

**2018 MUNICIPAL DEVELOPMENT PLAN**  
**FOR**  
**TOWN OF BARTON**  
**BARTON VILLAGE & ORLEANS**  
**VILLAGE**



**Planning Commission Hearings:**

**April 26, 2016**

**April 27, 2016**

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**October 26, 2017**

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Barton Municipal Development Plan  
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\*This document and the associated planning maps were developed with the assistance of a Municipal Planning Grant award from the Vermont Agency of Commerce and Community Development.

## A. MUNICIPAL DEVELOPMENT PLAN

Town Planning should begin first by evaluating the specific and philosophical goals of the townspeople. This should include an overall assessment of what the residents wish the town and villages to “look” like 5 to 10 years from now. The MUNICIPAL DEVELOPMENT PLAN should attempt to address current development problems as well as plan for orderly growth to the economic and environmental benefit of all, and balancing any planning goals with the individual property rights of its citizens. It is critical that the planning effort address those issues which are of serious concern to the citizens of the town of Barton and to both incorporated villages within the town. Adopted regulations should further the goals of this Plan; be the minimum necessary to promote and protect the interests of the municipalities; and, should incorporate some degree of FLEXIBILITY so that all proposals may be considered on their own merits.

Planning is the basic art of deciding how to accommodate growth and development in a given location. Analyzing existing land use patterns is a good starting point. Present and planned uses should be compatible with each other and, in addition, those uses should be supported by existing topographic conditions, natural resource constraints, as well as necessary manmade utilities. An inventory and analysis of existing land use patterns, soils and their capabilities, topography, building and environmental conditions, transportation, community facilities, utilities and the economy is contained in this Plan. Municipal plans, once adopted, have an effective life of 8 years under Vermont statute. However, plans may be amended at any time and should be reviewed periodically to ensure that the plan is relevant.

The MUNICIPAL DEVELOPMENT PLAN discusses several different districts. Each district is described based on its’ historic and/or current land use and natural features. These districts should correspond to the land use districts identified in the Town’s Zoning Bylaw. The MUNICIPAL DEVELOPMENT PLAN should identify what the land use requirements will be in the future in that there must be sufficient land area in each district to support reasonable future projected populations.

The MUNICIPAL DEVELOPMENT PLAN also acts as a guide to the District Environmental Commission in the Act 250 process and the Public Service Board in its Section 248 process to ensure that state permits do not contradict the planning goals approved by the townspeople. Before the District Commission grants a permit, it must find that the proposed land development is in conformance with a duly adopted MUNICIPAL DEVELOPMENT PLAN as approved by the Town. The Municipal Development Plan is, therefore, a policy and “goals” document.

The actual document used in the implementing these “goals” is called the ZONING BYLAW. Once adopted, the Zoning Bylaw remains in effect until it is next amended or repealed. The Zoning Bylaw sets forth the specific rules for accomplishing

and achieving the “goals” as defined in the MUNICIPAL DEVELOPMENT PLAN. The Zoning Bylaw may also incorporate “performance standards” to be utilized as an option where flexibility and latitude can promote the town “goals” more efficiently than the so-called “standard requirements” of a district. Municipal SUBDIVISION REGULATIONS may be incorporated into the BYLAW to provide guidance for the division of land into multiple lots and parcels.

Finally, public education and awareness is essential for the success of any plan. The citizens of Barton have a vested interest in staying involved with the direction of land use planning and development for their town or village.

24 V.S.A., Chapter 117, Section 4382(a)(1) requires: *“A statement of objectives, policies, and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment”*;

## B. GENERAL STATEMENT OF TOWN GOALS

The Town of Barton Planning Commission is comprised of members appointed by the Selectboard and charged with the duty of formulating a MUNICIPAL DEVELOPMENT PLAN and ZONING BYLAWS. The following basic goals are believed to represent the wishes of the majority of town’s residents.

### IT IS THE GOAL OF THE TOWN TO:

1. Promote compatible land uses within the various districts of town and to protect the value and integrity of existing land uses and natural resources including water bodies, significant wildlife and fish habitat; but with extra attention given to those structures and uses which by their nature may have an adverse negative impact on the scenic character of some of these areas.
2. Allow all reasonable land uses with minimal regulatory delay.
3. Maintain the current character of the town and villages, yet encourage the economic and cultural growth of the entire community.
4. Provide fair and equitable guidelines for promoting town goals and to treat all citizens equally in the administration of its by-laws.
5. Provide a mechanism for flexibility when strict compliance with adopted standards does not promote the overall goals of the town.

24 V.S.A., Chapter 117, Section 4382(2) requires: *“A land use plan, consisting of a map and statement of present and prospective land uses, indicating those areas proposed for*

*forests, recreation, agriculture (using the agricultural lands identification process established in 6 V.S.A. § 8), residence, commerce, industry, public, and semi-public uses and open spaces reserved for flood plain, wetland protection, or other conservation purposes; and setting forth the present and prospective location, amount, intensity, and character of such land uses and the appropriate timing or sequence of land development activities in relation to the provision of necessary community facilities and service”;*

## C. LAND USE

The Town of Barton reflects stream valley development of roads and railroads along the Barton River, Crystal Lake and southeasterly along the Willoughby Brook, which currently defines U.S. Highway 5 and the route of the Northern Vermont Railroad (formerly Canadian Pacific Railroad). Major topographic features which have historically limited development include the areas with steep slopes to the east along the northeastern shore of Crystal Lake. Barton Mountain, in the northern central area of the Town, and Stillwater Swamp, to the east of the mountain has also had an impact on how the land in Barton has been developed. Generally, the Town is characterized by rolling topography with numerous small streams draining through the area into the Barton and Willoughby Rivers.

Currently, agricultural land is spread out generally throughout the Town, although conversion of some farm land to residential uses has substantially increased over recent decades. The ongoing trend of dairy farm consolidation continues to decrease the number of farming units while at the same time average farm size has increased. The number of Farm parcels on the 2013 Grand List for the entire town of Barton was 20. Similarly, there are also 20 Woodland parcels in the Town.

Residential units are clustered in single, two and multi-family structures within the two village areas. The vast majority of these units are of older construction varying in age between 50 to 150 years old. Single family residential units, interspersed with farming operations, are located along local town roads, State Highway 16 and U.S. Highway 5, with some of these units being seasonal in nature. The 2013 Grand List shows that there are 685 Residential-1 (dwelling and <6 acres) properties in Barton, primarily in the village areas, and 272 Residential-2 (dwelling and >6 acres) in the town and mainly outside of the village areas. There are also 133 Mobile homes in the community (78 with land and 55 without land), and 14 Commercial Apartment buildings.

Crystal Lake has been developed for recreational uses in the form of seasonal units along the north, eastern and western shores, a State and Village park to the north and recreational oriented accommodations, (year-round and seasonal) units along U.S. Highway 5. Current 2013 information on file with the Town of Barton Listers Office indicates that there are now approximately 134 vacation homes in the Town of Barton (86 with a dwelling and <6 acres, and 48 with dwelling and >6 acres).

Current Commerce and Industrial land uses are concentrated in the Barton and

Orleans Village areas. The largest industry in this area is limited to Orleans Manufacturing, a division of Ethan Allen, Inc. The 2013 Grand List indicates that there were 77 Commercial properties, 4 Industrial properties, and 5 Utility properties in the Town.

## LAND USE DISTRICTS (These correspond with local Zoning Districts)

### 1. 'RESOURCE DISTRICT'

This category includes land generally characterized by poor or limited road access, public infrastructure, thin or poor soils, steep topographic conditions and remoteness from existing concentrated settlement. The development of lands in this category could cause undue damage to the environment by the extension of roads and public utilities necessary to serve the area. Further, the burden of road or public utility maintenance could become an undue expense to the owner, future owner, public utilities, and the town. For this reason, standard lot size in this district (10-acres or greater) will be larger than any other district. The remote district also includes a large majority of the towns' wildlife habitat, forestry and agricultural resources, source protection areas (i.e. wellheads), including headwaters of high quality streams and brooks. All of these natural resources are best preserved by minimal or limited development.

The suitability of these areas for development should be demonstrated by the landowner through meeting reasonable performance development standards for this district as reviewed through conditional use review.

The "resource district" category includes most of the southern half of the Town around Crystal Lake, Wheeler Mountain, May Pond, and Barton Mountain. There are also resource district designations around Baker Pond and the Barton and Willoughby Rivers.

### 2. 'LOW DENSITY'

This area is designed for agriculture and forestry enterprises, low-density residential development, limited commercial development, and other non-intensive uses of the land. Low density areas are designated where dwelling units will be placed on lots of at least five (5) acres and will not be provided with municipal sewer or water in the foreseeable future. Development in this district will be buffered by existing trees and topography, so as to promote the current rural setting while at the same time providing an atmosphere of privacy within a reasonable distance to the central more populated areas of the Town.

The "Low Density" district is the largest category of land use in the Town. It includes most of the northern half of the Town between the villages.

### **3. ‘MEDIUM DENSITY’**

The designation of the “Medium Density” district hinges primarily upon current availability and the designation of feasible (future) extensions of sewer and water utilities and proximity to the existing villages of Barton and Orleans. The existing settlement patterns and the transportation networks support denser development in these areas.

The “Medium Density” district will contribute towards the growth of built up sections which have already been developed.

The areas proposed for this category are those in which Municipal sewer and water facilities are most feasible. Compact development is by far the most economical and efficient method for providing these municipal type services. Minimum lot sizes in this district range from 0.5 – 2.0 acres in size.

Lands in the “Medium Density” district are primarily limited to lands adjacent to the incorporated limits of Orleans Village and Barton Village as these areas are served by exiting municipal sewer and water, or the ability to extend services is reasonable. The district extends from each of the village centers, making access by walking or bicycling reasonable.

### **4. ‘HIGH DENSITY’**

The ‘High Density’ district is designed to be the location for the most intense levels of residential development in the Town. Again, this is primarily limited to the incorporated Village areas in keeping with the State’s goal of compact, dense villages surrounded by less-developed areas and working lands. It is contemplated that dense residential and limited commercial development will be located in these village areas. Sewer, water, and electric utilities are readily available and the central business district is nearby. The minimum lot size in this district is 7,000 sq. ft. or 0.167 acres.

### **5. ‘MIXED USE’**

Designated ‘Mixed Use’ areas are designated to provide for a reasonable level of commerce, employment, access to goods and services, and housing in the Town and Villages. Mixed Use areas are located within both villages, an area along Route 5 south of Barton Village, and along Route 16 from the I-91 interchange to the Glover town line. The minimum lot size in this district is 0.5 acres.

### **6. ‘INDUSTRIAL’**

Industrial areas are designated in the Town based on existing settlement patterns,



facilities and services. It is important that industry be located so as to optimize positive aesthetic effects and minimize negative impacts upon other land uses (e.g. residential or commercial uses). In permitting industrial uses, the benefit to the project area must be weighed against the effects industrial development can have upon the economic balance and character of the community.

