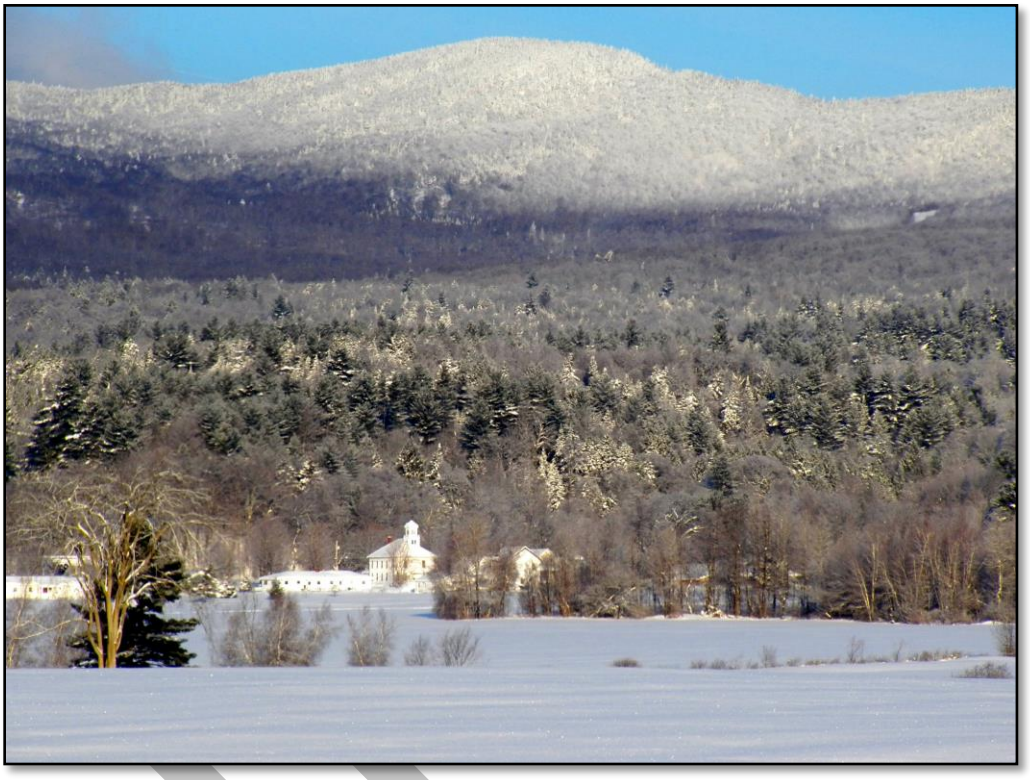
Westfield, Vermont

Town Plan



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This plan was prepared and adopted in accordance with the provisions of 24 V.S.A., Ch. 117, sections 4381-4385. The goals and recommendations outlined in this plan are consistent with the statutory goals recommended in section 4302 of 24 V.S.A.

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1. INTRODUCTION

This Town Plan is our attempt to set a course for Westfield's growth and development. Town officials assembled information about the history and current status of the Town, its resources, facilities and services, and current land use. We discussed problems, identified issues to address, and noted opportunities that can or might benefit the town, including those identified through a survey sent to all property owners. Finally, we developed priority recommendations to guide our actions over the next eight years.

We have recognized the importance of Westfield's history by providing a historical context for each section of the plan. We hope this will help us remember the relationships between past and present, as we make our decisions for the future. Much of Westfield's history is preserved within the Hitchcock Museum and Library.

Our natural environment contributes economically and aesthetically to the town's character. In 2006, National Geographic named the Northeast Kingdom a Geotourism destination, and published photographs of a section of North Hill Road in all four seasons as exemplary of the region's natural beauty. The rocky ledges of Hazen's Notch, a vast tract of forest, the Missisquoi River and the 350-million-year-old peaks of the Green Mountain Range extending from the southern to northern border of the town provide the physical setting for life in Westfield. These scenic resources contribute to our quality of life and our economy. Over the next eight years, we want to maintain the historic and scenic resources which have shaped the lifestyles we enjoy here.

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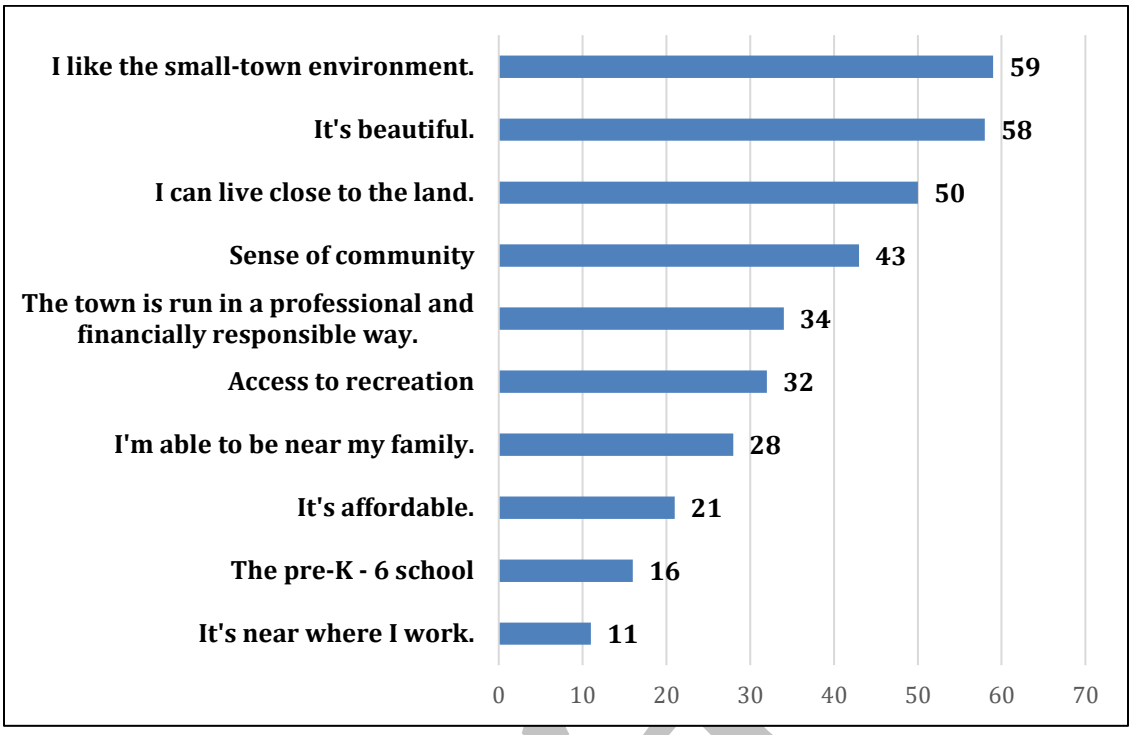
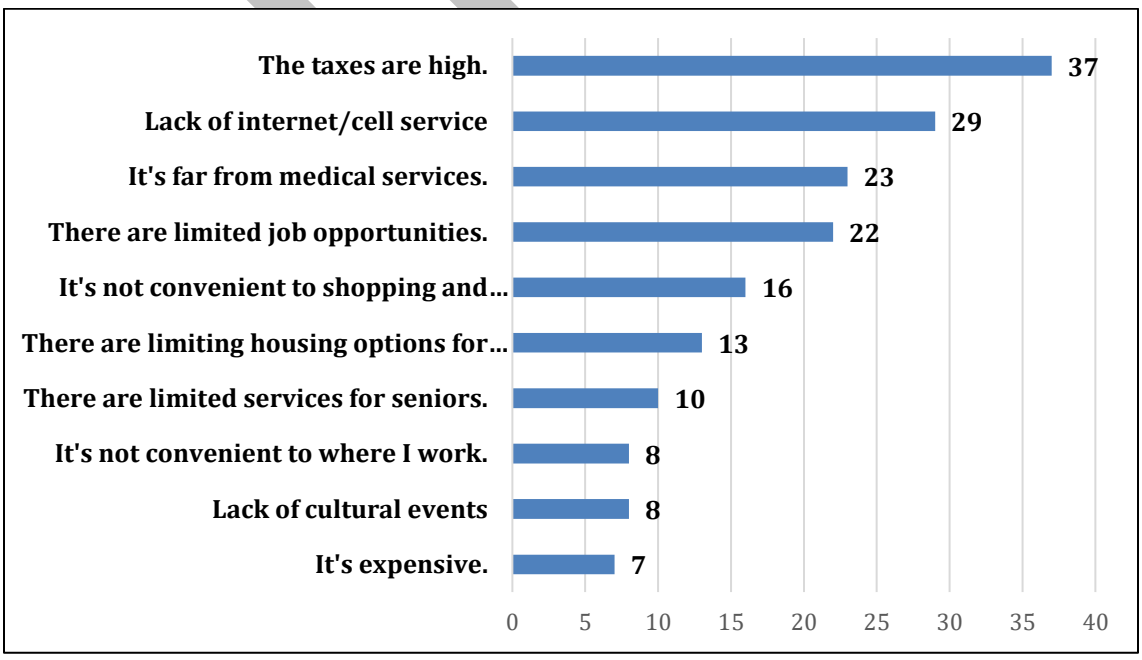
Figure 1.1: Westfield Community Survey -- What do you like about living in Westfield? (77 respondents, multiple answers)



The biggest changes Westfield residents have noted over the last 10 years are the loss in the number of farms and an influx of new residents – young and old.

Figure 1.2: What do you dislike about living in Westfield? (71 respondents, multiple answers)



Residents would like the Town to remain rural and peaceful with well-kept homes and yards and a core of prosperous, productive farms. They want Westfield to remain a small town with opportunities for people to work together for the benefit of their community.

Westfield officials and residents recognize the importance of respecting private property rights. Cooperation, and understanding shared interests, are essential to maintain community and balance public and private interests.

Our Vision for the Next Eight Years

Many of us wish we could bring back all the farms that contributed so much to Westfield's agricultural heritage. We can help keep the remaining farms through vigilant updating of town policies and bylaws to ensure that farmers have opportunities to diversify. We will encourage the productive use of our land and support development that strengthens the rural character we value as central to our quality of life.

We want to maintain local recreation access to farm and forest land for hunting, fishing, skiing, biking, snowmobiling, and hiking.

We are dedicated to supporting our existing businesses and industries. We will keep them by minimizing local government interference.

Over the next eight years, we will continue working with the town of Jay to ensure the collaborative operation of our joint, pre-K to 6 school and keep the educational needs of our children a top priority.

We will continue to monitor development at Jay Peak Resort and new developments near the resort. These have the potential to impact the Town, creating opportunities and challenges.

We welcome residential growth at a pace that allows us to retain Westfield's rural character, and provide municipal services. We will maintain community spirit by welcoming newcomers, and by maintaining the Town's neat appearance.

Finally, we want to continue the spirit of cooperation we have with the Town of Jay and extend it to other neighboring Towns. Transparency in local development ensures that the concerns of neighboring towns and benefits to them are as important as the benefits to the host town.

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2. WATER RESOURCES

Surface Water

Westfield lies in the Missisquoi River drainage basin. Its streams once offered excellent mill sites to early settlers. Mill Brook was named by Lyman Taft, who erected the town's first grist and saw mill on its banks.

In 2014, the Upper Missisquoi and Trout Rivers were the first in Vermont to join the National Wild & Scenic Rivers System. The designation helps ensure the long-term preservation of the scenic, recreational, geologic, fish and wildlife, historic, and cultural values connected to these river systems.

According to a Vermont Rivers Study (1986), Coburn Brook and its tributaries in the town's northeast quadrant, including Phillips Pond, are Class A waters - "of uniformly excellent character" and suitable for public water supply. All other surface waters are Class B - "suitable for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection." Threats to water quality in town include agricultural runoff and sediments washing into streams as a result of logging activities, and new development that increases runoff.

Ground Water

Ground water is the source of drinking water supplies in Westfield. Conditions present in Westfield that can introduce contaminants directly into the ground - underground storage tanks, leach fields, agricultural activities – affect ground water quality. Private wells and springs supply most of the potable water. There are six water systems serving more than one household. Fire District #1 provides water to residents in the village from a spring and well located on North Hill Road. Source protection areas for systems serving more than one property lie completely or partially within Westfield: Jay Peak Basin, Slopeside, Jay Peak Phases 1 and II, Trillium Woods, Westfield Village, Alpine Haven, and North Troy. Protection areas for each of these systems are identified, mapped and noted in Bylaws.

Wetlands

The National Wetlands Inventory lists 444 acres of wetlands in Westfield, comprised of numerous small areas representing less than 2% of total land area. They are distributed throughout the town, with the majority of wetlands along the Missisquoi River. Two large forested wetlands, associated with Snider and Taft Brooks, are located west of TH 17, Balance

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Rock Road. Wetlands serve important water quality functions such as filtering and flood protection, and they are subject to both state and federal regulation.

Setbacks and Vegetated Buffer Strips

Minimum setback distances from the top of the bank for septic systems, buildings, or other structures, as well as a vegetated buffer strip between any land use activity and a water body will serve to prevent or minimize water pollution. A minimum setback distance for any structure will keep construction or repair activity away from the shoreline; will help maintain the vegetated buffer strip; and will provide a permeable area for rain and runoff. Setbacks and buffer strips also help protect the natural character of the waterways providing recreational and aesthetic value.

Riparian buffer strips are areas of natural, undisturbed vegetation along the shoreline of lakes, ponds, and streams. They provide valuable functions including: bank and stream bed stabilization; nutrient pollution and sediment capture and retention; regulating water temperature and stream flow velocity; cover for fish in the water and for wildlife on the shoreline, and; feeding and nesting habitat for birds. Riparian buffers are complex ecosystems that help provide optimum food and habitat for stream communities and are useful in mitigating or controlling non-point source pollution.

