 Recommended Actions for Historic Structures

- 1. Support identification, inventory, photography and mapping of historic structures.
- 2. Encourage residents to contact the State Historic Preservation Office (SHPO) or State Archeologist for assistance in evaluation of their properties.
- 3. Coordinate activities within the Town concerning documented historic sites or potential historic sites with the USFS.
- 4. Collaborate with the Goshen Historical Society to access resources and educate the community in regard to the Town's historic sites.

7.4 Agricultural and Forest Lands

While the Town of Goshen can be described as a growing rural community of singlefamily dwellings, its character is most dramatically shaped by its agricultural history and the large tracts of land that lie within its boundaries. The contemporary agricultural landscape consists mainly of private vegetable gardens, small orchards, and hay fields. Maple sugaring operations are prevalent as are several wood lots. The Town also owns a forest consisting of 1,050 acres (See Goshen Municipal Forest in Section 6.4).

Grazing and pasturelands from Goshen's past help to define the Town's character. Although only small-scale agricultural uses now remain, it was logging and agriculture that created our small rural town. Because this rural quality is valued by Town residents, the Town should work to preserve the rural and small agricultural qualities that have inspired settlement here.



Earth Resources - Map 7.2

The USFS administers and maintains about 8,000 acres of woodlands within the Town's boundaries. The USFS holdings offer numerous recreational possibilities for the public. The USFS lands are open to the public for hunting, hiking, camping, fishing, cross-country skiing, snowmobiling, mountain biking, etc.

Goshen's large wooded tracts possess a mixture of hardwood tree species that provide brilliant autumn foliage displays. Goshen's forests are a valuable asset that benefits all. They are to be cherished and must be protected. Town land use regulations and ordinances must ensure that such protection is provided.

7.5 Goal for Agricultural and Forest Lands

1. Maintain the rural, silvacultural and agricultural character that has defined Goshen since its inception.

7.6 Recommended Actions for Agricultural and Forest Lands

- 1. Encourage the Town and its residents to exercise stewardship of agricultural and forest lands.
- Support best management practices on Goshen's agricultural and forestlands under the guidance of professional consultants, non-profit organizations or by utilizing county and/or state resources.
- 3. Support maintenance of contiguous forestland to protect animal habitat and corridors and to reduce flooding.
- 4. Promote sustainable agricultural and forest management techniques through Federal and State assistance programs.

7.7 Recreation

Goshen is a community that is home to some, but serves only as a temporary vacation or recreation spot for others. A balance of land use and preservation values is essential in the attempt to satisfy the needs of both groups. Preserving the character and natural beauty of Goshen is important for the permanent residents and landowners. Maintaining the environment and ecology for scenic and recreational purposes is important to all.

There are many public recreation areas in Goshen that are available to both residents and the general public. Some of these areas are handicapped accessible. Various areas provide opportunities for fishing, swimming, canoeing, kayaking, hiking, horseback riding, snowmobiling, skiing, hunting, camping and other activities.

These areas include:

- 1. Sugar Hill Reservoir (Goshen Dam)
- 2. Catamount Ski Trail
- 3. Blueberry Management Area
- 4. Silver Lake Recreational Area and Campground
- 5. Goshen Municipal Forest
- 6. Moosalamoo Campground
- 7. Long Trail, VAST trails, bridle trails and several other hiking trails

Many residents and visitors also enjoy walking, running, horseback riding and cycling on Town roads.

Goshen residents are very fortunate to live in an area with such a diversity of recreational resources. However, these resources come with responsibilities and costs. Added road traffic and damage, vandalism, illegal dumping and ATV use on public rights-of-way all create problems. Policing the recreational areas, restoring vandalized property, repairing roads, hauling trash, etc., are necessary expenses often borne by the community. A strong working relationship with the USFS is essential for good planning and management of USFS recreational areas in Goshen. Such a relationship can contribute to effective responses to problems associated with these numerous facilities keeping the cost of mitigating such problems as low as possible.

7.8 Goal for Recreation

1. Maintain and protect the environmental character and ecological quality of the community through appropriate recreational land use.

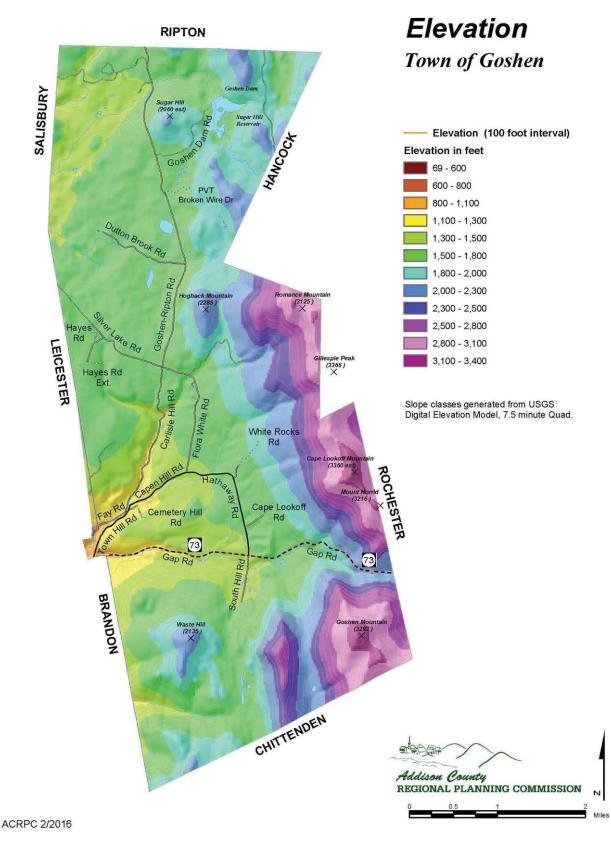
7.9 Recommended Actions for Recreation

- 1. Encourage and support opportunities for dispersed, low intensity recreational activities.
- 2. Encourage landowners to provide open access to their lands for low intensity recreation opportunities, and urge people who take advantage of this access to treat the privilege responsibly.
- 3. Encourage everyone to consider environmental conditions when determining the appropriateness of recreational activities. For example, consider riding or hiking on back roads rather than forest trails when wet, soggy conditions make the trails susceptible to erosion.
- 4. Discourage the use of motorized vehicles on trails, particularly without snow cover, to limit noise pollution and soil erosion. This recommended action is consistent with other sections of the Town Plan that seek to maintain high quality ground and surface waters for a variety of uses within the Town, and to protect wetlands and fragile biologically significant areas. The damage created by off road vehicles in the form of soil compaction and erosion is contrary to the values set forth in the Town Plan.

7.10 Scenic and Natural Areas

The Town of Goshen is fortunate to have a variety of scenic and natural areas that contribute to its character and beauty. It is the intent of this Plan to encourage the continued preservation, maintenance, and enhancement of these areas for the enjoyment of present and future generations. Scenic vistas, viewable from public rights-of-way, should be maintained through thoughtful and careful clearing of Town roadsides. Likewise, private landowners should be encouraged to maintain their land in a manner conducive to the preservation of open view sheds to mountains and valleys.

Areas above 2,000 feet in elevation are particularly significant and often fragile. They are vulnerable to human activities such as hiking and mountain biking as well as to natural hazards from acid rain, storm water run-off, etc. The State imposes strict restrictions on development of areas above 2,000 feet. Organizations such as The Green Mountain Club impose additional restrictions on the use of public areas such as the Long Trail. The Town of Goshen supports these efforts and should adopt and maintain sufficient regulatory restrictions in town bylaws and ordinances to further protect these fragile and significant areas.



Elevation - Map 7.3

7.11 Goal for Scenic and Natural Areas

1. Preserve scenic and natural areas.

7.12 Recommended Actions Scenic and Natural Areas

- 1. Encourage the management of private and public lands in a manner that will protect, maintain and promote the scenic quality and natural areas of Goshen.
- 2. Town zoning bylaws and other regulatory tools such as design standards and viewshed management standards should be written so as to encourage and guide the preservation of the scenic and natural areas in Goshen.
- 3. Support efforts of the Green Mountain Club, Catamount Trail Association, USFS, other organizations and agencies to protect areas above 2,000 ft. elevation.