There are existing industrial areas in and near Orleans Village. A continuation of the Industrial district is located south of Orleans Village along Route 5. Recently, there has been a new freight rail siding installed in this area for an agricultural enterprise, and the Town's recycling center is located here as well. The minimum lot size in this district is 1.0 acre.

The Orleans Industrial Park, located south and west of Route 5 is designated as an industrial area. The park is approximately 28 acres in size. Almost thirty years since its inception, only three established businesses have set up operations within the park. The vast majority of acreage available within the park (22.8 acres) remains vacant. It is generally believed that the park has good commercial potential since it borders upon, and has easy access to Interstate 91, and is within close proximity of an established state railway system which runs through Orleans Village. Since the park is located west of the center of the village, it is not contiguous with any residential concentrations within the village. Local officials and development organizations should increase their efforts to encourage the commercial development of this asset. In March 2013, the Orleans industrial park was designated as a Magnet Site for the region's official Foreign Trade Zone (FTZ) designation. Importing and manufacturing businesses that locate within the site may be eligible for reductions in customs fees, duties, and tariffs under FTZ regulations. Warehousing and distribution operations may receive FTZ benefits immediately upon setting up.

## **7. Shore Land Areas**

This district governs land uses around one of Barton's most valuable natural resources; its lakes and ponds. The depth of this district (250 ft. from the shoreline of lakes and ponds) is determined generally by the topography and existing land uses which tend to define the extent of shoreline related activity. For the continued enjoyment and use of these resources, by its' residents and the public, there is a vested interest in preserving water quality, essential for swimming, fishing and recreation, by preventing and eliminating pollution and by encouraging responsible and compatible development. Accomplishing this task requires a delicate balance between establishing standards for development and preserving the rights of individuals to make reasonable use of their property. It is recognized that both land values and property taxes have increased more dramatically in the shore land district around lakes than for properties in other districts.

Due to recently passed legislation, as of July 1, 2014, the development of all lots within 250 ft. of lakes and ponds lakes larger than 10 acres in size is also subject to review and approval by the Vermont Agency of Natural Resources.

New lots created within the “shore land” areas shall comply with the required minimum basic dimensional standards of the underlying district and shall be sufficiently large to protect neighboring properties and general water quality to the extent possible.

Since July 1, 2007, all new subsurface wastewater disposal systems and replacements are subject to regulation by the Vermont Agency of Natural Resources. The Town does not intend to seek jurisdiction to regulate these facilities in the future.

Reasonable shoreline setbacks and vegetative buffers serve to create a protection between developed land and the shoreline or bank in order to provide better habitat for the fish, to trap sediment and nutrients before they reach the water, and to provide habitat and wildlife access to the shoreline. It is important to note that development along shore lands borders valuable natural public resources. Development requirements are sensitive to protecting a landowner’s right to use their property while at the same time balancing the environmental concerns of the public.

The shore land areas of Crystal Lake, May Pond, Wheeler Pond, and Baker Pond are included in the water bodies subject to regulation by the Vermont Agency of Natural Resources.

## **8. Floodplains**

Development in flood hazard areas may be regulated but not prohibited unless the development is to be located within the floodway itself. Unregulated development in these flood hazard areas can be hazardous and detrimental to all property owners in the floodplain. The Barton Zoning Bylaw contains flood hazard area regulations to comply with the Towns participation in the National Flood Insurance Program (NFIP) which is administered by the Federal Emergency Management Administration (FEMA). Owners of existing and proposed structures are eligible for federally subsidized flood insurance with the Towns participation. so that owners of existing and proposed structures are able to obtain flood insurance for their property under the National Flood Insurance Program. The current flood maps and flood insurance study were completed by the Federal Emergency Management Agency in 1992. Accurately documenting the development in and around the flood hazard areas is required important for participation in the National Flood Insurance Program. Additional discussion can be found in the Flood Resiliency section.

## **9. Wetlands**

Wetlands are those lands where the water table is at or near the surface of the land or the land is actually covered by shallow water. To be defined as a wetland, and the area

much have one or more of the following attributes: (1) at least periodically, the land supports significant vegetation or aquatic life which depends on saturated or seasonally saturated soils conditions for growth and reproduction; (2) the substrate is predominately un-drained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year. Among other things, wetlands store floodwater which reduces flood levels, they purify water by breaking down nutrients and pollutants, they provide critical habitat for fish spawning and feeding, they provide habitat for ducks and other waterfowl, they provide habitat for mammals, amphibians and reptiles, they provide recreational and educational opportunity as well as contribute to the open spaces and general beauty of the landscape.

A number of wetland areas in the Town of Barton are on the national Wetlands Inventory Mapping. The Army Corps of Engineers has control over discharge of dredged or fill material into certain designated wetlands under their jurisdiction.

The Vermont Agency of Natural Resources has control of Class I and Class II wetlands including 100 and 50 ft., respectively, buffer zones along their defined perimeters. Class III wetlands are unprotected wetlands which are not Class I or II and have not been determined to have sufficient value for protection under Class I or II.

The Town Plan and Zoning Bylaw propose no additional protection to wetlands beyond that provided by the State and Federal Regulatory Agencies, nor will the Town attempt to determine or define wetland areas as this is more of a role for State Agencies.

It is the intent of the Town plan to notify the citizens of Barton to be generally aware of wetland regulations and to obtain the proper state/federal determinations before attempting to fill or dredge a possible wetland area. Copies of National Wetlands Inventory Maps are available for viewing at the Town Clerk's office.

It is also noted that significant protected wetland areas may exist that is not fully or correctly delineated on the national Wetland Inventory Mapping. Landowners should verify these locations prior to commencing any land development which might impact these protected areas. State and Federal Laws provide for severe fines for unlawful filling, dredging or harmful alteration of protected Wetlands. The State of Vermont revised its definition of "significant wetlands" in 2010, and this expanded the amount of Class 2 wetlands in the Town.

## **10. River Corridors**

The Vermont Agency of Natural Resources has developed river corridor data layers for Vermont communities to use for better land use planning and regulation. This came about from the catastrophic damage caused by Tropical Storm Irene. Identified river corridors hold the potential for erosive damage to occur, unlike the damage from

inundation events normally seen when rivers overflow their banks. For Barton, the Planning Commission should consider amending the bylaw to allow for increased setbacks from the river corridors identified by ANR.

24 V.S.A., Chapter 117, Section 4382(5) requires: “A *statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources*”;

#### D. NATURAL RESOURCES, PUBLIC LANDS, RARE & IRREPLACEABLE NATURAL AREAS, SCENIC, and HISTORIC FEATURES & RESOURCES.

##### Overview:

It is clear that the Town’s natural resources and public lands serve as a strong tourist and recreational attraction. Tourism will likely remain one of the Town’s leading economic industries for the foreseeable future. For this industry to thrive, the Town’s natural resources must be protected. These resources include Crystal Lake, Baker Pond, May Pond, Wheeler Mountain, May Hill, Barton Mountain, the Lee Emerson Memorial Forest, and Crystal Lake State Park (listed on the National Registry of Historic Places), and also the Willoughby Falls Wildlife Management Area and the Barton River, all of which contribute to the unique scenic beauty of the area. Barton residents should have a general awareness of how these resources are critical to the town’s economy and environment.

Barton residents and the general public utilize and access the town’s natural resources in a number of ways. It is important to identify these resources and measures implemented to provide access to them. The state Fish and Wildlife Department has taken steps over the years to provide public access to public waters. These include developed boating access on Crystal Lake, and May Pond, and undeveloped boating access on Baker Pond, one developed angler parking area on the Barton River, one at the confluence of the Willoughby and Barton Rivers, and one at Willoughby Falls. Over 130 acres of Willoughby Falls Wildlife Management Area are in Barton. Also, during the 1950’s and ‘60’s, the Department of Fish and Wildlife acquired significant amount of stream bank land to provide fishing access and create a greenbelt along certain rivers. These include portions of both banks of the Barton River in the Town and the banks of the Willoughby Falls which are also in State ownership. It is well established that the Willoughby Falls springtime fishing contributes significantly to the local economy. Because many of Barton’s primary natural resources are its water bodies, the Town of Barton will protect these waters through floodplain management, buffer zones and development setbacks.

Rare plants, animals and natural areas have been identified in the larger remote areas of town or located in designated wetland areas and are protected by the State of Vermont.

Historic structures have been identified by local, state, and federal agencies and other structures may be eligible for listing. Owners of these properties are encouraged to preserve these structures when economically and functionally appropriate, although there will be no specific requirement to do so without sufficient economic incentive or assistance. The Crystal Lake Falls Historic District (also known as the Brick Kingdom) is a historic site in Barton Village. It is located along Water Street. It was added to the U.S. National Register of Historic Places on August 7, 1994. The Crystal Lake Falls Historic District is known covers several blocks of the village. Roughly, Water St. from Church St. to Main St., Main from Water to Duck Pond Rd. and West St. from Cemetery Rd. to Main[1] The latter areas is known colloquially as the "Brick Kingdom." Harnessing power from the falls from Crystal Lake, factories clustered along Water Street. These manufactured piano works, furniture, ladies cotton garments, and baseball bats. Some of these dated to the 1790s. These mostly closed by the 1940s, with the last leaving in 1952.

24 V.S.A. Section 4382(3) requires: “*A transportation plan, consisting of a map and statement of present and prospective transportation and circulation facilities showing existing and proposed highways and streets by type and character of improvement, and where pertinent, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads, and port facilities, and other similar facilities or uses, with indications of priority of need*”;

## E. TRANSPORTATION PLAN

### 1. Existing Transportation

Currently the main U.S. highways for transportation to and through Barton are U.S. Route 5 and Interstate 91 linking Barton with Newport to the north and Lyndon and St. Johnsbury to the south. State Highway 16 links Barton with Hardwick and Montpelier (and Westmore to the east) and State Highway 58 provides access to Irasburg and Brownington. A state-owned rail line (Vermont Rail Company) carrying freight trains run through Barton along the Route 5 corridor through the built-up areas of both Villages. Historically, traffic levels have shown a gradual increase along Route 5 especially at the Interstate 91 interchanges. . Generally since 2003 AADT has declined or held steady on I 91and US Rte 5. Data is available in ATR Station History 2003-2013.

[http://vtransplanning.vermont.gov/sites/aot\\_policy/files/documents/trafficresearch/ATRStaHist2003\\_2012.pdf](http://vtransplanning.vermont.gov/sites/aot_policy/files/documents/trafficresearch/ATRStaHist2003_2012.pdf)

For the past 150 years, the Town has been a throughway area for railroad traffic with one of the State’s major railways passing through both villages. Over the years this access to rail contributed to the economic development of the Town. The availability and frequency of rail service has steadily declined over time as greater emphasis was placed on trucking to satisfy time-sensitive delivery of freight. However, with the recent escalation in energy costs, this decline has begun to reverse itself and increased usage of

rail is expected in the foreseeable future. The railway is currently owned by the State of Vermont through the Agency of Transportation (VAOT) and operated by the Connecticut River Subdivision of the Washington County Railroad. There have been recent upgrades made to sections of the railway passing through Barton and these are ongoing. A rail siding has been constructed just off of May Farm Road that will be used as a freight trans-load facility for agricultural and non-agricultural products.