Buffer strips shall be maintained on all waterways, including small streams. Planting of vegetation and trees along the shoreline of the Missisqoui River is already being done by the Missisquoi and Trout River Wild and Scenic Rivers Committee. Westfield's current Zoning Bylaw provides that a minimum, 50 ft. setback with a vegetated buffer strip shall be maintained along all waterways. Small streams are most vulnerable because they respond most dramatically to changes in adjacent land uses, tend to be located on steep, erosion-prone slopes, and often have the highest quality habitat. Even brooks not big enough to hold trout provide benefit, because shade keeps the water cool and rich in oxygen for trout habitat downstream. It is essential to maintain the quality of these headwater streams to ensure the protection of water quality downstream.

Agriculture and logging are generally exempt from local zoning bylaws, but they are subject to state regulations and standards. Agriculture operations must follow the Required Agricultural Practices (RAPs), which can be found at: agriculture.vermont.gov/rap or by contacting the Vermont Agency of Agriculture Farms and Markets (AAFM). Information on Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont can be found at: http://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/Forest_Management/Library/VT%20Administrative%20Act%20Procedures%20Forms.pdf or by contacting the Vermont Dept. of Forests, Parks, and Recreation.

Challenges/Opportunities:

- More intense rain events increase the need for vegetated buffer strips along shorelines of streams and the Missisquoi River to prevent bank erosion and collapse.
- Landowners along the river have had problems during high water with erosion and collapse of banks.

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- State regulations now address the siting, design, and installation of all on-site septic systems and potable water supplies. (Vermont Department of Environmental Conservation's Environmental Protection Rules, Chapter 1, Wastewater System and Potable Water Supply Rules, Effective September 29, 2007)
- Updated Required Agricultural Practices (RAPs) from the Agency of Agriculture, Farms and Markets and forestry Acceptable Management Practices (AMPs) by Department of Forest and Parks are designed to protect and improve water quality.
- Soils with higher organic matter can better withstand weather extremes and reduce runoff.
- There is a need to limit or exclude development in flood-prone areas.
- The Missisquoi River's National Wild & Scenic River designation may attract tourists and potential homebuyers.
- The Orleans County Conservation District is available to offer technical assistance to private landowners with flooding and erosion control problems.

Recommendations:

- Assess existing land uses in floodplains, near wetlands, and in well-head protection areas and identify potential sources of contamination.
- Identify chronic erosion locations for remediation.
- Amend Zoning Bylaw to include storm water management and erosion control responsibilities for property owners.
- Amend Zoning Bylaw to increase buffers and/or erosion control measures where 50' set back does not provide sufficient erosion control.
- Ensure the Zoning Bylaw maintains provisions for consideration of ground and surface water contamination and wetland disturbance.
- Ensure that Westfield's flood hazard regulations maintain the Town's eligibility for the National Flood Insurance Program. Consider amending the regulations as needed, especially to address erosion hazards. (See the next chapter, Flood Resilience, for more information.)
- Use the National Wild & Scenic River designation to build support for water quality education and protection measures.

3. FLOOD RESILIENCE

Westfield Floodplain Regulations

The Town of Westfield adopted Floodplain Regulations in 1998 to promote public health, safety and general welfare, to prevent increases in flooding caused by uncontrolled development of lands in areas of special flood hazard, and to minimize losses due to floods. This is achieved by requiring a Conditional Use Permit for activities listed in the Bylaws; and by adhering to FEMA's development standards. Westfield's existing floodplain maps are hard to read and lack technical details, such as base flood elevations and delineation of floodways, so the Administrative Officer relies on state officials for assistance when interpreting the map.

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The regulations also require that uses vulnerable to floods, including public facilities that serve such uses, be protected against flood damage at the time of construction. Enacting flood regulations allows all Westfield property owners – regardless of whether they are located in the Special Flood Hazard Areas – to purchase flood insurance through the National Flood Insurance Program.

The Town currently regulates development in the "Special Flood Hazard Area." These areas are likely to flood when the river spills over its bank during a "100-year" flood. The latter term, which is commonly used to designate what would be a statistically significant flood, is misleading. It does not mean that a flood only occurs once a century. Rather, it means that there is a 1% change of flooding in any given year. Considering that flooding is becoming more frequent in Vermont, this type of flooding could actually occur every year – or even multiple times a year.

Allowable land uses in the Special Flood Hazard Area include recreational, and residential uses such as lawns, gardens, parking areas and play areas. Development in the Special Flood Hazard Area – including fill, excavation, grading, erection, placement, or substantial improvement of structures – must first receive a permit. The Town of Westfield Flood Plain Regulations can be found on the town website: http://westfield.vt.gov/wp-content/uploads/2012/01/WESTFIELDZONINGBYLAW-1-13-101.pdf

Communities participating in the National Flood Insurance Program must issue permits for all development proposed in flood hazard areas. Development in the Special Flood Hazard Area must meet specified standards, such as elevation and floodproofing. However, the regulations should not be seen as an effective way to minimize flood risks. Westfield's regulations meet only the minimum development standards set by FEMA, so it is possible that development can still cut off access to critical floodplain storage, resulting in increases to the base flood elevations and flood velocities to other properties.

Westfield's Flood Map

Westfield's Floodplain Regulations reference a FEMA Flood Hazard Boundary Map, which was first identified in 1974 and made effective in 1998, the year Westfield joined the National Flood Insurance Program. This is a paper map, which is organized into 12 separate panels. Only four of the panels – depicting the eastern side of town – are published because the other eight panels contain no information. FEMA did not conduct hydrologic or hydraulic studies, so the map lacks detail such as:

- base flood elevations (how high the water can be expected to rise in the Special Flood Hazard Area);
- delineation of floodways (where floodwaters run the deepest and fastest); or
- 500-year floodplains, (areas that could become inundated in a flooding event with a 0.2% chance of occurring in any given year).

Fortunately, FEMA and the U.S. Geological Survey are remapping areas of the Missisquoi watershed and should yield useful data in a few years.

Westfield's mapped Special Flood Hazard Area includes Coburn Brook, where it runs near Kennison Road; portions of Mill Brook and Taft Brook; and the Missisquoi River. Development in

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the Special Flood Hazard Area is mostly concentrated along Loop Road. The age of the maps and lack of detail make it difficult to determine how many structures may be prone to flooding. According to rough estimates from NVDA and the Department of Environmental Conservation, there may be as many as 25 structures located in the Special Flood Hazard Area. FEMA has issued three Letters of Map Amendment to remove properties on Loop Road from the Special Flood Hazard Area.

There are currently four flood insurance policies in force in Westfield, for a total insured value of $1,062,000. Only one of these policies is for a property in the Special Flood Hazard Area. There are no repetitive loss structures. The majority of flooding damage has been to public infrastructure, such as roads, bridges, and culverts. Since 2001, there have been four federally declared disasters in Westfield that caused damage to public infrastructure. (One disaster involved heavy snowfall.) To date, Westfield has received more than $36,000 in federal disaster assistance through FEMA's Public Assistance Program, which typically covers about 75% of the cost of repair to public infrastructure.

Erosion and Flash Flooding

Flood hazards result from flash flood situations, in particular along steeper stream sections. Clearing of vegetation cover and constructing impervious surfaces, like roofs and parking lots, increases storm runoff particularly in higher elevations. To prevent flash flood situations, development should not increase the volume or velocity of streams. Channelizing and straightening streams also increases stream velocity and increases the risk of flash floods. Many times, roads and driveways up steep hills create perfect conditions for flash floods because they are designed to rapidly drain water from the surface and send it downhill in a straight steep ditch. The Vermont Better Roads Program (formerly known as "Better Backroads") has grants and technical assistance to avoid erosion and flash floods resulting from road design and construction. Westfield's most recent grant award under this program was in 2018, when the town received more than $16,000 to work on ditching along Buck Hill Road.

Meeting the minimal requirements for participation in the National Flood Insurance Program will not necessarily protect Westfield from future flood losses. The FEMA standards – which are reflected in Westfield's Floodplain Regulations – only address inundation risks and do not address the risks of fluvial erosion. Areas subject to erosion due to shifting rivers and streams are not identified on FEMA maps. Ironically, this erosion damage occurs frequently in Vermont, due in part to the state's mountainous topography.

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In late 2014, the Agency of Natural Resources published **river corridor** map data depicting areas that may be subject to fluvial erosion. The map consists of two components:

- On streams with a drainage area of more than two square miles, the river corridor identifies the minimum area needed to accommodate lateral movement of the stream channel, PLUS a 50-foot vegetation buffer on either side.
- On streams with a drainage area of two square miles or less, the river corridor is identified as a 50-foot vegetation buffer.

The river corridor maps need to be reviewed to account for bedrock and steep valley slopes. Nevertheless, river corridors account for river change vertically and horizontally over time, and, therefore, are not as likely to become outdated as FEMA maps, which are based on the elevation and location of the river at the time when the maps are produced. Within river corridors, floodplains may be formed and maintained over time. This means that corridors may consistently help mitigate both erosion and inundation hazards in comparison to the FEMA map counterpart.

Other Flood Attenuation Assets

Proper management of upland areas plays an important role in flood hazard management. While these areas are important for supporting wide-ranging species of wildlife, their flood resilience function is also critical. Limiting clearing of upland slopes helps attenuate flood flows and reduce stormwater runoff. Westfield's 85% forest cover, particularly in areas with steep slopes and high elevations (where headwaters are located) are protected from unpermitted clear-cutting and development pressures. Lands with an 1,800 foot or higher elevation are in the western side of town, and include lands that are either conserved through Vermont Land Trust/Nature Conservancy or are enrolled in the Current Use Program. Much of the farmland along Route 100 is also conserved and/or managed using organic farming practices that emphasize soil health and cropping practices to minimize erosion.

Wetlands also have the capacity to retain significant amounts of floodwaters. The State of Vermont regulates activities in and adjacent to wetlands. These rules apply to the wetlands and associated buffer zones within 100 feet of Class 1 wetlands, and 50 feet of Class II wetlands. Any activity in a Class I or II wetland requires a state permit. Westfield has 444 acres of identified wetlands.

Culverts & Bridges

The combination of roads, steep slopes, and running water constitute areas of higher road erosion risk, and drives the placement and sizing of culverts. The Vermont Online Bridge and Inventory Tool (VOBCIT) database shows that Westfield has 198 culverts, and nine bridges. As of September 2018, all are in "good" or "fair" condition.

The Northeastern Vermont Development Association (NVDA) annually assists towns in updating their culvert data by hiring consultants to do the field work using GIS and then uploading this to the VOBCIT. The VTrans Maintenance Districts

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ideally want an inventory done every three years, but NVDA can only do 4-5 towns per year. NVDA is working to get towns to use VOBCIT to input their annual updates so that they will always have an up to date inventory.

Critical Facilities

Critical facilities are essential to a community's resilience and sustainability. In general, there are two kinds of facilities that a community would consider "critical" during and after a flood:

- Those that are vital to the health and safety of the public before, during, and after a flood, such as emergency responders, schools, and shelters; and
- Those that, if flooded, would exacerbate the problem, such as a hazardous materials facility, power generation facility, water utilities, or wastewater treatment plant.

Because they are defined by their ability to quickly and efficiently respond to and recover from floods, critical facilities should never be flooded, and their critical actions should never be conducted in floodplains if at all avoidable.

Westfield has three critical facilities: the Town Garage/Recycling Center; the Community Center, which serves as a temporary emergency shelter; and the Town Office, which serves as the emergency command center. None of these facilities are located in the Special Flood Hazard Area. There is not sufficient data to determine if they are located in the 500-year floodplain.

Emergency Relief and Assistance Fund (ERAF)

When a community requires public assistance, FEMA funds generally cover 75% of the loss. To date, Vermont's Emergency Relief and Assistance Fund (ERAF) has provided half of the matching funds (about 12.5%) required by FEMA, and the town has assumed the remainder of the cost. In October 2014, however, new legislation tied the State's percentage of ERAF funding to specific local initiatives to reduce flood-related risks and prepare for emergencies.

For federally declared disasters that occur after October 23, 2014, ERAF will contribute half of the required match only if the town has taken all the following steps to reduce flood damage:

1. Adopt the most current Town Road and Bridge Standards (which can be found in the VTrans Orange Book: Handbook for Local Officials).
2. Adopt flood regulations that meet the minimum standards for enrollment in the National Flood Insurance Program.
3. Maintain a Local Emergency Operations Plan.
4. Adopt a FEMA-approved Local Hazard Mitigation Plan.

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Otherwise, the level of State funding will be reduced to 30% of the remaining match, which will usually be about 7.5% of the total cost of the loss. The Town of Westfield currently meets the first three requirements.

Local Emergency Operations Plan

The Local Emergency Operations Plan (LEOP) establishes lines of responsibilities in the critical hours immediately following a disaster. This information is particularly important in coordinating responses through mutual aid towns, and regional and state entities. The LEOP is on file with VEM and NVDA and is updated annually.

Hazard Mitigation Plan

The Hazard Mitigation Plan was approved by FEMA in 2005 and expired in 2010. NVDA has received grant funds to develop a new plan. Since FEMA's standards for approving the Hazard Mitigation Plan have become more rigorous, we should expect this to take up to two years. Once approved, the Town will be able to apply for FEMA funds to mitigate flood risks, such as purchasing generators, or upgrading or improving public infrastructure.

Above and Beyond

The legislative changes to ERAF funding propose to address the limitations of the National Flood Insurance Program by providing an incentive: Under ERAF, the Town may receive an increased state match for federally declared losses, if the town adopts flood regulations that are more aggressive than the minimum standards of the National Flood Insurance Program. These above-and-beyond standards include prohibiting most forms of new development in the river corridor, prohibiting most forms of new development in the Special Flood Hazard Area, and requiring structures that are more than 50% damaged to be elevated or floodproofed to at least one foot above the base flood elevation. The Planning Commission and local officials should review river corridor data, as well as FEMA maps, to determine if the town can become eligible for an increased match. Adopting flood regulations that exceed the minimum standard may be desirable, and would likely require outreach to taxpayers on the benefits of increasing flood hazard mitigation. The state Department of Environmental Conservation and NVDA are available to assist with public outreach and education.