7.13 Wildlife

The Town of Goshen recognizes the importance of natural ecosystems and their vital contribution to the quality of life in Goshen. With this in mind, the Plan encourages the protection of wildlife habitats, breeding grounds, wildlife corridors, wintering areas, and wetlands. State identified buffers for sensitive areas should be recognized by Town regulations and local zoning and subdivision decisions. Additionally, State of Vermont Natural Resource maps for the Town of Goshen should be available at the Town office for public review and be incorporated into the Town subdivision and zoning regulations. Significant habitat areas for wildlife are located within the Green Mountain National Forest. The Town should encourage the USFS to foster policies and practices that will continue to protect critical areas located in Goshen that fall under their jurisdiction.

7.14 Goal for Wildlife

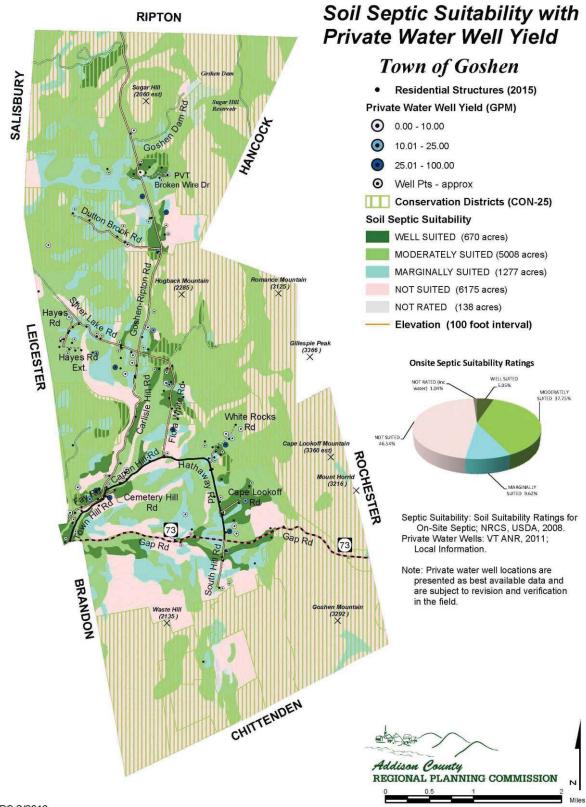
1. Maintain and conserve wildlife habitats, corridors and wintering areas.

7.15 Recommended Actions for Wildlife

- 1. Acquire a summary of state identified buffers and setbacks from wildlife areas and wetlands.
- 2. Obtain State of Vermont Natural Resource maps for the Town of Goshen. Make maps available at the Town office for public review and incorporate into the Town subdivision and zoning regulations.
- 3. Identify the means to obtain an inventory of wildlife habitats.
- 4. Town shall encourage the USFS to protect critical habitats, corridors and areas within their jurisdiction.
- 5. Town shall follow policies that will protect critical habitats, corridors and areas within the Goshen Town Forest.



Sugar Hill Reservoir



ACRPC 2/2016

Soil Septic Suitability with Private Water Well Yield - Map 7.4

7.16 Water

Water resources in Goshen are plentiful but cannot be taken for granted. They are essential to the health and stability of the Town and important for future development. Water resources are subject to countless risks and hazards. Not the least of these include toxic waste materials leaching into ground waters and water supplies, improper functioning of private septic systems, agricultural field run-off of pesticides, insecticides, and fertilizers, road salts, illegal dumping of solid waste, erosion, and poor management of new land development projects. All can contribute to the contamination of water sources and supplies. Poor water quality impacts individuals, wildlife, flora, the community, and adds to the global decline in the integrity of our environment. Every decision made by the Town must include a careful analysis of the impact of that decision upon water quality and such decisions must be structured so as to insure a safe and reliable supply of water for all purposes.

7.17 Ground Water

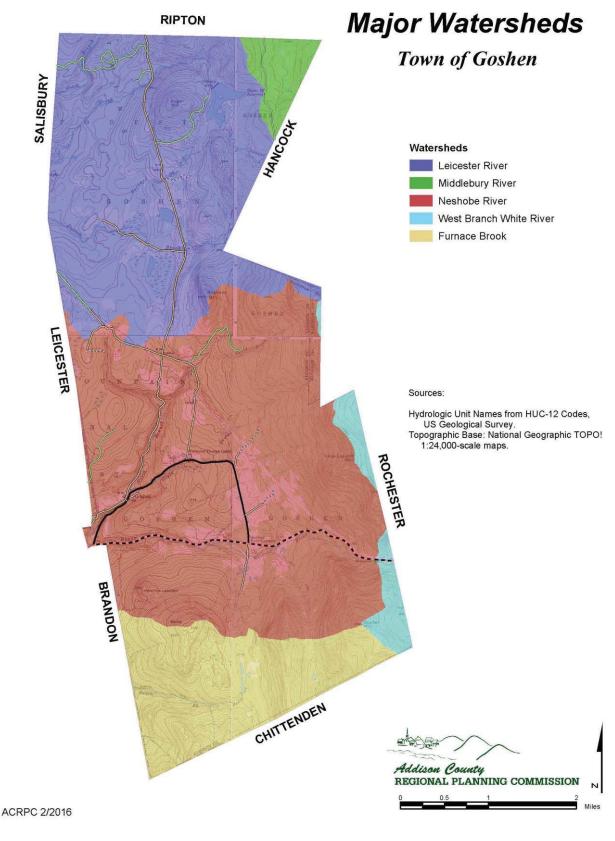
Goshen adheres to the ground water protections rules and strategies adopted by the State of Vermont. These rules address such things as classification, mapping and management. Despite access to such State resources, Goshen lacks important information concerning the location of aquifers, the quality of present groundwater supplies, and tools to insure the best management of Town groundwater. Many residents rely on springs or dug wells for water which are more prone to contamination from surface sources. The Town of Goshen supports continuing efforts to gather information on the locations, sources, and quality of groundwater and on the methods and regulations available to protect and, if necessary, restore groundwater quality.

7.18 Goal for Ground Water

1. Take all necessary measures to prevent contamination of water system source areas in Goshen.

7.19 Recommended Actions for Ground Water

- 1. Prohibit any activity that could degrade the quality of Goshen's ground water.
- 2. Discourage any activity that could degrade the yields of Goshen's ground water,
- 3. Identify locations, sources, and quality of ground water.
- 4. Ensure that all residents comply with sewage regulations of the Vermont Agency of Natural Resources.
- 5. Require residents to properly dispose of substances that could degrade ground water quality. These include, but are not limited to, automotive fluids, fluorescent bulbs, gasoline, mothballs, pesticides/herbicides, batteries and other substances, as outlined by the ACSWMD.
- 6. Identify groundwater source protection zones and potential risks/impacts to these zones.



Major Watersheds - Map 7.5

7.20 Surface Water

The Neshobe River and many other smaller streams flow through Goshen. Many pristine lakes and ponds are also located in the community. The Town of Goshen recognizes that it has a special responsibility to maintain the quality of these water bodies for its citizens and for the citizens of communities downstream. The Town therefore supports all efforts to keep these water bodies as clean and pure as possible. The Town should acquire and maintain information about the current status of all lakes, ponds, rivers and streams in Goshen and support plans aimed at the preservation of the surface water bodies. The plan encourages town officials to incorporate into town zoning bylaws and subdivision regulations language supporting the creation of riparian buffers or setbacks to lakes, ponds, rivers and streams in Goshen. Such "do not disturb" buffer zones serve to filter sediment and pollution runoff, capture nutrients, stabilize banks and combat erosion, provide complex habitats, slow the velocity of runoff for flood control, and moderate water temperatures for aquatic habitat.

7.21 Goal for Surface Water

- 1. Protect the quality of surface waters to keep Town waterways as clean and pure as possible.
- 2. Mitigate the impacts of stormwater.

7.22 Recommended Actions for Surface Water

- 1. Incorporate language into town zoning bylaws and subdivision regulations that supports the creation of riparian buffers.
- 2. Encourage the use of protective buffer vegetation to filter and limit runoff into surface waters.
- 3. Encourage road maintenance practices that limit contamination and stormwater runoff including participation in the VT Better Back Roads Program and incorporation of Green Infrastructure Stormwater Mitigation measures.
- 4. Limit development in areas where there is a high potential for erosion and subsequent surface water pollution.
- 5. Take steps to maintain water quality and if necessary remedy causes of poor water quality.
- 6. Support efforts of the USFS, other agencies and organizations to protect and enhance the quality of Goshen's surface waters.

