SHAFTSBURY, VERMONT TOWN PLAN

December 2, 2019



View of West Mountain from East Road Edward Franklin "Frank" Howard, Shaftsbury landscape painter

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This Town Plan was prepared by the Shaftsbury Planning Commission (PC), with assistance provided by the Bennington County Regional Commission, Town employees, volunteers, and interested citizens.

ATTESTED:__ Town Clerk

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Appendix A: Maps

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1 | INTRODUCTION

Shaftsbury's last comprehensive Town Plan was adopted in 2014. According to the Vermont Planning and Development Act, municipal plans must be updated at least every eight years to reflect current conditions and address current demands and pressures. This new Plan will, therefore;

- Assess current conditions
- Identify goals
- Offer a variety of policies and actions to implement those goals.

At the request of the Selectboard (SB), the Planning Commission (PC) has reformatted the document to emphasize policies and actions that local government can take to achieve the stated goals. This is not a radical new Plan, but a significant change in format.

The Town Plan is intended to help Shaftsbury to deal with future growth and changes in land use and must therefore provide mechanisms to respond to changing pressures. It is intended to serve as a tool to help local residents have a say in the development of their town and to ensure that Shaftsbury will continue to be an outstanding community in which to live. The Plan should be consulted when making public policy decisions, evaluating public investments, reviewing development proposals, and when considering new or amended bylaws and ordinances. The Plan, along with the municipal zoning by-laws, sub-division regulations, and state land use law (i.e., Act 250) should provide clear guidelines to private individuals who propose new developments in Shaftsbury.

"Southern Vermont is in trouble." That was the message from 2015 Southern Vermont Economic Development Zone (SVEDZ) Report. That was news to no one. Our economy is in decline. We face challenges on multiple fronts including:

- Declining and aging population.
- Lack of affordable housing.
- Lack of broadband Internet and cell phone infrastructure confirmed in a recent survey when approximately one-quarter of residents responding were unsatisfied with the broadband service.

The challenges of our economy are on our minds as we write this Town Plan. While we are aware of the negatives, there are positive signs as well:

- Unemployment is low and many employers are looking to hire.
- As called for in the aforementioned SVEDZ Report, Windham and Bennington Counties have come together to create a Comprehensive Economic Development Strategy (CEDS) to steer regional economic development in the two counties.
- The Putnam Block Development in Bennington has broken ground, representing a massive and complex community effort to bring \$54M in commercial, residential, and retail development to downtown.

Shaftsbury is prepared to face the challenges and to leverage the opportunities. This Town Plan reflects a clear-eyed grasp of our situation and a pragmatic set of goals for navigating the next eight years.

Map 1.1, Town of Shaftsbury, can be found in Appendix A, Maps.

2 | GOALS

The Town Plan describes a vision for Shaftsbury's future and provides a guide for the municipal zoning and subdivision regulations that are intended to implement that vision. The following goals have been identified as fundamentally important in setting a direction for Shaftsbury's future. Some of the goals may be realized by continuing with current policies and directions; others may only be attained with new policies, regulations, investments, or other strategies. Each goal, however, will remain important and relevant for the Town over the next eight years. Subsequent chapters will detail specific policies and actions that will facilitate attainment of the goals.

ECONOMIC DEVELOPMENT

- Develop strategies that will increase economic opportunities while ensuring a vibrant community and healthy physical environment.
- Attract new population.
- Town government should support economies based on concepts such as "eco" tourism.
- Promote public appreciation, participation, and support for the contribution of arts and culture to economic vitality and quality of life.

NATURAL RESOURCES

- Maintain and enhance the quality of air and water, including both surface and groundwater.
- Maintain the long-term ecological integrity of natural communities and rare and unique species populations.
- Assure continuation of sustainable agricultural uses within the Town. Attempt to assure that at least 5,000 acres remain in agricultural uses.
- Conserve and manage forested lands, particularly the Highest Priority Interior Forest Blocks that occur within the Town or extend beyond the Town boundary, to avoid fragmentation and to provide connectivity and habitat.
- Minimize property damage from flooding and fluvial erosion, cognizant of increased risk that may result from climate change.
- Sand and gravel extraction activities on new parcels shall pose no threat to the community's natural resources.

LAND USE

Work to achieve orderly development of the Shaftsbury landscape through a realistic planning process.

HISTORIC PRESERVATION

• Buildings and sites of historical, archeological or architectural merit should be preserved whenever possible.

TRANSPORTATION

- The Department of Public Works should maintain and improve the roads while balancing the priorities of:
 - Efficient use of taxpayer money

- Improved driver experience
- Economic development
- Alignment with State goals and incentives.
- Safe and pleasurable bicycling opportunities should be incorporated in Town transportation planning.

PUBLIC UTILITIES, FACILITIES, AND SERVICES

• Maintain high quality public utilities, facilities and services and make quality improvements that will provide savings in the long term.

EDUCATION

• Shaftsbury should provide a quality public education to its citizenry.

RECREATION

• Make Shaftsbury a more active and attractive community by developing and promoting its outdoor resources.

HOUSING

- Increase the supply of housing opportunities for all income levels, age groups and special needs.
- Continue to assure that new construction meets or exceeds standards for thermal envelope and sustainability.

ENERGY

• To be consistent with state goals, reduce total energy consumption per capita by 15% by 2025, and by more than 33% by 2050; support installations of renewable energy sources to meet 25% of energy needs from renewable sources by 2025, 40% by 2035, and 90% by 2050; and by 2025, create sufficient capacity to achieve 10% renewable sources for transportation, 30% renewable sources for buildings, and 67% renewable sources of electric power.

MUNICIPAL FINANCE

• Maintain GAAP standards to provide the people of Shaftsbury accurate insight into Town finances and reduce future borrowing costs.

RELATIONSHIP TO NEIGHBORING TOWNS AND THE REGION

• Shaftsbury should work to build relationships with neighboring towns, Bennington County, and southern Vermont, and seek regional economic opportunities.

3 | ECONOMY AND POPULATION

Retaining old and attracting new businesses to Shaftsbury should be our goal if we are to sustain tax revenues and support income producing jobs. Shaftsbury has the capacity to attract small, medium and large sized businesses and new residents and families. The beauty and natural resources of our part of Bennington County, our close connection to Massachusetts and the Albany area and our village commercial and industrial districts all within walking distance from the Town's village center, provide strong incentives to businesses looking to relocate to our community.

Goal 3.1 Develop strategies that will increase economic opportunities while ensuring a vibrant community and healthy physical environment.

POLICY 3.1.1 BUILD PARTNERSHIPS BETWEEN SHAFTSBURY TOWN GOVERNMENT AND THE PRIVATE SECTOR TO FOSTER NEW ECONOMIC OPPORTUNITIES.

Actions

- Find ways to support organizations and committees that work on economic and community development. Residents should be encouraged to participate and volunteer for the "Energy" and "Economic Development" committees to find new avenues that would open income producing opportunities and cost saving solutions for the entire community.
- Continue to streamline the application process and zoning bylaws to fast track commercial activities. With the help of the Bennington County Regional Commission, the Shaftsbury Planning Commission has recently updated and amended the Town's zoning by-laws in order to clarify and simplify the application process for all prospective businesses. The residents of Shaftsbury have just this year voted to approve a by-law written to increase the number of home occupations in town that would make short term vacation rental income a possibility for residents in all zoning districts except forest and recreation.
- Encourage residents and Town officials to participate in regional and statewide marketing and economic development programs through the Southern Vermont Economic Development Zone, the Comprehensive Economic Development Zone Strategy (CEDS), the Southern Vermont Sustainable Recruitment and Marketing Project with the Bennington County Regional Commission (BCRC), and the Southern Vermont Economy Project.

Goal 3.2 Attract new population.

POLICY 3.2.1 BRING FAMILIES OF ALL AGES, AND ESPECIALLY YOUNG WORKING FAMILIES, TO SHAFTSBURY IN ORDER TO FILL EMPLOYMENT NEEDS, SUPPORT OUR ECONOMY AND CONTRIBUTE TO THE TOWN'S TAX BASE.

Actions

- Support efforts to expand internet access to all residents in Shaftsbury. The Planning Commission is currently working on mapping internet and cell service available to residents in an effort to expand economic access to a worldwide economy.
- Support public and private affordable housing strategies. A by-law was adopted in 2019 that
 increases housing options for all residents. By taking what are now vacant motel rooms and
 converting them to long term rental apartments, local businesses have increased housing
 options for new employees. Shires Housing, a local nonprofit housing developer, has
 successfully completed renovation of two historic buildings in the Brick Row on the edge of

North Bennington and is soon to break ground on a 22-unit affordable housing development on Paran Road.

• Seek ways to provide access to safe, high quality affordable childcare and educational opportunities for working families.

Goal 3.3 Town government should support economies based on concepts such as "eco" tourism.

POLICY 3.3.1 TAKE ADVANTAGE OF OUR NATURAL SURROUNDINGS IN ORDER TO DRAW IN MORE OF THE TOURISM VERMONT IS ALREADY FAMOUS FOR.

Actions

- Shaftsbury should recognize and quantify all outdoor recreational opportunities, including those on private lands whose owners are willing to allow public access.
- In order to attract more tourists to Shaftsbury, the PC should pursue funds needed to map out and provide access to the Town's municipal forest.
- Along with the Shaftsbury Recreation Committee, the Planning Commission should continue to look for ways to highlight the many uses and benefits of Lake Shaftsbury State Park, Howard Park, the Robert Frost House and local trails.

POLICY 3.3.2 SUPPORT EFFORTS TO GROW MORE FOOD LOCALLY.

Actions

- Citizens of Shaftsbury should consider and include local food producing farms when discussing ways to increase options for visitors to town.
- Help provide more residents ready access to locally grown nutritious food. 59,882 Vermonters live in food insecure households (Hunger Free Vermont). Shaftsbury should support efforts that build on our capacity to feed one another and support the family farms that have already made capital investments in our community.

Goal 3.4 Promote public appreciation, participation, and support for the contribution of arts and culture to economic vitality and quality of life.

POLICY 3.4.1 SUPPORT THE CREATION OF ART ACTIVITIES, EVENTS, AND ART INSTALLATIONS.

Actions

• Support arts and cultural events, like Ballet to Farm, by approval of event permits and promotion on the Town website.

- Make public spaces, like the newly renovated second floor of Cole Hall, available for local artists to display their work.
- Include aesthetic, not just utilitarian and financial, considerations in the design of public buildings, amenities, and infrastructure.

LOCAL BUSINESSES

The larger businesses in Shaftsbury reflect its manufacturing and agricultural history. Among them are the William E. Dailey Companies, a division of Peckham Industries, Dailey Precast, Bernstein Display, Clear Brook Farm, Mighty Food Farm, Whitman's Feed Store/Poulin Grain and T&M Enterprises Inc.

POPULATION

Declining population is the major barrier to growth in all of southern Vermont, including Shaftsbury. The way to attract people is to be more attractive. Improving and maintaining infrastructure is critical, particularly roads and telecommunications. Strive to be a welcoming community. Accentuate our strengths - the natural beauty of the landscape, recreational opportunities, and our proximity to cultural centers like New York, Boston, and Montreal.

According to the American Community Survey Estimate of 2017, Shaftsbury has a population of 3,487 which makes it the 46th most populated city in the state of Vermont out of 279 cities. The Town is estimated to have lost about 100 residents since the 2010 census. The population density is 33.16 people per square mile which is lower than the state average density of 65.13 people per square mile and much lower than the national average density of 82.73 people per square mile. The reasons for the loss in population are both a net migration and overall death rates surpassing birth rates.

Projections prepared by the Vermont Agency of Commerce and Community Development indicate that the population of Shaftsbury may either increase slightly or decrease, depending on which "scenario" one uses. Table 1 below shows the two potential trends for Shaftsbury, Bennington County and Vermont, with the Town population either remaining stable or declining.

Table 1. Population projections for Shaftsbury, VT to 2030			
(Jones, K. and Schwarz, L., 2013)			
Scenario A	Shaftsbury	Bennington County	Vermont
2010 Census	3,590	37,125	625,741
2020 Projection	+0.8% (=3,620)	+1.5% (=37,695)	+4.4% (=653,575)
2030 Projection	-0.5% (=3,572)	+0.9% (=37,470)	+7.1% (=670,073)
Scenario B	Shaftsbury	Bennington County	Vermont
2010 Census	3,590	37,125	625,741
2020 Projection	-2.4% (=3,503)	-1.8% (36,470)	+0.5% (628,688)
2030 Projection	-7.0% (=3,339)	-5.6% (35,034)	-0.8% (620,480)

Scenario A assumes a migration rate similar to the rate between 1990 and 2000 when the national economy was doing better than the 2000 to 2010 period. Scenario B assumes a rate similar to the rate between 2000 and 2010, when Vermont experienced lower migration into the state. Given the 2017 population estimates, it would seem Scenario B is more likely.

The ethnic population by percentage rates is as follows: White (96.2%) followed by mixed race (2.3%) and Hispanic (1.5%).

From the first United States census in 1790 to 1960, the population of Shaftsbury was relatively stable, fluctuating between approximately 1,500 and 2,100 people. Shaftsbury experienced rapid growth from 1960 to 2000 during which the population nearly doubled (94%). During that same period, the population of Bennington County increased by 48% while the population of Vermont increased just over 60%. Shaftsbury's population declined slightly after 2000 (Figure 2), and both the county and state populations have grown slightly compared to the previous periods.