Agricultural Uses

Vermont statute limits the authority of local regulations, such as required agricultural practices and the construction of farm structures, which are often located near flood hazards. Until recently, the Agency of Natural Resources operated under a Memorandum of Understanding with the Vermont Department of Agriculture to regulate agricultural practices in flood hazard areas. Under this MOU, the Agency of Natural Resources acted in a consultative capacity and established recommendations that only met the minimum standards of the National Flood

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Insurance Program. In March of 2015, **Vermont's Flood Hazard Area and River Corridor Rule** became effective. The new rule formalizes ANR's role in the regulatory process for agricultural practices and enforces more stringent standards. For example, most new developments in the river corridor (including fill) are prohibited. Development that displaces floodwaters must create compensatory storage and must not divert floodwaters onto adjacent property. The rule marks a significant policy change that requires outreach and education to farmers and local officials. The new rule can be found here: www.watershedmanagement.vt.gov/rivers/docs/FHA&RC_Rule_Adopted_10.24.2014.pdf

Goals

- Mitigate Westfield's flood hazards.
- Minimize the risk exposure and associated expense to Westfield residents.
- Ensure that the Town and its facilities are prepared to meet the demands of the next flood.
- Ensure that the Town can receive the maximum outside assistance in the event of the next federally declared disaster.

Challenges/Opportunities

- Westfield's financial assistance in the next federal disaster will be reduced until the town's updated Hazard Mitigation Plan is complete. (Estimated in 2020/21)
- Existing floodplain maps are hard to read and lack technical detail.
- Floodplain regulations do not address erosion, a significant source of risk.
- Statewide river corridor maps depicting potential erosion hazard areas were published in late 2014.
- Funding and technical assistance will be available to Westfield to develop a Hazard Mitigation Plan.
- Town road bridges and culverts are approved under the new Municipal Roads and General Permit (MRGP)

Recommendations

- Continue to identify and map Westfield's natural flood protection assets, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forested areas.
- Revisit Westfield's participation in the National Flood Insurance Program. Consider adopting regulations that will protect erosion-prone and floodwater storage areas from additional development and encroachment.
- Consider adopting a town stormwater ordinance to infiltrate water where it falls on disturbed/developed sites.
- Annually update the Local Emergency Operations Plan.
- Continue to meet the VTrans Road and Bridge standards. Participate in regional road foreman trainings and Transportation Advisory Committee meetings to stay abreast of flood resilience measures for the Town's roads and bridges.
- Update the Town's transportation infrastructure information in the Vermont Online Bridge and Culvert Inventory Tool.
- Identify and replace failing culverts.

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- Ensure proper training and outreach regarding development in flood hazard areas, including development exempt from local regulation, such as required agricultural practices.

4. FACILITIES & SERVICES

Water Supply

Forty-eight homes, businesses and town properties in the village are provided with water from a spring and a well on North Hill Road. It is owned and operated by the Westfield Fire District. The system was renovated in 1999, and a new drilled well became operational in August, 2016. With an estimated flow rate of 100 gal/minute, the new well has expansion capability to meet the needs of future residential and light industry development in the village center. Alpine Haven has a well-fed water supply that serves approximately fifty homes. Water quality of private wells and springs is acceptable without further treatment. Reports of high sulfur and iron content are common.

Since 1985, the delineation of Public Water Source Protection Areas (SPA) has been required for all proposed new sources for Public Community Water Systems. Since 1992, a Public Community and Non-Transient, Non-Community Water System must have an approved Source Protection Plan (SPP) in order to receive an Operating Permit. Assistance with all aspects of Vermont's Public Water Source Protection Program is available by calling the DEC Water Supply Division at (802) 828-1535. The division is also a good resource for guidance on controlling development in Wellhead Protection Areas (WHPA) http://dec.vermont.gov/water.

Identified Source Protection Areas (SPA) and Wellhead Protection Areas (WHPA) are located on the zoning map. Development within the identified SPA and WHPA areas are subject to a higher level of review (i.e. Conditional Use Review) prior to permitting.

Challenges\Opportunities:

- The Department of Environmental Conservation's Wastewater System and Potable Water Supply Rules, Effective September 29, 2007 now control the siting and installation of all potable water supplies and on-site septic systems.
- Guidance on Source Protection Plan and Wellhead Protection Areas is available through the VT Department of Environmental Conservation – Water Quality Division. Vermont Rural Water Association also offers training and technical support for managing and monitoring water systems.
- Limited access to municipal water supply may limit residential development adjacent to the Village district.

Recommendations:

- The Planning Commission should contact VT DEC Water Quality Division and Vermont Rural Water as necessary to determine if the SPA and WHPA zoning overlays are adequate.

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Waste Disposal

Currently, solid waste collected locally for disposal goes to the Waste USA, Inc. located on the Airport Road in Coventry. Westfield has a solid waste transfer station and recycling center. This facility is located at the town garage. Dumpsters are available for residents to get rid of waste on a fee per bag basis. The town covers the cost to operate the recycling center from the per bag fees. Recycling is also provided at the Waste USA, Inc. facility. Some residents opt to have trash pickup by a privately contracted hauler. Hazardous waste disposal days are offered five times a year at different locations in Orleans County, and at no cost to residents. In 2017 the Town began offering organics collection for food scraps. This material is hauled to a farm-based composting facility in Lyndonville

Local officials are concerned the Town's neat appearance is increasingly marred by an accumulation of junk vehicles on some properties, and an increase in roadside littering.

Westfield is a member of the Northeast Kingdom Waste Management District (NEKWMD http://nekwmd.org/pdf/MMP.pdf). The regional solid waste management organization is responsible for maintaining the solid waste plan for its member towns. Westfield is compliant with Vermont's Universal Recycling Law, Act 148.

Challenges/Opportunities:

- There is an opportunity for cooperation with adjoining Towns on recycling program.
- There is an opportunity to work with NEKWMD on solid waste management issues and planning.
- The Zoning provision for junk car removal, junky yards, and junkyards may need to be clarified to make enforcement easier.

Recommendations:

- Examine existing junk car ordinance in the Bylaws and determine if it meets the current need and if it is enforceable.
- Continue membership in the Northeast Kingdom Waste Management District for solid waste planning and recycling.
- Continue to provide and expand services as available at the recycling center.
- Explore options to compost collected food scraps locally.

Post Office

Years ago, the early inhabitants of Westfield traveled to Craftsbury for their mail. In about 1830, a mail route was established between Craftsbury and St. Albans. Soon after, a branch route was created between Lowell and North Troy. Ezra Johnson carried the mail twice a week on horseback and finally, a post office was established in Westfield. The post office is located in a private residence between the general store and the Community Center. Hours are limited.

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Cemeteries

Cemeteries are managed by the Westfield Selectboard with an appropriation from the Town. For 2018, $4,300 was budgeted for expenses. The Town has reserved funds of $55,000 to provide sufficient cemetery space and management and maintenance. As of July 1, 2017, the price of a single 4' x 10' Lot is $150. At the time of purchase, corner stones must also be purchased. As of July 1, 2018, the price of the corner stones is $130. Burial fees are $300 for a casket, and $100 to bury cremains. The acreage of North Hill Cemetery was doubled in March 2016, with a donation of adjacent land from Merlin and Luke Backus.

Table 4.1: Cemeteries in Westfield

	Status	Total acreage	Lots
North Hill Cemetery	At the current rate of sales, this cemetery will be full in about 60 years.	Total acreage: 1 Acre	Number of 4' x 10' Lots: 594 Number of Lots available: 447 Number of Lots sold in the last 5 years: 37
Westfield Cemetery	All Lots have been purchased. There is currently no option to expand this cemetery.	Total acreage: 1.8 Acres	Number of Lots - 199 Number of Lots remaining to be sold: 0

Challenges/Opportunities:

- Price for cemetery lots is not adequate to provide for perpetual care of the grounds.

Recommendations:

- Monitor rate of lot purchases and plan for expansion of North Hill Cemetery and/or siting a new cemetery
- Restructure Lot prices so more of the maintenance expenses are covered by Lot sales and burial fees, and are in line with Lot prices in the region.
- Monitor for land acquisition opportunities to expand North Hill Cemetery or site a new cemetery.
- Develop guidelines for sale of cemetery Lots.
- Explore higher yield options for Cemetery Reserve Fund to help offset maintenance expenses.

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Emergency Services

Fire Protection: Westfield contracts the Troy Volunteer Fire Department through an annual appropriation for fire protection services, except for the area of Alpine Haven, which is served by Montgomery's Volunteer Fire Department. The State Police provides E-911 dispatch services out of Williston. The Town pays for fire and rescue services through an annual appropriation.

Emergency Medical Services: The Towns of Westfield, Jay, Troy and Lowell contribute annual appropriations to support the Missisquoi Valley Ambulance Service (MVAS) based in Jay. MVAS provides 24-hour Paramedic level emergency medical services. Staff are in residence at the station while on duty, reducing response time to about five minutes. In 2017 MVAS responded to 48 calls in Westfield. MVAS bills insurance companies directly. They offer a subscription service of $50/yr. to minimize costs not covered by insurance. Patients are typically taken to North Country Hospital, 15 miles away in Newport.

Police Protection: The Orleans County Sheriff's Department and the Vermont State Police in Derby provide law enforcement services for the Town. The Town contracts yearly with the Orleans County Sheriff's Department to patrol the roads.

Emergency Planning and Services: Westfield is a member of the Local Emergency Planning Committee (LEPC) District 10. The Selectboard has adopted the LEPC 10 Hazardous Materials Emergency Plan. This plan is for coordinated response to spills of hazardous materials within a regional network in Essex, Orleans, and Caledonia Counties.

Dan Backus is the Town's Community Emergency Coordinator. Town residents are notified of tornados, floods, and severe storms by radio or television.

The Town has a Local Emergency Operations Plan on file with VEM & NVDA that is updated annually. The Town Local-Hazards Mitigation Plan (LHMP) has expired, and is on file with VEM and NVDA. We expect to have an updated plan within two years. Having a current LHMP reduces the local match requirement in the event of a declared disaster where FEMA is involved.

The Selectboard monitors the provision of emergency services. The Town's disaster relief program provides temporary emergency shelter, food and water. The Town Office is designated as the command center, and has a back-up generator. The Community Center provides shelter and also has a generator. There are 25 cots, bedding and bottled water in the cellar. During an emergency food on site for senior meals would be used along with other provisions purchased at the general store, less than 150'away. For long term disaster shelter residents would go to a Red Cross shelter, most likely in Newport.

Goal:

- Ensure that emergency services continue to be appropriate for the size of the town and volunteer capacity.

Recommendations:

- Complete All-Hazards Mitigation Plan update.
- Keep the Local Emergency Operations Plan current.
- Provide training for responders as needed.

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- Identify roster of volunteers to implement the Town's emergency services and ensure they are properly trained.
- Establish a schedule to update bottled water.
- Consider storing cots and bedding on third floor.

Recreation

Westfield and the surrounding area offer recreational opportunities for all ages. All season outdoor recreation includes canoeing on the Missisquoi River, snowmobiling and cross-country skiing on miles of V.A.S.T. Trails, hiking on the Long Trail, hunting, fishing, and trapping. Private landowners provide users access for many of these activities.

For children, there is a recently upgraded playground at the Community Center maintained by the town. There are tennis and basketball courts located behind the Town Office. The school participates in a ski program offered at Jay Peak, and there is hockey for all ages in Newport and Jay. The Hazen's Notch Association offers a children's summer camp, as well as hiking and cross-country skiing trails from their Rte. 58 location just a few miles beyond the Westfield town line.

Road biking is popular throughout the area. Recreation trails, a water park, ice arena, golf course, outdoor pool and a climbing wall are nearby at Jay Peak Resort along with downhill, cross-country, and back-country skiing and snowboarding. Other commercial establishments in the area offer camping, swim lessons, downhill skiing, and a fitness center. There is a growing interest to develop mountain bike trails off of Route 242 in and near the Jay State Forest.

Senior meals and activities are provided at the Westfield Community Center on Thursdays. The Community Center is also used for dances, scouts, community celebrations, music events, and private functions.

The Hitchcock Museum and Library is open Tuesday and Thursday 1 – 4 p.m. There are two computers for public use, and scheduled programs for children. More information on this facility can be found in the Public Buildings and Lands section of the plan.

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In the last few years, the exceptional acoustics in the Congregational Church has drawn performers from across Vermont and beyond. Event admission donations are used to help maintain the facility. Events often include a potluck meal or desserts before the event.

Challenges/Opportunities:

- Some landowners are beginning to post their land, and this may limit certain recreation opportunities - snowmobiling, cross country skiing, hiking, hunting, fishing, trapping.

Recommendations:

- Encourage landowners to continue allowing recreation on their land.
- Promote use of Town facilities (i.e. the Community Center and outdoor recreation facilities).
- Encourage communication between landowners and recreational users. Recognize the contribution private landowners make for local recreation with readily available information on the Town website and at the Town Office.
- Work with VASA to reduce illegal ATV use of Town roads and private property.
- Monitor bike and ski trail development on state-owned lands. Convey the Town's level of interest in these activities to Dept. of Forest, Parks and Recreation.

Public Buildings & Lands

The Hitchcock Museum and Library is a Westfield landmark. It was built in 1899 with funds donated by Aaron E. Hitchcock, a local farmer, businessman, and real estate investor. Hitchcock's $10,000 donation to the Town constructed the building, established a natural history collection, and provided a fund for maintenance. Since then, the museum collection has grown to include wild game trophies from around the world. There is a large collection of ships in bottles donated by Ralph Preston, a onetime Lowell resident. The museum also houses a complete history of the Town in photos, documents, and objects such as the first plow to till Westfield's soil. The Selectboard is charged with overseeing the Museum & Library facilities.