7.23 Wetlands

As their name implies, wetlands are defined by water, an abundant and important resource in Goshen. The significant elevations of Mount Horrid, Cape Look Off, Gillespie Peak and White Rocks to our east funnel water through town, creating a complex network of brooks and creeks. Nearly every part of Goshen is affected by this flow, which in turn has created Class 2 wetlands and numerous unmapped Class 3 open and forested wetlands.

There are three basic characteristics of a wetland: an area inundated or saturated with water during the growing season; soil that develops from being saturated; and abundant vegetation that thrives on water soaked soil. The National Wetland Inventory divides wetlands into three classifications:

Class One wetlands are deemed exceptional and/or irreplaceable for their contribution to Vermont's natural heritage. A 100-foot buffer zone is required. Goshen has no Class One wetlands.

Class Two wetlands are considered significant in that they serve one or more functions described in applicable sections of the Vermont Wetland Rules, or share a boundary with a mapped wetland. They usually require a 50-foot buffer. The rules describe ten functions and values including: water storage for flood or storm runoff, surface and pond water protection, erosion control, as well as habitats for wildlife, birds, fisheries and hydrophytic vegetation. Educational opportunities, aesthetic consideration, and recreation are also important.

Class Three wetlands are usually less than one acre in size. The mapping is done by aerial photography. This process, however, often overlooks forested wetlands, which are potentially quite large, an important consideration in Goshen. Although not protected under the Vermont Wetland Rules, Class Three wetlands offer the same advantages as the other classifications.

Wetlands serve important environmental functions. Wetlands can serve as a buffer, trapping floodwaters and preventing serious erosion and flooding. Wetlands help cleanse floodwaters of suspended contaminants. Wetlands will help reduce the contamination to groundwater caused from agricultural run-off. Wetlands also serve as a vital habitat for aquatic and forest wildlife and are breeding grounds for insects and reptilian life. Vernal pools and seeps, swamps, and backyard marshes enrich our lives from the song of wood frogs to the warning slap of a beaver's tail. Birds utilize wetlands for food sources, safety, nest building, and migration. The distinctive greens of our water-loving hemlocks, balsams and spruces help define Goshen itself.

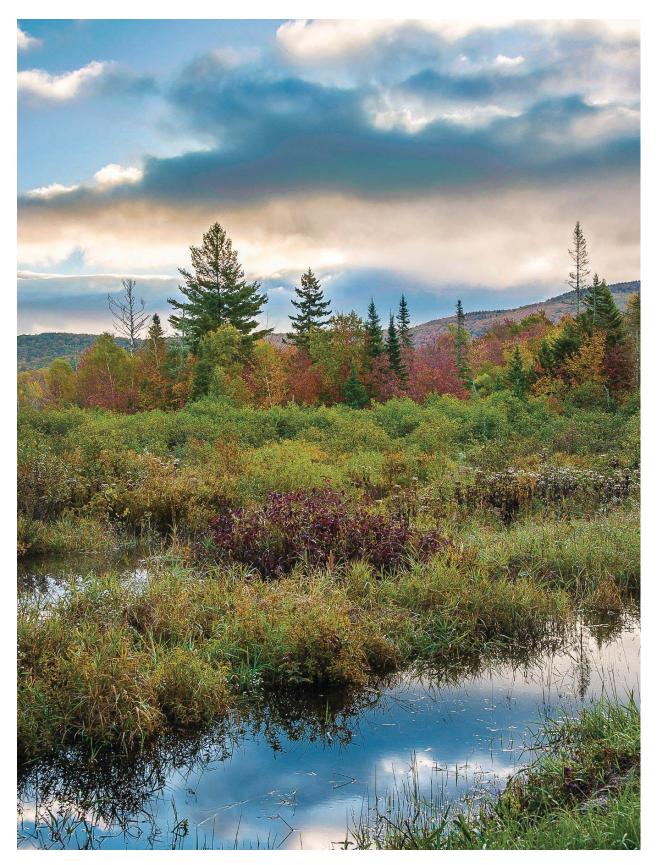
Wetlands are also very fragile. To ensure the preservation and health of wetlands, development in wetlands or land in close proximity to wetlands should only be allowed after review and approval by the appropriate governmental agencies. The Town of Goshen supports regulations that protect wetlands. Copies of the State of Vermont Wetlands Inventory Map can be found in the Town Office. All land development in Goshen must adhere to State Wetland Regulations. In the Town of Goshen final approvals cannot be granted for projects involving wetlands unless the Agency of Natural Resources first has had an opportunity to evaluate the effect of the project on the wetland. Additionally, future investigations of wetlands within Goshen may result in additional areas being determined as significant or important for conservation.

7.24 Goal for Wetlands

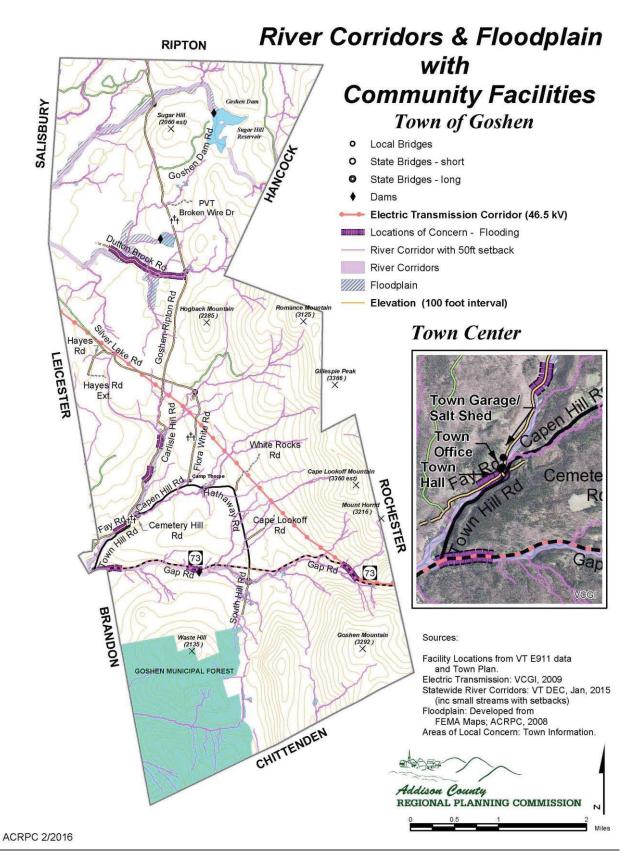
1. Protect Goshen's wetlands and the value and functions they provide.

7.25 Recommended Actions for Wetlands

- 1. Encourage the control of invasive and exotic species that directly threaten wetlands.
- 2. Discourage activities that could harm or degrade wetlands such as the use of offroad recreational vehicles and equipment, or horses.
- 3. Discourage logging and land development practices that threaten or have adverse impacts on wetlands.



Twin Culverts at Dutton Brook Road



River Corridors & Floodplain with Community Facilities - Map 7.6

7.26 Flood and Hazard Resilience

Floods are inevitable and uncontrollable natural events that occur sporadically and affect lands adjacent to watercourses (flood plains). It is therefore in the public interest to plan to mitigate flood damages, and to implement land use strategies that will protect these areas and minimize the risks to public health, safety, and property.

Floodplains are periodically inundated by heavy rains or spring runoffs with a propensity for flooding. Floodplains make excellent agricultural land but for this reason are poorly suited for development.

As of 1 July 2014 (24 VSA §4302), the Vermont legislature requires consideration of flood resilience in the Town Plan. The Town Plan addresses this hazard, while noting that other hazards dealt with in the Town Plan are worth consideration under the heading of "Resilience". A variety of social, economic or demographic hazards not included in the Town Plan, but which could result in serious economic losses, loss of homes, livelihood, essential services and other significant disruptions, could also be considered under the heading "Resilience".

Vermont has experienced a number of statewide and regional floods that were declared federal disasters, and economic losses were significant. Damage was not limited to designated floodplains, but often occurred along unstable river systems and steep streams. In some cases, recovery costs to the public sector alone amounted to several million dollars per flooding event. Public interest dictates that every reasonable attempt should be made to avoid or reduce exposure to flood damage.

Flooding of the Neshobe River, North Branch, Dutton Brook, Sucker Brook and/or their tributaries took place in 2008, again in 2011 and in 2012, with less impactful flood events about every other year. Goshen responded to these flood events effectively. If predictions regarding increased precipitation, largely from intense storms as the result of climate change, prove true, the potential for more flood events will increase.