Shaftsbury's population is broadly in line with state population trends. According to the US Census, 2017 American Community Survey Estimates, the median age of the Shaftsbury population is 44.8 years compared to the estimated median age of Bennington County residents at 43 years. Residents under the age of 20 make up about 26 percent of the population while residents over the age of 65 make up about 24 percent of Shaftsbury's residents. Bennington County, by contrast has 21 percent of its population under the age of 20 and has about 21 percent of its residents over the age of 65.

According to the Vermont Dept. of Labor, the average wage was \$44,019 and the median household income of Shaftsbury residents was \$65,164. Shaftsbury has a total of 1,632 housing units, this includes full time residences and vacation or part time residences.

Decreasing population in Shaftsbury will affect the Town's priorities in the future. The effects will be seen in future decisions related to public services, transportation, land use, education, economic development, health and housing.

4 | Physical Characteristics and Natural Resources

Natural resources provide many ecosystem services, or benefits for humans (Ecological Society of America 2000). These include:

- providing drinking water cleansed by passing through forests and wetlands;
- cycling and moving nutrients;
- cleansing the air to enhance air quality;
- reducing stormwater flows as water quantity and velocity is attenuated by forests and wetland;
- providing raw materials such as wood for various uses including fuel or mineral resources;
- reducing pest species by promoting native insect predators;
- sequestering of carbon to reduce CO2 in the atmosphere;
- providing recreational uses including hiking, boating, birdwatching and recreational motor vehicle use;
- providing traditional uses such as hunting, fishing and foraging;
- providing food from crops;
- providing pollinators critical to fruit production.

Natural systems face numerous threats including development, habitat loss and fragmentation, invasive species, unsustainable use and management, and climate change. Climate change threatens the health and safety of residents, the economic well-being of our culture, and the long-term benefits provided by natural resources.

Goal 4.1 Maintain and enhance the quality of air and water, including both surface and groundwater resources, on which the health, safety and welfare of the Town depends.

POLICY 4.1.1 AIR QUALITY IS A NATURAL RESOURCE OF CENTRAL SIGNIFICANCE TO THE HEALTH AND SAFETY OF SHAFTSBURY'S RESIDENTS AND SHOULD BE PROTECTED THROUGH THE DEVELOPMENT AND ENFORCEMENT OF LOCAL AND STATE LAWS.

Actions

- Transportation system improvements should address improvements to air quality that may be degraded by vehicle emissions. Shifting to more electric vehicles, as discussed in the Energy Section, should be encouraged.
- Encourage participation in EPA stove rebate programs to reduce wood stove particulate emissions.
- Encourage the use of heat pumps through the Green Mountain Power rebate program.

POLICY 4.1.2 SHAFTSBURY RELIES ON SAFE AND CLEAN GROUNDWATER FOR DOMESTIC AND COMMERCIAL WATER SUPPLIES. Actions • GROUNDWATER RECHARGE AREAS SHOULD BE IDENTIFIED AND PROTECTED FROM CONTAMINATION AND INCOMPATIBLE DEVELOPMENT.

POLICY 4.1.3 LAND USES PROXIMATE TO WETLANDS, STREAMS AND WATER BODIES AND SURFACE AND GROUNDWATER SOURCE PROTECTION AREAS SHOULD NOT ADVERSELY AFFECT THE QUALITY OF SURFACE AND GROUNDWATER RESOURCES.

Actions

- The Zoning Administrator should direct applicants to check with State Permit Specialist on applicable regulations related to water protection and erosion control.
- Employ zoning and development review as tools to protect the quality of streams, rivers, and water bodies including Riparian Wildlife Corridors and Highest Priority Surface Water and Riparian Areas (Map 4.1)

Goal 4.2 Maintain the long-term ecological integrity of natural communities and rare and unique species populations.

POLICY 4.2 THE QUANTITY AND VARIETY OF BIODIVERSITY IN THE TOWN SHOULD BE PROTECTED.

Actions

• Referencing areas shown on Maps 4.1 and 4.2, the Town should ensure that new developments avoid disrupting rare or endangered species' habitats, deer wintering areas, and habitat for wide-ranging animals.

Goal 4.3 Assure continuation of sustainable agricultural uses within the town. Attempt to assure that at least 5,000 acres remain in agricultural uses.

POLICY 4.3.1 CAREFULLY CONSIDER DEVELOPMENT ON PRIME AGRICULTURAL SOILS.

Actions

- Landowners proposing development or subdivision of lands with current or potential for future agricultural use should be encouraged to work with The Vermont Land Trust to provide for the continuation of agricultural use.
- Continue to explore options for a sewer system in the village in order to encourage compact development and to maintain open spaces.

POLICY 4.3.2 INCORPORATE AGRICULTURE INTO ECONOMIC DEVELOPMENT PLANS AND PROJECTS.

Actions

- Locally based food resources should be encouraged through local markets and by encouraging the purchase of local foods on the Town Website and through other venues available to the Town.
- Qualified landowners should be informed of the Vermont Current Use/Use Value Appraisal program through the Town website and through postings on Cole Hall's bulletin board.

Goal 4.4 Conserve and manage forested lands, particularly the Highest Priority Interior Forest Blocks that occur within the Town or extend beyond the town boundary, to avoid fragmentation and to provide connectivity and habitat.

POLICY 4.4.1: THE TOWN SHOULD SUPPORT AND COMPLY WITH STATE INITIATIVES AIMED AT PREVENTING FOREST FRAGMENTATION. LARGE, INTACT FOREST BLOCKS SHOULD BE MAINTAINED TO ASSURE THE LONG-TERM VIABILITY OF THE FOREST AND FOR WIDE-RANGING ANIMALS AND NEOTROPICAL MIGRATORY BIRDS AND TO MODERATE FLOOD FLOWS AT LOWER ELEVATIONS.

Actions

- The Planning Commission should complete a study of potential connections between high quality forest blocks.
- The Town should encourage compact development where soil, topography, and other site conditions permit. Use Maps 4.1 and 4.2 (Terrestrial and Aquatic Systems) and (Rare Species and Natural Communities) when reviewing development proposals to minimize or avoid impacts, forest fragmentation and the creation of barriers for movement of species.
- Public access to National Forest land within Town borders should be maintained.
- Logging undertaken in Shaftsbury should be encouraged to conform to the State's Voluntary Harvesting Guidelines (<u>https://fpr.vermont.gov/sites/fpr/files/VHG_FINAL.pdf</u>).
- Landowners proposing development or subdivision of lands with current or potential for future forest use should be encouraged to work with The Vermont Land Trust to provide for the continuation or development of forest use.

 Shaftsbury should support the forest conservation activities of groups such as the U.S. Forest Service and nonprofit conservation organizations that seek to balance forest preservation with economic development.

POLICY 4.4.2: INCREASE THE PERCENTAGE OF PRIVATE LANDOWNERS ENROLLED IN THE USE VALUE APPRAISAL PROGRAM TO HELP PRIVATE LANDOWNERS RETAIN THEIR LANDS AS FOREST.

Actions

• The Town should provide information in the Town Hall and Town website on forest management options for private landowners.

Goal 4.5 Minimize property damage from flooding and fluvial erosion, cognizant of increased risk that may result from climate change.

POLICY 4.5.1: PROVIDE RESIDENTS AND PROPERTY OWNERS WITH ACCESS TO INFORMATION TO HELP THEM MAKE INFORMED DECISIONS TO ADDRESS POTENTIAL IMPACTS FROM FLOODING EVENTS.

Actions

• Provide information showing the specific areas within the Town that are at risk from flooding and fluvial erosion. (See Map 4.3.)

POLICY 4.5.2: As FLOOD ZONES AND RIPARIAN AREAS SHIFT IN RELATION TO SHIFTING CLIMATE CONDITIONS, FLOOD HAZARD MAPS SHOULD BE PERIODICALLY RE-EXAMINED TO ENSURE THAT THE TOWN'S ZONING GUIDELINES PROTECT RESIDENTIAL AND COMMERCIAL STRUCTURES FROM STORM FLOODING OF RIVERS, STREAMS AND BROOKS.

Actions

• Consider adopting ANR river corridor protections.

POLICY **4.5.3** *PLANS SHOULD BE PREPARED TO ADDRESS VULNERABILITIES THAT FLOODING AND OTHER CLIMATE-CHANGE RELATED DISASTERS MIGHT POSE TO MUNICIPAL FACILITIES.*

Actions

- Avoid placing new critical infrastructure such as emergency services, power substations, and municipal buildings within the flood hazard areas.
- Maintain bridges, roads, ditches, and culverts to Town Road and Bridge Standards in order to avoid incurring additional flood damage costs associated with failure of these critical structures.
- Develop and maintain mutual aid agreements for sharing road repair and maintenance with neighboring communities after disasters.

- Address the potential for contamination of floodwaters with gasoline, diesel, septic waste and industrial chemicals during storm events.
- Maintain an up to date Hazard Mitigation Plan that addresses flood vulnerabilities.

Goal 4.6 Sand and gravel extraction activities on new parcels shall pose no threat to the community's natural resources.

POLICY 4.6. EARTH RESOURCE EXTRACTION OPERATIONS SHOULD BE PERMITTED BUT SHOULD NOT DEGRADE ENVIRONMENTAL QUALITY.

Actions

• Bylaws should require that new gravel extraction operations be designed with the goal of reclaiming the land when operations end.

TOPOGRAPHY AND SOILS

Shaftsbury contains parts of three biophysical regions in Vermont, which are large, distinct areas defined by geology, landforms and the kinds of plants and animals that inhabit them. (Map 4.4, Bedrock and Surficial Geology and Map 4.5, Slope and Elevation). The Taconics, which form the western boundary with New York, have older phyllite, an intermediate between shale and slate, on top of younger limestones, so that the latter are generally found at lower elevations. Slopes are steep on the eastern side, but a bit more gradual on the west. The Vermont Valley runs through the lower elevations in the middle of the Town and consists of limestone and other calcareous rocks. The Southern Green Mountains contain some of the oldest rocks in North America, more than one billion years old. The Southern Green Mountains contain steep slopes, especially on the western side, as well as relatively flat areas creating plateaus.

Topography is an important factor in land use decisions as slopes greater than 15% are generally not suitable for development, including road or driveway construction and maintenance. Map 4.5, Slope and Elevation shows these in the northwest portion and south and east portions of the Town. There are no areas above 2,500 feet in elevation.

Soil is unconsolidated material consisting of mineral or organic components that supports soil fauna and flora. Soils have a variety of characteristics that determine the suitability of a given site or area for various uses, including forestry, agriculture and development. Map 4.6, Soil Characteristics, shows depth to restrictive material (e.g., bedrock) and hydrologic soil group. The depth to restriction refers to a condition that prevents or limits further excavation. Soil hydrologic classes indicate how well water moves downward into the soil. Development becomes more limited where soil depth or drainage is limited.

Most of Shaftsbury is relatively undeveloped. Forested lands make up nearly 70% of land area. Map 4.7 Shaftsbury Land Cover shows land cover types.

SURFACE AND GROUNDWATER RESOURCES

Map 4.8 Water Resources shows surface waters and surface and groundwater protection areas. The quality of surface and ground water is essential to the well-being of the area's residents and visitors as well as the region's economy, and provide a valuable resource for drinking and irrigation, recreational opportunities and essential habitat for wildlife species.

Groundwater resources have not been assessed in Shaftsbury, but most potable water comes from wells. Groundwater may come from aquifers within sand and gravel deposits or from bedrock fractures. Groundwater recharge is from surface waters including streams, water bodies and wetlands. Forests and wetlands serve to absorb nutrients and pollutants, thereby cleansing groundwater recharge.

FLOOD HAZARD AREAS

There are two types of hazards from flooding in Vermont -- inundation and fluvial erosion. Inundation flooding occurs when water rises outside a stream channel or waterbody and overflows onto low- lying, normally dry land. The Federal Emergency Management Agency (FEMA) periodically creates flood hazard maps that outline the community's range of flood frequencies up to and including the one percent annual chance flood (i.e. base flood). These maps, called Flood Insurance Rate Maps (FIRMs), are used by the insurance industry to rate flood insurance policies according to the flood risk of the property to be insured. The Shaftsbury FIRMs were updated effective December 2015.

The land area covered by the base flood area is identified on the FIRM as the Special Flood Hazard Area (SFHA). Map 4.3 shows the Special Flood Hazard Areas for Shaftsbury. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the purchase of flood insurance is required by lenders. This is the regulatory standard also referred to as the "100-year flood." There are different areas or zones delineated within the SFHA. In Shaftsbury, only 1.6% of the Town's area is within the SFHA. Of the SFHA in Town, 0.2% is within Zone AE (1% annual chance with elevations), and 1.4% within Zone A (1% annual chance with no elevations.

In Vermont, most flood damage to private property and public infrastructure results from fluvial erosion rather than inundation. The Vermont Agency of Natural Resources (VT ANR) has identified and mapped areas with the highest fluvial erosion hazard, which they have called "river corridors," using available field data as well geographic information systems analyses (Map 4.3). River corridors encompass the area of land surrounding a river that provides for the meandering of the river, the formation of the floodplain, and for riparian functions necessary to restore and maintain the naturally stable (i.e., least erosive) form of a river which will minimize erosion hazards over time.