In 1999, a celebration was held in honor of the Museum's centennial birthday. Neighboring Towns supplied floats, antiques, and clowns for a parade. Bread & Puppet Theater of Glover also participated with a humorous selection of puppet characters. Craft vendors and other set-ups contributed a festive atmosphere for the celebration. The Air Force National Guard of Burlington opened the celebration by leading the parade.

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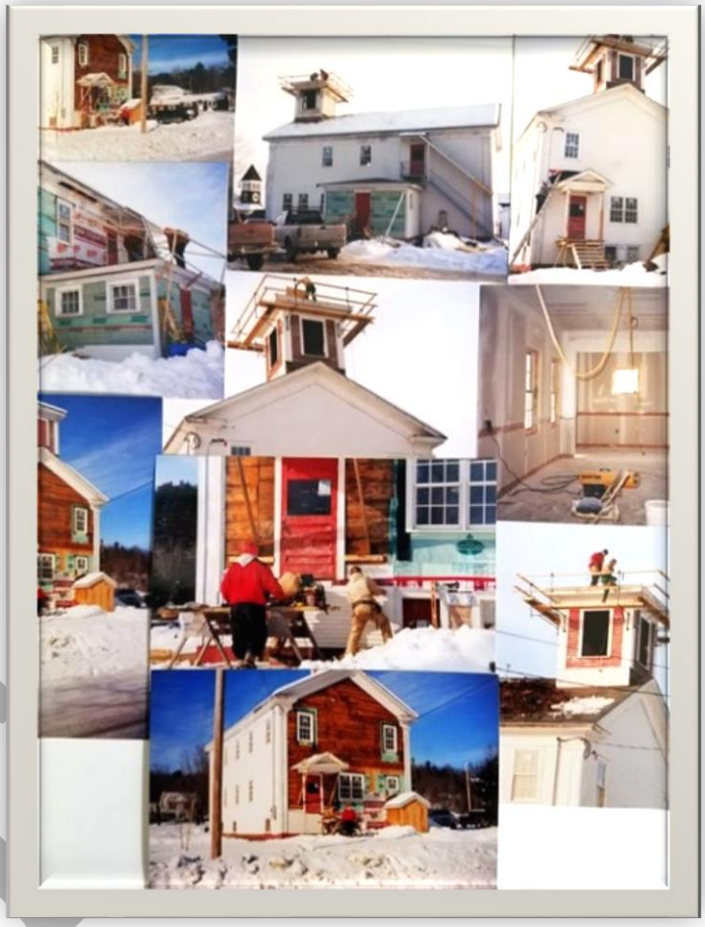
The Hitchcock Museum and Library completed ADA approved accessibility updates in 2017: an entrance ramp and doorways, enlarged parking lot with designated parking. These improvements were funded by taxpayer money and funds from Vermont Community Development Program.



The former Village School (ca, 1860) became the Westfield Community Center in the mid-'90s. Grants from the State, Preservation Trust of Vermont, and the Area Agency on Aging funded the renovations to modernize the inside, with ADA compliant access, and restore the exterior to resemble the building's appearance after it was elevated onto a foundation in 1920. The building is used for senior meals and activities on Thursdays. It is used for civic groups, Town and other board meetings, and is available to rent for private functions. The main floor hardwood flooring was replaced in 2017. Rebuilding the cellar stairs and minor plumbing work is slated for 2019/2020. The Selectboard is charged with overseeing the Community Center facilities.

There is free WIFI internet access 24/7 from the parking lots of the Hitchcock Museum and Library and the Community Center.

Table 4.2: Public facilities and lands in Westfield

Town Owned:	State owned:
Town Office Hitchcock Museum & Library Town Garage Community Center Playground, tennis court and basketball court One-quarter acre on Route 242 (gifted to the town) One-half of the Jay/Westfield School (located in Jay) The Village Common (intersection of Route 100 and North Hill Road) Westfield and North Hill Cemeteries	State Highway Garage Jay State Forest Hazen's Notch State Park and Natural Heritage Area Long Trail State Forest

Challenges/Opportunities:

- The Green Mountain Club occasionally purchases available property to add to the Long Trail, and donates the rest of the land to the State.
- The Hitchcock Museum & Library, Community Center, Town Office, and Town Garage require ongoing upkeep and maintenance.
- Village Center Designation may make the Hitchcock Museum and Library and the Community Center more competitive for grants to fund future improvements.

Recommendations:

- Consider areas of town, places important to local residents, where the Town may want to secure public access through donation, acquisition, or easements.
- Continue improving and renovating the Community Center and outdoor recreation areas.
- Monitor for land acquisition opportunities to expand North Hill Cemetery or site a new cemetery.
- Develop guidelines for sale of cemetery lots.
- Town officials review and comment on proposed purchases/acquisitions/ donations that increase the amount of public lands in Westfield.
- Pursue Village Center Designation for Westfield Village.

Telecommunication Facilities

Towers and related infrastructure require careful consideration. These structures tend to be located on highly visible locations on mountaintops, ridgelines and in residential areas. As

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people increasingly feel the need to be 'connected', it is expected that the need for additional facilities will increase in the coming years.

The Federal Telecommunications Act of 1996 placed certain limitations over municipal control of these structures; however, within those confines, there is a desire to protect the Town's historic character, rural nature, and aesthetic beauty. Toward that end, the Westfield Zoning Bylaw incorporates provisions for regulating personal wireless telecommunication facilities. Personal Wireless Telecommunication Facilities may be approved conditionally in any zoning district within the town. Subjecting these facilities to Conditional Use Review allows local officials to consider such things as aesthetics, integrity of residential zones, ridge line protection, preferred locations, and collocation or clustering of tower facilities. Projects may be approved with conditions that can mitigate any potential negative impacts. It is important to note, however, that developers have the option to bypass local permitting process and instead use the Public Utility Commission's Section 248 process.

Westfield residents and visitors currently have spotty cell service and limited internet service options. The Town supports investment in telecommunications and broadband infrastructure within the Town. In the last few years, two cell towers/transmitters were installed on Loop Road, on silos. Comcast has installed cable along Route 100 and part way up North Hill Road.

Recommendations:

1. All such facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural resource issues. Through the Zoning Bylaws, the Town may specify areas where these facilities may be located.

2. Towers and related infrastructure shall only be as tall as absolutely necessary.

3. Unless required by the FAA, towers shall not be illuminated. Where required, lights shall be shielded in order to minimize aesthetic impacts and/or be motion activated.

4. Structures shall be designed and sited to minimize aesthetic impacts. Towers and related infrastructure shall be screened from view to the greatest extent possible.

5. Structures should be co-located whenever possible.

6. Electric lines shall be installed so as to minimize aesthetic and ecological impacts.

7. The Town reserves the right to hire independent consultants to evaluate applications for telecommunication facilities. The applicant shall pay reasonable costs of these services.

8. All equipment shall be removed when no longer used or needed. A bond may be required to ensure that funds are available to accomplish these purposes.

9. The Town should participate in telecommunications projects that go through the Public Utility Commission's Section 248 process.

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5. EDUCATION

In the late 1800s, when Westfield's population was at its peak, the Town had six common schools serving 138 pupils. The Town paid out a total of $439.75 in salaries to ten teachers! The last remaining school in Westfield, built in 1860, was closed in June 1992.

In March of 1992, the Town voted to form a Joint School District with the Town of Jay and together built an elementary school in Jay to serve K-6 students. At that time, Westfield students in grades seven and eight had middle school choice, and students in grades 9-12 attended North Country Union High School. In March of 2018, the Town voted to become part of the North Country Union Junior High School, eliminating school choice for middle school students.

In response to increasing social, emotional, and academic needs of children, the Westfield School District eagerly welcomed Vermont Act 166 and Universal Preschool Legislation. Early intervention for the youngest community members became the focus of the strategic plan, and in the fall of 2015, Jay Westfield Joint Elementary School (JWJES) added a preschool program. The Preschool at JWJES is one of a few statewide to offer a full day program with transportation for four-year-olds, and up to 20 hours a week for three-year-olds. In 2017 the program was awarded five out of five stars through the Vermont STARS process, and enrollment is at maximum capacity.

Enrollment at the Jay Westfield Joint Elementary School reached a high point in 2012-13 with a reported 97 students in grades K-6. After an expected student/staff decrease in 2015-16, numbers have stayed steady with an average grade size of 11 students. For the 2019 school year, there will be five combined classrooms, with approximately 14-25 students in each. Student/teacher ratios are lower in the K-1 and 1-2 classrooms. Additional student/staff information is provided in the following chart:

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Table 5.1: Longitudinal Student and Staff Data

	2013-14	2014-15	2015-16	2016-17	2017-18
Enrollment	84	86	94	82	83
Classroom Teachers	6.5	6.5	6	6	6
Other Teachers**	3.6	3.5	3	3.75	3
Teacher/Student Ratio	1:13	1:13	1:16	1:14	1:14
Eligible Special Education	20%	17%	14%	19%	22%
Home Study	NA	6	5	3	3

Addition of PreK to Enrollment Numbers Data retrieved from JWJES working records

** Other Teachers (special education, Intervention, Music, PE, Art)

The Westfield School District is part of North Country Supervisory Union, formerly known as Orleans Essex North Supervisory Union. The end of the year enrollment count showed Westfield had 26 students in grades PreK-6 (31.32% of JWJES), 10 students at NCUJHS (4.17% of NCUJHS) and 20 students at North Country Union High School (2.75% of NCHS).

JWJES has a strong reputation and the community shows tremendous support for the students and staff. At the March 2016 Town Meeting 88% of the voters voted yes to a budget that yielded a 9.56% increase in the spending per equalized pupils. In recent years, the school has been repeatedly listed as one of the top ten schools in the entire state. The school uses Responsive Classroom and Team Teaching to create a strong foundation of professionalism and inquiry for students and staff. On federal and state assessments JWJES often exceeds the state proficiency percentages, especially in Mathematics. The following charts show how JWJES students performed on the Smarter Balanced Common Assessment in English Language Arts and Math over the last three years.

Figure 5.1: JWJES Smarter Balanced Common Assessment in English Language Arts (2014-15 State Information Not Available)

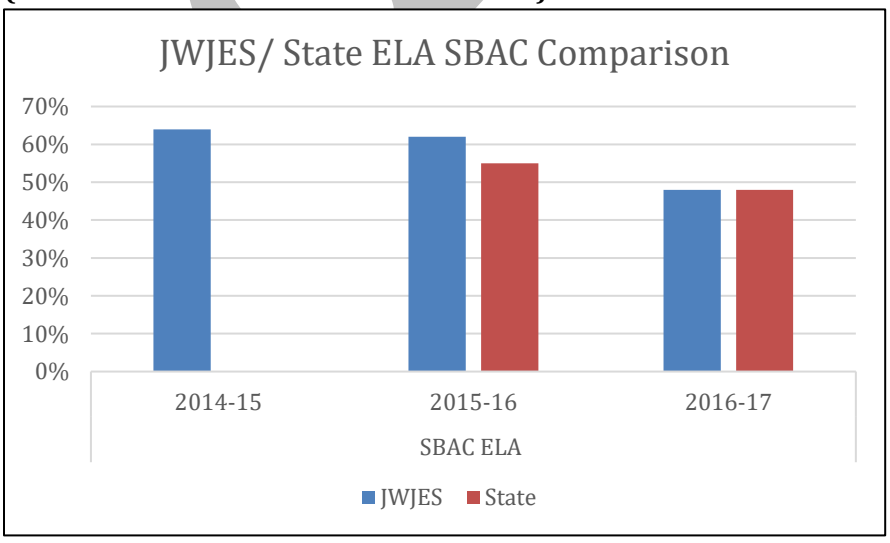

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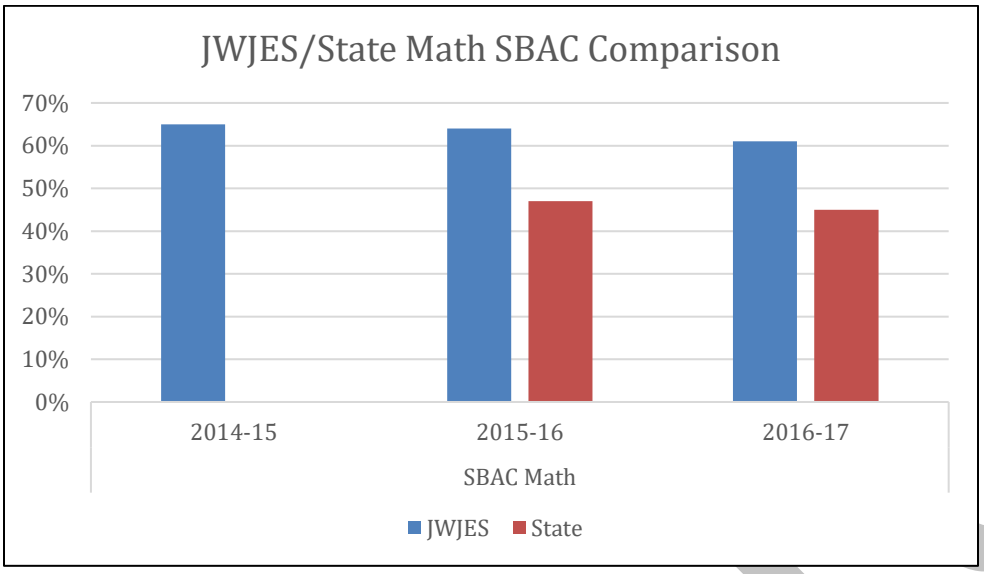
Figure 5.2: JWJES Smarter Balanced Common Assessment in Math (2014-15 State Information Not Available)



School financing and education legislation is an important issue for the Town. In the context of Act 60 and the statewide education tax, Westfield may be a sending town one year and a receiving town the next. Act 46, which focuses on consolidation of school governance, is creating a new challenge for the Westfield School District. Expected mandates from the Vermont State Board of Education, in accordance with Act 46, will move to dissolve the Jay Westfield Joint School Contract and force the creation of a Unified Union School District between Jay and Westfield. Much is unknown about the articles of agreement for this union. For example, there may be a 5-member school board with members elected at large, instead of the current model with three members elected by each town.