In June and again in August 2008, locally intense storms produced flood damage to the Ripton - Goshen Road and equally severe damage to several private roads. A major portion of at the base of Carlisle Hill that had washed out was replaced. The State repaired minor washouts on Route 73 east of Goshen's Town Center at the same time.

Tropical storms Irene in 2011 and Sandy in 2012 hit Vermont hard. With Irene Route 73 again suffered damage above and below Goshen's Town center, but the Town escaped with relatively minor damage. During Irene, Goshen ground transportation was cut off from all other communities for several hours with travel west on Route 73 reopening a day after the storm and travel east on Route 73 not reopening until months later.

FEMA has prepared Flood Hazard Boundary Maps for the Town of Goshen, which includes flood hazard areas for the major rivers, streams and ponds. These maps are on file at the Town Office.

FEMA also administers the National Flood Insurance Program, which provides flood hazard insurance for property owners in affected areas. In order to qualify for federal insurance, towns must adopt and retain a by-law to control land development within flood hazard areas. Minimum standards must be included and approved by FEMA.

An assessment of the erosion hazards associated with the Neshobe River in Goshen was conducted in 2004 by a consultant working for the Addison County Regional Planning Commission. The resulting report recommended, among other things, that the Town provide appropriately sized bridges and culverts to minimize the disturbance of

river buffers and to limit future development in the fluvial erosion hazard areas. This plan supports mitigation efforts of fluvial erosion hazard areas, supports assessment of stream channel stability, and efforts to manage river corridors for general safety purposes and infrastructure protection.

Ditching and drainage mitigation work and culvert replacement with larger capacity culverts have left the Town better prepared to weather the next round of storms. Goshen's Town Center, with its homes close to the riverbank and two public historic structures along the edge of the floodplain, remains in a potentially hazardous place, in view of predicted increases in precipitation.

Winter/Ice Storms, Widespread Power Outages, High Winds - These three categories of hazard are very closely related in terms of their impact on Town infrastructure and resultant community needs. Any of these hazards has the capacity to impact the entire town, whereas flooding hazard is usually more locally restricted.

Significant snow or ice storms occur nearly annually. Goshen has adequate equipment to deal effectively with heavy snowfall or moderate ice buildup, but that capacity has been tested occasionally. While the major ice storm of 1998 caused severe infrastructure damage to large portions of Vermont due to ice build-up below 1000 feet and above 1800 feet elevation. The inhabited part of Goshen lies between these elevations and suffered little damage.

The ice and snow storm of December 2014 coated all tree branches with a half inch of ice and an inch or two of wet snow which damaged many trees and left the town without power for four days. Relatively mild temperatures within 4 degrees of freezing afforded households with woodstoves or generators the choice of staying put. Roads and driveways needed to be cleared of trees or branches multiple times.

7.27 Goal for Flood and Hazard Resilience

1. Mitigate flood damage and implement land use strategies that will protect flood plains and minimize risks to public health, safety and property.

7.28 Recommended Actions for Flood and Hazard Resilience

- 1. Enhance and maintain wise use of flood hazard areas as open space, greenways, noncommercial recreation and/or agricultural land.
- 2. To the extent possible, allow stream channel migration and adjustment to encourage natural flow equilibrium, stabilize riverbanks, and avoid degrading stream channelization.
- 3. Encourage retention of a largely forested land cover to attenuate the rate of runoff and limit erosion from heavy storms.
- 4. Ensure no net loss of flood storage capacity in order to minimize the loss of life and property, disruption of commerce, and demand for extraordinary public services and expenditures which result from flood damage.
- 5. Retain the Town's eligibility for and participation in the National Flood Insurance Program.
- 6. Maintain maps that reflect as accurately as possible the flood hazard areas, to assist in appropriate land use decisions.
- 7. Undertake a long-range plan for the future of Goshen Town buildings in the Goshen Town Center, including determination by FEMA of base flood elevations for Goshen.

- 8. Recognize that upland areas adjacent to unstable rivers and to steep streams may be at risk of erosion during floods.
- Ensure that it is the policy of the Town that the preferred uses for flood hazard areas shall be for open space, greenbelts, and non-commercial recreational or agricultural uses.
- 10. Prohibit any land use activity (filling, or removal of earth or rock) within flood hazard areas which would result in net loss of flood storage or increased or diverted flood levels or increased risk to adjacent or other riparian areas.
- 11. Ensure that utilities or facilities serving existing development (e.g. water lines, electrical service, waste disposal systems, roads, and bridges) are located within these areas only when off-site options are not feasible and provided that their placement protected from flooding damage.
- 12. Extend flood hazard regulations to areas identified as being at risk to flood erosion.
- 13. Prevent new development and strongly control renovation in special erosion and flood zones.
- 14. Continue to replace undersized culverts with ones of larger dimensions better able to withstand flood events. Utilize the state's culvert database to inventory the town's culverts and prioritize their shortcomings for planning purposes. Identify vulnerable culverts and bridges and have studies on file for replacement.
- 15. Update the Local Emergency Operating Plan annually.

7.29 Earth Resources

Goshen has few earth resources of economic importance. Gravel deposits have been extracted from the GMNF and private property in Goshen for many years. Materials for construction and road maintenance are now primarily trucked to Goshen from the Champlain Valley. Planning and construction of new extraction sites must adhere to State and Town policies regarding appropriate development of land.

Any extraction of soil, sand, or gravel must be undertaken in a manner which will prevent erosion debris from entering watercourses and poses no safety hazards from extraction sites, pits, steep or unstable slopes. Upon termination of extraction activities, sites must be restored to natural contours with a vegetative cover. Goshen's policy, in accordance with applicable Vermont State law prohibits the removal of sand or gravel directly from watercourses. Such extraction decreases stream and stream bank stability and increases the likelihood of sediment transport.

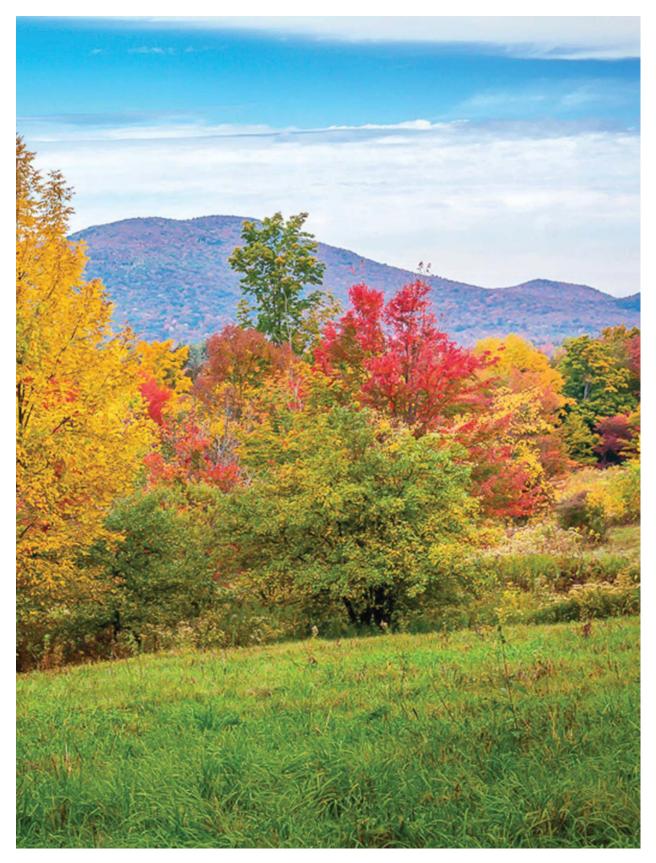
7.30 Goal for Earth Resources

1. Manage the extraction of earth resources, including siting and processing, in a manner that does not unduly impact environmental quality or the character of the community.