## 2. Proposed Transportation

The transportation plan for Barton recommends the upgrading or maintaining of existing roads to meet certain standards which are commensurate with the most recent version of the VAOT Orange Book a handbook for Local Officials.

[http://vtransoperations.vermont.gov/sites/aot\\_operations/files/documents/AOT-OPS\\_OrangeBook.pdf](http://vtransoperations.vermont.gov/sites/aot_operations/files/documents/AOT-OPS_OrangeBook.pdf).

U.S. Route 5, State Highway 16 (south of the Village of Barton) and State Highway 58 (west of Orleans Village) are classified as rural major collectors. Roads classified as major collectors are designated to handle traffic between counties and the population centers which are not served by higher classification roads and to link population centers with other traffic generators. Town Highway #1 (a.k.a. State Highway 16 east) north of Barton Village, State Highway 58 (east of Orleans Village, Town Highway 2, and Roaring Brook Road are classified as rural minor collectors. These roads are designed to link local roads with major collectors, tie them in with smaller settled areas and link important local traffic generators with rural areas.

The Road Commissioner(s), Select Board, and Trustees should develop a priority list and repair schedule for roads and Bridges most in need of repair or upgrade. The town should review and prioritize particularly the town short structures (Bridges under 20 ft) as these are not inspected by VAOT unless specifically requested by the Town. The Barton Planning Commission supports the widening of shoulders on VT Rt. 16 and US Rt. 5 to improve accessibility and safety for cyclists and pedestrians.

An informal “Park and Ride” area exists at the junction of U.S. Route 5 and VT Route 58 in Orleans Village. . The Town and/or Villages should explore development of formal park and ride locations through the Municipal Park and Ride Grant Program:

<http://vtransengineering.vermont.gov/sections/ltf/parkandride>

Car and van pooling not only conserves energy but also reduces Vermont’s carbon footprint and should be encouraged going forward. In addition, Rural Community Transit (RCT) provides valuable shuttle service for area senior citizens and the disabled adding to the benefits of group transportation.

Bridge and culvert maintenance is an important activity that extends the useful life of transportation infrastructure. Local road departments should utilize VOBCIT (VT Online Bridge and Culvert Inventory Tool) to keep their inventory updated annually <http://www.vtculverts.org/>

There have been developments at the Newport State Airport in Coventry over recent years and more is planned, including a runway extension to accommodate larger aircraft. There may be business opportunities associated with the airport development that could benefit local businesses in Barton.

Both Orleans and Barton Villages have sidewalk networks that are important for residents to safely and efficiently move around the community. The Villages should prioritize sections that need to be connected and plan upgrades for accessibility, as well as develop a reasonable maintenance cycle to protect the investment. Vermont has a Bicycle and Pedestrian Grant Program that each Village should consider to make improvements: <http://vtransengineering.vermont.gov/bureaus/mab/local-projects/bike-ped>

Bicycling is common on roads within Barton and its villages. By visiting the web link [www.nvda.net/files/cyclingthekingdom070413.pdf](http://www.nvda.net/files/cyclingthekingdom070413.pdf) it becomes apparent that Barton is an important community in the region's popular bicycle networks. The "Around the Block" loop passes through Barton in a north-south direction, while Rt. 16 connects Barton with communities east as part of the "Glacial Lakes" loop. Maintaining adequate road shoulders along all paved roads in the town is important for bicycle traffic.

Access management is important for protecting the functionality of Town and State Highways. This is done by controlling the location and number of access points onto the highways. Both VAOT and the legislative bodies are responsible for issuing 'curb cut' or 'access' permits for new developments that need to access local highways.

The Town would support a greater use of the existing rail facilities for commerce, especially if it reduced or avoided additional freight traffic on existing highways in the Town. There are rail sidings in Orleans and south of Barton Village, and a new facility just off of May Farm Road. There is room to expand economic activities at the May Farm site.

24 V.S.A., Chapter 117, Section 4382(4) requires: "*A utility and facility plan, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed educational, recreational and other public sites, buildings and facilities, including hospitals, libraries, power generating plants and transmission lines, water supply, sewage disposal, refuse disposal, storm drainage, and other similar facilities and activities, and recommendations to meet future needs for community facilities and services, with indications of priority of need, costs and method of financing*";

## F. COMMUNITY FACILITIES, UTILITIES & SERVICES

### 1. EXISTING FACILITIES, UTILITIES & SERVICES

#### a. Municipal Buildings

The Town offices, including the Town Clerk's office, Listers' office, the Zoning Administrator's office and municipal meeting room are located at 34 Main Street in the Village of Barton. These offices were originally located on the second floor of the Howard Bank Building but were moved to a separate, newly renovated building at the south end of Main Street in 1999.

The Village of Barton has a centrally located, two-story, brick municipal building, called the Memorial Building. Built in 1931, the building appears to be in good condition and provides adequate space. The left side of the building houses the Villages offices on the first floor, the American Legion Hall, with kitchen facilities, on the second floor; while the right side of the building is a 400-seat auditorium with movie facilities, a stage for theatrical productions, and a new elevator for handicapped access. There is a small meeting hall, with kitchen facilities, for various groups and organizations along with storage spaces for village vehicles on the ground level. The basement is used as a meeting hall for various groups and organizations, including an active senior center. The building also functions as an emergency shelter and operations center.

The Orleans Municipal building is a brick, three story building build in 1929. On the first floor are the village municipal offices, reception hall and kitchen facilities. The second floor is a 440-seat auditorium with movie facilities and a stage for theatrical productions. The Masonic Order and the Order of the Eastern Star, with dining and kitchen facilities, share the third floor. In recent years, the building has benefited from a number of renovations and is in good condition. The building also functions as an emergency shelter and operations center.

#### b. Police Protection

The Villages of Barton and Orleans and the Town of Barton receive law enforcement services from the Orleans County Sheriff's Department and the Vermont State Police. 911 police calls are dispatched through the State Police Barracks in Williston, VT, but an alternate service option with the county is being explored. Services with the County Sheriff are contracted and the Town has the option to vary the level of service within the Town to best meet local needs.

#### c. Fire Departments

There are two fire departments in the Town of Barton. Barton Fire Department located on Main St. in Barton Village and Orleans Fire Department located on Main St. in Orleans Village. All 911 fire calls are dispatched to the fire departments through the Vermont State Police Barracks in Williston, VT. The Barton Village and Orleans Village fire departments are all volunteer staffed and provide service to the Villages, Town and provide mutual aid for each other and other Towns.

In addition, the Town is a member of the Local Emergency Planning Commission



(LEPC) for District 10. The LEPC focuses on planning for a variety of disasters that may affect the community including floods, hazardous material spills, wildfires, natural disasters, and even acts of terrorism. Currently, the Town is beginning the process of drafting an All-Hazards mitigation plan update that would identify potential risks to the community and plan for mitigation efforts.

The Barton Fire Department is housed in a two story frame building, which is in good condition. The first floor is a garage that houses three small engines and a van. The second floor is a meeting room with kitchen facilities. In 2007, an additional 30' x 30' two bay garage was constructed adjacent to the existing fire station adding much needed storage space for the department.

The Barton Fire Department has the following equipment:

- 2008 International quad-cab pumper with a 1000 gallon tank
- 2001 Freightliner with a 1500 gallon tanker (Purchased used in 2013)
- 1995 Ford F350 Equipment Response Vehicle (purchased used in 2011)
- 1993 Ford F350 (4x4) 750 gallon per minute mini pumper, 250 gallons storage with Class A foam, equal to 1250 gallons capacity water.
- Equipment Van.
- Portable pumps, generators, resuscitator, thermal imaging camera and other minor equipment.

The Barton Fire Department is constrained for new equipment purchase due to the small antiquated station bays.

The Orleans Fire Department was recently relocated to a new 80' x 60' fire station building on Main Street in 1998. The fire station consists of four bays with room enough for two vehicles each and a training room with kitchen. The building should be adequate for the department's equipment needs for the foreseeable future. The Orleans Fire Department has the following equipment:

- 2000 International 4-door pumper with a 5-man cab, 1250 gallon per minute pump and a 1000 gallon tank.
- 2006 International pumper with 1500 gallon per minute pump and a 1000 gallon tank.
- 1987 Freightliner Tanker with a 3,000 gallon tank.
- 1987 Freightliner Van
- 1974 International with a 1250 gallon per minute pump with 1000 gallon tank.
- 1985 Ward LaFrance Ladder/Tower Truck
- 1938 International with a 500 gallon per minute pump

The Orleans Fire Department equipment has been available to the Barton Fire Department upon request. The tanker is on automatic response to any fire in the Town of Barton.

#### d. Ambulance / Rescue Squads

There are two ambulance/emergency units in the Town of Barton. The Barton Ambulance squad, located on Municipal Lane in Barton Village and Orleans Emergency Unit located on U.S. Route 5 adjacent to Orleans Village.

The Barton Ambulance squad is an all-volunteer, 24 hour emergency service. The squad located to its Municipal Lane facility in 2001.

The building has two stalls, a training room, an office, and a kitchen. The squad has two ambulances: one 1989 Ford Van and one 1999 Ford box style.

Orleans also has an all-volunteer ambulance/rescue squad known as the Orleans Emergency Unit. The unit currently uses two ambulances: one 1999 Chevrolet box style and one 1997 Ford F-350 Heavy Rescue Unit equipped with the “jaws of life.” The squad uses the phone system for notification and offers 24 hour service, with State Police dispatch.

#### e. Public Recreation and Open Space

The community has several publicly owned recreation areas or open spaces. The existing public recreation areas include the public school playgrounds in Barton and Orleans Villages and Lake Region Union High School. Amenities include ball fields, basketball and tennis courts, playground equipment, and a winter skating rink.

Barton Village also has Pageant Park and the Crystal Lake State Park on the north shore of Crystal Lake. The Lee Emerson Memorial Forest is a town-owned parcel located off Route 16 and available for hiking, and the Orleans Country Fairgrounds offers a number of events around the year for the public to attend. Barton Village purchased land along the Barton River and adjacent to its ballfield with conservation grant funds some years ago. They would like to develop the land as a park for recreational use.

#### f. Public Works

Maintenance work in the Town and both Villages is performed primarily by municipal employees using municipal equipment, with some work contracted out to private businesses on occasion. Both Barton and Orleans Villages have municipally-owned water and wastewater systems, and each operates a municipal electric utility that serves a geographic area larger than the village municipal boundaries. Barton Village contracts with a private outfit to operate its water and wastewater systems.

Each of the three municipal entities – the Town and two incorporated Villages – has a road or street department with their own equipment. The Villages of Barton and Orleans each have sidewalk networks to maintain as well.