The table below contains financial information for the JWJES and the Town of Westfield. Expenditures per Equalized Pupil along with the Common Level of Appraisal (CLA) is what drives the tax rate. Given relatively low PreK-6 enrollment, Expenditures per Equalized Pupil can fluctuate from year to year. Westfield's status as a high or low spending town goes back and forth, and is highly dependent on overall enrollment, and specifically on enrollment at JWJES and NCUJHS. However, the Town has never exceeded the state threshold, thus avoiding financial penalties. A Unified Union School District at the PreK-6 level will likely decrease year-to-year fluctuations, but is not likely to reduce taxes.

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Table 5.2: School Expenditures

Expenditure % of Total School Budgeted Expenses	2014-15	2015-16	2016-17	2017-18
Direct Instruction	51%	50%	48.50%	52%
Student Services*	20%	19.50%	22.70%	22.80%
Supervisory Union Services	2%	2%	2%	2%
School based Leadership Services	9%	9%	9%	9.60%
Operations	6.70%	7%	6.20%	
Westfield's Education Spending per Equalized Pupil	$13,969.61	14,681.16	16,085.00	14,721.00
Tuition & Fees to other VT Districts	101,976	200,000	188,000	181,000

Data retrieved from JWJES Working Records. Does not represent all budget categories.

*Student Services: Special Education, Nursing Services, Evaluation Service and School Clinician Service

In addition to governance of the PreK-12 public education system, the Town appropriates funding for Adult Basic Education and Literacy, provided by Northeast Kingdom Learning Services. They also support the Jay Area Athletics Association, Green Mountain Farm to School, and fund a scholarship for an elementary student to attend the Hazen Notch Summer Camp.

Challenges/Opportunities

- The size and proximity to other elementary schools makes JWJES a prime target for unfavorable legislative mandates and reduction in state- aid.
- It may be time to explore other forms of local revenue, which could come with tuition students and partnering with local agencies and/or businesses.
- Continue to foster a positive learning community and provide gold standard educational experiences for our students and staff, regardless of state mandates and support.

Recommendations

- Use JWJES as a hub of community wellness and medical services for students and community members.
- Include students and staff in more community service work outside the school building.
- Share our stories of consistent success and effective practice with policymakers to challenge the state's negative narrative around small schools.

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6. ECONOMY

Westfield's first center of business and industry was West Hill, now called Buck Hill. The first gristmill was built here in 1802. The gristmills were followed by other businesses including a boarding house, blacksmith shop, and a starch factory. The valley later witnessed the development of sawmills, a wheelwright, and a shoe shop. In 1818, Westfield residents were glad when a small store was opened eliminating the need to travel to Craftsbury to do their trading. A cheese factory operated below the LeBlanc farm house. The Bowen Hunter Bobbin Mill began its operation on Mill Brook, north of the village in the early 1900s. At one time, the Mill was a blacksmith shop. The Mill produced its last commercial wooden products in 1964.

In the 1950s, residents of the surrounding communities decided to develop Jay Peak as a ski area. They formed a company, sold shares, marked trails, and put up a chair lift. Today, Jay Peak has dozens of trails, glades, and chutes served by nine lifts. The Jay Peak Tram House is located in Westfield. Jay Peak Resort, now has an18-hole golf course; new hotels with shops, restaurants, and other amenities; a four-season indoor recreation center with an ice rink and water park; and residential developments continue around the mountain. These existing and planned facilities are in the Town of Jay. We anticipate the development around Jay Peak, will impact Westfield. Town officials keep up to date on development at Jay Peak Resort and monitor for potential effects in Westfield.

The table of economic indicators below provides a snapshot of the town's labor force and income levels. Orleans County ranks 12th of 14 counties (third lowest) for per capita income. Westfield's median and per capita incomes exceed the county median and per capita incomes.

Table 6.1: Westfield Economic Indicators

	Westfield	**Orleans County**	**Vermont**
Median Household Income, in dollars	$52,614	$43,959	$56,104
Per Capita Income, in dollars	$29,917	$24,204	$30,663
Mean travel time to work (commute), in minutes	37.5	24.3	22.7
% of population in civilian labor force	62.0	57.9	66.2
…% employed	61.4	54.9	62.9
…% unemployed	0.7	3.0	3.3
% Not in labor force	38.0	42.0	33.7
% with high school diploma or higher	91.5	87.1	91.9
% with bachelor's degree or higher	32.8	22.1	36.2

Source: American Community Survey Five-Year Estimates 2012-2016

Westfield has a diverse mix of small-scale business and industry typical for a town of 500 people. These businesses predominately provide goods and services in demand by the local community and tourists. There is no car wash or laundromat available in town or in adjacent towns. However, unlike similarly rural areas there is a full-service bank in neighboring Troy.

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Economic activities are tied to agriculture, forest products, manufacturing, recreation, tourism, and services for the Town and region. While the Town would like to see the number of businesses increase, the Town is more interested in maintaining the vitality of existing businesses. The Town would like to see new, non-polluting, value-added businesses come to Town that are a good fit with the character of the Town and that utilize products produced on the Town's farms.

The nine operating farms ranging in size from 534 acres to 35 acres. (There are 11 parcels of land categorized as farms in the 2017 Grand List). Westfield has over 10,000 acres of managed forestland in the Current Use Program. There are 47 parcels of land categorized as woodland in the 2017 Grand List, ranging in size from 6.6 acres to 3257acres.

Most arable land on former dairy farms is leased to farmers. Six of the nine farmers sell pulp, logs, or firewood to supplement their income. Currently six commercial maple-sugaring operations process sap from an estimated 25,000 – 30,000 taps. These operations range in size from 400 to 10,000 taps. Wood is used to boil all sap processed in Westfield. Other existing businesses are listed below.

Table 6.2: Westfield Business Mix, 2018

Manufacturing	Commerce	Services\Recreation/Tourism	Agriculture\Forestry
t-shirt factory bourbon distillery (pending)	general store hardware store antique store	2 campgrounds Room rental, top of Jay Peak 3 storage rental facilities bed and breakfast 5+ excavation and construction contractors Portable sawmill 1 auto shop/car sales 2 electrical contractors 2 Landscapers Lawn mowing	9 operating farms 2 cheese producers yogurt producer sugaring supplies dealer eggs – retail/whls sheep farm apiary market garden – retail & whls 2 plant nurseries 6 commercial maple producers woodlot management -- pulp, firewood, saw logs

Westfield Planning Commission, 2018

2016 County Business Pattern data (https://www.census.gov/programs-surveys/cbp.html) indicated that there were 8 business establishments in Westfield (i.e. locations with paid employees at any given time of the year). The 2017 Grand List indicates that there are 12 commercial properties. Seven establishments 1-4 people, and one business employed between

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10-19 people. The table below provides a breakdown of local employment:

Table 6.3: Westfield Establishments by # and Employment-size Class, 2016

Industry Sector	1-4 employees	5-9 employees	10-19 employees	Total establishments
Construction	1	0	0	1
Retail trade	1	0	0	1
Real estate and rental and leasing	1	0	0	1
Professional, scientific, and technical services	1	0	0	1
Administrative and support and waste management and remediation services	1	0	0	1
Accommodation and food services	1	0	0	1
Other services (except public administration)	1	0	0	1
All Sectors	7	0	1	8

Source: U.S. Census Bureau, 2016 ZIP Code Business Patterns

Goals:

- Maintain good relations with Town of Jay.
- Encourage new businesses that fit well with the character of the Town, especially new value-added businesses that utilize the products of local farms.
- Encourage the use of forestry Acceptable Management Practices (AMPs) and Required Agricultural Practices (RAPs) even by landowners not required to adhere to these state mandates.

Challenges\Opportunities:

- Expansion at Jay Peak Resort may increase residential development in Westfield. Many of these homes could potentially be for seasonal/vacation use. There may be increased opportunity for tourist-related businesses and services.
- An increasing number of retirees and young families are choosing Westfield as a place to live. There are also more working people who move here and either commute or find ways to work out of their homes.
- The Hitchcock Museum and Library is an unusual facility for a small town, and has potential to attract visitors to Westfield.
- Home occupations are a permitted use in Westfield's zoning districts, depending on the type of business and/or if conditional use permit is needed.
- Lack of high-speed internet and cell service are factors considered by potential new residents.

Recommendations:

- Ensure zoning is flexible enough to allow agricultural diversification.
- Investigate ways to maintain productive land and enhance the resiliency of disturbed land while allowing additional residential development.
- Communicate with local forestland owners about public recreation access and concerns regarding erosion control and visual impacts of clear-cuts.

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- Conduct a feasibility study to improve internet and cell service.
- Explore the feasibility of locating, shared office space rentals where there is high speed internet service.
- Apply for Village Center Designation.

7. HOUSING

The first settler in Westfield was Jesse Olds who arrived from Massachusetts in 1798. Olds was a lawyer and Congregational Clergyman, who "by reason of irregularities, left civilization and sought the wilds of Vermont." He settled on the West Hill.

The first family to settle in the flat where the village now stands, Captain Medad Hitchcock and his sons, Thomas, Heber, and Smith arrived in 1804. By 1810, Westfield's population was 149, and by 1890 it had reached its peak at 763. From there, it descended to an all-time low of 354 persons in 1940, and has risen slowly to its current level at 500.

Westfield's settlement patterns today are remarkably similar to those captured in the 1878 map (see Appendix A.) Clustered residential development in the village center and an equal number of residents spread out across mostly higher elevation locations.

In 1990 the Town of Westfield had a population of 422 persons. By 2000, this number increased to 503, and in 2010 to 536. Since then Census data estimates a slow loss of population with an estimate of 498 in 2017. The 2000 Census figure for Westfield represented the first time that Westfield's population has exceeded 500 persons since the 1910 Census.

Table 7.1: Westfield Housing Data

	Westfield	**Orleans County**
Total Population, 2010 Census	536	27231
Total Housing Units	375	16,709
…% owning home	89.6	855378.3
…% renting home	10.4	21.7
…vacant housing units	174	5,349
……for seasonal use	129	4,247
……for rent	14	258
……for sale	7	143
Median housing unit age, 2010	1979	1974
Average household size	2.5	2.31

All data, except for population, comes from American Community Survey Five Year Estimates, 2012-2016

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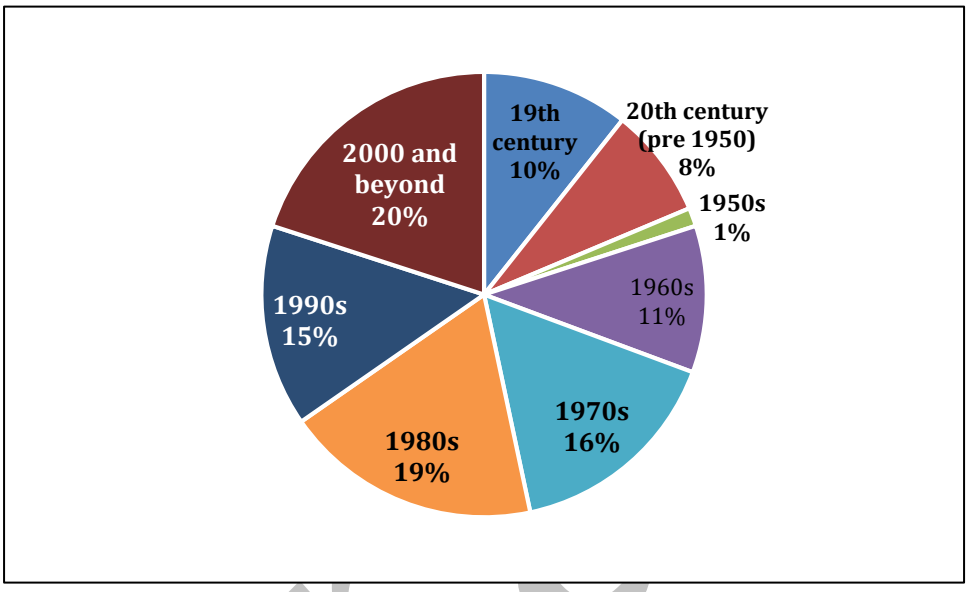
A closer look at the 2010 Census population revealed that 131 (24.4%) persons were aged 62 and older; 105 (14.6%) persons were aged 17 and under; and, 300 (56.0%) persons were between the ages of 18 and 61.

Latest American Community Survey estimates indicate that Westfield's housing stock is relatively new, compared to county-wide figures. Community Survey responses reinforce this. The majority of respondents had a home that was built in the 1970s or later. (Figure 7.1)

Figure 7.1: Westfield Community Survey – Approximate Year Housing was Built



Westfield lost 13 units of rental housing when condominiums in Alpine Haven burned. There is an opportunity to redevelop the now-closed Scenic View care facility for affordable or senior housing units, depending on the level of demand in the housing market.

2017 Grand List data for the Town reveals that there are 111 Residential -1 properties (less than 6-acres) and 120 Residential – 2 properties (6-acres or larger) in Westfield, an increase of 10 percent and 20 percent respectively in five years. There are 15 Mobile Homes in the Town – three unlanded (without land). Seasonal properties in the Town totaled 102 (46 homes on less than 6-acres, and 56 homes on 6-acres or more). Of the 348 dwellings in the Grand List (farms not included), the percentage of Seasonal dwellings is approximately 29%.