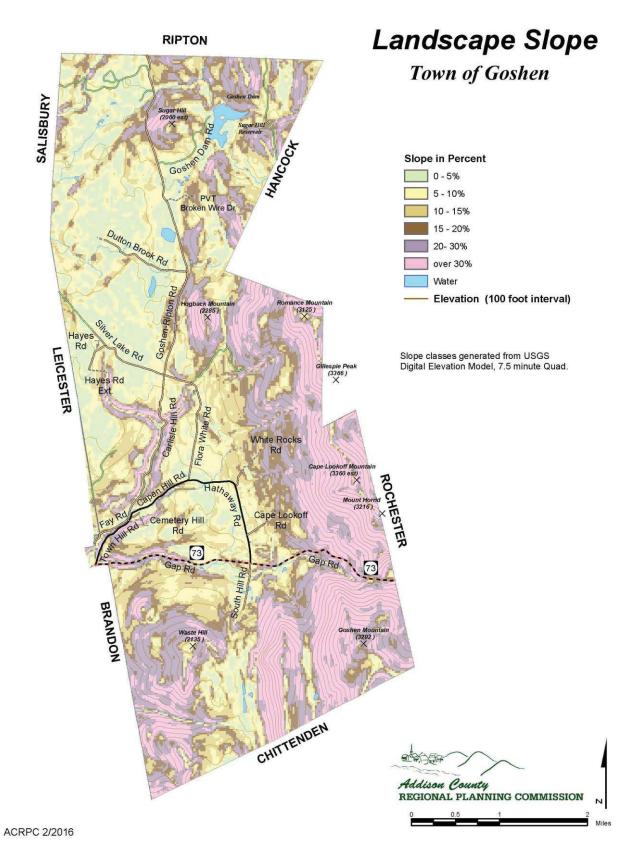
7.31 Recommended Actions for Earth Resources

- 1. Regulate local earth resource extraction to:
- 2. Prevent erosion debris from entering watercourses;
- 3. Reduce safety hazards caused by pits or steep or unstable slopes;
- 4. Restore terminated sites to blend naturally into surrounding areas;

- 5. Prohibit the removal of sand or gravel directly from watercourses, as stated in Vermont State law, except in emergency situations, i.e., severe storm flooding.
- 6. Prohibit the locating and development of extraction sites which can have an adverse impact on surrounding properties.
- 7. Collaborate with the USFS to identify potential gravel extraction sites for Town use.



Mt. Moosalamoo



Landscape Slope - Map 7.7

7.32 Soils and Slopes

Goshen's soils are quite varied. The Town expects that land use and development will be cognizant of and compatible with the types of soil in a given area. The Town, in its bylaws, ordinances, and regulations, seeks to ensure the wise and efficient use of natural resources and preservation of the aesthetic qualities of the community. The Town follows the State of Vermont Department of Environmental Conservation Rules and Regulations for siting and constructing septic systems. Proper siting of proposed septic systems is crucial for the protection of public health and safety. Improperly sited and constructed septic systems may fail, contaminate ground water and water in nearby streams, ponds, wetlands and wells could be affected. For this reason State regulations require that soils be tested and a professionally engineered septic system be designed before any development commence.

The environment of Goshen is mountainous. Slopes, therefore, are a major consideration in land use and development. The Town prohibits development on slopes of 25% or greater. Development on slopes of less than 25% shall be carried out in a manner that prevents undue erosion, run-off, and environmental impact. The Town also observes State regulations regarding storm water run-off. Maps depicting Landscape Slope and Elevation are included in this Section.

7.33 Goals for Soils and Slopes

- 1. Protect unsuitable soils and steep slopes from development which would result in an undue impact on environmental quality or the character of the community.
- 2. Manage development to minimize risks to public health and safety.

7.34 Recommended Actions for Soils and Slopes

- 1. Prohibit development in locations involving slopes of 25% or greater.
- 2. Prohibit development in locations encompassing areas of unsuitable soils.
- 3. Enforce applicable State and Federal regulations including but not limited to water supply, wastewater, stormwater and wetlands regulations.
- 4. Encourage development practices which prevent erosion and other environmental damages while preserving and maintaining the aesthetic and scenic qualities of the community.

7.35 Air Resources

While most issues dealing with air quality are beyond the purview of the Town, potential air pollution sources within the community warrant discussion.

The ACSWMD, of which the Town is a member, prohibits, by ordinance, the burning of solid waste. Violators are subject to a fine.

The Town expects compliance with regulations concerning use, operation and location of outdoor wood-fired boilers, wood burning stoves and other fuel burning appliances. Residents are encouraged to maintain chimneys, fuel burning appliances and related safety features in a clean and fully operational manner and in compliance with applicable codes.

7.36 Goals for Air Resources

- 1. Protect and maintain the air quality of the community
- 2. Minimize risks to public health and safety.

7.37 Recommended Actions for Air Resources

- 1. Prohibit installation and operation of fuel burning appliances which do not fully comply with State and Federal emission and air quality regulations.
- 2. Prohibit installation and use of fuel burning appliances which do not fully comply with State life safety and fire regulations.

8 EDUCATION AND CHILD CARE RESOURCES

8.1 Education

The Town is a member of the Rutland Northeast Supervisory Union (RNESU) which serves the towns of Brandon, Chittenden, Leicester, Mendon, Pittsford, Sudbury, Whiting and Goshen. Since Goshen has no public or private schools within its borders, maps will not therefore depict any educational facilities in the town. See Community Facilities Map located in Section 6.

Goshen is responsible for the cost of transporting their students to and from the Neshobe Elementary School and Otter Valley Union High School. Representatives from the Goshen School Board attend Brandon School Board meetings and are provided the same privileges and responsibilities as other members of the Brandon School Board, except that they are not able to vote. As a member of RNESU, the Town has one voting representative on the Otter Valley School Board.

In recent years Goshen has annually sent 10 to 15 students to the Neshobe Elementary School. Should Goshen's student population increase beyond a level deemed acceptable by the Brandon School Board, it may become necessary for the Goshen School Board and Select Board to find alternatives for educating its elementary age school children.

As a member of the RNESU, students from Goshen attend the Otter Valley Union High School at the annual per pupil rate. Otter Valley Union High School offers a variety of educational options for college preparatory, general, and special-needs students. Otter Valley also makes arrangements with Rutland Vocational School for students wishing to pursue vocational training.

Vermont's Act 46 School Consolidation law may influence these current arrangements.

Educational expenditures comprise a significant portion of the Town's tax rate. The rising cost of education places a continuing burden on Goshen property owners. Rising property tax rates and tax payments are always a cause for concern. The Goshen School Board must seek to contain, without damage to educational quality, the rising costs associated with education.

8.2 Childcare

Goshen's pre-school age children (3 yrs. - 5 yrs.) may attend RNESU's Early Education Center at the Neshobe School. Goshen's elementary age students typically attend the Neshobe School, although some may attend other public or private facilities; and, Goshen's students in grades seven through twelve generally attend Otter Valley Union High School. The alternative of the home schooling of children, where appropriate, is also supported by this plan.

There are a limited number of pre-school children currently residing in Goshen, and these children have access to the Early Education Center at the Neshobe Elementary School. Consequently the opportunity for development of childcare facilities within the community is believed to be very limited. However, the plan encourages development and availability of safe and affordable childcare facilities here and in surrounding communities.

8.3 Goal

1. Ensure educational and early childcare needs are met for children living within the community.

8.4 Recommended Actions

- 1. Encourage the community's support of the Goshen School Directors in their dealings with RNESU Board, Otter Valley Board and Brandon School Board.
- 2. Encourage the development of safe and affordable childcare facilities.
- 3. Permit childcare facilities as a home occupation in all residential zones.

9. RELATIONSHIP TO NEIGHBORING TOWNS AND THE REGION

Goshen is situated in the southeast corner of Addison County surrounded by seven towns. One of these towns, Rochester, is in Windsor County; two of the towns, Chittenden and Brandon, are in Rutland County; and, four towns, Leicester, Salisbury, Ripton, and Hancock, are in Addison County.

Land located along the Town of Goshen's boundary is for the most part steep and mountainous; and, therefore unlikely to be developed. With exception of a limited amount of Town or privately owned land that abuts the towns of Brandon, Chittenden, Hancock, Leicester and Salisbury, the USFS owns the land located at the Town's boundary. Accordingly, Goshen's land use plan and bylaws are intended to take into consideration USFS land use plans and regulations in addition to the land use plans and bylaws of adjacent towns.

Planners in neighboring towns do not expect any unusual growth in residential, commercial or industrial development trends that may have an effect on Goshen. Nor does Goshen plan any development that might affect those neighboring towns.

Bisecting the southern portion of the Town is Route 73, a regional and state highway, which crosses the spine of the Green Mountains in Brandon Gap. Development trends in the Route 7 or Route 100 corridors, which are both accessed and connected by Route 73, could potentially impact Goshen by increasing traffic volume or truck traffic. Projects like road widening or changes to highway access policies could affect the Town as well.