#### g. Libraries

There are two Public Libraries in the Town of Barton. The Barton Public Library

located on Church Street in Barton Village and the Jones Memorial Library located at the intersection of Church Street and Water Street in Orleans Village.

The Barton Public Library is a two-story brick building constructed in 1928 with a new addition in 1984 and contains 3840 square feet of space. The library contains a large collection of reading materials, offers wireless internet and computer access, and hosts book discussions, film showings, and story hours for children. The library is staffed by one full-time librarian and two part-time aides. The library is open at limited hours on Monday, Wednesday, Friday, and Saturday.

There is a meeting room downstairs, with kitchen facilities available to educational, cultural and civic organizations and groups for occasional meetings and special events. The library is more than adequate for its present use. *The Barton Public Library and its Board of Trustees endorse the Library Bill of Right and offers its services to all groups regardless of beliefs and affiliations.*

The Jones Memorial Library is housed in a two-story brick building constructed in 1950 with a new addition added in 1989. The 4,864 square feet provide adequate space for the collection of 27,717 volumes. Personal computers are available to the public and wireless Internet access is available. The basement provides the village with some meeting space which is used by local clubs. The library is staffed by one full-time librarian and two part-time aides. The library offers limited hours of service on Monday, Wednesday, Friday, and Saturday. *The Jones Memorial Library and its Board of Trustees endorse the Library Bill of Right and offers its services to all groups regardless of beliefs and affiliations.*

#### h. Water Supply and Wastewater Systems Utilities:

There are two municipal public community water systems that serve over 500 people in the Town of Barton. One system serves the Village of Barton and the other system serves the Village of Orleans. The Town has no role in operating either village – owned system. Homes and public buildings outside of the Village of Orleans and Village of Barton utilize onsite water supply systems. These systems include drilled bedrock wells and shallow spring wells.

#### VILLAGE OF BARTON PUBLIC WATER SYSTEM

The Village of Barton is supplied by surface water from May Pond Brook. The Village treats the surface water for a system demand of approximately 60,000-120,000 gallons per day. The facility is located approximately 1 mile outside of the Village on the Willoughby Lake Road. The current facility was constructed in 1992 along with a concrete water storage tank for average day demand and fire protection. During the 1992 project, the Village replaced some of its antiquated cast iron transmission main into the Village center. In 2011 the village completed construction on major water main replacements throughout the village to restore the ability to adequately flush all water

mains. This undertaking also ensured that there would be a fire hydrant capable of producing 500 gallons per minute within 500 feet of each home in the Village.

## VILLAGE OF ORLEANS PUBLIC WATER SYSTEM

The Village of Orleans is supplied by a groundwater source located along the Willoughby River. The Village provides treatment and has storage for average day demand and fire protection for the Village. The Village has continued to replace water mains to improve water quality, ability to flush and ability to provide fire protection.

Other types of public and non-public water systems exist for other public buildings that are not connected to the municipal systems. These smaller water systems include Lake Region Union High School, Maple Lane Nursing Home, the B&W Snackbar, the Candlepin Restaurant (currently closed) and the Pine Crest Motel. Development of public buildings and multifamily buildings is encouraged in areas that can be connected to the Public Community Water Systems of Orleans and Barton Village. New public water systems although allowed are not encouraged because they require more part time certified operators. Consolidation of systems is always encouraged.

All public water systems throughout the Town include source protection areas. The water systems are requirement to maintain and update source protection plans. Any landowners within these source protection areas are notified by the water system as required by the State of Vermont. The Village of Barton water system has the largest source protection area since it treats surface water, however the majority of this source protection area is rural undeveloped land. There are no major restrictions in these areas but human activity creates possible sources of contamination.

The most recent source protection areas in the Town of Barton can be found on the State of Vermont Natural Resource Atlas <http://anrmaps.vermont.gov/websites/anra/>.

Both Villages have been active in the past in improving the quality and quantity of their existing water supplies,

## WASTEWATER UTILITIES:

The majority of homes in the Town of Barton utilize individual onsite wastewater systems such as in-ground systems or mound wastewater disposal systems. The Town also has two municipal wastewater (sewer) collection and treatment systems. These are village-owned and operated systems. One system is located in the Village of Barton and the other system is located in the Village of Orleans. Both treatment systems discharge to the Barton River. Prior to 1979, these village centers only operated combined wastewater and stormwater collection systems that discharged directly to the river. Construction of separated sewer systems and treatment facilities were a result of federal mandates and grant programs in the 1972 Clean Water Act.

## VILLAGE OF BARTON MUNICIPAL SYSTEM

The Village of Barton Wastewater System is generally described as gravity sewer collection system. All Village sewage is collected at the Main Pump Station located behind Church Street and is pumped to the Wastewater Treatment Facility located on Municipal Lane.

The Barton Village system uses an aerated lagoon system treatment system, prior to discharge to the Barton River. The Barton system was designed for an average day of 165,000 gallons and a maximum day of 240,000 gallons. Barton's average day flows are significantly below the average day design but the village system has continued to deal with flows exceeding the maximum daily design due to precipitation events. The Village has constructed major collection system upgrades and stormwater separation projects in 1979, 1992 and 2012. The 2012 project also provide sewer to the remaining areas of the Village that had undersized sewers or no previous access to the sewer system.

The Barton Village System also operates as a shared use system. Twenty percent (20%) of the capacity of the treatment facility was designed and reserved for the Town of Glover. The Town of Glover constructed a collection system in 1980 and pumps wastewater north to Barton Village along route 16. Flows from Glover have begun to increase recently due to Glover's recent expansion to service the area of West Glover village which had a failed onsite wastewater system. Glover's wastewater is metered prior to discharging into the Village of Barton collection system.

## VILLAGE OF ORLEANS MUNICIPAL SYSTEM

The Village of Orleans Wastewater system is generally described as a gravity sewer collection system. Nine collection pump stations are also located throughout the system. Once collected, wastewater is sent to the Wastewater Treatment Facility located on Maintenance Street.

The Orleans Village System was designed as an aerated lagoon treatment system similar to the Barton Village System. The system had issues meeting discharge limits through the 1990's and it was converted to a Biophosphorus Treatment Process utilizing concrete clarifiers and improved filtration. The Orleans Village system was designed for an average day capacity of 190,000 gallons and does not have issues exceeding average day flows.

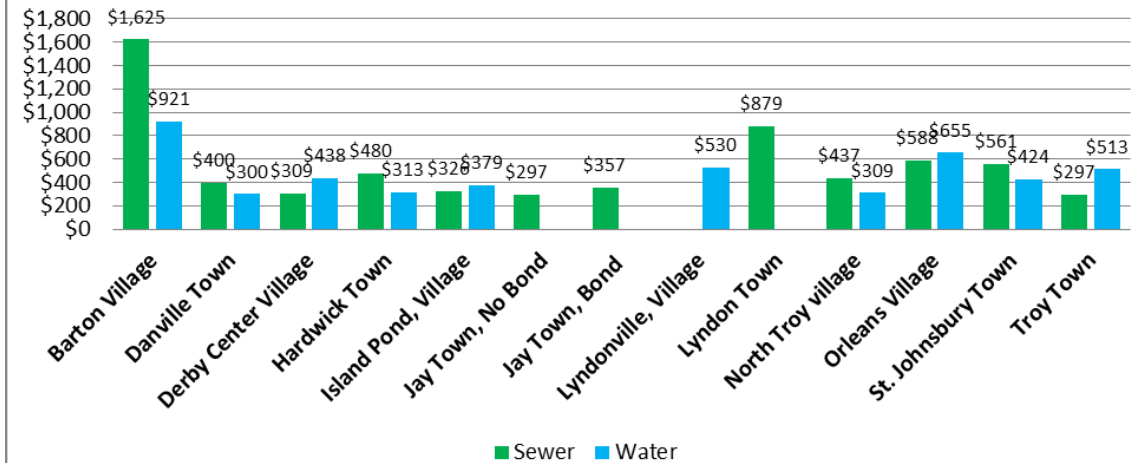
The Village has constructed major collection system upgrades and stormwater separation projects including the original construction, including 1995 and the early 2000's. The Orleans Village System also receives waste from the Orleans Industrial Park and from the Ethan Allen Manufacturing Facility.

An informational comparison of user rates for municipal systems throughout the region for 2013 is listed below.

## AVERAGE ANNUAL RATES FOR WATER AND SEWER in Municipal Systems throughout the Northeast Kingdom

(Based on typical use of a 4 family (45gal./day/person) single family home with a property assessment of \$140,000)

Data collected by the Barton Planning Commission



24 V.S.A., Section 4382(9) requires: “An energy plan, including an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy, including programs, such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy”;

### i. ENERGY

Barton’s energy needs are currently being met by the Orleans and Barton municipal electric departments, fuel oil and gasoline suppliers and propane distributors, and cord wood and wood pellet suppliers.

Historically, most residents use either fuel oil or propane to heat their homes in the winter time, although many residents have supplemented or replaced those sources with wood or wood pellets. Some newer homes have employed radiant heat as an efficient heating source. Most of the Town’s municipal and commercial buildings are

heated with fuel oil. Electricity may also be an option for some as electric heat pumps are now being promoted statewide.

Car and van pooling by residents has increased in recent years as more and more residents are working outside of the Town. “Park and Ride” areas have been established at the junction of U.S. Route 5 and VT Route 58 in Orleans Village, and near the U.S. Route 5 and I-91 interchange in Barton Village. Utilization of the park and ride areas by local residents is expected to increase over time as gas prices continue their gradual climb.

Electric power supply is provided by Barton Electric Department and Orleans Electric Department. The electric departments purchase power from the New England Power Grid. The electric departments own and maintain a transmission line from the distribution main connection located on Route 16 south of Barton Village to the Substation on Baird Road. The Orleans Electric Department has recently overseen and coordinated the upgrade and replacement of the transmission system. Barton Electric Department offsets part of its power supply purchase costs because the Village owns a generation facility that feeds into the New England power grid. The facility is located on the Clyde River in West Charleston, VT. Through participation in a committee, Barton Village investigated a hydroelectric generation facility that would have been located at the outlet of Crystal Lake. The project was determined to be infeasible. Upgrades and repairs to other existing electric infrastructure are ongoing in both Villages, including transmission lines and facilities.

Both Orleans and Barton Electric are members of the Vermont Public Power Supply Authority (VPPSA). The VPPSA assists its members with power supply purchase contracts necessary to meet municipal needs, and also with financial monitoring and billing services.

The Planning Commission recognizes the importance of renewable energy resources and generally supports their development for residential use within the Town as a whole. These resources would include residential-scale wood and solar heat, solar electricity, small-scale wind turbines, and geothermal systems. Community-scale (or commercial) solar arrays, wind turbines, biomass systems, and hydroelectric generation facilities require more thoughtful public consideration for siting due to potential impacts on adjacent properties. The Planning Commission considers a solar array as community-scale when the total rated capacity is 150kW or greater. Similarly, wind turbines are considered industrial-scale when the total height exceeds 200 feet from the ground, thereby requiring FAA lighting.