Preventing further encroachment into the river corridor will minimize fluvial erosion hazards and property loss, enhance public safety, maximize channel stability, and maintain or improve water quality and habitat function. As rivers shift their location both vertically and horizontally, erosion of adjacent lands can occur and threaten properties that may be outside of special flood hazard areas. Map 4.3 shows the number of structures by type within mapped river corridors.

WETLANDS

Vermont's wetlands are defined as those areas of the state that are inundated by surface or ground water with a frequency sufficient to support plants and animals that depend on saturated or seasonally saturated soil conditions for growth and reproduction (https://dec.vermont.gov/watershed/wetlands/what).

The Vermont Significant Wetlands Inventory shows approximately 2,080 acres of wetlands within the Town. Benefits provided by wetlands include flood and storm water control, maintenance of surface and groundwater quality, open space and aesthetic appreciation, educational and scientific research areas, wildlife habitat, and sources of nutrients for freshwater food chains. Concentrations of significant wetlands in Shaftsbury are found along stream floodplains and in areas in the southwestern and northeastern portions of the Town, as shown on Map 4.1.

The Vermont Wetland Rules and their amendments list activities that are allowed within significant wetlands and their adjacent buffer zones without review under the rules, as well as activities requiring a permit from VT ANR.

Vernal pools are temporary bodies of water that usually occur in woodland depressions. Only a few have been verified in Shaftsbury. Most vernal pools are small and are filled by spring rains and snowmelt and sometimes by late summer and fall rains, though they are typically dry during the summer months. Vernal pools provide important breeding habitat for many species of amphibians and invertebrates. These habitats are safe breeding grounds because they do not support fish populations. Since many amphibians return to the same vernal pool each year to breed, destruction or alteration of vernal pools may result in the loss of local populations of some species. Vernal pools are not protected under the Vermont Wetland Rules.

CRITICAL RIPARIAN CORRIDORS

Map 4.1, Terrestrial and Aquatic Resources, shows additional critical water resources.

Highest Priority Surface Water and Riparian Areas are the network of lakes, ponds, rivers, streams and riparian zones in which geophysical processes occur and provide for connection of these surface waters to groundwater.

Riparian Wildlife Corridors are the riparian lands adjacent to the surface water areas that provide for movement of wildlife and plants between riparian areas and between riparian zones and terrestrial systems. These often overlap with Highest Priority Surface Water and Riparian Areas, and both provide connections between forest blocks as well as connections between lowland areas and higher elevation areas. They are critical to avoiding the impacts of forest fragmentation, protecting drinking water supplies, reducing risks from flooding and fluvial erosion and providing for movement of wildlife.

FORESTS

Nearly seventy percent of Shaftsbury is forested. Detailed mapping of cover types has not been completed, but Table 2 below shows the likely forest types in Shaftsbury. These forest types cover large areas and may have numerous other community types, including terrestrial communities, wetlands and stream courses within them. These smaller communities are maintained by variations in environmental

gradients such as soil depth, depth to groundwater, exposure to wind and solar radiation, disturbance and other factors. Much of the Vermont Valley includes developed and agricultural areas and smaller forest patches and wetlands.

Table 2 Likely forest types in Shaf	tsbury
(Thompson and Sorenson, 2000)	
Biophysical Region	Matrix Communities
Taconic Mountains	Northern Hardwood Forest
	Rich Northern Hardwood Forest
	Mesic Maple-Ash-Hickory-Oak Forest
Vermont Valley	None Known
Southern Green Mountains	Montane Spruce-Fir Forest Montane Yellow Birch-Red Spruce Forest
	Northern Hardwood Forest

24 V.S.A. §4382 requires that Town plans identify forested areas of several kinds and incorporate goals and policies to minimize forest fragmentation and promote the health, viability, and ecological function of forests. Plans may include specific policies to encourage the active management of those areas for wildlife habitat, water quality, timber production, recreation, or other values or functions.

Map 4.1, Terrestrial and Aquatic Resources, illustrates several forest types. High Priority Interior Forest Blocks are areas of contiguous forest, unfragmented by roads, development or agricultural lands. They may also contain wetlands, waterbodies and other features. These overlap with Highest Priority Connectivity Blocks. Both areas are critical to wide ranging species such as black bear and those with small ranges such as amphibians that breed in wetlands and vernal pools. These forest blocks provide habitat for many forest nesting birds that migrate to and from the tropics. They also are likely to be most resilient to climate change. These areas have been identified by the Vermont Conservation Design program as those areas necessary for the long-term ecological function of a diversity of species and natural communities and which require large-scale conservation to remain viable.

Physical Landscapes (also called Physical Landscape Diversity Blocks) are areas of natural vegetation that may contain unique geologic, topographic and vegetation characteristics, and may also overlap with the above-mentioned types. Within Shaftsbury, there is a north-south running feature within the Valley, several separate blocks, and a larger, more extensive block following the Green Mountains.

Wildlife Road Crossings are road segments with suitable habitat on both sides of the road that provide connections for movement of animals.

RARE SPECIES AND NATURAL COMMUNITIES

The Vermont Diversity Program within the Wildlife Management Program of VT ANR maintains an inventory of rare, threatened and endangered species and natural communities in Vermont. This is part of a national and international effort to catalogue the biodiversity of the planet. Species and communities are characterized by Global (G) and State (S) ranks indicating the number of occurrences either globally or in a state.

Table 3 below summarizes the number of species by S-rank. Map 4.2, Rare Species and Natural Communities shows the locations of these occurrences.

Table 3. N	Table 3. Number of rare species in Shaftsbury by S-rank. Source: Vermont Diversity Program						
Туре	S1 Very rare	S1S2 Very rare/rare	S2 Uncommon	S2S3 Very Rare/Un- common	S3 Un- common	S3S4 Common/ Very common	Total
Plant	3	1	4	3		1	12
Animal		1	5	1	2		9
Total	3	2	9	4	2	1	21

AGRICULTURE

Approximately 20% of the land in Shaftsbury is in agricultural uses. The recent significant resurgence of local and small-scale agricultural production of daily food is having an increasing impact on Shaftsbury's economy. But making a living from small-scale farming remains difficult, with one of the main impediments being the price of land. At least two farms in the community were acquired by partnering with The Vermont Land Trust. Such partnerships will likely be essential to ongoing development in the Town of small-scale farming and the concomitant increase in availability of local foods.

Map 4.9, Shaftsbury Agricultural Soils, shows the extent of prime and statewide important soils. Some of these have flooding or wetness limitations, but as can be seen, there are extensive areas of agricultural soils in the Town.

5 | LAND USE

Goal 5.1 Work to achieve orderly development of the Shaftsbury landscape through a rational and inclusive planning process.

POLICY 5.1.1 RECOGNIZING THAT NOTHING STAYS THE SAME, – USES CHANGE, POPULATION CHANGES, VALUES CHANGE, LAWS CHANGE – PERIODICALLY REVIEW THE ZONING BYLAWS AND SUBDIVISION REGULATIONS FOR ALIGNMENT WITH STATE STATUTES AND WITH USES THAT CAN BE OBSERVED ON THE GROUND TO MINIMIZE NONCONFORMITY AND NONCOMPLIANCE.

Actions

- The Planning Commission should review the Zoning Map and Bylaws to determine if the districts are functioning as described in this Plan and adjust if necessary.
- The Planning Commission should take note of land uses not described in the Bylaws and adjust regulations accordingly.

POLICY 5.1.2 PROTECTION OF PUBLIC HEALTH AND SAFETY HAS TO BE A PRIMARY DRIVER OF THE ZONING BYLAWS.

POLICY 5.1.3 RECOGNIZE THAT OUR NEAR PRISTINE RURAL LANDSCAPE IS ONE OF OUR MOST VALUABLE ASSETS AND A KEY INGREDIENT IN A HIGH QUALITY OF LIFE.

Actions

- The Town should seek party status in Act 250 actions to support the land use goals of this Plan.
- Open space designs are particularly important when certain conditions are present. The Planning Commission should consider proposing a bylaw authorizing the Development Review Board to require developers to implement an open space design when failure to do so would result in one or more of the following:
 - 1. A significant reduction in the agricultural use potential of the land;
 - 2. Degradation of the natural visual appeal of a hillside, ridgeline, or open field;
 - 3. Encroachment upon an important natural or historic area, wildlife habitat, or a stream, wetland, vernal pool, or other water body;
 - 4. Elimination of access to an important recreational resource;
 - 5. Allowing excessive erosion, ground or surface water contamination, or otherwise endangering environmental quality.
 - 6. Fragmentation of a significant forest resource.
- Adjacent open space developments should be planned, to the greatest extent possible, so that reserved open spaces are contiguous.

LAND USE DISTRICTS

The land use policies of the Town Plan are implemented through enforcement of the Zoning Bylaws and Subdivision Regulations, which identify planning districts and guide the type, location and density of land use for future growth.

In 2016 the Planning Commission was awarded a Municipal Planning Grant for an update of the Zoning Bylaws. With the Bennington County Regional Commission serving as consultant, contradictions, conflicts with State statutes and setbacks for village commercial uses were corrected and adjusted. Voters approved the revised bylaw at Town Meeting 2017.

Village Residential (VR) District

The purpose of the Village Residential District is to provide for compact residential development, relieving pressure to develop rural areas of the Town, promoting efficiency of infrastructure and delivery of municipal services, and reinforcing historic development patterns. Since approval of the last Town Plan, the Planning Commission recommended, and the voters approved multi-family housing in this district.

These objectives are furthered by the designation of South Shaftsbury as a Village Center through the Vermont Downtown Program. Such a designation provides financial benefits for commercial properties, including tax credits for building improvements and receiving priority consideration for various community development grant programs.

There are two VR districts in Shaftsbury, one in South Shaftsbury Village, and another abutting North Bennington near Lake Paran. This district was expanded in the bylaw revision to include the Paran Acres subdivision. Permitted uses include single, two-family and multi-family dwellings, and certain religious, educational, medical, and community facilities. (Permitted uses are those that can be approved by the Zoning Administrator without a public hearing.) Minimum lot size is 10,000 square feet per dwelling unit if connected to the public water system, and 20,000 square feet per dwelling unit if not connected to the system. The "group service" uses permitted in the district require a lot of at least 80,000 square feet.

Rural Residential (R) Districts

The purpose of the Rural Residential Districts is to ensure the preservation of natural resources, scenic qualities and agricultural land while accommodating relatively low-density residential development. These districts are planned to be predominantly residential in character, while permitting appropriate compact development but in all cases at densities to avoid the need for municipal water supplies or sewer systems.

Single dwellings, agricultural and forestry uses, and certain religious, educational, medical, and community facilities are permitted in the R districts, while customary home occupations, community care homes, veterinary hospitals, and wholesale establishments are conditionally permitted. (Conditional uses are those requiring Development Review Board approval.)

The R districts are divided into three sub districts based on permitted residential densities: R40 (minimum of 40,000 square feet per dwelling unit) covering much of the southern and northeastern portions of the Town; R80 (minimum of 80,000 square feet per dwelling unit); and R200 (200,000 square feet per dwelling unit) covering lands 1,500 feet deep on either side of East Road north of the Route 7 overpass and lands above 1,400 feet in Granger and Shaftsbury Hollows. Group service uses in any R district require a minimum lot size of 130,000 square feet.

The Rural Residential districts include those areas that have recently experienced the most development pressure and which also contain many areas deserving of special protection for resource conservation.

a) Open space design - which enables and encourages flexibility in the development of tracts of land, promotes appropriate use of land, facilitates the economical provision of streets and utilities, and enhances the environmental quality of an area through maximum preservation of open land – is provided for in the Zoning Bylaws and Subdivision Regulations.



Two views of new residential development in a rural area near an existing cluster of buildings. By using effective residential planned unit development techniques, subdivisions with the same number of units can be achieved without consuming productive farm land and open space. This can allow agricultural land to stay in production, increase infrastructure efficiency, and lead to the creation of open spaces for community use. From <u>Growing Smarter - Best Site Planning for Residential, Com-</u> <u>mercial, and Industrial Development</u>, produced by the Vermont Forum on Sprawl.

The Zoning Bylaw permits open space development in VR and R Districts. As of this writing the first open space design subdivision has been approved involving the Shires Housing subdivision on Paran Road.

Commercial (VC & RC) Districts

The purpose of the Village Center (VC) District is to promote the sound economic development of the Town by encouraging commercial, business, and service uses at a scale and intensity that reinforces the historic development pattern of the Town. The VC District, located in South Shaftsbury, runs for about one-half mile along Route 7A. The area for retail uses has been concentrated nearer the four corners of historic Rt. 7A, Church Street, Buck Hill Road, and along Route 67 at the edge of North Bennington by Whitman's Feed Store.

The Roadside Commercial (RC) zone recognizes the potential for commercial opportunities along Route 7A. As can be seen in Map 6.1, Shaftsbury, Vermont Land Use Plan, The RC zone extends along Route 7A from the junction of Route 67A to West Mountain Road.

Industrial (I) Districts

The purpose of the Industrial Districts is to permit industrial growth to support local economic development while ensuring the preservation of the historic village, rural, and scenic qualities of the Town. The Zoning Bylaws identify a number of specific industrial uses as conditionally permitted in the Industrial Districts, with a minimum lot size of 80,000 square feet.