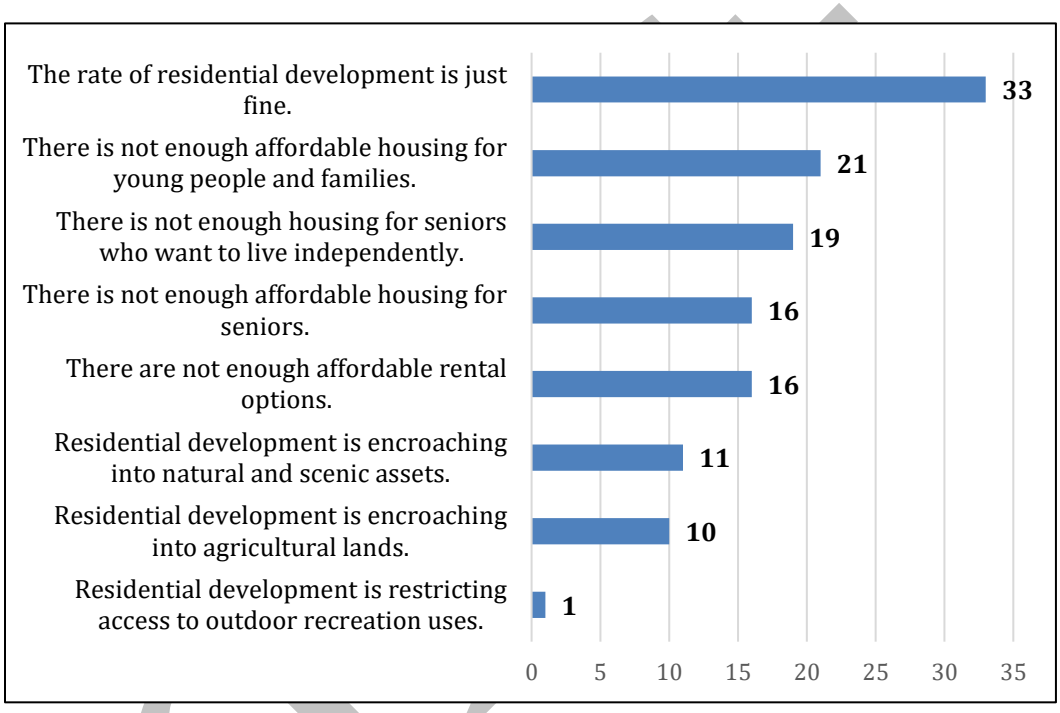
Housing Affordability

A household's total housing costs should be 30% or less of the household income in order to be considered affordable. While the 30% rule generally applies to housing costs for all income brackets, Vermont statute sets different income limits for owner-occupied housing and for rental housing. Rental housing is classified as "affordable" if it serves households earning no more than 80% of area median income (AMI), while owner-occupied housing is considered affordable if it is priced to serve households earning up to 120% of AMI. This change in statutory definition accounts for the number of higher income individuals who still have difficulty finding suitable housing.

The 120% threshold is often referred to as "workforce" housing. It is typically used to describe housing for those who are gainfully employed in occupations that are essential to a community, such as teachers, healthcare workers, first responders, as well as occupations that may pay relatively lower incomes, such as food services, retail, hospitality and tourism. It does not typically include age- or income-restricted housing, nor is it likely to be supported through the use of subsidies.

The majority of survey respondents indicated that their housing was "somewhat" affordable (52%). Respondents, however, noted some concerns about housing options for young families, seniors, as well as overall availability of rental options. (Figure 7.2)

Figure 7.2: Westfield Community Survey – Assessing the rate of residential development



The Planning Commission believes there is a need for a limited number of new, affordable rental units (where ownership costs are the highest). As a whole, though, housing affordability does not seem to be a serious issue in Westfield. The town has a limited amount of goods and services available, few local employment opportunities, and lacks the infrastructure needed for significant amounts of multi-family housing, affordable senior housing or assisted living facilities. The Alpine Haven development on Route 242 in the northwestern corner of town provided some affordable rental housing although these condominiums were lost to fire in 2017

The following table provides information on housing affordability for Westfield and Orleans County, including ownership costs and affordability. "Severely cost-burdened" households are those paying more than 50% of income on housing costs. If this data is representative of the housing supply, as many as 36 Westfield households are living in a financially untenable situation.

Table 7.2: Westfield Housing Affordability

	Westfield	Orleans County
Households , 2016	201	11,360
Primary residences sold, 2017	16	117
Median Primary Home Sale Price, 2017	$179,000	$141,000
Average annual increase in households, 2010-2016	-3.8%	0.1%
Median gross rent, 2010-2016	$684	$715
Rental vacancy rate (county-wide only)	--	4.2%
% of households paying more than 50% of income on housing	18%	18%

VT Housing Data, www.housingdata.org

Town officials believe the more important needs are to ensure residents live in safe, energy efficient housing provided with water supply and sewage treatment systems that function properly. To this end the Town created a fire district to upgrade a water supply system that serves the Village. This system was at one time privately owned and has been donated to the Fire District. With regard to sewage treatment, Westfield does not have a public sewer system nor does it regulate private, on-site systems. Therefore, it is critical that residents comply with the applicable State regulations.

To address energy efficiency, the town encourages the utilization of existing resources such as the Northeast Employment and Training Organization (NETO). NETO provides qualified applicants no-cost home weatherization assistance, and their Home Energy Assistance Technology division provides energy audit services. Efficiency Vermont also provides energy efficiency assistance to individuals, businesses, and municipalities.

Projected Housing Needs

According to the Orleans County Housing Needs Assessment, county-wide population and household growth was significant between 2000 and 2010, increasing by 956 (3.6%) and 875 (8.4%), respectively.[1] They are projected to increase by 250 (0.9%) people and 197 (1.7%) households, respectively, between 2015 and 2020. These positive projected demographic changes are very similar to the state of Vermont.

Within the county, the share of owner-occupied households represented three-fourths of all households and renter-occupied households represented the remaining one fourth in 2000 and 2010. It is projected that in 2015 and 2020, the share of owner and renter-occupied households will be similar to recent distributions.

[1] Bowen National Research: Orleans County Housing Needs Assessment. https://accd.vermont.gov/sites/accdnew/files/documents/Housing/H-Research-HousingNeedsOrleans.pdf

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The assessment found that the largest share (22.0%) of renter households in 2015 was projected to be among households with incomes between $10,000 and $19,999, while the largest share (21.1%) of owner-occupied households at this same time would be among those with incomes between $60,000 and $99,999. Between 2015 and 2020, the greatest renter household growth was projected to occur among households with incomes between $40,000 and lower. Homeowners with incomes below $40,000 are also projected to experience the greatest growth. The assessment concluded that the greatest housing gap appeared to be among housing that serves renter households with incomes below 50% of Area Median Household Income (AMHI) and among homeowners with incomes below 50% of AMHI.

When the age distribution of the population was examined, it appeared that most of the increase is in the older population. This could be that more people are choosing to retire in this area, as well as the aging in the existing population. For the past twenty years, all age groups under 30 have been declining in number, while those over 30 have been on the increase. This trend will affect the type of services and housing needed by Westfield residents in the coming years. Demands for health services and accessibility will probably increase. It will be important to ensure public buildings are accessible. Access for emergency vehicles will also become more important as an aging population moves further into remote areas.

Town officials feel there is limited room for residential development within the village because of a lack of conventional housing infrastructure. However, 43% of survey respondents indicated they would consider converting part of their home into a studio apartment or to 'home share' their primary residence. Most of the land along Route 100, School Street, and lower North Hill Road is either in flood plain, has lots too small to subdivide, is actively in agriculture, and/or is permanently conserved, limiting development potential. Future development is expected to occur at higher elevations. Alpine Haven and North Hill are likely places for residential growth. These areas are served by blacktop local roads or state highway. In addition, development in Alpine Haven and North Hill areas will not substantially affect farming or forestry activities. Completing the upgrade of Balance Rock Road to Class 3 specifications may encourage more housing development. Housing that abuts or intrudes into the large block of forested uplands may require new siting and land management bylaws to maintain the water infiltration and storage capacity of undisturbed forestland.

The State of Vermont encourages communities to provide housing that meets a range of needs, particularly for low- and moderate-income residents. Westfield attempts to do this by permitting one- and two-family dwellings in all zoning districts. Multi-family dwellings are permitted conditionally in the Village and Recreation-Residential districts, and mobile home parks are permitted conditionally in the Rural-Agricultural district. By statute (24 V.S.A., Ch. 117), accessory dwellings must be allowed in all districts where conventional housing is allowed, and the Zoning Bylaw was amended to address this requirement.

Goals:

- Ensure zoning regulations offer options for future home sites, especially in the areas of town most able to support new growth.
- Monitor residential growth to ensure that municipal services are adequate.

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Challenges\Opportunities:

- Jay Peak Resort may cause an increase in residential development in Westfield, especially in the Alpine Haven area.
- An increasing number of retirees are choosing Westfield as a place to live.
- There are also more working people who move here and either commute or work out of their homes. New residents may have different needs for town services than those who have lived here in the past. (e.g. faster internet). Their preferences may challenge traditional settlement patterns. For example, a higher percentage of new residents may choose to live outside the village center or along main travel routes.
- Land and housing prices may rise above the affordability level of those seeking housing in Westfield.
- The quality of education provided at the Jay/Westfield School is attracting young families to Westfield.
- 33 miles of roads reduces maintenance costs, and therefore property taxes, a consideration for potential new residents. The amount of roadway also limits locations for more affordable housing along road frontage with easy access to existing electrical and internet infrastructure.
- Interest in home sharing or conversion of single-family dwellings to include studio or 'mother-in-law' apartment is an opportunity to expand housing options with the current housing stock that also meet the need for affordable housing and energy efficiency goals.

Recommendations:

- Review and amend Bylaws as needed to accommodate 'Tiny Houses'
- Review and amend Bylaws for new construction to ensure stormwater is managed on site
- Review and amend Bylaws to site portable storage structures such as shipping containers and metal framed/fabric covered sheds
- Provide homeowners information regarding energy efficient home improvements.
- Provide information to landowners to ensure they are aware that Vermont regulates on-site water and wastewater systems and state permits are needed if changes are needed for these systems.
- Conduct a feasibility study for converting the former Scenic View Care Facility into single occupancy affordable senior housing, and/or accessible housing for persons with mobility disabilities.
- Participate in regional effort to create a NEK Home Share program
- Further assess interest and barriers to Home Share living arrangements
- Have 'Do-it-Yourself' home share information available at Town Office.

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8. TRANSPORTATION

The main road from Westfield to Lowell was laid out in 1806. This was a welcome development to residents who previously had road access only to Craftsbury, a long uncomfortable ride over West Hill. Today, Westfield has 33 miles of traveled highways, the least amount for towns in Orleans County according to NVDA statistics. The route from Westfield to Lowell is part of Route 100, which crosses 5.9 miles of the town. Another 3.7 miles of State Highway Route 242, traverses the northwest corner of the Town along Jay Brook into the Jay State Forest.

Westfield has nearly 23 miles of town roads, which are classified according to the table below:

Table 8.1: Town Highways

Classification	Description	Mileage
Class #1	Town highways form the extension of a state highway route and which carry a state highway route number. **	0
Class #2	Town highways selected as the most important highways in each town. As far as practicable they shall be selected with the purposes of securing trunk lines of improved highways from town to town and to places which by their nature have more than normal amount of traffic. These roads are town maintained with state aid.	6.57 miles of Class 2 highways Nos. 1, 2, 3 – North Hill Rd, Rte 58, and Kennison Rd, respectively.
Class #3	All traveled town highways other than class 1 or 2 highways. These roads are town maintained with state aid.	16.17 miles of Class 3 highways
Class #4	Town highways that are not class 1, 2, or 3 town highways or unidentified corridors. Some of these roads are actively maintained by the town.	Just over 2 miles of Class 4 highway, mostly located in the forested area of town, west of Route 100
Legal trails	Trails are not considered highways and the town shall not be liable for their construction, maintenance, repair or safety.	Westfield has just over 7.5 miles of legal trails. The longest sections of trail are Legal Trail 8 – a continuation of School Street (2.4 miles), which crosses Mill Brook and Legal Trail 5 – a continuation of Town Hwy 13, Corrow Basin Road (1.8 miles), which runs just north of Taft Brook.

** Road class descriptions are from Title 19 VSA, Chapter 3: Town Highways,

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Getting to, From, and Around Westfield

Travel to, from, and within the Town of Westfield is by ground transportation. Bus and Taxi services are available out of Newport. Rural Community Transit, the region's non-profit public transit organization, provides ride services upon request utilizing a network of volunteer drivers who are reimbursed on a per mile basis, and has a Monday – Friday route with a stop in Westfield. https://www.riderct.org/programs-and-services/. Private, chartered, and limited commercial and freight aircraft transportation is available via the Newport State Airport 16 miles east of Westfield. The major commercial airport for the area is the International Airport in South Burlington, Vermont, 70 miles southwest of Westfield. Montreal airports are also used for international travel.

There is a growing interest in private helipads. The state Transportation Board is reviewing the issue and the implications for Town zoning.

Town businesses have access to Central Vermont and Canadian Pacific rail lines 22 miles away in Richford.

The public highway system is the most critical transportation resource for residents and visitors. The road system provides linkage to all other transportation systems in the region. The local road system is the primary internal movement system within Westfield for vehicles, bicycles and pedestrians.

Gravel for road building and maintenance comes from private sources in Westfield. The Town owns a 2003 grader and a sander, and maintains a reserve fund for repair and/or replacement of road equipment. Road maintenance is contracted out to a local excavation company, an arrangement Westfield has used for more than 50 years.

The Town has a schedule for regular maintenance of its roads and bridges. At this time, all bridges have been replaced. A culvert for Taft Brook under Buck Hill Road is on the list for replacement with a bridge. The new state Municipal Roads General Permit (MRGP) has taken effect and Westfield's Erosion Inventory is expected to be completed by the end of the year. Maintenance, according to the MRGP standards, will ensure funding for the replacement or repair of roads, bridges, and /or culverts damaged by floodwaters. Importantly, roads, bridges, and culverts installed in accordance with these standards should help reduce damage caused by floodwaters. An inventory and maps of bridges and culverts in the Town is maintained by the Northeastern Vermont Development Association.