Goshen also has an obvious interest in the USFS lands. Because the USFS owns a large portion of property in town and in the adjoining communities, the USFS has potential to significantly impact the Town of Goshen.

While Goshen's plan is primarily focused on guiding future development within its own borders, the effects of development do not necessarily respect municipal boundaries. Development and land use policies in neighboring communities and the region as a whole will impact the town. Conversely, trends and policies in Goshen may affect its neighbors or potentially the region. By state statute, town plans must be compatible with the regional plan and accordingly Goshen's Town Plan contains goals and recommended actions similar to the Addison County Regional Plan. The Addison County Regional Plan adopts the land use plans of its member municipalities, of which Goshen is one. This ensures that there is no conflict between local and regional land use plans.

Communication among adjoining towns, State and Federal agencies, and regional service organizations is encouraged to insure compatibility of development along the Town's borders and with larger planning efforts.

As a forested mountain town with inspiring views of Goshen Mountain, Brandon Gap, Cape Lookoff Mountain and Romance Mountain, Goshen enhances the desirability, natural views, watersheds and ecological health of the towns surrounding it. Resources in Goshen provide benefits to the Addison and Rutland Regions. The Moosalamoo National Recreation Area, Sugar Hill Reservoir and USFS lands provide recreation opportunities enjoyed by people throughout the region.

Goshen utilizes numerous facilities and services located in Brandon and the region, including schools, daycare, rescue squad and fire protection services. Conversely Goshen's residents contribute to the vitality of Brandon's downtown, and the economy of the region.

Goshen participates in the Brandon-Leicester-Goshen-Salisbury (BLGS) Mosquito Control District which is funded partly by state grants and partly by member town contributions. The District works to control populations of mosquitoes through treatment of standing water, aerial and ground spraying, and public education.

9.1 Goal

1. Encourage continued communication and cooperation between the Town of Goshen, the Addison County Regional Planning Commission, Rutland Regional Planning Commission, Windsor County Regional Planning Commission and adjoining towns.

9.2 Recommended Actions

- 1. Exchange planning information and development data with neighboring communities.
- 2. Collaborate with the Addison County Regional Planning Commission, Rutland Regional Planning Commission, Windsor Regional Planning Commission and adjoining towns regarding planning efforts.
- 3. Participate in the planning activities of the USFS and coordinate Goshen's planning activities with the USFS.

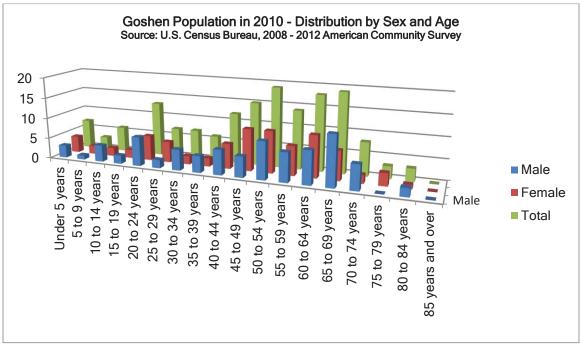
10. POPULATION AND HOUSING

10.1 Population

In 1800, Goshen had a total population of four. Over the next forty years the population grew to a record level of 621. From that time forward, the population steadily declined to a low of approximately 150 people in 1970.

In 2010, the U. S. Census placed the population of Goshen at 164. In comparison 226 people were recorded in the 1990 census, and 227 people were recorded in the 2000 census. Although Goshen's population remained relatively stable between 1990 and 2000, the 2010 census population figure represents a 27.8% reduction in Goshen's population from the year 2000.

The age distribution of Goshen's population in 2010 shows 26.4% under the age of 18, 4.0% from ages 18 to 24, 22.9% from ages 25 to 44, 37.4% from ages 45 to 64, and 9.3% who were 65 years of age or older. The median age was 43 years. For every 100 females there were 108.3 males and for every 100 females age 18 and over, there were 111.4 males.



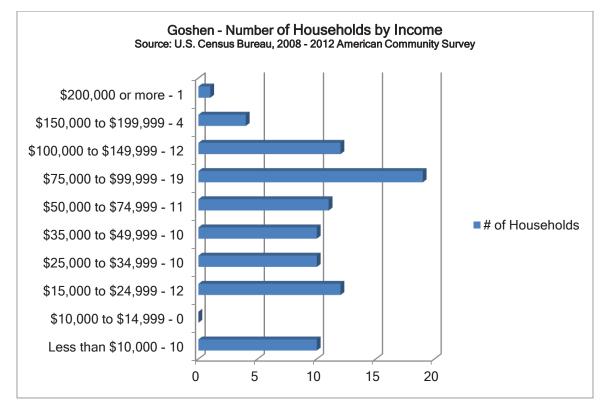
Goshen Population in 2010 - Distribution by Sex and Age - Table 10.1

At a population of 164 Goshen is the town with the lowest population in Addison County. The next smallest town in Addison County is Granville. In comparison, Granville has a population of 298 which is 82% larger than Goshen's population.

According to the United States Census Bureau, Goshen has a total area of 20.81 square miles, of which 20.65 square miles is land and 0.16 square miles is water. Consequently Goshen's population density is 7.9 persons per square mile, with a housing unit density of 5.5 units per square mile. In contrast, Addison County has a population density of 48 persons per square mile and a housing density of 21.9 units per square mile.

Taking into account Granville, Goshen's low population density makes the community the second least densely populated town in Addison County. And currently there are no signs that Goshen's population is expected to grow hugely in the foreseeable future.

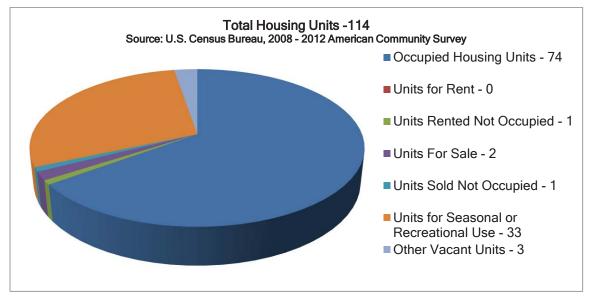
Goshen's citizens are diverse in terms of age, economic strata and occupations. Based on Vermont Housing Data figures, Goshen has a median household income (census 2007 - 2011) of \$70,000; a median family income (census 2007 - 2011) of \$85,625; an average household size (2010) of 2.22 persons; an average family size (2010) of 2.74 persons; and, the median value of owner-occupied housing units (2007 - 2011) is \$258,900.



Goshen Number of Households by Income - Table 10.2 In 2012 Inflation Adjusted Dollars

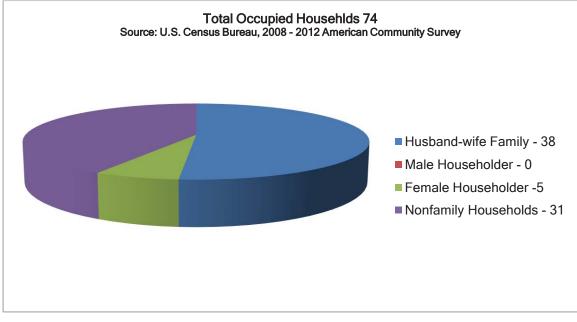
In comparison Addison County has a median household income (census 2007 - 2011) of \$57,203; a median family income (census 2007 - 2011) of \$69,759; an average household size (2010) of 2.41 persons; an average family size (2010) of 2.88 persons; and, the median value of owner-occupied housing units (2007 - 2011) is \$228,600.

Based on the 2010 Census, Goshen had a total of 114 housing units with 74 occupied units, 33 units for seasonal or recreational use, and 7 units that were unoccupied at the time of the census.



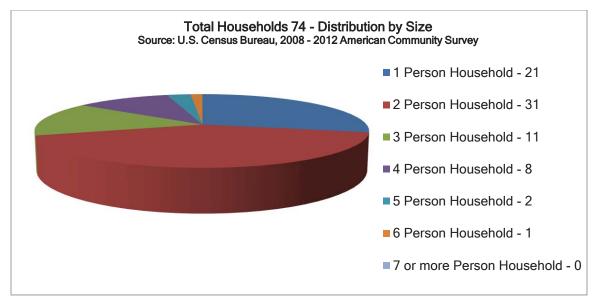
Goshen Total Housing Units in 2010 - Table 10.3 Distribution by Occupancy

Of the 74 occupied households, 33.3% had children under the age of 18 living within them, 59.5% were married couples living together, and 32.1% were non-families. 17.9% of all households were made up of individuals and 8.3% had someone living alone who was 65 years of age or older. The average household size was 2.22 and the average family size was 2.74.