Forest and Recreation (FR) Districts

Shaftsbury's Forest and Recreation (FR) Districts are designed to provide opportunities for forestry and recreational uses and to protect timber, wildlife, and watershed resources in the Town's major forested areas, and to protect our watersheds from contamination. Only seasonally occupied residences (i.e. camps) with chemical or composting toilets are permitted. The recent Bylaw revision has added low impact non-motorized recreational uses.

The upland and mountainous areas in the districts are irreplaceable natural assets that deserve special protection. These areas are characterized by environmental limitations associated with steep slopes, shallow soils, drainage, and other conditions that constrain sound development. Furthermore, any significant level of development would severely impact the cost of providing community facilities and

services. The importance of these areas is recognized in the zoning Bylaw regulating elevation and district lines of Forest and Recreation. Limiting permanent development in these areas will assure:

- 1. Protection of important groundwater recharge and watershed areas which provide a safe, healthy, and reliable water supply for present and future needs;
- 2. Protection against soil erosion and down slope flooding of valley areas;
- 3. Preservation of the Town's natural beauty and rural character;
- 4. Maintenance of forest resources for timber production, recreation, and wildlife habitat;
- 5. Prevention of costly and poorly planned scattered development.
- 6. Maintain large, intact forest blocks to assure the long-term viability of the forest and for wide-ranging animals and neotropical migratory songbirds.

Village Center Designations

The Town has received approval by the state for Village Center Designations in South Shaftsbury and Center Shaftsbury. The Vermont Agency of Commerce and Community Development grants Village designations, which then provide a range of financial incentives and grants to encourage increased density, foot and bicycle travel, and other programs to encourage small, dense villages. There are no additional regulatory requirements for properties within designated areas.

The Village Center Designation (VCD) in Center Shaftsbury largely coincides with the Historic District. Preservation and restoration of this historic village will be aided by resources made available through the VCD program. The VCD in South Shaftsbury encompasses the modern-day Village.

See maps 5.1, Town of Shaftsbury Land Use Plan, and 5.2, Town of Shaftsbury Village Centers, for a summary of the above discussion.

6 | HISTORIC PRESERVATION

Goal 6.1 Buildings and sites of historical, archeological or architectural merit should be preserved whenever possible.

POLICY 6.1 THE TOWN SHOULD ENCOURAGE THE PRESERVATION OF HISTORICAL RESOURCES TO THE EXTENT ALLOWED BY THE PRIMACY OF PRIVATE PROPERTY RIGHTS.

Actions

- The Town should support the work of the Shaftsbury Historical Society as the keeper of local history and as an advocate for historic preservation of structures.
- The Town is owner and steward of Cole Hall, one of the most significant historic structures in Shaftsbury. If in the future the Town decides to relocate the Town offices, every effort should be made to assure the viability of the building under new ownership.
- The Town should collaborate with the Shaftsbury Historical Society to identify additional historic landmarks and individual properties.

HISTORICAL CONSIDERATIONS

The Town, with its distinctive village centers, contains sites and buildings that vividly reflect the community's rich history, archeology, and architectural heritage. At the same time, the Town has no active role in historic preservation other than stewardship of Cole Hall. Zoning Bylaws do not recognize the Center Shaftsbury Historic District. No special provisions exist in Town regulations pertaining to historic structures. Noting the long list of historic resources that follows, we must conclude that private ownership has done a mostly acceptable job in protecting them. This is not to say that there are not any endangered historic structures in Shaftsbury.

The area in Center Shaftsbury, primarily occupying the more built-up areas around the intersection of West Mountain and Tunic Roads at Route 7A was officially designated a Historic District by the National Park Service in 1987 and the Vermont Historic Sites and Structures Survey in 1973/4. The Shaftsbury Historical Society has restored the Baptist Church in Center Shaftsbury and taken ownership of the Governor Galusha property there. This section of Shaftsbury lies partly within the Roadside Commercial and partly within the Rural Residential Zoning Districts.

Center Shaftsbury Historic District has several historic buildings including the Old Center Shaftsbury meetinghouse, the Hickory Stick Center Shaftsbury School and the Old Baptist Church and Cemetery, most of which are adjacent to open fields and orchards. See map 5.2, Town of Shaftsbury Village Centers

Endangered Historic Buildings

The Planning Commission calls attention to two outstanding historic buildings both vacant and in need of rescue.

Potter-Montgomery House, 1780, Potter-Montgomery Road Douglas House, 1850, 3474 Historic Route 7A

7 | TRANSPORTATION

Goal 7.1 The Department of Public Works should maintain and improve the roads while balancing the priorities of efficient use of taxpayer money, improved driver experience, economic development, and alignment with State goals and incentives

POLICY 7.1 A COMPREHENSIVE CAPITAL IMPROVEMENT PLAN ADDRESSING THE LACK OF DITCHING, UNDERSIZED CULVERTS, INADEQUATE ROAD BASES, AND STRUCTURALLY DEFICIENT BRIDGES IS A PRIORITY OF THE DEPARTMENT OF PUBLIC WORKS.

Actions

- A capital improvements plan should be developed.
- The Town should consider increasing taxes to make improvements called for in the capital improvement plan.
- The Town should continue to seek State grant funds to make improvements called for in the capital improvement plan. Grant funds enable the Town to hire contractors for projects that, if undertaken by the Department of Public Works, would pull those employees off routine but necessary improvement and maintenance tasks that directly affect users of Town roads.
- Consider making greater use of rented equipment. Renting equipment allows efficiencies in spending on equipment that can be targeted seasonally and spending on maintenance, which is off-loaded onto the equipment owner.
- The requirements of the Municipal Roads General Permit, the findings of a recent road and erosion and culvert study, and the findings of a recent Stormwater Master Plan should help guide the Department of Public Works in the creation of its comprehensive capital improvements plan.
- Over the period of the required stormwater permit process, the town should bring roads connected to surface waters up to the standards developed by VT ANR to reduce sediment transport to these surface waters

Goal 7.2 Safe and pleasurable bicycling opportunities should be incorporated in town transportation planning.

POLICY 7.2 ROAD IMPROVEMENTS TO ACCOMMODATE BICYCLING ARE NEEDED TO ATTRACT BICYCLE TOURISTS.

Action

- Encourage the Recreation Committee to explore participating in the Western New England Greenway, a multi-segment, multi-state bike route that envisions using, in part, several back roads in Shaftsbury.
- Urge VTrans to establish bicycle lanes on Route 7A in Shaftsbury.

TRANSPORTATION CONSIDERATIONS

Roads within Shaftsbury can be classified under one of the following categories based on Title 19 of the Vermont Statutes Annotated, Section 302 (Vermont State Legislature, 2017). These are shown on Map 1.1 and listed in Table 4.

Table 4. Roads by type in Shaftsh	bury		
Source: Vermont Agency of Tran	sportation, 2019		
Type of Road	Number of Miles	Notes	
U.S. Highway (US-7)	5.364	 A total of 15.849 miles of state- maintained roads 	
State Highway (VT-7A)	6.895		
State Highway (VT-67)	3.590		
Town Class 2	19.99	A total of 70,420 miles of town	
Town Class 3	50.44	A total of 70.430 miles of town-	
Town Class 4	1.43	 maintained roads 	
Private Roads (estimated)	11.08	Private roads	
Legal Trail (estimated)	3.03		

US Highways and State Roads: U.S. 7 is on the National Highway System and is a "principal arterial" highway corridor along the western side of VT. VT 67 and VT 7A are "major collector" highways.

Class 1 Highways: There are no Class 1 Highways in Shaftsbury.

Class 2 Highways: Class 2 Town Highways are selected as the most important highways in each town serving as roads from town to town and to places which by their nature have more than normal amounts of traffic.

Class 3 Highways: Class 3 Town Highways are all traveled town highways other than class 1 or 2 highways, and negotiable under normal conditions all seasons of the year by a standard vehicle.

Class 4 Highways: Class 4 Town Highways are all other Town highways. The Select Board determines what highways are Class 4 Highways.

The potential exists for expanded use of railroad transportation. A rail line runs through Shaftsbury in close proximity to the industrial area. The State of Vermont has purchased the B & M rail line between North Bennington and Hoosick Falls, and this is providing the Town with more direct access to the northeast rail corridor.

The Vermont Clean Water Act, Vermont Act 64/H.35 and the Lake Champlain Phase 1 total maximum daily load (TMDL, a regulatory term under the Clean Water Act identifying the maximum amount of a pollutant that a body of water can receive and still meet water quality standards) require that municipalities reduce sedimentation runoff from their road systems over a twenty-year period following attainment of stormwater permits between 2018 to 2021. Towns are required to develop road stormwater management plans in the following steps:

- 1. Identify sections of roads connected to surface waters through ditches, culverts, or other drainage structures;
- 2. Inventory connected portions of the road network to determine if these sections meet the standards being developed by the Vermont Agency of Natural Resources;
- 3. Develop a long-term plan to bring all connected sections up to statewide design standards.

The Bennington County Regional Commission hired Fitzgerald Environmental Associates to complete both a stormwater master plan and to inventory hydrologically connected roads for erosion problems in Shaftsbury. Work was completed in 2018 and 2019 and the plans completed in 2019. The stormwater master plan identified forty-nine projects of varying complexity to reduce erosion and protect stormwater infrastructure (Map 7.1). More detail on these projects can be found in the Fitzgerald Environmental Associates reports completed in 2018 and 2019 available from the Town. More specific design information will be developed for these for use in grant applications. In addition, partner organizations including the Bennington County Regional Commission and the Bennington County Conservation District are working with the Town to find funding to remedy these problem areas.

Table 5 Road erosion survey results		
Category	Meters	Feet
Does Not Meet		
Very High	1,468.1	4,816.4
High	7,264.9	23,835.0
Moderate	5,973.5	19,598.0
Subtotal	14,706.4	48,249.4
Partially Meets		
Moderate	5,841.9	19,166.4
Low	10,383.8	34,067.7
Subtotal	10,383.8	34,067.7
Fully Meets	21,076.4	69,148.3
Not Connected	22,238.4	72,960.6
Grand Total	99,337.2	325,909.6

The road erosion survey identified the following categories of road condition:

Roads that do not meet standards generally lacked drainage ditches, had eroded ditches or had unstable conveyances. Those segments categorized as "Very High" priority will need to be brought up to standards by 2025 to meet the municipal general permit requirements. All segments should be brought up to standard by 2036 (Map7.1).

Culvert surveys (Map 7.1) completed by BCRC indicate the following culvert conditions:

Table 6 Culvert condition for Shaftsbury culverts		
Culvert Condition	Number	
Excellent	26	
Good	163	
Poor	113	
Unknown	1	
Total	303	

8 | PUBLIC UTILITIES, FACILITIES, AND SERVICES

Goal 8.1 Maintain high quality public utilities, facilities and services and make improvements that will provide savings in the long term.

POLICY 8.1.1 COLE HALL AND ITS ENVIRONS ARE THE PUBLIC FACE OF THE TOWN. ITS EXTERIOR AND INTERIOR SHOULD BE MAINTAINED OR UPGRADED AS NECESSARY TO ENSURE THE BUILDING CAN CONTINUE TO PROVIDE SERVICES TO THE CITIZENS OF THE TOWN.

Actions

- Seek professional design consultants to suggest improvements to the esthetics, functionality, and long-term maintenance of the Cole Hall site, the building's exterior and interior, and the public park.
- Remove the old garage building, salt shed, and other remnants of DPW operations from the Cole Hall site.
- Add public parking to the old garage site.
- Explore the possibility of placing a charging station for electric cars in the parking lot of Cole Hall.
- Replace the thirty-year old boiler at Cole Hall.

POLICY 8.1.2 KEEP THE COST OF WASTE DISPOSAL FOR TOWN RESIDENTS AS LOW AS IS POSSIBLE WITHOUT COMPROMISING GOOD WASTE DISPOSAL PRACTICES AND THE REQUIREMENTS OF THE TOWN'S SOLID WASTE IMPLEMENTATION PLAN.

Actions

- Re-evaluate waste disposal revenues in light of Shaftsbury's pay-per-throw rate and transfer station access fee, which have not changed in many years and are considerably lower than those of surrounding towns.
- Reestablish the swap shed in a location that can be monitored by transfer station personal.
- Working through the Bennington County Solid Waste Alliance (BCSWA), develop a compliance plan for Act 148's banning of all food scraps from landfills effective in 2020.

POLICY 8.1.3 EXISTING AND POTENTIAL PUBLIC WATER SUPPLIES ARE CRITICALLY IMPORTANT TO THE TOWN OF SHAFTSBURY AND MUST BE PROTECTED.

Actions

• The village water mains are due for replacement. The concrete-asbestos mains should be replaced in three phases, beginning in approximately 2023 and continuing into the 2040s or later. A three-phase schedule will allow new debt to be acquired as old debt is retired, minimizing the cost impact on ratepayers.

POLICY 8.1.4 BROADBAND INTERNET ACCESS AND RELIABLE CELL SERVICE SHOULD BE AVAILABLE FOR ALL RESIDENTS AND BUSINESS.

Action

- Work with federal, state, regional, and local partners on strategies to extend access and coverage.
- Consider taking advantage of ACT 79/H.513 to investigate local strategies for extending Internet access to under-served areas.
- Reach out to neighboring towns to evaluate support for a Communications Union District that would combine under-served areas across town lines to be served by a local telecommunications utility.