#### Industrial Wind:

Industrial wind energy developers have identified areas in the Northeast Kingdom

as preferred locations for the development of commercial (industrial) wind power generation facilities. The nearest facility is located in the neighboring town of Sheffield, with a second project located in Lowell. Both projects can be seen from numerous locations in Barton. The Town and Village of Barton have been participants in the Public Service Board's Section 248 review process for energy generation projects. Future plans for the development of large-scale commercial wind generating projects within the Town are unknown at this time, but any local support would be in conflict with the NVDA Regional Plan's statement of 'non-support' for industrial scale wind projects in the region.

#### Portland Pipeline:

Running through much of Barton is The Portland Pipeline - a combination of major crude oil pipelines that stretches from Portland, Maine, through Guildhall, VT running in a northwesterly direction toward Jay, VT before heading into Canada. While Vermont doesn't tap into the pipeline at any point, its existence in our region as major transporter of oil is important for potential future use.

In Barton, the pipeline(s) runs along the western side of Crystal Lake and cross the Barton River near the Interstate exit for Barton Village. These are important water resources for Barton and other communities. With the average age of the pipeline(s) being approximately 60 years old, it is important that the pipelines be kept in a safe operating condition to prevent future leaks/spills.

24 V.S.A., Section 4382(a)(6) requires: "*An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system*";

#### j. SCHOOLS

The Barton graded school is a four-story brick building which at one time also served as the high school (Barton Academy). The school has an average enrollment of between 148-173 pupils in kindergarten through grade eight over the last 6 years, instructed by 21 teachers and 18 support staff. The school has 16 classrooms including a library. The gymnasium is available for community activities and has been used as the site for the Town's Annual Meeting.

St. Paul's Catholic School, serving grades Pre-K to 8<sup>th</sup>, is also located in Barton Village. It is a private school with a current enrollment of approximately 75 area students, including students attending from other towns in Orleans County.

The Orleans Elementary School is a 90 year old brick structure located on School Street in Orleans Village. Like Barton, the graded school once served as a high school for the village. The school has kindergarten through 8<sup>th</sup> grade and an average enrollment of



100 - 112 pupils. Presently the school is staffed by approximately 13 teachers, with an additional part-time teaching staff. The building consists of 10 classrooms, a library, laboratory, and a gymnasium, but an addition in 1993 more than doubled the available space and eased congestion. Internal improvements and remodeling have taken place within the past few years and are ongoing. The building is available for community access such as adult gymnasium use, fire department training programs, and organized summer activities for students. The current building facilities are considered to be adequate for the foreseeable future. The school recently participated in the "Safe Route to School" program and worked with the Village to improve walking routes for students.

The Lake Region Union High School serves the Town of Barton, both villages, and five surrounding towns. The all-brick structure is located between the two villages on Lake Region Road in Barton. The current enrollment is approximately 400 pupils in the ninth through twelfth grades, with an average student/teacher ratio of 10 to 1. The facilities include 23 classrooms, an Academic Achievement Center (formerly the Lecture Hall), a 70 pupil library, 5 laboratories, an industrial arts room, a vocational/agriculture room, a drafting room, a music room, a gymnasium, fitness and weight room, and a cafeteria with a seating capacity of 450. The school is staffed by approximately 40 teachers, 3 guidance counselors, 1 nurse, 5 teacher's aides, 3 secretaries, 3 cooks, 4 custodians, a principal and an assistant principal. Outdoor recreational facilities available to the general public include: tennis courts, basketball court, baseball/softball diamonds, a cross country course, and soccer fields.

The Central Orleans Family Education Center located on Kinsey Road in Barton was built in 2003. This 10,000 sq. ft. facility provides pre-school education programs as well as adult educational and training programs to area residents. Also, several owner operated daycare service providers are available in both Villages.

#### k. Solid Waste Disposal

In 1992, the Town of Barton closed its landfill operation on May Farm Road. The town monitors the landfill in the spring and fall of each year. The town received its post closure certification from the State of Vermont Agency of Natural Resources, Waste Management Division, in 2002. This certification is renewed by the State every five years provided that test results at the site remain satisfactory. The town utilizes the lined solid waste disposal facility at Waste USA on Airport Road, in Coventry, Vermont. Residents can either self-haul or contract individually to transport waste to the Coventry facility. Household hazardous waste is collected twice per year at pre-selected sites within the town. Recycling facilities are available at the old town landfill location on every Saturday of each month.

Barton is now dealing with a law passed by the Vermont legislature that addresses recycling (Act 148, the Universal Recycling Law). The primary goal of Universal Recycling is to improve the capture and diversion rates for recyclable materials to prevent them from being landfilled. When the law takes full effect more materials will be

diverted from the landfill.

Recyclables banned from landfills by July 1, 2015 include: aluminum and steel cans; glass bottles and jars; plastic containers, bottles and jugs; corrugated cardboard; white and mixed paper, newspaper, magazines, paper mail, and envelopes, and paper bags. By July 1, 2016, leaf and yard debris and clean wood waste will be banned from landfills, and by 2020 all food scraps will be banned (initiated in phases beginning in 2017). For more information: <http://www.anr.state.vt.us/dec/wastediv/solid/act148.htm>

Solid waste facility owners that offer trash collection must also offer collection of: Recyclables by July 1, 2014; Leaf and yard debris by July 1, 2015, and; Food scraps by July 1, 2017. Haulers that offer services for managing trash must also offer services for managing: Recyclables by July 1, 2015; Leaf and yard debris by July 1, 2016, and; Food scraps by July 1, 2017.

Provisions for the inclusion and enforcement of ordinances for the regulation of junky yards were deemed necessary and were implemented by the town and Barton Village in 2005. The degree to which these ordinances have been enforced in some areas is questionable. Also, the Town maintains an approved Solid Waste Improvement Plan (“SWIP”) that benefits its residents with reduced waste rates while allowing for recycling and household hazardous waste (“HHW”) collection.

#### l. Medical Services:

The Orleans Medical Clinic is located on East Street in Orleans Village closed in 2014, leaving the clinic in Barton Village as the nearest medical facility.

A medical facility is located at the intersection of Elm St. and Kinsey Road in Barton Village. The recently expanded facility is owned by North Country Hospital and provides various medical services to both residents and non-residents of the Town. The lower floor of this facility is used by North Country Hospital’s Physical Therapy Department.

#### m. Museums/Historical Sites:

The Crystal Lake Falls Historical Association operates a museum located off Water Street in the Village of Barton. The museum and much of the area surrounding it are part of the Crystal Lake Falls National Historic District.

The Pierce House, historic ca. 1820 home on Water Street, services as the Crystal Lake Historical Association Museum for Barton’s Education and Industry. The Museum adjoins an historic park in the “Brick Kingdom” Mill Hill site, where factories and mills once operated from about 1797 to 1952. In the museum is a model of Mill Hill, created by Lake Region High School students. The museum is open on selected afternoons in the summer and by calling members for access. CLFHA works with the schools and

provides slide lectures and exhibits and prepares oral histories and photographic and research material. There is no admission charge.

There are also a number of historic sites within the Town worth noting including: the Henry Leland monument at the Barton Public Library; the Barton Landing site and marker on the River Road in Orleans; and historic cemeteries such as the Welcome O. Brown, St. Paul's, Heath, St. Theresa's and North and South cemeteries in Barton, and the Maple Street and Pleasant View cemeteries in Orleans.

Pageant Park was the setting for the elaborate historical pageant to commemorate the 125<sup>th</sup> anniversary of the settling of the Town. The elaborate production lasted from July 1, 1921 to July 4, 1921. A grandstand was built with seating for 1200 people. In 1924 Henry Cutler donated the land to the village to be used as a municipal park, hence the name Pageant Park.

#### Village Center Designation:

The Village of Barton also has a state-designated Village Center. The designated area roughly extends from the intersection of Glover and Elm Streets into the village center to Lincoln Avenue, and then up Main Street up to Duck Pond Road. The Village Center designation brings with it a number of benefits, including:

- 10% Historic Tax Credits - Available as an add-on to approved Federal Historic Tax Credit projects. Eligible costs include interior and exterior improvements, code compliance, plumbing and electrical upgrades.
- 25% Facade Improvement Tax Credits - Eligible facade work up to \$25,000.
- 50% Code Improvement Tax Credits - Available for up to \$50,000 each for elevators and sprinkler systems and \$12,000 for lifts. Eligible code work includes ADA modifications, electrical or plumbing up to \$25,000.
- Priority consideration for Municipal Planning Grants and funding from Vermont's Community Development Program.
- Priority site consideration by the State Building and General Services (BGS) when leasing or constructing buildings.
- Special Assessment Districts (or business improvement district)– May be created to raise funds for both operating costs and capital expenses to support specific projects in the village center.

Owners of properties in the Village Center or National Historic districts should consider the resources available to them as they make property improvements. The designated Village Center for Barton should be amended as it does not match up with the boundaries of the Crystal Lake Falls National Historic District, although they do overlap. This would allow commercial properties to apply for both federal and state credits. Village Center Designation is being applied for by the Village of Orleans so that commercial properties there can also benefit from tax credits.

Recent statutory changes in Vermont require local plans to be more specific about village center designation and how a village center furthers goals of the town plan. In addition to the tax credit opportunities already listed, here are other examples of how the designation can benefit Barton and Orleans Villages:

- **Transportation:** Sidewalk networks in both villages are important to the town. This plan recommends pursuing Bicycle and Pedestrian Grants to make sidewalk improvements. Priority consideration for funding is given to communities with designated village centers.
- **Utilities and Facilities:** This plan recommends pursuing Historic Preservation Grants. This program is highly competitive, but if a project is in a designated Village Center, the application automatically gets an extra point.
- **Housing:** This plan talks about the age of the housing stock and supports efforts to make improvements (mostly for saving energy, but also for preservation) The Village Center designation tax credit program has been used to improve housing stock in the NEK, and even has created market-rate housing. Unlike other tax credit programs, this is easy to administer, can be sold to banks as collateral for a project, and there's no recapture if a property is sold. These credits may be particularly attractive to private property owners, who don't have the capacity to administer other federal and state tax credits (like the low-income housing tax credit).
- **New Neighborhoods** – this is an area within a quarter mile radius of the Village Center designation area. Since this plan proposes to increase the density in the Village zoning districts, the New Neighborhood program may benefit the town. There are reduced permitting fees on appropriate infill development.

Historic Preservation Grants have been used to revitalize buildings such as town halls, museums, theaters, libraries, recreation centers and other municipal buildings. If a municipality (town or village) or a non-profit organization owns a historic property, they may be eligible to apply for a Historic Preservation Grant to assist with the cost of repairing and maintaining your building or structure. Match is 1:1 and the limit is \$20,000.