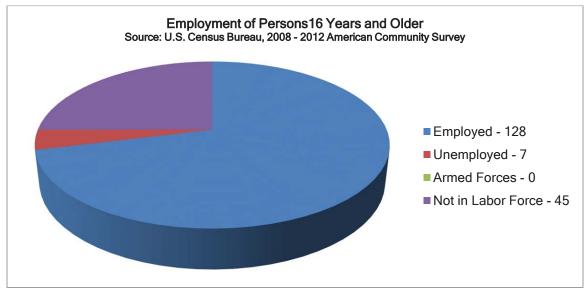
Goshen Total Occupied Households 2010 - Table 10.4 Distribution by Household Type

Over 70% of Goshen's households are 1 or 2 persons in size, approximately 26% are 3 or 4 persons in size, with the remaining 4% of households being 5 or 6 persons in size.



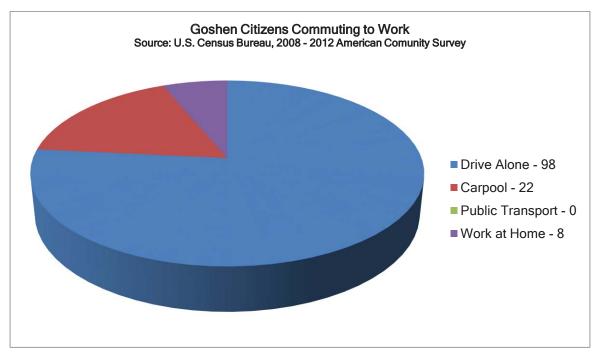
Goshen Total Households 2010 - Table 10.5 Distribution by Size

Of Goshen's population that is 16 years of age or older, 71% are employed, 4% are unemployed and 25% are not in the labor force.



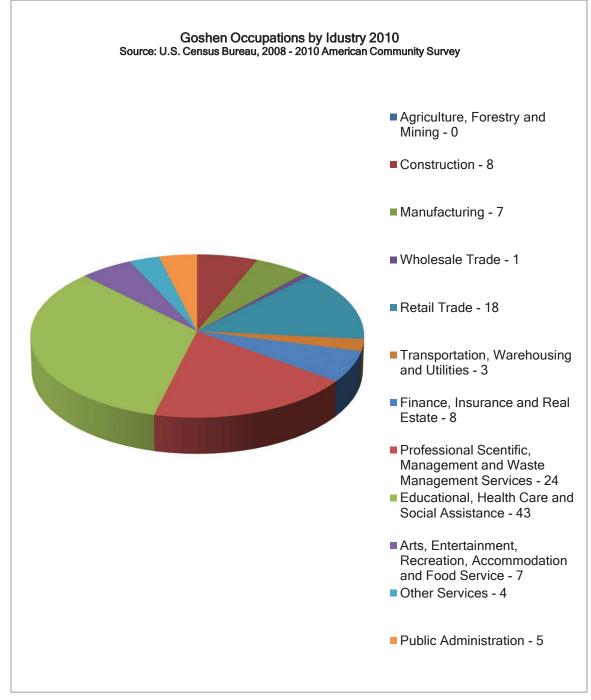
Goshen Employment of Persons 16 Years and Older - Table 10.6

Of Goshen's 128 employed citizens, 77% drive alone when commuting to work, 17% carpool and 6% work at home. Since there are no public transportation routes within the community, public transportation is not an option for workers residing in Goshen.



Goshen Citizens Commuting to Work - Table 10.7

Goshen's population is employed in a wide variety of occupations and industries in the surrounding region. The largest employment sector is Education, Health Care and Social Assistance which employs 33% of Goshen's citizens. The second largest employment sector is Retail Trade which employs 14%. And although Goshen once had a thriving agrarian based economy, there appear no longer to be any residents employed in this industry at the time of the census.



Goshen Occupations by Industry 2010 - Table 10.8

10.2 Housing Stock

In comparison to Goshen's total of 114 housing units in 2010, thirty-two housing units existed prior to 1939 with some of the older homes being of historic significance.

Eight of Goshen's homes were originally built between 1835 and 1900. The Vermont State Register of Historic Places and The Historic Architecture of Addison County lists twelve sites in the State Register of Historic Places.

Properties owned by town residents have a broad range of market values. As indicated above, according to Vermont Housing Data (2007 - 2011) the median value of owner-occupied housing units in Goshen was \$258,900.

In 2005, the calculation for affordable housing in Addison County placed the value of an affordable home in Goshen, based upon the U.S. Department of Housing and Urban Development formula, at \$87,600. In relative terms, Goshen is doing an exemplary job in providing affordable housing for its residents. There is a danger however, that inflationary trends, increase in land values, and the desire to build ever larger and more luxurious homes will cause property and home values in Goshen to increase to a point where affordability becomes an elusive reality. This plan recognizes the dilemma of affordable housing and encourages the adoption by town officials of land use regulations, tax policies, and legislative initiatives that seek to address and insure the perpetual availability of homes affordable for all who seek to live in Goshen.

10.3 Rental Housing

All housing currently in Goshen is single-family residential. The town is not aware of any units built exclusively for rental; however, individuals may rent their dwellings without restrictions. According to Vermont Housing Data (2007-2011) there were 21 renter-occupied housing units in Goshen. Goshen's remote geographical location and its lack of traditional service sector infrastructure tend to discourage development of other than traditional, single-family, owner-occupied homes. Having no service sector infrastructure and no public transportation, large scale development of rental housing is not likely to occur in Goshen, at least not in the foreseeable future. Accessory apartment units, attached to primary residences or in a detached structure, are now mandated to be permitted under state law and are permitted under the newly adopted Goshen zoning bylaws. Such apartments do provide a level of affordable, rental housing, although there are state imposed restrictions as to the size of such units and to the number of bedrooms.

Prior town plans encouraged the town to develop a rental-housing ordinance, patterned after the State of Vermont, Department of Health, Rental Housing Health Code. Such a code would provide the town the tools necessary to insure that any rental housing, either existing or developed in the future, would remain safe, healthy, and a credit to the Town of Goshen. A rental housing registry is another tool that the town should employ in an effort to control rental housing and make certain that property owners maintain rental units in accordance with accepted health and safety standards. As a part of both the proposed rental housing ordinance and rental housing registry, this plan recommends, if adopted, that annual inspections of all rental housing be conducted by the town with appropriate fines and penalties levied against non-compliant property owners.

New construction and subdivisions of land are controlled by the town's existing zoning bylaws, subdivision regulations, and septic ordinance. These land use regulations have been in effect, in one form or another, since the mid 1970's. It is anticipated that the most recent amendments to the land use regulations in the form of changes to the zoning

bylaws will become effective after approval by the town sometime in 2012 or early 2013. This plan encourages all residents of Goshen and all owners of property in Goshen to take an active interest and participation in the development of our land use regulations. An understanding and appreciation of the rationale behind the creation and implementation of land use regulations will serve to make everyone who lives in Goshen and who acts in an official capacity for Goshen a more informed citizen and better servant of the town.

Being small, Goshen has limited resources. Uncontrolled rapid development could cause problems that are beyond the town's ability to manage. The public safety, health, and happiness of all Goshen's residents depend upon following reasonable and prudent growth management policies.

Planning for the future development of housing stock to accommodate a community's ever-growing population is one of the most important aspects of any town plan. Safe, secure, and affordable housing is a fundamental requirement, if not a right, of all residents of Goshen. Recent changes to state law, found in the State of Vermont Statutes, Annotated, require that all municipalities in the State of Vermont make provisions in local bylaws and ordinances for affordable housing. 24 VSA Chapter 117 at Section 4412 (1) (A) states that:

"no bylaw shall have the effect of excluding housing that meets the needs of the population as determined in the housing element of its municipal plan as required"

Additionally, 24 VSA Chapter 117 at Section 4412 (1) requires a municipality to treat all housing equally and to make no provision in its bylaws that prohibit mobile homes, mobile-home parks, accessory apartments, or multi-family housing. Town zoning bylaws can, however, designate appropriate districts and reasonable regulations for multi-unit or multi-family dwellings. This plan supports the adoption of such zoning bylaw language.