WATER SUPPLY AND WASTEWATER DISPOSAL

Shaftsbury's network of water mains, serving the South Shaftsbury area, receives water from an open water reservoir fed by Basin Brook in the Green Mountain National Forest. The system is owned by the Village of North Bennington (Map 8.1). Two storage ponds and a filtration plant are located on a parcel south of Buck Hill Road owned by the North Bennington Board of Water Commissioners.

Approximately 300 meters service the village water supply. According to the Town's Water Superintendent, no new customers have been connected in the last five years. The reserve capacity is about 1 million to 1.5 million gallons, enough to serve approximately fifty new homes.

A municipal sewage treatment facility would effectively address potential groundwater contamination and constraints on growth in the Village. A town-wide survey which addressed alternative sewage systems as well as the possibility of connecting to the Bennington sewage plant was completed in 2007. These alternatives were rejected by the vast majority of the survey respondents and further investigation is currently on hold.

SOLID WASTE

For many years Shaftsbury operated a landfill on North Road. Shaftsbury's solid waste disposal needs are now being met by a certified transfer station operated on Town property under contract with TAM Waste Management, which was recently sold to Casella Waste Systems. The impact of this change is being evaluated. The Transfer Station was refurbished in 2018 during the Town garage project and is sufficient to serve the Town's needs for the foreseeable future. The Town is a member of the Bennington County Solid Waste Alliance, which implements a solid waste implementation Plan (SWIP) in accordance with the Materials Management Plan developed by the Vermont Agency of Natural Resources and the many state statutes regarding solid waste. This plan was approved by the Vermont Agency of Natural Resources in December 2015. The Alliance provides outreach and technical assistance to member towns, businesses, schools and institutions to reduce the amount of material sent to landfills and incinerators and to increase the amount of material recycled. The Alliance also holds household hazardous waste events for the member towns annually and provides information on means to safely dispose of such substances year-round.

The closed landfill continues to require ongoing monitoring of groundwater in the vicinity of the capped landfill. In addition, a remediation system has been installed to prevent excessive buildup of methane in the monitoring wells along the western boundary of the property.

PUBLIC BUILDINGS AND LAND

In addition to those facilities already discussed, the Town owns Howard Park off Buck Hill Road, a small recreational area located on Cleveland Avenue, and the Shaftsbury Municipal Forest, a 55-acre parcel located on West Mountain. These facilities are discussed in detail in Chapter 10.

Several Cemeteries are located around the Town and are managed by the Town's active Cemetery Committee.

South Shaftsbury on Route 7A at Cleveland Avenue Center Shaftsbury on Route 7A near Tunic Road Maple Hill on East Road near Maple Hill Road Grandview at Grandview Street and Lamb Road Little Rhode Island Waite at Waite Hill Cemetery Road



The new Department of Public Works garage on North Road.

FIRE, EMERGENCY, AND PUBLIC SAFETY

Shaftsbury is fortunate to be served by an outstanding volunteer fire department. A mutual aid agreement is in place with Bennington County, Washington County, New York, and Rensselaer County, New York to better provide services to Shaftsbury residents.

One new fire truck is purchased periodically; these purchases are currently financed through a sinking fund.

Shaftsbury has no emergency rescue service of its own, but rather relies on the Bennington and Arlington Volunteer Rescue Squads. However, Shaftsbury has extrication equipment and a brush fire truck. The Town does not maintain a police force; the Bennington County Sheriff Department and the Vermont State Police provide law enforcement coverage for the Town.

The Town is required to prepare and adopt a Local Emergency Management Plan each year specifying roles and responsibilities in the event of a disaster. The Town adopted a hazard mitigation plan in 2015, and that plan will need to be updated in 2020. Hazard mitigation is intended to reduce potential losses from future disasters. Hazard mitigation plans identify potential natural hazards that could affect a community and the projects and actions that a jurisdiction can undertake to reduce risks and damage from natural hazards such as flooding, landslides, wildland fire, and similar events. This Shaftsbury Hazard Mitigation Plan identified, described and prioritized potential natural hazards that could impact the Town and measures to reduce or avoid those impacts. The Federal Emergency Management Agency, within the U.S. Department of Homeland Security, and the Department of Vermont Emergency Management both advocate the implementation of hazard mitigation measures to save lives and property and reduce the financial and human costs of disasters. The Town of Shaftsbury intends to implement the actions in the hazard mitigation plan and to annually monitor progress in doing so. Where appropriate, such as with respect to flood resiliency and emergency management, actions have been integrated into Shaftsbury Town Plan.

TELECOMMUNICATIONS

The Planning Commission and the Selectboard conducted a survey in the spring of 2019 to gauge the types of broadband coverage experienced by residents of Shaftsbury. Approximately 255 persons responded. Significant results of the survey include:

- 24% reported no cell service and an additional 20% reported one bar.
- Eight percent reported no internet while an additional 42% reported that service was not fast enough.

Also in the spring of 2019, the PC and Selectboard made detailed maps of cell coverage in Shaftsbury, using equipment borrowed from Corey Chase at the Public Utilities Commission. Cell signal strength for 6 different carriers was collected on every road in Shaftsbury. An example of the data for ATT is included in Map 8.2 below.

Comparing coverage from the different carriers is difficult; they all show areas of good signal strength and other areas of poor signal strength. One consistent result is that the Shaftsbury and Granger Hollow areas have essentially no cell coverage from any carrier. This data would be useful for individuals trying to decide which carrier provides the best coverage at their home.

More information about the Internet survey and the cell coverage mapping can be found at shaftsburyvt.gov.

9 | EDUCATION

Goal 9.1 Shaftsbury should provide a quality public education to its citizenry.

POLICY 9.1 COLLABORATION SHOULD BE ENCOURAGED BETWEEN TOWN AND SCHOOL GOVERNING BODIES (RECOGNIZING THAT THEY ARE LEGALLY SEPARATE ENTITIES).

Action

• Mention or link to the school website on the Town website.

EDUCATIONAL CONSIDERATIONS

Shaftsbury is a part of the Southwest Vermont Supervisory Union (SVSU), the largest school district in the State of Vermont. Elementary education (grades Kindergarten through six) is provided at the Shaftsbury Elementary School. and the Village School of North Bennington. Middle School and high school students attend Mount Anthony Union Middle School and Mount Anthony Union High School, respectively. High School students also have the opportunity to attend the Southwest Vermont Career Development (vocational) Center. Several post-secondary schools are located in the Bennington area: Bennington College, branches of the Community College of Vermont, and Rensselaer Polytechnic Institute among others.

A unique feature in the local educational picture is the relationship between Shaftsbury and North Bennington and the schools in those municipalities. For instance, a family in Shaftsbury District 1 sends its children to school and votes on school issues in North Bennington, pays school taxes to North Bennington and Mount Anthony Union Middle and High Schools, but votes on Town issues and pays Town taxes to Shaftsbury.



Enrollment has decreased by almost 10% in the past two school years. The physical structure of the school can continue to meet the needs of the current enrollment with room if it should increase. Maintenance of the building is a high priority. The roof on the north end of the building was replaced in 2017. A new ventilation system was installed in the same wing in 2018. New flooring was installed in the gym, primary wing and lobby in 2018 as well. Work is underway to improve ventilation in the rest of the building in the summer of 2019. Recent upgrades to the building have complied with state standards for energy use and thermal envelope.

Аст 46

In April, a new consolidated elementary school board was elected, and in June, a new budget was approved by voters. In 2020 Arlington and Sandgate will merge with the SVSU.

CHILDCARE

Childcare centers and family childcare homes provide services, which contribute to the Town and region's economy by allowing more people to enter the local labor force. Among the centers in Shaftsbury are Myers-Prouty Childcare (also known as the Shaftsbury Early Childhood Center), which operates out of the Red Brick building on Grange Road. The center was formerly a UCS/Head Start facility.

10 | RECREATION

Goal 10.1 Make Shaftsbury a more active and attractive community by developing and promoting its outdoor resources.

POLICY 10.1.1: PROVIDE AND IMPROVE TRAILS, SCENIC ROADS AND BIKEWAYS, AND PARKS AND OTHER OUTDOOR SPACES TO ENHANCE RECREATIONAL OPPORTUNITIES.

Actions

- The Shaftsbury Lake trail should undergo minor upgrades: the addition of signage to allow visitors to know the trail exists; ongoing bridge maintenance; and other ongoing maintenance as may be required.
- A trail should be constructed in the Municipal Forest and a destination be developed at the top.
- Repair the ice skating rink and reinstall it at Cleveland Avenue Park in the winter months.

POLICY 10.1.2 DESIGNATE AND PROMOTE SCENIC ROADS AND BIKEWAYS WITHIN THE TOWN.

Action •

Consider for official "scenic" designation the following roads and bikeways: West Mountain Road - La Clair Road - Murphy Hill Road Coulter Road - Tinkham Road Myers Road Cold Spring Road Maple Hill Road - Harrison Road: from Jack Cross Road to East Road East Road: from Route 7 overpass to Arlington Town Line Trumbull Hill Road: from Holy Smoke Road to end Potter-Montgomery Road Buck Hill Road Rollin Road Stone Bridge

POLICY 10.1.3 RESIDENTS AND VISITORS TO SHAFTSBURY SHOULD BE ABLE TO ACCESS AND UTILIZE THE STATE PARK, THE TOWN'S PARKS, AND THE MUNICIPAL FOREST WITH EASE. WHERE WILLING LANDOWNERS AGREE, ACCESS SHOULD BE PROVIDED TO PRIVATE LANDS FOR LOW IMPACT USES.

Actions

- Work with the State to improve the scenic trail and to include historical information for day hikers at Lake Shaftsbury.
- Make access points to both municipal parks and the Town's forest more visible with better signage.
- Upgrade the entrance to Howard Park.
- Develop strategies to make private land available to visitors and community members for low impact hiking, cross country skiing, trail running, and cycling.

- The Town should provide the public with easy access to the municipal forest with a parking "right of way."
- Search for avenues by which to add bike lanes.
- Seek opportunities for informal recreation on public and private land in order to encourage residents and visitors to walk, hike, cycle and cross-country ski.
- Begin to locate and coordinate landowners in the "forest and recreation" zone in an effort to get permission to provide low impact access for all those seeking other forms of informal recreation on logging roads and backcountry trails.

RECREATIONAL CONSIDERATIONS

Residents of Shaftsbury have access to many recreational opportunities. Lake Shaftsbury State Park, Howard Park (a municipal park that is within walking distance from Shaftsbury Town center), Lake Paran, the village park on Cleveland Ave, a municipal forest and The Robert Frost Trail are the high points.

The above-mentioned parks and trails help to provide access to streams, forests, trails, lakes and open space for fishing, hiking, picnicking, organized youth sports and camping. Along with many miles of scenic back roads, these parks and trails allow the Town's residents to safely exercise and socialize with other members of the community.

Lake Shaftsbury State Park is located in the northern part of Shaftsbury and consists of 84 acres of land that surround a picturesque lake, a picnic area, a concession stand, a pavilion, and a group campground. The Park provides opportunities for swimming, boating and fishing. Boat rentals, volleyball courts, horseshoe pits and a 1-mile scenic trail that circles the lake make Lake Shaftsbury a destination for residents and visitors alike.

The Recreation Committee advises the the Selectboard on matters regarding the operation and maintenance of both of the Town's municipal parks.

Howard Park is situated just east of South Shaftsbury Village on 65 acres of land. The park contains facilities for a wide variety of sports and activities including; softball, baseball, and soccer fields, tennis courts, a basketball court, playground equipment, a picnic area, bathrooms, a concession stand, a pavilion, and a storage building. Residents can reserve the pavilion for celebrating family events. The Cleveland Avenue Park is a one-acre neighborhood park in the village with new playground equipment, a picnic area and a warming hut for winter meet-ups and skating. At this time the Town is subsidizing the general operation and maintenance of the two municipal recreation parks through an endowment fund and the Town's general fund "operating budget."

Residents and visitors can also make use of Lake Paran Park, which is located on the border with North Bennington. Paran Recreations, Inc., a non-profit organization, manages the operation of the waterbased recreational facilities. The operating expenses are generally covered from charging membership fees, usage fees and contributions.

The Robert Frost trail stretches from Route 7A at the Frost Museum, crosses over Paran Creek at a beautiful bridge and viewing platform (with material and labor donated by local craftsmen, businesses, and volunteers), and continues to Lake Paran. The trail is 2.1 miles each way.

11 | HOUSING

Goal 11.1 Increase the supply of housing opportunities for all income levels, age groups and special needs.

POLICY 11.1.1 WORK WITH NONPROFIT AND FOR-PROFIT DEVELOPERS TO INCREASE OPPORTUNITIES FOR RENTAL HOUSING AND HOMEOWNERSHIP IN SHAFTSBURY.

Actions

- Support US Department of Agricultural Rural Development pass-thru loans where the Town acts as sponsor of a project.
- Seek party status in Act 250 hearings to promote housing development.
- Work with local employers to ascertain needs for workforce housing to support expanding local businesses.
- Support the work of Shires Housing, BROC Community Action, Western Vermont NeighborWorks and similar organizations that provide workforce housing solutions.

POLICY 11.1.2: RECOGNIZING THAT HOMELESSNESS IS A REGIONAL PROBLEM, SUPPORT INITIATIVES BY THE STATE, SURROUNDING TOWNS, AND LOCAL ORGANIZATIONS TO HOUSE THE HOMELESS POPULATION.