Respondents to the 2018 Westfield Community Survey identified "speeding vehicles" as the fifth most cited issue for the Town to address over the next eight years. NVDA conducted a transportation study in 2012 which includes recommendations for improvements in Westfield's

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village center area. Upon further discussion with VTrans, most of the recommendations were too cost prohibitive. Westfield voters approved the purchase of flashing speeding signs at the 2018 Town Meeting. Grants will help to defray costs of future transportation improvements and traffic calming measures. Village Center Designation will make grant applications more competitive.

The western side of Town connects to hiking and cross-country skiing trail systems, notably the Long Trail, Burnt Rock Mountain, Hazen's Notch Association and in areas around Jay Peak Resort. The Long Trail State Forest extends through the entire town from north to south along the spine of the Green Mountains, from Jay State Forest to Hazen's Notch State Forest.

There are snowmobile trails throughout Town that are part of the VAST (Vermont Association Snowmobile Travelers) network.

Challenges/Opportunities:

- As more people build homes in remote places, property owners may upgrade Class 4 roads and petition the town to maintain them.
- Remote homes on poor quality roads offer limited access for fire and rescue vehicles.
- The Vermont Agency of Transportation controls access to the state highways in Westfield.
- Development at Jay Peak Resort has increased traffic on Route 100 and North Hill Road.
- Westfield's Erosion Control Inventory, to comply with the new Municipal Roads General Permit (MRGP), is expected to be completed by the end of the year.
- Illegal ATV travel on Town roads is increasing. This may in part be due to neighboring towns of Montgomery and Lowell allowing ATVs to travel on all town roads. ATV travel poses safety and erosion concerns.
- Closing the Moretown landfill has increased the number of tractor trailer trash hauling trucks passing through Town, affecting quality of life for Route 100 residents from increased noise and air pollution.
- If the former Scenic View Care facility is turned into senior housing, the Town may reconsider the cost/benefits to implement other recommendations in the NVDA transportation study.
- A minimum amount of use is required to put a state-approved designated crosswalk on a state highway.
- Private helipads create noise, light and air pollution. Westfield's proximity to Jay Peak Resort increases the possibility of requests for siting private helipads.

Recommendations:

- Minimize curb cuts accessing private driveways onto Town roads.
- Continue maintaining Town roads in an efficient and cost-effective manner. Ensure cost effective compliance with MRGP by reducing stormwater and seasonal runoff from private land.
- Implement recommendations in the NVDA transportation study when financially feasible, as part of highway upgrades/maintenance.
- Review updated state Hazard Mitigation Plan to ensure compliance.

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- Review Town's erosion control inventory and consider a stormwater ordinance for runoff from private properties.
- Develop Zoning Bylaw provisions for siting private helipads.
- Consider reducing the village speed limit to 30 MPH.
- Review Class 3 and 4 road status under new MRGP.
- Explore liability issues of ATVs on town roads.
- Explore how ATVs on town roads may affect highway funding and maintenance costs.
- Install roadside signs at town lines indicating ATV travel is illegal.
- To encourage carpooling, identify a 'Park and Ride' site.

9. ENERGY

"Enhanced" Energy Planning

Energy generation and transmission systems that are linked to the electrical grid are preempted from local land use regulation. They are instead regulated by the Public Utility Commission (PUC) under 30 V.S.A. Section 248 (i.e. Section 248 review).

Until recently, the PUC was only obligated to give "due consideration" to municipal and regional plans prior to issuing a Certificate of Public Good. In 2016 the Vermont legislature passed Act 174, which established a new set of energy planning standards for municipalities seeking more input on siting electric generation. Plans that meet these standards receive "substantial deference" in the Section 248 process. Unlike "due consideration," "substantial deference" is defined in statute:

"…that a land conservation measure or specific policy shall be applied in accordance with its terms unless there is a clear and convincing demonstration that other factors affecting the general good of the State outweigh the application of the measure of policy."

Under Act 174, the requirements for substantial deference are based on statewide energy policies and goals in the Vermont Comprehensive Energy Plan, which are summarized in the box on the right. Westfield's energy plan has been prepared in anticipation of meeting the requirements for substantial deference.

Energy Goals and Policies from the Vermont Comprehensive Energy Plan (2016)

Meet 90% of all energy needs from renewable resources by 2050

Reduce greenhouse gas emissions to 50% below 1990 levels by 2028 and 75% by 2050

Improve the energy efficiency of 25% of homes by 2025

Meet the Vermont Renewable Energy Standard through renewable generation and energy transformation

Energy Use, Needs, Scarcities, and Problems

Westfield energy use estimates were developed by NVDA and follow the same data methodologies used for the 2018 amendment to the Regional Plan for the Northeast Kingdom. Addenda A and B to the Regional Plan document the methodologies used to develop usage estimates and targets. (www.nvda.net). Energy use data were based on the best available data and should be considered approximations rather than a precise count. Fuels are measured in

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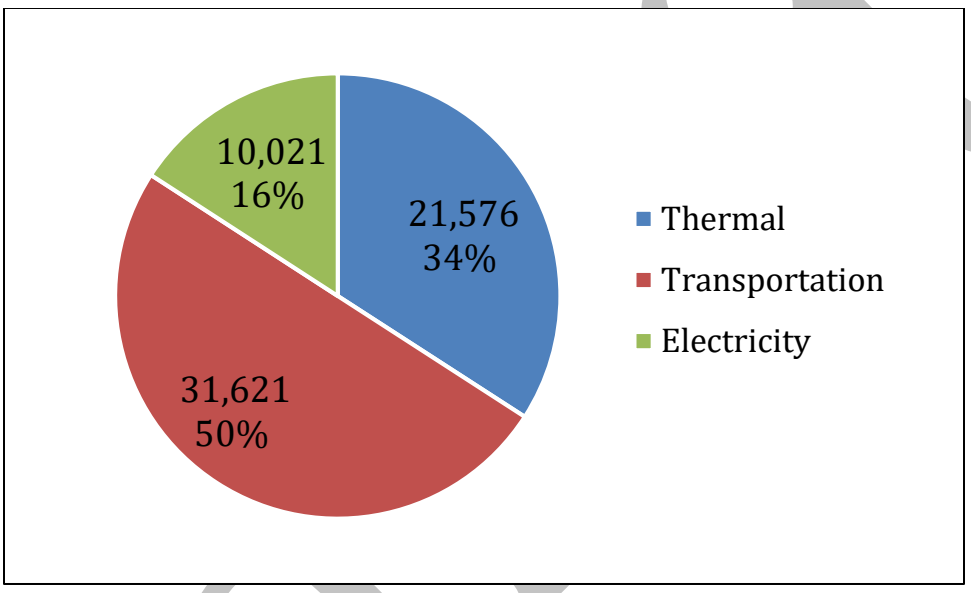
different ways – by cord, by gallon, by kilowatt – so this plan converts units of measurement into **British Thermal Units (BTUs)** in order to compare their energy output consistently.[2]

According to latest American Community Survey (ACS) 5-Year Estimates, 80% of Westfield's housing stock consists of detached single-family homes, and fewer than 10% are duplexes or multiunit structures. Even though Westfield has a small but vibrant village core with a mix of civic, community, and commercial uses, nearly all its residents still travel out of town for work, shopping, and other necessities. This pattern of development is linked with considerable energy use to meet transportation, heating, and electricity needs. According to NVDA estimates, transportation accounts for the largest share of energy consumption, closely followed by thermal (heating occupied and seasonal residences, and commercial uses). Electricity consumption accounts for the smallest share.

Figure 9.1: Westfield Energy Use by Sector (in MM BTUs)



Source: NVDA Estimates

Current and Future Transportation Use

Energy use in transportation is greatly influenced by the development patterns of the region. According to NVDA estimates, long commutes and incidental trips require residents to drive an average of 14,000 miles per year. Based on this estimate, Westfield residents collectively drive roughly 7.4 million miles annually, adding up to more than $750,000 in fuel costs. Nearly all of this energy is non-renewable. Ethanol is the most prevalent form of renewable transportation energy usage in Westfield and represents only about 6% of total MM BTUs used annually.

There are three kinds of electric vehicles (EVs) available: all-electric, plug-in hybrid electric, and hybrid electric. The first two require a plug-in, and the latter simply recharges from the

[2] According to the US Energy Information Administration a BTU is the measurement of the quantity of heat required to raise the temperature of one pound of liquid water by 1° F at the temperature that water has its greatest density (approximately 39 °F.) One BTU is a miniscule amount, so BTUs are often measured in the millions (MM BTUs).

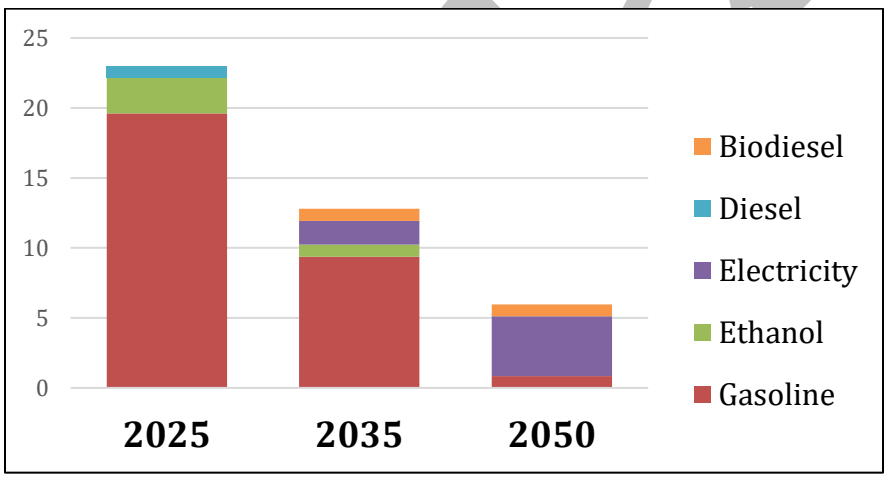
combustion motor and from braking. According to Efficiency Vermont data (as of January 2017), there were only two plug-in hybrid vehicles registered in Westfield. Together, these probably use about 16 MM BTUs annually, representing .05% of total transportation energy use.

Cost, terrain, and limited range in cold weather are the most common deterrents to switching to EVs. There are also few opportunities to charge EVs away from home. The nearest public charging stations are in Derby Line and in Barton. Both are level 2 (240 volt), which can produce about 10 to 20 miles of range per hour of charge, depending on the weather.

Despite today's reliance on internal combustion engines, electric vehicles (EVs) will play a major role in Westfield's future transportation energy use. "Refueling" currently costs the equivalent of about $1.00 per gallon. Their efficiency over internal combustion can also reduce overall transportation energy consumption: Latest figures from the EPA show that EVs in the northeastern US get the equivalent of 102 miles per gallon.[3] Technological improvements over time will improve range and efficiency.

According to figures derived from statewide LEAP projections, meeting the statewide "90 x 2050" energy challenge will require a massive transformation of Westfield's current transportation energy usage. (LEAP stands for Long-Range Energy Alternative Planning Systems, a software tool for energy policy analysis.) The scenarios in the LEAP projections show one possible route for Westfield to meet 2050 energy goals, but other pathways are possible. The LEAP projections should be viewed as a tool to help achieve efficiency and fuel-switching goals.

Figure 9.2: Future Transportation Energy Use in Westfield (in thousands of MM BTUs)

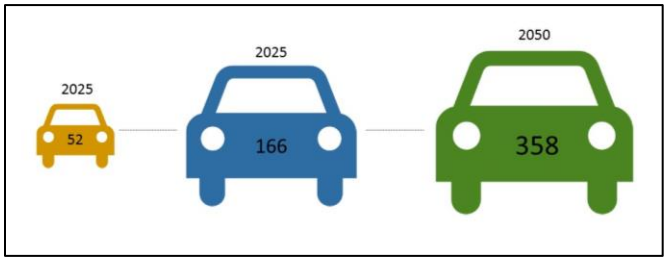


Source: Department of Public Service: LEAP Projection Modeling

According to the LEAP scenario, Westfield's total transportation use will have fallen to **just over one-fifth of current levels by the year 2050**. Electricity use will be the predominant fuel by 2050, accounting for 4,000 MM BTUs. Biofuels will account for about 1,000 MM BTUs. Gasoline use will drop **by 96%** over that same period, due primarily to the use of more energy-efficient EVs. (Figure 8.3)

[3] https://blog.ucsusa.org/dave-reichmuth/new-data-show-electric-vehicles-continue-to-get-cleaner

Figure 9.3: Projected Number of EVs in Westfield



Source: Department of Public Service: LEAP Projection Modeling

Although the overall efficiency of EVs will reduce transportation energy use, Westfield residents will still need to cut vehicle miles travelled (VMTs) in order to meet 2050 energy goals. This is a tall order for any rural community with limited transit options and few employment opportunities in town. VTrans offers grant assistance to municipalities to establish park-and-rides on municipal, state, or leased property on or near state highways. Alternative transportation accommodations, such as bike and pedestrian lanes, can help to reduce VMTs as well. Westfield's most effective strategy for reducing VMTs, however, will be through improved telecommunications, which will enable more residents to telecommute. The Westfield Community Survey results support the need for improved infrastructure: When asked to identify barriers to telecommuting, 24% (out of 54 respondents) indicated poor or no Internet access, and 20% indicated lack of cell phone coverage.

Current and Future Thermal Use

NVDA's estimates for residential thermal energy use in Westfield is based on data from American Community Survey five-year estimates. (See Table 8.1). Collectively, total energy use for heating all occupied residences in Westfield accounts for about 18,281 MM BTUs annually at an annual cost of more than $327,000. Wood is the predominant heating fuel for owner-occupied homes. Renters, who are less likely to have control over their heating sources, are more likely to rely on propane. The data appear to be roughly in line with the Westfield Community Survey results: 39% of respondents who live in Westfield full-time and own their homes indicated that wood was their primary heating source (with another 10% using wood pellets), followed by fuel oil at 33%.