[http://accd.vermont.gov/strong\\_communities/preservation/grants/historic\\_preservation](http://accd.vermont.gov/strong_communities/preservation/grants/historic_preservation)

#### n. Wireless Telecommunications

The Town currently has wireless telecommunications facilities located on Ingersoll Lane (Verizon), Burton Hill (Verizon), Orleans Country Club (T-Mobile), and Barton Mountain (AT&T). These communication facilities are used by their associated tier I providers and they provide facilities for tier II operators. These Tier II operators include companies such as Consumer Cellular, Tracfone or Straight Talk that provide that generally provide lower cost or pay as you go plans. Residents, especially lower income residents should look at these Tier II operators as lower cost alternatives for service. .

Although the Telecommunications Act of 1996 prevents municipalities from prohibiting these towers, towns can control how the towers are placed and located. Pursuant to this, and to help guide the expansion of this technology within the Town, the Town adopted a telecommunications provision for the zoning bylaw, however, developers do have an option to bypass local permitting and use the Public Service Board's Section 248 certificate of public good process. This has been done in recent years.

## 2. COMMUNITY FACILITIES, UTILITIES & SERVICES - OBJECTIVES/RECOMMENDATIONS

### a. Recommendations for Municipal Office Buildings

Both villages currently own and use municipal office buildings of a similar nature. The Barton Village and Orleans Village municipal buildings are historic structures. It is important to renovate, update and expand the buildings in accordance with the historic preservation requirements of the State of Vermont and to protect the character of the Villages. All municipal office buildings received energy efficiency audits in 2010. The audit recommendations, which included costs and payback periods, should be implemented to save taxpayer money.

### b. Recommendations for Police Protection

Police protection needs of the Town of Barton and both Barton and Orleans Village should continue to rely on County and State resources. Maintaining the flexibility to shift the amount of contracted coverage with the County Sheriff between the villages and the town is important.

### c. Recommendations for Fire Protection

Population projections indicate only small to moderate growth envisioned for all of Barton, therefore, the current fire station locations in Orleans and Barton Village should be adequate for the near future. The departments should train together when possible and explore other ways in which they could work together to keep total costs down and improve the coordination of services. The departments often respond together via their mutual aid agreement.

### d. Recommendations for Water Supply and Wastewater Disposal Utilities

The municipal water systems are encouraged to maintain the water systems through annual flushing programs, valve operation, hydrant operation, backflow protection for commercial users and to follow the guidance in source protection plans to protect the citizens of the Town of Barton. The Villages are also encouraged to follow

regulatory requirements to use certified operators for all system components. The Villages are also encouraged to notify the residents of the Town and Villages of the Source Protection Areas for the public community water systems.

The Barton Village systems are concerned about controlling costs for operation and maintenance. The rate structure has recently changed with each user paying a larger base amount. The Village is also encouraged to look at other water supply sources that require less demand for operation thus reducing operating costs. Most surface water treatment facilities are found in communities much larger than Barton where more users can absorb the cost of full time operators with the expertise to treat surface water.

New public water systems although allowed are not encouraged because they require more part time certified operators and part time managers. Consolidation of systems and connection to existing systems is encouraged whenever possible. It is also encouraged to actively control user costs in municipal or shared systems to ensure that user rates are relative to nearby communities and onsite wastewater disposal costs. Controlling rates is critical to the ability to attract new residents and businesses.

The municipal wastewater disposal systems will continue to require maintenance including manhole maintenance, frame and cover repairs from corrosion, pump equipment replacement and inspections for major precipitation inflow and infiltration. It is anticipated that the both Municipal Systems will be subject to future upgrades not only for age replacement but for increasingly lower discharge limits for pollutants such as phosphorus. The Barton River is part of the Lake Memphremagog Watershed Basin and Lake Memphremagog is an impaired water body due to excessive phosphorus. Vermont adopted a Basin 17 Water Quality Management Plan in January 2012 and the top priorities include establishing a Total Maximum Daily Limit (TMDL) for phosphorus and to complete stormwater system mapping in the Village of Barton and Orleans including illicit discharge detection. Both villages have completed the stormwater system mapping.

It is encouraged to consolidate wastewater disposal systems when possible. It is also encouraged to actively control user costs in municipal or shared systems to ensure that user rates are relative to nearby communities and onsite wastewater disposal costs. Controlling rates is critical to the ability to attract new residents and businesses.

#### e. Recommendations for Energy Sources and Uses

Electric Service: As mentioned above, Barton Electric's production capabilities help both to mitigate costs and to make it attractive for purchase by larger systems. A sale, however, would be a Village registered voter decision. Employee costs for small systems tend to be relatively high and it has been difficult to retain experienced linemen when other utilities can pay more. Also, the complexities of the electric industry require a significant investment of time for project permitting and development, system planning, and operations. The Village of Barton should also explore options to: a) merge or jointly manage its department with the Orleans Electric Department or others, or b) consider

selling the department to a larger utility as another way to save ratepayers money.

The Planning Commission reiterates its earlier recommendation that power generation potential of Crystal Lake falls outlet be investigated to determine if and when this resource could be developed for small hydro generation purposes. It is recommended that the historic value of these falls be preserved to the extent possible in any future planning. At this writing, there is a local committee looking into the development of this site, and the Town is supportive of their efforts.

**Industrial Scale Wind:** The State of Vermont Wind Resources Map depicts the greater Wheeler Mountain and May Hill areas as being conducive to commercial or industrial wind power development with “Class 7” wind speeds of up to 18 to 26 mph. Likewise, smaller areas to the north around Barton Mountain are also considered to be favorable with Class 6 and Class 5 wind speeds. The Planning Commission feels that these areas, however, would not be suitable for commercial wind development since May Hill is too near May Pond – Barton Village’s surface drinking water supply and residential properties and subject to runoff; Wheeler Mountain is a very popular hiking destination and adjacent to Willoughby State Forest; and, Barton Mountain is the most prominent and scenic mountain in the Town.

**Renewable Resources:** The Town supports the continued development of small-scale (residential) renewable energy resources in the community as long as they do not harm the natural resources and the environment, do not create instability in the regional transmission grid, and do not significantly increase costs for ratepayers in the community.

The Planning Commission recommends that the Town of Barton joins the PACE (Property Assessed Clean Energy) program to facilitate the development of small-scale renewable energy.

Community-scale (or commercial) solar arrays, wind turbines, biomass systems, and hydroelectric generation facilities require more thoughtful public consideration for siting due to potential impacts on neighboring properties. Proposed projects should address the following goals:

- Generation projects should meet the demands of local customers and utilities;
- Projects should be situated near or adjacent to existing transmission/distribution lines;
- Projects should be screened and set back from adjoining properties to the greatest degree possible;
- Power generated should be affordable (i.e. market rate) and, ideally, benefit local users and ratepayers.

The Planning Commission supports Barton Village’s efforts to improve the existing hydro facility located in West Charleston. The Planning Commission also offered its support of the Barton Solar Project proposed along Route 16 near Glover, as the project is located in a designated commercial zone; there will be a positive impact to

the Town's taxable base; and support for the facility demonstrated that the town is helping to meet Vermont's renewable energy goals.

Efficiency: The other large energy use in Barton is for thermal heating. Fuel Oil and Propane are the major sources for heating and the costs of these sources can be volatile. As technologies improve, a somewhat lower reliance on petroleum based sources could be gained through the suggested use of alternative sources of energy such as wood pellet stoves, high-efficiency biomass boilers, or geothermal systems. The VT Residential Energy Code is a minimum standard of energy efficiency that applies to virtually all new residential construction, renovations, alterations and repairs in Vermont. Energy code information can be found at:

[publicservice.vermont.gov/energy/ee\\_resbuildingstandards.html](http://publicservice.vermont.gov/energy/ee_resbuildingstandards.html)

Taking advantage of weatherization programs through NETO and grant money currently available through Efficiency Vermont and other State programs would also help to reduce local heating and electric costs.

Wood heats many homes fully or partially, and it is a renewable and maintainable resource. Both Villages sit in valleys so wood smoke pollution should be considered, but continued improvement in wood stove design and the gradual replacement of older units with those incorporating catalytic converters or similar pollution reducing technologies should help to alleviate pollution by wood burning.

Maintaining concentrated growth areas in Barton and Orleans Villages helps to keep electric transmission and distribution costs down. Such growth also helps to minimize car and truck traffic, thus saving on fuel costs.

Car pooling and van pooling are available and should be utilized. As mentioned above, park and ride areas are available in both Barton and Orleans Villages.

Portland Pipeline: In Barton, the currently inactive Portland pipeline(s) runs along the western side of Crystal Lake and cross the Barton River near the Interstate exit for Barton Village. These are important water resources for Barton and other communities. With the average age of the pipeline(s) being approximately 60 years old, it is important that the pipelines be kept in a safe operating condition to prevent future leaks/spills.

There have been discussions in Barton, the region, and Vermont about the need to establish a position against any project that would reverse the directional flow of the pipeline to accommodate the movement of tar sands oils out of Canada to Portland, Maine. The concern of those advocating for action is that heavier, abrasive tar sands flowing through the pipelines in a direction opposite to the current flow would stress the aging facility.

However, the Town has not seen or heard from the pipeline owner (or developer) of any proposed project that would reverse the flow of oil in the pipeline. The issues of concern that have been raised would certainly be important to local officials and these



should be addressed if a project is proposed. Other factors to consider for a recommendation would be the movement of these same materials over highways or rail lines in the community as transportation infrastructure follows lake and rivers.

At the 2014 Barton Town Annual Meeting, an advisory vote of those present showed that a large majority of voters present were opposed to any proposed pipeline reversal project. A recent jurisdictional opinion by the District 7 Environmental Commission is that a plan to reverse the flow of oil in these pipeline(s) would require an Act 250 permit. The Town and Village officials support this and would certainly participate in such an application.

#### f. Recommendations for Public Recreation and Open Space

With additional growth, the two built-up village areas within Barton should each have and maintain outdoor recreation areas to serve all residents in the village areas. Recreation areas would augment the recreational facilities at the school playgrounds in the area. Each area should be easily accessible, within walking distance of the residential area it is designed to serve. The land acquired by Barton Village adjacent to and behind the library should be developed as a community green space as originally proposed at its acquisition.

Recreational facilities at the regional high school should be available for use by area residents, as well. There are several privately owned and operated recreational facilities in the Town of Barton including: the Orleans Country Club, the Barton Golf Club, the Orleans County Fair Grounds, a snowmobile trail network and a rod and gun club. The public use of these facilities through cooperation with private entities should be encouraged.

The municipal buildings in Barton or Orleans could provide year-round indoor recreation opportunities for all ages in the community. The opportunity to utilize buildings at the county fairground for indoor winter recreation should also be explored. The village should plan open spaces which are aesthetically and physically beneficial to the community.

Barton's extensive water resources, lakes, ponds, rivers, streams, offer many forms of recreation. Besides these resources being of obvious natural value, they are of great economic value because of tourists, fishermen, boaters, swimmers, and hikers. Every effort should be made to maintain and improve water quality.