Action

• Support local organizations which serve the homeless.

Goal 11.2 Continue to assure that new construction meets or exceeds standards for thermal envelope and sustainability.

POLICY 11.2.1 NEW CONSTRUCTION WILL MEET THE STATE ENERGY CODE (VERMONT BUILDING ENERGY STANDARD 30 VSA SECTION 51).

Action

- The Town should consider requiring that builders certify that new construction meets the state energy code prior to issuing a letter of zoning compliance.
- Promote incorporation of energy efficient design and techniques by making information available on programs and resources. This is addressed in more detail in Chapter 13, Energy.

HOUSING CONSIDERATIONS

As of 2017 (the most recent year for which data is available, at American Fact Finder), there were 1,632 housing units in Shaftsbury. The total number of housing units as of 2010 was 1,676 (USA Census Bureau, Census 2010). The great majority of units in 2017 were single-family detached houses, with about 9% in multi-family (two or more unit) buildings. There were 11 mobile homes.

Based on the 2020 population projection (3,503 to 3,620 residents) and the current household size of 2.38 persons, few new housing units would be needed over the next several years (assuming a constant number of vacant housing units).

The medium sale price of a single-family house in 2012, \$180,000 was approximately the same as the medium for the county (\$178,250) and slightly below that of the State (\$203,000). Approximately 14% of the households in Shaftsbury occupy a rental unit; median rental costs are \$801 in Shaftsbury and the County and State rental costs are \$760 and \$843 respectively (source: Center for Rural Studies, UVM).

Housing is considered affordable when total housing costs are no more than 30% of total income (rent or mortgage, property taxes and insurance). The cost of heating a household, providing necessary services such as electricity and water and of maintaining the physical structure must also be considered. Although the median family income in Shaftsbury provides sufficient funds to support median rental and home ownership costs, 31% of households in Town pay rental costs in excess of 30% of total income and 20.5% of households pay rental costs in excess of 50% of total income (source: Center for Rural Studies, UVM).

At the time of this writing, Shires Housing is building a 22-unit affordable housing development on Paran Road right at the edge of North Bennington. The project is budgeted at \$7.2 million. Construction began in the summer of 2019. During the winter of 2018, Shires housing renovated two buildings of the Brick Row next to Whitman's Feed at a cost of \$1.1 million. These buildings house seven units of affordable rental housing.



Brick Row, newly renovated affordable housing on Vermont Route 67E
No discussion of housing would be complete without looking at those who are without – the homeless. Each year a census of the homeless takes place throughout the state – the annual Point-in-Time survey. In the January 26, 2016 count 1,102 Vermonters were homeless, down from a high of 1,556 in 2014. The Great Recession of 2008-09 generated a spike in the homeless population which has begun to recede. Of the 1,102 homeless Vermonters in 2016, 64 were in Bennington County. Shaftsbury has no facility serving this population. The Bennington Coalition for the Homeless operates a shelter in Bennington and along with other community organizations provides outreach to this population.

Because of the age of Shaftsbury's housing stock, 42% built before 1960, operating costs around energy issues are significant. Only through major renovation of the exterior envelope and updating of mechanical systems can these older structures be made viable.

12 | ENERGY

The energy policy of the State of Vermont, as codified in 30 V.S.A. § 202a (1), states:

"It is the general policy of the State of Vermont:

(1) To assure, to the greatest extent practicable, that Vermont can meet its energy service needs in a manner that is adequate, reliable, secure, and sustainable; that assures affordability and encourages the State's economic vitality, the efficient use of energy resources, and cost-effective demand-side management; and that is environmentally sound.

(2) To identify and evaluate, on an ongoing basis, resources that will meet Vermont's energy service needs in accordance with the principles of least-cost integrated planning; including efficiency, conservation and load management alternatives, wise use of renewable resources, and environmentally sound energy supply."

Providing energy that is reliable and resilient in terms of supply and cost is essential to the Vermont economy. The sources of energy use can be realigned from fossil fuels to solar, wind, hydropower, geothermal, biomass and other sources not derived from fossil fuels to mitigate changes in the climate resulting from greenhouse gas emissions. The Vermont Comprehensive Energy Plan (2016) established the following set of goals:

• Reduce total energy consumption per capita by 15% by 2025, and by more than one third by 2050.

• Meet 25% of the remaining energy need from renewable sources by 2025, 40% by 2035, and 90% by 2050.

• Achieve three end-use sector goals for 2025: 10% renewable sources for transportation, 30% renewable sources for buildings, and 67% renewable sources of electric power (Vermont Department of Public Service, 2016).

Goal 12.1 To be consistent with state goals, reduce total energy consumption per capita by 15% by 2025, and by more than 33% by 2050; support installations of renewable energy sources to meet 25% of energy needs from renewable sources by 2025, 40% by 2035, and 90% by 2050; and, by 2025, create sufficient capacity to achieve 10% renewable sources for transportation, 30% renewable sources for buildings, and 67% renewable sources of electric power.

POLICY 12.1.1 THE TOWN OF SHAFTSBURY WILL NOT IMPOSE SCREENING OR OTHER RESTRICTIONS ON RENEWABLE ENERGY DEVELOPMENT BEYOND THOSE IMPOSED FOR OTHER TYPES OF BUILDING AND INDUSTRY. THE TOWN DOES NOT SEEK TO REGULATE RENEWABLE ENERGY BEYOND REGULATIONS IMPOSED BY THE PUBLIC SERVICE BOARD. THE TOWN SHOULD NOT INSTITUTE ZONING OR OTHER ORDINANCES THAT WOULD LIMIT RENEWABLE ENERGY DEVELOPMENT.

POLICY 12.1.2 PROMOTE ENERGY EFFICIENCY IN BUILDINGS.

Actions

- Consider requiring that copies of energy code certificates be submitted to the Zoning Administrator for all new building construction as part of the issuance of a Certificate of Zoning Compliance.
- Increase conservation, insulation and energy efficiency within Town and school buildings.
- Task the zoning administrator and the town energy committee with providing information on energy efficient heating and building systems.
- Task the town energy committee with providing information about BROC, NeighborWorks, and other organization that provide free and reduced cost weatherization.

POLICY **12.1.3** SHAFTSBURY PROMOTES COMPACT DEVELOPMENT IN THE DESIGNATED VILLAGES TO THE EXTENT IT IS FEASIBLE GIVEN THE AVAILABILITY OF INFRASTRUCTURE.

POLICY **12.1.4** ENCOURAGE OPTIONS FOR REDUCING THE NUMBER OF VEHICLE TRIPS BY RESIDENTS, BOTH WITHIN THE TOWN AND FOR COMMUTING TO WORK.

Actions

• Consider providing for recharge stations for electric vehicles as part of the redevelopment of the Cole Hall site and encourage Shaftsbury Elementary and major employers to install charging stations at their sites.

SUITABLE AREAS FOR WIND, SOLAR, BIOMASS AND HYDROELECTRIC RESOURCES

The Bennington County Regional Energy Plan, completed in 2017, developed siting guidelines for renewable energy resources based on:

- 1. Locations where resources existed in sufficient quantities to make development technically and economically feasible;
- 2. Known and possible constraints to development;
- 3. Regionally or locally identified conditions where development should be discouraged or may not be feasible or where development should be encouraged;
- 4. Any additional considerations such as scenic viewsheds, necessary screening to reduce impacts, location of energy and transportation.

The BCRC plan identified the following as "known" or primary constraints with the maps in this plan where they are shown listed:

Vernal Pools (Map 4.1) DEC River Corridors (Map 4.3) FEMA Floodways (Map 4.3) State-significant Natural Communities and Rare, Threatened and Endangered Species (Map 4.2) National Wilderness Areas (none mapped within Shaftsbury) Class 1 and Class 2 Wetlands and Advisory Layers (Map 4.1)

The plan identified the following as possible or lower priority constraints with the maps in this plan where they are shown listed:

Agricultural Soils (Map 4.9) FEMA Special Flood Hazard Areas (Map 4.3) Protected Lands (Map 10.1) Deer Wintering Areas (Map 4.1) ANR's Vermont Conservation Design Highest Priority Forest Blocks (Map 4.1) Hydric Soils (Map 4.8)

Finally, the BCRC plan identified the following as regional constraints:
Prime Agricultural Soils (Map 4.9)
Historical and Cultural Districts (Map 5.2)
Residential Wind Buffer of 1,000 m from residential areas (Map 12.2)

The Shaftsbury Planning Commission has determined that prime agricultural soils and the Center Shaftsbury Historic District should not be considered constraints to solar or wind energy development.

POTENTIAL WIND AND SOLAR RESOURCES

Map 12.1, Town of Shaftsbury Existing and Proposed Solar Sites and Solar Potential, shows the areas where solar resources potentially exist, both with and with none of the constraints listed above. There are approximately 1,000 acres of land with solar resources without any constraints, within one mile of three phase lines which would allow a total capacity of 125 MW based on an estimate of eight acres per megawatt.

Table 8. Solar energy size classes (Source VT DPS 2017)

Category	Туре	Generation Capacity
Net Metered1	Residential	<=15 kW
	Small Commercial	<=50 kW
	Commercial/Large	<=150 kW
	Residential Group	<=500 kW
Standard Offer2		2.2 MW
Utility		Can be less than, equal to or
		greater than 5 MW

Map 12.2 Town of Shaftsbury Wind Resources, shows potential wind resources both with and without the above constraints. The inset map shows the added constraint from the Bennington County Regional Energy Plan of areas within 1,000 meters of residences. Currently there are no wind generation operations in Shaftsbury. There are no suitable areas for industrial wind development within the Town. There are some unconstrained areas in the eastern part of the Town suitable for commercial scale wind turbines. These would likely serve specific businesses and not be developed as a wind farm as in the case of industrial scale projects.

Both maps also show a one-mile buffer from three phase power lines. Lines of this capacity are generally necessary to connect solar installations to the power grid. However, larger capacity lines may be necessary depending on the size of the installation. Three-phase lines in Shaftsbury are limited to the southern part of the Town in and around South Shaftsbury.

The Planning Commission has concluded that the Town should not regulate or limit the locations of solar or wind resources and will leave siting decisions to the Vermont Department of Public Services.

A "preferred site" as defined by the Public Utilities Commission (2017) can include:

- 1. A new or existing structure whose primary use is not the generation of electricity or providing support for the placement of equipment that generates electricity;
- 2. A parking lot canopy over a paved parking lot, provided that the location remains in use as a parking lot;
- 3. A tract previously developed for a use other than siting a plant on which a structure or impervious surface was lawfully in existence and use prior to July 1 of the year preceding the year in which an application for a certificate of public good under this Rule is filed but not including any headwaters, streams, shorelines, floodways, rare and irreplaceable natural areas, necessary wildlife habitat, wetlands, endangered species, productive forestlands, or primary agricultural soils;
- 4. Land certified by the Secretary of Natural Resources to be a brownfield site;
- 5. A sanitary landfill provided that the Secretary of Natural Resources certifies that the land constitutes such a landfill and is suitable for the development of the plant;
- 6. The disturbed portion of a lawful gravel pit, quarry, or similar site for the extraction of a mineral resource provided that all activities pertaining to site reclamation required by applicable law or permit condition are completed prior to the installation of the plant;

¹ Net metering requires utilities to allow individuals or groups to generate their own power and sell the excess back to the grid.

² The Vermont Standard Offer program provides incentives to rapidly develop larger scale renewable energy projects.

- A specific location designated in a duly adopted municipal plan under 24 V.S.A. Chapter 117 for the siting of a renewable energy plant or specific type or size of renewable energy plant, provided that the plant meets the siting criteria recommended in the plan for the location;
- 8. A specific location that is identified in a joint letter of support from the municipal legislative body and municipal and regional planning commissions in the community where the netmetering system will be located;
- 9. A site listed on the National Priorities List (NPL) established under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Chapter 103 and the development will not compromise or interfere with any site remediation;
- 10. On the same parcel as, or directly adjacent to, a customer that has been allocated more than 50 percent of the net-metering system's electrical output.

In determining whether or not to grant preferred site status for solar installations on sites not meeting the above criteria, the Planning Commission and the Select Board will make decisions on a case by case basis using the above referenced maps for guidance.

BIOMASS

Biomass from wood and other sources is already used for home heating in wood and pellet stoves. Biomass to generate electricity is very inefficient. Based on the regional energy plan (BCRC 2017), the Planning Commission has determined that biomass for district heating could be used for Bernstein Displays, the area including the Town Hall, Shaftsbury Elementary and the fire station, and Peckham Industries. Currently, outside of residential wood stoves, there are no biomass facilities in Shaftsbury.

HYDROELECTRIC

Streams in Shaftsbury are small so that hydroelectric potential would likely provide little energy or return on investment.

CURRENT ENERGY PROGRAMS IN SHAFTSBURY

New residential construction built after July 1, 1998, is required to adhere to the Vermont Residential Building Energy Standards (VRBES), and all relevant updates. These include such measures as efficient insulation, heating systems, and weatherproofing windows and doors. This is implemented in Shaftsbury as part of the building permit application process. The contractor must certify compliance.

Presently in Shaftsbury solar electricity is generated by 84 sites based on data of net metering installations supplied by the Public Service Board. This includes five sites of greater than 15 KW. Southshire Community Solar on Buck Hill Road is a 200 KW installation owned by a diverse pool of investors throughout the community. Two sites are currently proposed at 150 and 500 KW. This would bring the total current generating capacity to 0.96 MW. The 2050 goal in the regional energy plan is for Shaftsbury to provide 10.5 megawatts of electricity from solar energy.