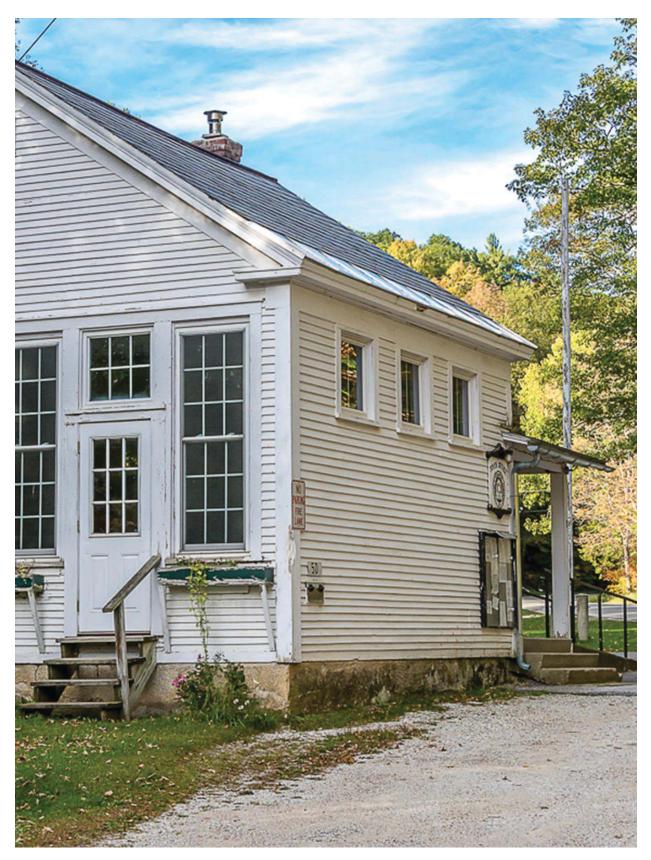
10.4 Goals

- 1. Develop safe, affordable and energy efficient housing in-keeping with the natural surroundings and the character of the existing community.
- 2. Development of housing shall occur in harmony with the environment and natural resources.
- 3. Minimize the cost to the municipality for development of housing.

10.5 Recommended Actions

- 1. Encourage development of housing that is compatible with existing architecture, community character and other land use characteristics.
- 2. Encourage the preservation of historic structures within the town.
- 3. Encourage enforcement of Vermont Department of Health minimum health and safety standards.
- 4. Adopt building and health codes to prevent loss or degradation of existing housing.
- 5. Encourage identification and improvement of substandard sewage disposal systems.
- 6. Support fire department efforts for chimney and wood-burning safety.
- 7. Encourage innovative planning, design and construction of housing that minimizes cost, energy consumption, and environmental impact.

- Encourage construction that complies with the Vermont energy code, Energy Star efficiency standards, LEED standards, and Vermont Residential Building Energy Standards.
- 9. Consider energy requirements necessary for residences and businesses when establishing plans and bylaws.
- 10. Encourage establishment of home occupations and small businesses, compatible with the surrounding land use, to reduce commuting costs.
- 11. Encourage all new residential construction to use a code compliance form from VT Software, Fast-Track Compliance Tables, Trade-Off Compliance Tables, or from an energy ratings service like Efficiency Vermont.
- 12. Support policy that keeps affordable housing affordable for the long-term, particularly when there is public funding of the project.
- 13. Support the designation of appropriate districts and the creation of reasonable regulations for multi-unit or multi-family dwellings.
- 14. Encourage the preservation of existing safe and energy-efficient affordable housing that complies with zoning and septic regulations.
- 15. Support environmentally sound policies that promote growth of household income to make housing more affordable.
- 16. Encourage enforcement of Vermont Department of Health minimum health and safety standards.
- 17. Adopt building and health codes to prevent loss or degradation of existing housing.
- 18. Encourage identification and improvement of substandard sewage disposal systems.
- 19. Encourage establishment of home occupations and small businesses, compatible with the surrounding land use, to reduce commuting costs.
- 20. Encourage new residential construction to use a code compliance recommendations from an energy rating organization like Efficiency Vermont.
- 21. Encourage location of development in areas with the least valuable or sensitive environmental characteristics.
- 22. Maintain vegetation along stream banks to the greatest extent feasible to provide habitat, prevent erosion, and reduce the amount of pollutants entering surface waters.
- 23. Establish Flood Erosion Hazard Districts along rivers and streams to protect property and natural resources.
- 24. Minimize the costs of new development to the municipality by discouraging development on class 4 roads and in remote areas.
- 25. Monitor conversions of camps or seasonal housing to year-round housing.
- 26. Discourage development on environmentally sensitive sites.



Town Offices

11 EMPLOYMENT AND ECONOMIC DEVELOPMENT

11.1 Employment

Goshen is a bedroom community of Rutland, Middlebury, Brandon and other larger centers in the region. According to the 2010 US Census of the 128 employed Goshen citizens, 120 commute to work and 8 work at home.

Because the vast majority of Goshen's residents work in surrounding communities or other employment centers, Goshen has a strong interest in the overall health and diversity of the regional economy. Therefore Goshen's Town Plan endorses decisionmaking at the regional level that supports the region's economy and stimulates job opportunities while maintaining high environmental standards, Goshen's rural character and quality of life.

11.2 Economic Development

Education, health care, social assistance, professional consulting, finance, insurance, real estate, arts, recreation, tourism, retail trade, construction and manufacturing represent the diverse occupations by industry that contribute to Goshen's economy. This plan supports the continued employment of Goshen's citizens in these industries and their expansion within regional centers consistent with the Town of Goshen's rural nature and scenic character.

11.3 Goals

- 1. Sustain available locally based work at home jobs while maintaining the rural character of Goshen.
- 2. Evaluate improvement of public transportation options and ride sharing from Goshen to employment centers such as Rutland, Middlebury and Brandon.
- 3. Support regional decision making for job opportunities.

11.4 Recommended Actions

- 1. Support development of high speed internet and cellular phone services technology that has low impact on the environment and enables home occupations and educational opportunity.
- 2. Support development of local enterprises that create markets for locally produced goods and services.
- 3. Support new business development in areas where services such as road, fire protection, and utilities exist.
- 4. Support efforts to create more childcare opportunities.
- 5. Encourage home occupations, and support the opportunity for home occupations through zoning.
- 6. Encourage small-scale agricultural businesses.
- 7. Encourage forest products based businesses.
- 8. Support development of public transportation and ride sharing to employment centers if deemed to be needed and viable.
- 9. Consider the implications of an aging population and its needs.



Horse and Maple Tree on Hathaway Road

12. IMPLEMENTATION

The Goshen Selectboard and the Goshen Planning Commission are responsible for implementation of the Town Plan.

As detailed in Section 3, the Land Use portion of this plan, use of land is structured by zoning districts, which are defined and include the types of use, areas, and dimensional standards involved in each of the zones, all of which must conform to the Vermont Municipal and Regional Planning Act (Title 24 Vermont Statutes Annotated, Chapter 117).

Implementation of this plan will include Goshen's Road Access Ordinance any other ordinances in effect, the Goshen Zoning Bylaw and Subdivision Regulations.

12.1 Priority Tasks

Priority tasks to undertake in 2016 to 2021 include:

- 1. Evaluate creating Tax Maps for the Town which would indicate property boundaries and related information.
- 2. Consider the need and the means to prepare a Solar Siting Study for future use in evaluating the development of potential commercial scale solar installations and their related energy transmission lines.
- 3. Update Zoning Bylaws.
- 4. Seek grant funding for Stormwater Planning and Permitting FY 2017 VT Better Roads Grant Program application due March 17, 2017.
- 5. Inventory and Capital Planning for Stormwater Mitigation and obtaining Municipal Roads General Permit from State. General Permit is scheduled to be required to be in effect prior to January 2018.
- 6. Confirm Stormwater Permit for Municipally Owned developed land is not required (i.e. Town has less than 3 acres of impervious surface on developed land).
- Confirm Local Emergency Operations Plan is updated and filed. As of 01-28-16 the State's Expanded Community Report for Goshen indicates the plan has not been filed.
- 8. Confirm Local Hazard Mitigation Plan is prepared and filed. As of 01-28-16 the State's Expanded Community Report for Goshen indicates the plan has not been filed.
- 9. Confirm River Corridor Protection Plan is prepared and filed. As of 01-28-16 the State's Expanded Community Report for Goshen indicates the plan has not been filed.