Consideration should continue to be given to greater utilization of school properties, municipal buildings and other suitable existing facilities for both indoor and outdoor recreation activities. Efforts to provide for tennis, skating and ski facilities should be encouraged.

g. Recommendations for Schools

Population data and projections of growth would indicate that the present educational facilities of Barton and Orleans Elementary Schools, and Lake Region Union High School, will be more than adequate for the needs of the town over the next five years. The Vermont Department of Education projects that state-wide student enrollment will actually decline over the long term.

Town and Village Officials should consider utilizing Lake Region high school students for community service projects. Students are required to provide a defined number of hours of community service and this could be beneficial for municipalities.

h. Recommendations for Wireless Telecommunication Facilities:

The Town of Barton will generally support local telecommunication (broadband) projects that can demonstrate improvements in reliability, affordability, and better coverage for the town and/or village areas of the community. However, the Town will not support telecommunication facilities that are built on speculation to attract wireless or broadband providers, or telecommunication facilities in excess of 200 ft. in height that would require lighting under FAA regulations. The Town would like to see all telecommunications projects adhere to the requirements of the Town’s zoning bylaw, regardless of whether or not the developer chooses to bypass the local permitting process in favor of the Public Service Board’s Certificate of Public Good process.

24 V.S.A., Section 4382(10) requires: “A housing element that shall include a recommended program for addressing low and moderate income persons' housing needs as identified by the regional planning commission pursuant to subdivision 4348a(a)(9) of this title. The program should account for permitted accessory dwelling units, as defined in subdivision 4412(1)(E) of this title, which provide affordable housing”.

G. HOUSING STATEMENT AND POPULATION DATA:

The total population of the Town of Barton declined over the ten year period from 2,967 persons in 1990 to 2,780 in 2000. From 2000 – 2010, the population increased slightly from 2,780 to 2,810. Other demographic information for the Town and both Villages is as follows:

Table 1: Housing and Affordability

	Barton Village	Orleans Village	Barton Town	Orleans County
<b>Housing demand</b>				
Population, 2010	737	818	2,810	2,7231
# in occupied housing units	736	818	2,743	26,413
...owner occupied	442	538	1,994	20,458

...renter occupied	294	280	749	5,955
Households, 2010	355	349	1,192	11,320
Avg. household size, 2010	2.07	2.34	2.30	2.33
<b>Ability to afford</b>				
Median household income, 2007-2011	\$28,333	\$31,750	\$43,139	\$40,929
Annual avg. wage, 2010 (VDOL)	--	--	\$30,379	\$31,666
Per capita income, 2007-2011	\$20,534	\$17,547	\$20,318	\$21,000
Labor force, 2012 (DET)	--	--	1,550	15,200
Unemployment rate, 2012	--	--	11.4%	7.3%
<b>Housing stock</b>				
Total housing units, 2010	460	399	1,531	16,162
...owner occupied	199	217	830	8,553
...renter occupied	156	132	362	2,767
...vacant units	105	50	339	4,842
Home heating fuel oil/kerosene, 2007-2011	78.5%	74.6%	65.4%	61.6%
<b>Homeownership costs</b>				
Median monthly owner costs, 2007-2011	\$906	\$847	\$912	\$875
...>30% of household income	30.2%	30.9%	32.6%	35.2%
Rental costs >30% of household income	54.9%	40.5%	48.4%	57.3%
Pop. For whom poverty status determined, 2007-2011	798	790	2,719	26,445
Below poverty level	123	183	397	4,229
Families below poverty level	23	32	76	724

Source: VT Housing Data – [www.housingdata.org](http://www.housingdata.org)

**Note: More specific population and demographic data on the Town and Villages is available at the following websites: [www.census.gov](http://www.census.gov) or [www.nvda.net](http://www.nvda.net) – select ‘About NVDA’ and ‘Our Towns’.**

The need for housing can be approximated by comparison of population with the number of persons in occupied housing units. In Barton, there were 2810 persons in the community in 2010. Of this number, 2,743 persons were living in occupied housing units of which there were 1,531 units and the average household size was 2.3 persons, so it

seems that there is an adequate amount of housing in the Town and Villages.

Of the 1,531 total housing units, 830 were owner-occupied units, 362 were renter-occupied, and 339 units were vacant (primarily, seasonal dwellings). Barton Village had a slightly higher number of renter-occupied units (156) than did Orleans Village (132). Both villages have municipal water and wastewater systems and any new multi-unit structures should be located within either village. Barton also has a greater number of vacant (seasonal) dwellings than Orleans, and this is likely due to Crystal Lake being in Barton Village.

Housing affordability seems to be a significant issue in both of Barton's villages. While the median household income in Barton was \$43,139, the household incomes in Barton and Orleans were \$28,333 and \$31,750, respectively. Thirty-two percent of Barton's homeowners spend more than 30 percent of the monthly income on housing costs. This number increases to 48 percent for those who rent their housing (this figure is nearly 55 percent in Barton Village). Based upon demographic data for the period 2007-2011, of the 397 persons in Barton who were determined to be earning below the poverty level, 123 of these individuals were living in Barton Village and 183 were residing in Orleans Village.

The Zoning Bylaw for the Town and Villages does make provisions for the establishment of affordable housing in the community. These provisions include: allowing for accessory dwellings; treatment of mobile homes as single family housing; and guiding multi-family housing toward already-developed areas where municipal infrastructure and goods and services exist.

Given the age of much of the existing housing (and many commercial buildings) in Barton and Orleans Villages, the Town will be supportive of weatherization and energy efficiency efforts that reduce heating costs for owners. The Villages are encouraged to closely monitor utility costs – water, sewer, and electric – as these directly impact housing affordability.

24 V.S.A., Section 4382(8) requires: “A *statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title*”;

## I. STATEMENT OF IMPACT OF TOWN PLAN ON SURROUNDING TOWN PLANS & THE REGIONAL PLAN

Barton, with the incorporated villages of Orleans and Barton, is the most populous and developed of those towns whose borders it shares. The historical status of Barton as

a retail and industrial hub of its immediate surroundings is well established but over time its prominence has decreased, primarily due to declines in manufacturing and losses in retail development. We are now seeing increased commercial and retail development and employment in the Newport/Derby area (at a distance not too far for many residents to commute. The Planning Commission feels that the overall effect of adoption of the plan on surrounding towns, and plans they have, will be positive. The seven surrounding towns are:

- Albany: As of 2015, no Town Plan or local zoning. NVDA worked with the Town's Planning Commission on a draft plan, but it is unclear when this may be adopted. Barton and Albany are connected most directly by the East Albany Road. This unpaved route passes by a number of working farms and wooded areas. The intensity and type of development should remain as it exists today.
- Brownington: Recently, Brownington adopted an updated Town Plan in September 2015. The Town has no local zoning. The primary road connecting Barton to Brownington is Route 58. This state highway connects Orleans to Evansville and essentially follows the scenic Willoughby River which originates in Westmore at Lake Willoughby. The Churchill Road – Hinman Settler Road and Tarbox Hill Roads are other routes that connect the communities. Like Albany, the primary land uses in these areas are farming and forestry and this is likely to remain that way for the future.
- Glover: A Town Plan is in effect until October 2016. Glover has no local zoning. Glover village utilizes the Village of Barton's wastewater treatment facility for sewage treatment. A sewer main line follows state Route 16. The Barton Zoning regulations allow commercial development along this highway up to the Glover town line.
- Irasburg: The Town is in the process of drafting a first ever Town Plan. Irasburg has no local zoning. Barton is connected to Irasburg by Routes 5 and 58, and also by Lake Region Road (serves the union high school and connects to Route 58). There is some limited commercial development along Route 5 in Irasburg to the northwest of Orleans Village and the I-91 exit 26. Lake Region Road is residential in nature and should remain so into the future. There has been an industrial wind project proposed in Irasburg on Kidder Hill that may impact some adjoining communities.
- Sheffield: The Sheffield Town Plan expired in March 2015. They are in the process of updating the plan. Sheffield has no local zoning. The area bordering the Sheffield – Barton line is rural, wooded upland. The greatest impact Sheffield has on the community is the First Wind project – a 16-turbine industrial wind farm that is very visible from Crystal Lake and the surrounding area. The industrial wind facility can be accessed via Duck Pond Road from Barton Village or from Route 122 in Sheffield. With an awareness that the First Wind project is operating with a Certificate of Public Good issued by the Public Service Board,

the Barton Planning Commission would like to see the night-time lighting associated with the project altered from blinking red lights to lights that can be activated by radar once these are approved by the FAA.

- Sutton: Sutton has a Town Plan in effect until October 2016. The Town also has a zoning bylaw in effect that was last revised in 2005. They are in the process of updating their bylaw. The boundary area between Barton and Sutton is very hilly with steep slopes and several wetlands and small ponds right along Route 5 at the point where Route 5 leaves Sutton and enters Barton. Significant developments in this area could have negative environmental impacts on both towns. The Barton Town Plan has categorized this part of Barton as remote land and it should remain so. Land uses permitted in this area by the Barton Zoning Bylaw are limited and the minimum lot size for development in this area is 10 acres. The use requirements of the Barton Zoning Bylaw should also help to mitigate any development impacts of development in this area.
- Westmore: The Town Plan for Westmore is in effect until April 2018. Westmore does have local zoning and this was last revised in 2008. The major road linking Barton to Westmore is VT Route 16, a scenic highway that leaves Barton Village, passing Crystal Lake and Barton Mountain and continuing on to Lake Willoughby. Development along this road should remain primarily residential in nature with working farms and forests. RCT provides regular bus shuttle service between Westmore and Barton, and many seniors from Westmore utilize the Senior Center in Barton Village.

#### Regional Plan:

The NVDA Regional Plan, updated and adopted in August, 2015 and in effect for eight years, identifies Barton as a “Service Center” which is defined as a community with centers for commerce, services, employment and community life. Service centers are separated by distance from regional urban centers (Newport/Derby and Lyndon/St. Johnsbury) and they do not provide enough employment to be completely self-contained. Service centers provide municipal water and sewer, employ municipal staffs, and are served by state highways. The core of a service center is characterized by relatively dense mixed land uses, containing civic, governmental, commercial, and mixed residential uses. Service centers typically have significant areas for industrial use and development. This is exemplified by the Ethan Allen plant in Orleans and the NVDA industrial park.

The intentions and goals outlined in this plan are also compatible with the NVDA regional plan.

24 V.S.A., Section 4382(a)(11) requires: *“An economic development element that describes present economic conditions and the location, type, and scale of desired*

*economic development, and identifies policies, projects, and programs necessary to foster economic growth”.*

## J. ECONOMIC DEVELOPMENT

Under the NVDA Regional Plan for the Northeast Kingdom, Barton and Orleans are considered sub-regional service centers due to the fact that they are separated by distance from the two regional urban centers of Newport-Derby and St. Johnsbury-Lyndon. The villages do not provide enough employment to be completely self-contained, so they partly serve as bedroom communities for the larger urban centers.