13 | MUNICIPAL FINANCE

Goal 13.1 Maintain GAAP standards to provide the people of Shaftsbury accurate insight into town finances and reduce future borrowing costs.

POLICY 13.1.1 BORROWING COSTS FOR DEPARTMENT OF PUBLIC WORKS EQUIPMENT SHOULD BE MINIMIZED.

Action

- Maintain the recently initiated Department of Public Works equipment reserve fund. This fund currently receives 100K dollars a year to fund equipment purchases as they are needed rather than borrowing to fund these purchases.
- The Selectboard should continue to develop and update its Capital Budget plan on an annual basis, in consultation with various Town departments, including its Facilities Committee, Road Foreman, and Fire Department

POLICY 13.1.2 TRANSPARENCY RE MUNICIPAL FINANCIAL MATTERS SHOULD BE MAINTAINED.

Actions

- Maintain the recently initiated professional audit on an annual basis. This standard practice allows tighter control of Town finances and reduces borrowing costs if they should arise.
- Maintain treasurer's report as an agenda item at Selectboard meetings.
- Implement suggestions and findings from the professional audit.

FINANCIAL CONSIDERATIONS

The cost trend of municipal government operations has varied in Shaftsbury over the past several years, as displayed below.

Total municipal expenditures (not including school costs), 2010 to Present

Fiscal Year	Expenditures
2009-10	\$1,442,792
2010-11	\$1,597,321
2011-12	\$1,658,335
2012-13	\$1,798,763
2013-14	\$1,704,707
2014-15	\$2,027,634
2015-16	\$1,798,171
2016-17	\$1,921,448
2017-18	\$1,934,579
2018-19	\$1,976,711

Predictably, the taxes paid by individuals owning property in Shaftsbury have varied accordingly over this same time period. Increases in property taxes have not been uncommon in Vermont communities in recent years and have led to a number of proposals for tax reform.

Tax Rate (Per \$100 Assessed Value) (Town and School Combined)

Year	District 1	District 2
	(N. Bennington)	(Shaftsbury)
	Resident/Non-Resident	Resident/Non-Resident
FY 2011	1.5794/1.6923	1.4452/1.6769
FY 2012	1.6023/1.6912	1.4634/1.6894
FY 2013	1.5249/1.6869	1.43665/1.6949
FY 2014	1.3763/1.3785	1.2038/1.3576
FY 2015	1.4173/1.4049	1.2014/1.3926
FY 2016	1.5047/1.4442	1.2443/1.4208
FY 2017	1.5041/1.4651	1.2558/1.4366
FY 2018	1.5012/1.4689	1.3177/1.4379
FY 2019	1.3972/1.4753	1.2746/1.4615

School taxes comprise the largest share of the local tax burden. Shaftsbury residents who live in "District 1" pay school taxes to support the North Bennington Elementary School as well as to the Mount Anthony Union Middle and High Schools, while residents in "District 2" pay taxes to the South Shaftsbury Elementary School and to the MAU secondary schools. The tax rates paid by residents of each district have been fairly even in the past two years, although the District 1 tax rate has been up to ten percent higher than the District 2 rate at times in the past decade.

The Town's expenditures for municipal services can be broken down into several categories: General Government (Selectors, Board of Civil Authority, Treasurer, Listers, Town Clerk, Planning and Zoning, building maintenance, clerical, etc.), Public Safety (Emergency Management, Constables, Animal Warden, Fire Warden, Fire Department - but not including expenditures on capital equipment), Public Works (utilities, transfer station, and all aspects of the Town Highway Department except for certain capital equipment), Appropriations (voted as separate articles at Town Meeting and including requests from human service agencies, libraries, and recreation committees, and certain capital equipment funds - e.g., fire truck and highway equipment replacement), and Employee Benefits and Miscellaneous Expenses.

Further details on Town financial matters can be found in the Annual Town Report, published and furnished to all taxpayers of Shaftsbury prior to Town Meeting.

14 | Relationship to Neighboring Towns and the Region

Goal 14.1 Shaftsbury should work to build relationships with neighboring towns, Bennington County, and southern Vermont, and seek regional economic opportunities.

POLICY 14.1 REGIONAL ECONOMIC DEVELOPMENT IS A PRIORITY.

Action

- Work with neighboring towns to implement economic development strategies.
- The Town should support and participate in the Regional Economic Development (RED) Group in developing a strategy for economic revitalization of southern Vermont.
- The Town should partner with the Bennington County Regional Commission on regional initiatives.
- Local officials in Shaftsbury and North Bennington -- including school boards, Selectors/Trustees, recreation groups, planning commissions, and others -- should make intermunicipal discussions regular events.
- Shaftsbury should be involved in the planning process for Glastenbury, through the BCRC, to ensure that new growth in Glastenbury is limited, and that the costs associated with any such growth will not impact the Town of Shaftsbury.

REGIONAL CONSIDERATIONS

Shaftsbury has the capacity to provide housing to support new commercial and industrial development within the Town, and to help support other employment centers in the Region. The Town has the capacity to attract new commercial and industrial development to provide employment opportunities, needed services, and to support the property tax base.

The road system is adequate to accommodate inter-town travel between homes and job and shopping sites. Tourist through-traffic is not problematic but increasing truck traffic is a concern.

Intermunicipal cooperation is clearly called for in issues regarding the local school situation (relationship between Shaftsbury, North Bennington, and the SVSU) and South Shaftsbury's public water supply (system owned by the Village of North Bennington, source protection area partially in Glastenbury). These issues have been identified in the text of this plan, and appropriate courses of action suggested.

Glastenbury is of particular interest to Shaftsbury, as any new growth in Glastenbury will inevitably lead to demands for services from Shaftsbury (e.g., education at Shaftsbury schools, road maintenance, provision of emergency services, etc.). Such impacts would fall on Shaftsbury because there is no municipal government in the unorganized Town of Glastenbury and because the only feasible access to private lands in the town is from Shaftsbury. A Memorandum of Understanding (MOU) exists between Shaftsbury and Glastenbury, which is renewable every two years. The MOU deals with municipal services including the transfer station, emergency services and roads.

APPENDIX A. SHAFTSBURY TOWN PLAN MAPS

Data Sources: Unless otherwise specified, data sources included:

Basemap: the ESRI ArcGIS Online World Topographic Map which includes cities, water features, physiographic features, contours, parks, landmarks, highways, roads, railways, airports, and administrative boundaries, overlaid on shaded relief imagery for added context. This basemap is compiled from a variety of authoritative sources from several data providers, including the U.S. Geological Survey (USGS), U.S. Environmental Protection Agency (EPA), U.S. National Park Service (NPS), Food and Agriculture Organization of the United Nations (FAO), Department of Natural Resources Canada (NRCAN), HERE, and Esri as well as the ESRI community.

Vermont GeoPortal: <u>http://geodata.vermont.gov/</u>. This site was the source of data on transportation, biological resources, water resources, tax parcel information and other data used in the maps.

Map 1.1 Town of Shaftsbury

Map 4.1 Aquatic and Terrestrial Systems. See description and available reports at

https://anr.vermont.gov/node/1182

Map 4.2 Rare species and Natural Communities

Map 4.3 Flood Hazard Areas and River Corridors

Flood hazard area data available from the FEMA Map Service Center at

https://msc.fema.gov/portal/home

Map 4.4 Bedrock and Surficial Geology

Map 4.5 Slope and Elevation

Map 4.6 Soil Characteristics

Soil data from the NRCS Web Soil Survey at <u>https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm</u>

Map 4.7 Shaftsbury Land Cover

Land cover data from the National Oceanographic and Atmospheric Administration C-CAP Land Cover Atlas available at https://coast.noaa.gov/digitalcoast/tools/lca.html

Map 4.8 Shaftsbury Water Resources

Map 4.9 Shaftsbury Agricultural Soil Types

Soil data from the NRCS Web Soil Survey at <u>https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm</u> Farmland Classification of Vermont Soils (2006) available from <u>http://landforgood.org/wp-</u>

content/uploads/CLE_Classification-System-Vermont-Soils-.pdf

Map 5.1 Town of Shaftsbury Land Use Plan

Land use designations from BCRC data

Map 5.2 Town of Shaftsbury Village Centers

Village center and historic district boundaries from BCRC data

Map 7.1 Shaftsbury Road Erosion Survey and Culvert Condition

Culvert data from VTCULVERTS available from https://vtculverts.org/

Road erosion and stormwater problem areas from Fitzgerald Environmental Associates, Colchester, VT

Map 8.1 Town of Shaftsbury Facilities

Map 10.1 Town of Shaftsbury Open Space Lands

Map 12.1 Town of Shaftsbury Existing and Proposed Solar Sites and Solar Potential

Data on existing sites from the Vermont Community Energy Dashboard available from https://www.vtenergydashboard.org/

Map 12.2 Town of Shaftsbury Potential Wind Resources

1000 m buffer from BCRC data

Map 1.1 Town of Shaftsbury



Map 4.1 Terrestrial and Aquatic Systems





Map 4.2 Rare Species and Natural Communities

Miles

5

Rare and Uncommon Species



Natural Communities



This map was prepared by the Bennington County Regional Commission in August of 2019. This map should be used for planning purposes only.

Map 4.3 Flood Hazard Areas and River Corridors

2019. This map should be used for planning purposes only. Number of structures in the Special Flood Hazard Area (SFHA) and/or River Corridor River SFHA Туре Corridor 1 1 Camp Commercial 1 2 Industrial 1 0 Manufactured 4 0 Homes Single Family 1 24 Home Other 2 2 Total E911 Sites 10 29

This map was prepared by the Bennington County Regional Commission in August of

Special Flood Hazard Areas

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4



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7Miles

5

Map 4.4. Bedrock and Surficial Geologyy





This map was prepared by the Bennington County Regional Commission in August of 2019. This map should be used for planning purposes only.

Map 4.5 Slope and Elevation

Miles

5





This map was prepared by the Bennington County Regional Commission in August of 2019. This map should be used for planning purposes only.

Map 4.6 Soil Characteristics



Map 4.7 Shaftsbury Land Cover

Cover Type Bare Land (107.8 acres) Cultivated Crops (498.1 acres) Deciduous Forest (13,285.7 acres) Cashi Brook Developed, High Intensity (28.1 acres) Developed, Low Intensity (489.0 acres) Developed, Medium Intensity (208.9 acres) Developed, Open Space (343.5 acres) Evergreen Forest (2,297.5 acres) Grassland/Herbaceous (87.9 acres) Mixed Forest (2,543.3 acres) Open Water (47.5 acres) Palustrine Emergent Wetland (319.8 acres) Palustrine Forested Wetland (912.4 acres) Palustrine Scrub/Shrub Wetland (565.9 acres) This map was prepared by the Bennington County Pasture/Hay (5,462.8 acres) Regional Commission in August of 2019. This map should be used for planning purposes only. Scrub/Shrub (354.5 acres) Walloomsac River



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Map 4.8 Shaftsbury Water Resources



MUNDER. **Agricultural Soils** Prime (4,098 acres) Prime (wetness limitations) (711 acres) BALD MOUNTAIN Prime (frequently flooded) (303 acres) Statewide (5,557 acres) This map was prepared by the Bennington County Regional Commission in August of 2019. This map should be used for planning purposes only. Statewide (wetness limitations) (158 acres)

Map 4.9 Shaftsbury Agricultural Soil Types



Map 5.1 Town of Shaftsbury Land Use Plan



Map 5.2 Town of Shaftsbury Village Centers



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Map 7.1 Shaftsbury Road Erosion Survey and Culvert Condition

Stormwater Problem Areas and Road Erosion Inventory

Culvert Condition



0 0.5 1

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3

5

Map 8.1 Town of Shaftsbury Facilties



Map 10.1 Town of Shaftsbury Open Space Lands





Map 12.2 Town of Shaftsbury Potential Wind Resources



Map 12.1 Town of Shaftsbury Existing and Proposed Solar Sites and Solar Potential



APPENDIX B | HISTORY

Shaftsbury citizens may find this section, created for an earlier version of the Town Plan by a member of the Shaftsbury Historical Society, of interest.

Evidence has been found by Vermont State archeologists along the Walloomsac River between Bennington, North Bennington and the New York State border flowing West, that indigenous people hunted, fished and encamped there dating back to the end of the B.C. and early A.D. periods. No evidence has been found, however, of precolonial settlement in Shaftsbury.

The town of Shaftsbury was created by Benning Wentworth, governor of the province of New Hampshire in 1761 when he granted 66 shares, comprised of 20,040 acres of land. The Town was named for the third Earl of Shaftesbury, England. By 1765 eighteen settlers had taken up residence in Shaftsbury. The first recorded birth in Town occurred in 1766. The Town's population increased to almost 2,000 people by the end of the 18th century.

Shaftsbury's 18th century history, when not interrupted by war, was besieged by bitter land disputes waged between New York officials and local settlers. Vermonters had established themselves on land granted by the governor of New Hampshire, while New York felt that it had sole authority to make land grants in Vermont. After several years of angry debate and confrontation, the "Green Mountain Boys" secured their land and homes.