Service centers provide municipal water and sewer and employ municipal staffs. Limited other government functions like the State’s Transportation Maintenance Garage or Supervisory Union offices may also be carried out in service centers. All service centers in the region are served by at least one state highway (U.S. Route 5, VT Routes 16 and 58 in Barton). The cores of service centers continue to be characterized by relatively dense, mixed-use land developments containing civic, governmental, commercial, and residential uses. Service centers typically have significant areas for industrial use and development. The NVDA-owned industrial park in Orleans is zoned for commercial and industrial development and is also identified as a magnet site for the region’s Foreign Trade Zone.

Both this Plan and the Joint Zoning Bylaw promote and provide for business development in designated village, commercial, and industrial areas. These include Barton and Orleans Villages, commercial areas along state highways, and the Orleans Industrial Park. Home occupations, as defined by VT statute, are allowed in all zoning districts.

Orleans and Barton Village each have available infrastructure for business development, including municipal water and wastewater systems and electric utilities. High-speed broadband services are readily available in the community through providers like Fairpoint Communications and Comcast. Cellular service in the area continues to improve via providers like Verizon, AT&T, and T-Mobile and this is expected to continue.

Existing Businesses: Ethan Allen is by far the largest manufacturing business in the Town with an estimated 365 employees at their Orleans plant. The company’s importance to Orleans Village and the broader community cannot be understated, so retention efforts should be ongoing.

The Town and Villages are also fortunate to have all of the businesses that operate in the community as they provide needed goods and services, employ local workers, and bring dollars into the area. Some of these include local grocery and convenience stores, hardware stores, drug stores, banks, retail stores, auto-related sales and repair businesses, and restaurants and lodging establishments.

Business Opportunities / Needs: The Barton Area Chamber of Commerce, serving Barton and surrounding communities, has undertaken surveys with the assistance of UVM Extension in the recent past to determine what types of businesses and goods and services people would like to see in the community. A *2009 Barton Area Market Survey* was conducted to 1) gather information that would help existing businesses better meet local needs; 2) make information available for entrepreneurs interested in starting a new business; and 3) improve the availability of goods and services to consumers in the local area.

The 2009 survey's results showed that Barton's primary trade area for the residential market is effectively the area between Newport and Lyndon (N-S) and Westmore and Greensboro (E-W), or an approximate 15-minute drive from Barton in any direction. Beyond this and the Newport, Hardwick, and St. Johnsbury – Lyndon market areas begin to have a draw effect.

The survey also revealed that unique, destination-type businesses would likely have a broader market area, and second homeowners, tourists/visitors, and Canadian shoppers represent sizable market segments for Barton. Residents and visitors do have to leave the Barton area for some goods and services – e.g. furniture and home furnishings, electronics and appliances, clothing and shoes, and general merchandise / department store needs. For the full 2009 survey and a Second-homeowner survey that was completed in 2011 contact NVDA or UVM Extension.

The Town of Barton does maintain a flexible revolving loan fund that has been useful for businesses in the community. Applications are reviewed by a local loan fund committee and favorable applications are reviewed and approved by the Select Board.

Also, the Village Center designation program for Vermont does offer historic preservation and code improvement tax credit benefits for eligible commercial properties with a designated district. Barton Village has a state-designated district. The Planning Commission will work with Orleans Village as they apply for village-center designation.

Other important funding resources for the Town and Villages to remain aware of are:

- USDA Rural Development grants and loans for Community Facilities, Water/Wastewater and Environmental Programs, Business Development Grants, and Renewable Energy Grants. ( <http://www.rd.usda.gov/programs-services> )
- Northern Border Regional Commission grants for public infrastructure, transportation, and economic development. (<http://www.nbrc.gov/content/program-areas> )
- Vermont Community Development Program grant and loan opportunities for community and economic development projects, handicap accessibility, and planning. ([http://accd.vermont.gov/strong\\_communities/opportunities/funding/vcdp](http://accd.vermont.gov/strong_communities/opportunities/funding/vcdp))



24 V.S.A., Section 4382(a)(12)(A) requires: “A flood resilience plan that: (i) identifies flood hazard and fluvial erosion hazard areas, based on river corridor maps provided by the Secretary of Natural Resources pursuant to 10 V.S.A. § 1428(a) or maps recommended by the Secretary, and designates those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and (ii) recommends policies and strategies to protect the areas identified and designated under subdivision (12)(A)(i) of this subsection and to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments”.

(B) “A flood resilience plan may reference an existing local hazard mitigation plan approved under 44 C.F.R. § 201.6”.

## FLOOD RESILIENCY:

### A. Existing Conditions

The Town of Barton lies wholly within the Barton River watershed, which is within the larger Memphremagog Watershed Basin (#17). Waters in the basin support swimming, boating, and fishing and this is certainly true in Barton. Threats to the watershed and these uses include nutrient enrichment (phosphorus), aquatic invasive species (milfoil), alterations to riparian habitat, and illicit discharges (sewage and stormwater).

The ANR Water Quality Management Plan for Basin 17 indicates that stormwater system mapping and illicit discharge detection is a priority action for both Orleans and Barton Villages. Another recommended priority action is to encourage each town in the basin to apply for a Better Backroads Grant to address water quality issues identified by their road review committee. Pageant Park Road in Barton Village is a good candidate for such a grant due to runoff and sedimentation into Crystal Lake.

Infrastructure placed in close proximity to streams and rivers is particularly exposed to damage from flash flooding, bank failure, and stream channel dynamics. The Vermont DEC is in the process of developing “River Corridor” maps for the entire state, which identify both the river channel and the fluvial erosion hazard area associated with the river. For smaller streams that haven’t been included in the river corridor maps, a recommended standard setback is 50 feet. River Corridor maps for Barton have been developed.

NVDA has overlaid FEMA Flood Insurance Rate Maps over base maps developed for Barton with E-911 points to give an approximate estimate of the number of structures in the Special Flood Hazard Area. While useful for planning considerations, the maps are not suitable for making official determinations.

## **FEMA and NFIP**

In order to be eligible for participation in the National Flood Insurance Program (NFIP), the Town has adopted local flood hazard regulations that meet the minimum federal requirements.

The Federal Emergency Management Agency (FEMA) developed a Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) for the Town of Barton, Village of Barton and Village of Orleans. Flood plain, flood ways, drainage areas, peak discharges, river profiles and other technical information has been compiled for the Barton River, Willoughby River, Willoughby Brook, Roaring Brook and the Outlet from Crystal Lake. The Flood Insurance Study was originally completed in 1976, updated in 1984 and 1992. Historical information related to flooding issues can be found in the FIS. Also, you can find what zone your property may be located in by reviewing the FIRM. Zones include A, AE, X and others. FEMA has now developed user friendly online maps to view and print specific information. The maps can also be found in the Town office. FEMA has mapped the “Zone A” flood inundation areas in Town, but has not identified base flood elevations.

Since 1990, FEMA has developed a Community Rating System (CRS). The CRS is a voluntary program for recognizing and encouraging community floodplain management activities exceeding the minimum NFIP standards. Each CRS Class improvement produces a 5 percent greater discount on flood insurance premiums for properties in the Special Flood Hazard Area (SFHA). Each year the community would be required to submit an annual recertification which may be cumbersome for a rural community with limited resources. Participating in the CRS program may allow the community to qualify for discounted flood insurance.

The River Management Program within the Vermont Department of Environmental Conservation (DEC) has prepared model flood hazard regulations for towns in Vermont, that comply with the requirements of NFIP. In addition to setting standards for development within the flood inundation areas mapped by FEMA, the model ordinance also provides standards for development within mapped River Corridors identified by the State. As River Corridor data has not yet been developed for Barton and its incorporated villages, the Planning Commission has not considered the DEC models. This model can be found as a layer on the Natural Resource Atlas located at <http://anrmaps.vermont.gov/websites/anra/>.

## **Emergency Relief and Assistance Fund**

ERAF provides public assistance grants through FEMA to help municipalities repair damaged infrastructure after a presidentially-declared disaster. A 25% non-federal

match is required for approved projects, with half of this (12.5% of the total project cost) is typically covered by the State. A rule adopted in 2012 requires that by October 23, 2014, a Town must have four mitigation measures in place in order to be eligible to receive the same level of State funding. The four mitigation measures required are 1) adoption of the Agency of Transportation's Road and Bridge Standards, 2) adoption of flood regulations meeting NFIP standards, 3) adoption of a Local Hazard Mitigation Plan and 4) adoption of a Local Emergency Operations Plan.

When the new ERAF rule becomes effective in October 2014, municipalities can qualify for an increased state match of 70 percent for the non -federal share (or 17.5 percent of the total project cost) by either: 1) maintaining an active rate classification under FEMA's NFIP Community Rating System (CRS) that includes activities that prohibit new structures in mapped flood hazard zones; or 2) adopting a river corridor protection bylaw that meets or exceeds state model regulations and guidelines.

Goals and Recommended Actions:

- Stream bank setbacks and buffer standards should be based on default geomorphic standards from VT DEC.
- Adopt up to date flood hazard area and river corridor regulations to meet standards in the current Vermont flood hazard area regulation model, and to qualify for Vermont Flood Resilient Communities matching funds.
- Establish and sustain a flood hazard area education and outreach effort to support flood damage mitigation and better insure community residents and property for future flood damage.
- Explore participation in the FEMA Community Rating System (CRS) so as to secure a discount on flood insurance
- Establish clear guidelines to promote appropriate flood mitigation for historic structures in the Special Flood Hazard Area.
- Update the Emergency Operations Plan and All Hazards Mitigation Plan
- New bridges or culverts should be designed to meet a 25-year storm event.

24 V.S.A., Section 4382(7) requires: “A recommended program for the implementation of the objectives of the development plan”;

## H. MUNICIPAL DEVELOPMENT PLAN IMPLEMENTATION

Under 24 VSA §4385(a) and (c), in towns over 2,500 persons, a municipal development plan is adopted after two or more public hearings. In towns over 2,500 persons, and in cities and incorporated villages, the selectboard and/or trustees may adopt a plan after two or more public hearing. In towns that elect to do so, plans may be adopted through Australian ballot. Because Barton has a population in excess of 2,500 persons, Its' citizens voted in 1992 to act as a “rural town” to allow adoption or rejection of a proposed MUNICIPAL DEVELOPMENT PLAN or AMENDMENT by Australian ballot.

**PROPOSED IMPLEMENTATION SCHEDULE FOR THE TOWN PLAN,  
OBJECTIVES & RECOMMENDATIONS**

Item	Proposed Implementation Date
Town Plan Approval (Planning Commission/Select Board)	Fall 2017
All-Hazards Mitigation Plan (Planning Commission/Selectboard/Trustees)	2016 - 2017
Solid Waste Disposal Policy (Select Board)	2015-2016
PACE Program Promotion (Select Board)	2017

**NOTE OF MAPS**

All of the maps in this plan are reduced versions of the official maps which are available at the Town Clerk’s Office.