When not fighting the "Yorkers", or the British during the Revolutionary War, Shaftsbury residents were hard at work making a living and carving a community out of the wilderness. The first church in Shaftsbury, (and the second in Vermont), was the First Baptist Church, established in West Shaftsbury in 1768. Town meetings were held from at least 1779, where decisions were made that ranged from establishing school districts to raising tax revenues to laying out new roads. In 1784 a new road was laid out from Center Shaftsbury to Arlington.

Agricultural grains, vegetables, beef; pork and dairy products were all produced in abundance by the beginning of the 19th Century. Early manufacturing focused on small home-based enterprises that produced potash, (from burning hardwood trees), flax, maple sugar and similar products. Potash was made into pearl ash, which was important for making soap and glass. Shaftsbury's first factory was a small tannery. In the 1800's the town became well known for its wool derived from Merino sheep. Large areas of land were cleared for pasturing these animals. By 1840 there were nearly 25,000 sheep in Shaftsbury.

Forests were cleared not only for cropland and pasture, but also to feed logs to the Town's saw mills, (there were 12 in Shaftsbury in 1840) and paper mills, (two in 1840), and eventually to produce charcoal for the Burden Iron Works, an iron smelter which operated from 1850 to the 1870's. The Burden Iron Works, headquartered in Troy, New York had iron mines in East Hoosick, New York, and North Bennington, West Bennington and Shaftsbury, Vermont. In Shaftsbury production of pig iron went from 149 tons in 1863 to 2,315 tons in 1865. Production ceased by 1869. Charcoal was made from hardwood trees on Shaftsbury land that bordered the west line of Glastenbury and on East Mountain. The 1869 Beers map of South Shaftsbury shows the small cluster of Burden's Ironworks buildings in the hollow between Paran Creek and the Rutland and Bennington Railroad. It is three quarters of a mile southwest of the village four corners and Paran Creek. The blast furnace, casting shed, blacksmith shop and the furnace bellows shop were at the east end of the complex. It encompassed approximately twenty-eight

acres of land in total. The land was later sold and resold to various enterprises such as Eagle Square, Stanley Tool, and presently Bernstein Displays. Some of the original Shaftsbury iron ore came from the old Peleg Cole Farm, later the home of Robert Frost's son Carol Frost.

Agriculture continued to be of great importance to the Town throughout the 19th Century. However, several young Shaftsbury farmers migrated westward, especially to Michigan. When the sheep boom ended in the mid 1800's, many remaining farmers turned to dairy farming. The number of farms and farm acreage declined, only slightly, through the first part of the 20th century. A radical change occurred between 1936 and 1940, however, when 46 Shaftsbury farms went out of business. Nationwide, the United States was coming out of the "Great Depression", and many of our youth joined the military with the onset of WWII. A number of our local farmers continued to work their farms in spite of the war. Bulk storage milk tanks and refrigeration eliminated several small farms and only a few large farms remained.

As the number of farms declined, the population became less dispersed and the village area began to grow. Together with improved roads and the advent of the automobile, the result was a town that became functionally much smaller than it had originally been. This trend was clearly illustrated by the opening of a single elementary school to serve Shaftsbury's students in the late 1950's. This applied to all, except North Bennington District I students.

A number of small industries have contributed to Shaftsbury's economy over the years. In addition to the tannery, iron works, saw and paper mills, there were grist mills, a woolen factory, cider mills and flax mills for linen cloth, carriage and wagon makers, a gunsmith, a boot maker, a cheese factory and creamery; also ochre, marble, iron and stone mining, and a flax wheel and walking wheel factory.

David Millington, inventor of grafting wax, spawned a prosperous business employing several people each spring in the mid 1800's traveling throughout the Northeastern United States grafting apple trees.

Jacob Merritt Howard of Shaftsbury wrote the resolutions that formed the Republican Party in 1854. When he became a state senator, he pressed for an Amendment to the U.S. Constitution to abolish slavery. His efforts and others led to the Thirteenth Amendment to the Constitution, prohibiting slavery.

Silas Hawes forged two old iron saw blades at right angles on his forge and made the first American carpenters square. Hawes obtained a patent on the square and in 1817 went into business with Stephen Whipple, a blacksmith living near him. After Hawes' patent expired in the 1830's several small shops were established to make squares.

Norman Millington invented the 24-tool graduator that greatly increased the squares' accuracy. In 1859 The Eagle Square Company was created from these earlier individual square holders. Stanley Tools later acquired the Eagle Square Company. In 1915 the company was sold to the Stanley Rule and Level Co. of New Britain, CT.

A new factory was built in Shaftsbury in 1971 and named Stanley Tools Eagle Square plant. Unfortunately, the plant closed its doors in April 2002, displacing 160 skilled employees. Bernstein Displays, manufacturer of mannequins and other retail display fixtures and systems, now occupies the former plant facility.

The Shaftsbury Historical Society has taken the responsibility of housing several of the former Eagle Square/Stanley Tool artifacts at the Governor Galusha Homestead Museum property on Route 7A.

These artifacts, given to the Historical Society by the Stanley Tools Company, will be on permanent exhibition in one of the barns on the Galusha Homestead property.

Transportation improvements have played a significant role in shaping the town. The railroad first came to Shaftsbury in 1852. This increased trade and travel. Greater connections of local and state roads have made it easier for people to work and travel in and from Shaftsbury. With the advent of a State Scenic Byways destination for Shaftsbury portion of Historic Route 7A in 2013, visitors will be more aware of Shaftsbury's history and beauty.

In 2012 Shaftsbury celebrated its 250th Anniversary and organized a series of events around this historic milestone. While Shaftsbury has seen much change in its two hundred and fifty year plus existence, these celebrations indicate that the town retains a strong sense of its history.

Additional information about Shaftsbury can be found in the book, "Ordinary Heroes, The Story of Shaftsbury", by Ruth Levin and Tyler Resch, which was a source of much of the information presented in this chapter.

A listing of some of the notable historic sites in Shaftsbury follows. Several of the listed homes are on the State Historic list or the Federal Historic District list.

Robert Frost House Museum, 121 P.O. Box, Historic Route 7A, owned by Bennington College

Howard Stone House, Fortress/farmhouse, c.1770, 210 Buck Hill Road, South Shaftsbury

Parker Cole House, c. 1783, P. Cross, 217 Buck Hill Road, South Shaftsbury

Cole Hall, 1835, originally a church now the Town Hall, 61 Buck Hill Road, South Shaftsbury

Shaftsbury Country Store, E.T. Galle, 972 Historic Route 7A, South Shaftsbury

Eagle Square Mfg. (1820) Carpenter Square, Bernstein, Route 67. South Shaftsbury

Grist Mill Gerlach House, (c. 1823) Historic Grist Mill, Habberfield, 1197 Historic Route 7A

Site of Burden Iron Works and Mines near Paran Creek, South Shaftsbury

Site of Cross-Collins Marble Quarry, North end of Cross Collins Road near White Creek, New York border, R. & V. Shemeth, 1214 Cross Hill Road, North Bennington

Monroe Hawkins House, c. 1807, one of Vermont's finest Georgian residences, Bushee, 1696 Historic Route 7A

Grateful Morning Farm, c. 1807, Historic farm located off Historic Route 7A in Center Shaftsbury, Riordan, 75 Lawrence Road

Huntington-Dufresne (white pillar) c. 1858, Historic brick Federal house with single pillar, Dufresne, 3263 Historic Route 7A, Center Shaftsbury

David Galusha Inn-Weeks House, c.1787, Colonial Inn, M. & M. Sargent, P. O. Box 475,

Historic Route 7A, Center Shaftsbury

Brick School House, c.1814, B. & E. Hulet, 3486 Historic Route 7A, Center Shaftsbury

Center Shaftsbury, Baptist Church, c.1846, Museum, Shaftsbury Historical Society, Historic Route 7A, Center Shaftsbury

Governor Galusha House, c.1783, Georgian Architecture, Shaftsbury Historical Society Museum, 3871 Historic Route 7A, Center Shaftsbury

Mattteson/Topping Tavern, c.1777, Tavern, Museum now private residence, D. Sprague, 5148 East Road

Jacob Merritt Howard House, brick house, 957 Trumbull Hill, Author of 13th Amendment (outlawing slavery) and the founder of the Republican Party, Pullman Farm, 957 Trumbull Hill

Amos Huntington House, c.1782, Peters Four Corners, 2172, K. Moriority

State Line House, c.1800, Stately brick Georgian/Federal combination, originally a tavern with an interesting history, S. Cottrell, 37 State Line Road, West Shaftsbury

Colonel Baum Historic marker, German mercenary leader at Battle of Bennington, W. & E. Crosier, 1170A, Route 67W, Shaftsbury

Simon Bottum House, c.1795, Federal house probably part of underground railroad, M. Kudesh, 5206 Historic Route 7A, North Shaftsbury

Nathan Bottum House, c.1858, S.Balutis/T. Huncharek, 5055 West side of Historic Route 7A, North Shaftsbury

Nathan Bottum House and Barn, c.1855, B. Buxbaum, 5072 East side of Historic Route 7A, North Shaftsbury

Carpenter House, c. 1765, one of, if not the oldest house in Shaftsbury, Ann Knapp, 1584 West Mountain Road

Issiah Mattison House, c. 1810, home of early Baptist minister, near Route 67, 170 Mattison Road, Bennington College owner

Brick Row/Shoe Lane c.1860, Excellent example of industrial row housing, built by the North Bennington Boot and Shoe Company for its workers, Route 67 near Whitman's Feed, owners Shires Housing, Richard Howe and Timothy Smith

Amos Huntington Jr. House, c.1788, E. & P. Viereck, 2 Cold Spring Road

Rev. Caleb Blood House, c. 1768, Pastor Baptist Church, Center Shaftsbury, DeNatele, 3795 Historic Route 7A, Center Shaftsbury

Abitha and Rachel Waldo House, c. 1764-65, perhaps as old as the Carpenter House as the oldest in Shaftsbury, meat stored for participants in the Battle of Bennington, D. Newell, 3339 Historic Route 7A, Center Shaftsbury

Huntington-Spencer House, c. 1835, Greek revival façade, Bergman, 3716 Historic Route 7A, Center Shaftsbury

O'Dell House, c. 1785, once used as a post office, O'Dell, 3376 Historic Route 7A, Center Shaftsbury

Town House, c. 1847, Greek Revival style small version of Baptist Church, used for Civic functions later for gift shop. B. & E. Hulet, Historic Route 7A, Center Shaftsbury

Norman & Amelia Douglas House, c.1850, owned by one of the principal owners of the Eagle Square Manufacturing Company, Historic Route 7A and Tunic Road, 3474 Historic Route 7A, Center Shaftsbury

Myers House, c.1855, Salva, 2630 Historic Route 7A, on corner of 7A and Myers Road

Cole-Stone House, c.1825, First schoolhouse in Center Shaftsbury, R. Holmes, 3465 Historic Route 7A, Center Shaftsbury

Harrington/Stickels House, 19thc. & 18thc. Cape house, home of famous Vermont quilter, Her famous quilt is displayed in the Bennington Museum and a photocopy of the same quilt is on permanent display at the Shaftsbury Historical Society Galusha House Museum. Doggett, 3868 Historic Route 7A, Center Shaftsbury

Asa Whipple House, c. 1840, Martinka, 3367 Historic Route 7A, Center Shaftsbury

Galusha/Berezny House, c. 1810, Morris/Baker, 3111 Historic Route 7A, Center Shaftsbury

Baptist Parsonage/Brooks, c. 1849, E. & T. Galle, 3036 Historic Route 7A, Center Shaftsbury

Dyers House, c. 1855, Serraro, 3906 Historic Route 7A, Center Shaftsbury

Hulet/Gronning, c. 1800 cape, Second Chance Animal Shelter owner, now office, on Arlington line, P.O. Box 620, North Shaftsbury

M. Affleck, c. 1800 cape, on Arlington line near State Park, 6846 Historic Route 7A, North Shaftsbury

Van Ness/Gronning, Late 17c./Early 18thC., Dutch Barn, relocated, M. & N. Gronning, 6645 Historic Route 7A, North Shaftsbury

Ayers/Goodwin House, Late 18thc. Cape, C. & D. Goodwin, 6151 Historic Route 7A, North Shaftsbury

Babcock Spinning Wheel Factory, Late 18thc., Spencer/Montgomery/Mattison House, M. & J. Race, 5879 Historic Route 7a, North Shaftsbury

Peleg Spencer House, Late 18thc/Early 19thC., Federal two-story house, Jay Palmer, 5529 Historic Route 7A, North Shaftsbury

N. Bottum House, Ca. 1800, Salt Box, D. & P. Herzfeld, 4919 Historic Route 7A, North Shaftsbury

McCarthy house, Ca. Early 1800's, Two story Federal House, 938 Historic Route 7A, South Shaftsbury

M. Cross House, Early 19thC. brick Federal House, 855 Historic Route 7A, South Shaftsbury

W. Pennebaker House, Ca. 1780-1805, Cape, Relocated, 1799 Maple Hill Road, East Shaftsbury

Reuben Mattison House, Ca., 1790-1805, Half story colonial, M. Carver, 1370 Old Depot Road, North Shaftsbury

Potter-Montgomery House, Ca 1780, center-chimney cape. Potter-Montgomery Road, East Shaftsbury

North Shaftsbury Community House, former country church, Ca 1900, Depot Road, Shaftsbury Community Hall