Table 9.1: Current Residential Thermal Energy Use

Fuel Type	# Households	Total avg. use, annually		...in MMBTUs	% of use all households	% of use owner-occupied	% of use renter-occupied
Bottled tank or LP Gas	62	59,382	gallons	5,424	31%	26%	71%
Electricity	3	60,062	kWh	205	1%	0%	14%
Fuel Oil	62	41,201	gallons	5,727	31%	34%	14%
Wood	71	332	Cords	6,645	35%	39%	0%
Other	3	--	--	281	1%	2%	0%

Source: NVDA Estimates

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Although residential thermal estimates use best available data, they have some limitations. Like most Northeast Kingdom residents, Westfield residents are likely to use multiple heating sources. Among the Community Survey respondents, wood was the most popular backup heating source at 39%, followed by fuel oil at 26%. Second, this estimate does not account for seasonal housing units in Westfield, for which no published heating datasets are available. Of the 12 part-time residents who responded to the Community Survey, seven indicated that propane was their primary heating source. Vermont Department of Public Service (DPS) guidelines suggest that it is reasonable to assume that thermal use for seasonal unit is about 5% of the average owner-occupied housing unit. There are 129 seasonal units in Westfield. Assuming 5% of the average owner-occupied housing unit (about 94 MM BTUs), seasonal units could collectively account for another 604 MM BTUs annually.

Age of housing stock also affects thermal energy use. According to American Community Survey (ACS) 5-year estimates, roughly 12% of Westfield's owner-occupied housing units and 14% of renter-occupied housing units predate 1940. According to the DPS, pre-1940 structures are likely to be "leaky" and poorly insulated, which can nearly double thermal use to 80,000 BTUs per square foot. NVDA therefore assumed 80,000 BTUs per square foot for pre-1940 housing units, 45,000 BTUs for all others in its calculation.

Commercial thermal estimates are more difficult to calculate. The estimates in Table 8.2 were developed using data from the DPS and the Vermont Department of Labor's Economic and Labor Market Information. Heating fuels are not identified, but the DPS is able to estimate average heating loads on types of business. This estimate excludes commercial operations likely to be home-based, such as daycares, in order to avoid double-counting.

Table 9.2: Current Non-Residential Thermal Energy Use

Industry classification (North American Industry Classification System (NAICS)	Estimated avg. consumption (MM BTUs)	# of structures in town	Total MM BTUs
44-45. Retail trade	295	2	590
53. Real estate and rental and leasing	432	1	432
54. Professional and technical services	109	1	109
56. Administrative, support, remediation, and waste services	302	1	302
62. Healthcare and social assistance	1,084	1	1,084
81. Other services, except public administration	174	1	174
Total		7	2,691

Source: Department of Public Service, Vermont Department of Labor

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Westfield's public administration functions add another 68 MM BTUs annually. Town buildings are heated with oil. Town buildings are insulated, and energy audits have been conducted for the Town Garage, Town Office, the Hitchcock Museum and Library, and the Community Center, which was weatherized when it was renovated. Recommendations for energy efficiency improvements were included in the 2011 audits – along with estimated costs and payback periods. The Town Office is relatively new with radiant heat flooring and insulated windows. The town garage has a new heating system and chimney that was installed in 2012. This was done at the recommendation of our insurance company.

Meeting statewide thermal energy targets for 2050 will require two overall strategies:

1. Reducing overall thermal energy use through aggressive weatherization and efficiency improvements; and

2. Switching to non-fossil fuel burning sources

Table 9.3: Weatherization Targets for Westfield

	2025	**2035**	**2050**
Estimated number of households	213	226	239
# of households to be weatherized (cumulative)	66	115	123
Estimated number of commercial establishments	7	8	8
# of commercial establishments to be weatherized	1	1	3

Source: Department of Public Service: LEAP Projections

Many homeowners have taken advantage of energy audits and weatherization programs offered by utilities. Efficiency Vermont shows that Westfield residents have completed 23 projects to improve hot water efficiency over the past three years, and one residential customer has replaced a space heating system. Of the 68 respondents to the Westfield Community Survey, 20% indicated that they had installed more energy efficient heating equipment in the past years, and 46% had improved insulation or weather stripping.

This plan recommends the use of energy-saving products such as insulation, efficient appliances, and, winter weatherization products. The town models energy efficient behaviors by how it cares for and uses town buildings, such as shutting off lights when leaving a room and turning thermostats down, and provides information about the economic benefits of energy saving products and behavior change.

Building design and construction methods can reduce energy costs. Orienting and designing buildings to take advantage of southern exposure allows passive solar heating in winter. In the same way, design and construction can afford homeowners opportunities for solar development. Consideration of the natural surroundings is also important in site design as the use of shelterbelts, or tree rows, can further reduce energy costs. Shelterbelts act as buffers to the cold winter winds (if located on the north side of the building) or provide cooling shade in the summer (if on the south). Homesharing reduces a home's carbon footprint by reducing per capita energy use, while increasing affordability.

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Table 9.4: Thermal Fuel Switching Targets for Westfield

	2025	2035	2050
New Efficient Wood Heat Systems in Residences	174	146	106
New Efficient Wood Heat Systems in Commercial Establishments	2	3	4
New Heat Pumps in Residences	52	111	141
New Heat Pumps in Commercial Establishments	1	2	3

Source: Department of Public Service: LEAP Projections

In the LEAP scenario, fuel oil use will be virtually eliminated by 2050, although some LP gas use may remain. Although cord wood is likely to continue to be a popular choice, cleaner-burning wood options (such as wood pellets) would continue to gain popularity among residents. The overall use of wood, however, would be eventually offset by electric uses, such as heat pumps.

Geothermal, or "ground source heat pump systems", extract natural low-temperature thermal energy from the ground during colder months for heating, and transfer thermal energy from the building to the ground in warm months for cooling. This technology operates much like a refrigerator, utilizing a heat pump, heat exchanger, and refrigerant. While geothermal systems do require electricity to operate the pumps, the systems generally deliver between 3 to 5 times more heat energy than the electrical energy they require to operate.

Geothermal pumps require excavation and duct work, pricing the technology out of reach for many residents. In recent years, however, manufacturers have developed a similar air-sourced heat pumps that operate more consistently over Vermont's vast temperature ranges. Also called "cold climate heat pumps" or "mini splits", these units can be two to three times more efficient than propane and fuel oils. Unlike geothermal units, they do not require excavation or duct work and can be much less expensive to install. Cold climate heat pumps have the capacity to heat about 50% to 70% of a building, depending on the size and layout of the structure. Some buildings with multiple heating zones may be difficult to heat with heat pumps alone. The pumps also may provide some heat to underserved zones or uninsulated workspaces. Despite recent improvements in effectiveness on cold days, a backup heating source is usually required for sub-zero temperatures. Despite the limitations in open source heat pumps, their superior efficiency over combustion-based heating sources accounts for the overall decrease in the reliance on wood heat systems by the year 2050.

Current and Future Electricity Use

Electricity is supplied to Westfield by the Vermont Electric Cooperative (VEC), headquartered in Johnson, VT. VEC supplies electricity to much of northern Vermont, including all or part of 37 Northeast Kingdom towns. System reliability has improved over the past ten years and is considered reliable with infrequent and minor outages. According to Department of Public Service figures, for 2017 VEC residential members were charged the third highest rate in the state. The average monthly residential electric bill for VEC members was $100.29. Commercial members were charged 20 percent less than residential members: $0.159 cents/ KWh, versus $0.1925 for residential members.

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Reports from Efficiency Vermont show that residential electricity use has declined in Westfield since 2015 by about 1%.

Table 9.5: Westfield Electricity Use

	2015		2016		2017	
# of Residential Premises*	326		323		321	
Sector	**kWh**	**MM BTUs**	**kWh**	**MM BTUs**	**kWh**	**MM BTUs**
Commercial & Industrial	966,035	3,296.11	991,231	3,382.08	1,020,034	3,480.36
Residential	1,968,386	6,716.13	1,954,730	6,669.54	1,917,010	6,540.84
Total	2,934,421	10,012.24	2,945,961	10,051.62	2,937,044	10,021.19
Average Residential Usage	6,038	20.60	6,052	20.65	5,972	20.38

Source: Efficiency Vermont *Commercial customer counts are not available.

The same dataset indicates that Westfield residences have achieved savings of $1,826 in efficiency measures since 2015. The vast majority of the cost- and energy-saving measures have have been accomplished through switching light bulbs and lamps (e.g. CFL, LED, fluorescent tubes) and by replacing hardwired lighting fixtures. Other efficiency measures include switching to higher efficiency appliances (such as EnergyStar). Since 2017, Westfield residences have collectively replaced 1,352 light bulbs and 106 hardwired fixtures. Efficiency Vermont reports also indicate 23 rebates for more efficient equipment (such as monitors, power strips). Although electricity use increased in the commercial & Industrial sector during the same period, customers collectively replaced 225 light bulbs and 250 hardwired fixtures.

Total electricity use is expected to increase by 2050 due to fuel switching in thermal and transportation uses. LEAP projections for the town, for example, indicate an increase of 3.4 million MM BTUs by 2050. Electricity in thermal residential, according to the LEAP estimates, could increase by 4,000 MM BTUs, and thermal commercial uses could increase by 2,400 MM BTUs. This increase seems counterintuitive to energy use reduction goals, but because electricity is more efficient than the fuels it will replace, total energy consumption will decline even as electricity use rises. Nevertheless, meeting efficiency goals through ongoing replacement of equipment, bulbs, hardwiring, etc., will be critical to meet 2050 energy use goals.

Table 9.6: Westfield Residences with Upgraded Electrical Equipment by Year

	2025	2035	2050
Estimated number residential customers	320	339	359
Number of residential customers to upgrade electrical equipment	89	140	205

Source: Department of Public Service: LEAP Projections

Current and Future Electricity Generation

The Planning Commission recognizes the importance of renewable energy resources and recommends their development and use within the town. These would include wood, micro

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hydro and small hydro, thermal solar and heat pumps for water heating and home- or business-scale solar and wind electrical generation. Vermont Electric Cooperative's Community Solar project is another way for Westfield residents to use renewable energy even if they don't have a good generation site. Wind Energy Conversion Systems (WECS) that are not connected to the grid or permitted under Section 248, are specifically addressed in the Westfield Zoning Bylaw to address safety and design requirements. It is the Town's goal that all WECS meet these recommendations.

For policy purposes of this plan, solar energy facilities are grouped into three categories:

Small-Scale Solar, defined as solar electricity and transmission facilities up to and including 15 kW capacity;

Mid-Scale Solar, defined as solar electricity generation and transmission facilities greater than 15 kW capacity and less than or equal to 150 kW capacity or up to two acres of developed area including fencing, whichever is greater; and

Large-Scale Solar (also known as 'utility-scale'), defined as a solar electricity generation and transmission facility 150 kW or greater in capacity or more than 2 acres of developed site area, whichever is greater.

For policy purposes of this plan, wind energy facilities are grouped into three categories:

Small-Scale Wind, defined as systems with generating capacities up to and including 10kW;

Mid-Scale Wind, defined as systems with generating capacities greater than 10kW (AC) and less than 1MW; and

Utility-Scale Wind, defined as systems with a generating capacity per turbine of 1 MW or greater. (Utility scale wind generation facilities are not considered feasible in Westfield.)

For policy purposes of this plan, hydro energy facilities are grouped into two categories:

Micro hydro, defined as systems producing between 5 kW and 100 kW

Small hydro, here defined as systems producing between 100 kW and 20 MW

Westfield has no published data on potential hydro generation, and given stringent licensing and permitting concerns to minimize impacts to aquatic biota, hydro development is not likely in Westfield. (The last new hydro production facility in Vermont was licensed in 1987.) Nevertheless, the Town encourages finding new ways to harness hydro power in an environmentally responsible manner.

To meet 2050 goals, Westfield would have to generate 151 new renewable net megawatt hours each year. Generation that was established in Westfield prior to 2017 therefore does not count toward this goal. Westfield has two farm-scale wind energy generators. Lazy Lady Farm (which has been entirely off-grid for decades) generates one kW, and Butterworks Farm has a turbine with a 33 kW capacity that can generate between 3,000 and 4,000 kWh in winter months. Since 2017, two solar installations – including a 50 KW capacity installation on a barn roof – can generate about 68 kWh a year toward the new net generation goal.

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Energy Generation Land Resources for Renewables

There are more areas in Westfield where specific scales of solar and non-utility wind development are appropriate. The following map analyses, which comply with Act 174 standards for renewable resource mapping, provide information about potential solar and non-utility wind sites. Maps were generated using GIS (geographic information systems).

Table 9.7: Constraints to Renewable Energy Development

Known Constraints (Statewide layer developed in support of Act 174)	Regionally Unsuitable Areas (NVDA Regional Plan)	Possible Constraints (Statewide layer development in support of Act 174)	Local constraints
• Vernal pools • River corridors • Floodways • State significant natural communities • Rare, threatened, and endangered species • Natural wilderness areas • Class 1 and 2 wetlands	Lands with elevations of 2,000 feet or more	• VT agriculturally important soils • Special flood hazard areas • Protected and conserved lands • Deer wintering areas • Conservation design highest priority forest blocks • Hydric soils	• Open active agricultural fields • North Hill Road • Maiden Hair Fern Habitat

Renewable resource layers were mapped, and Statewide **'Known Constraints'** were removed entirely from available resource areas.

Regionally designated unsuitable areas were then extracted from the remaining resource areas. These include areas with an elevation of 2,000 feet or more; and according to NVDA's regional plan, are a special class of lands that should be protected from any large-scale commercial or industrial development characterized by a constructed height of 100' or more, and an acre or more of permanent site disturbance, such as clear-cutting. These areas contain one or more factors that make them unsuitable to such development – contiguous forest cover; sensitive wildlife and plant habitat; conservation lands and recreational assets; managed forestland; and headwaters and ephemeral surface waters, which are highly vulnerable to erosion and man-made disturbance.

Statewide Possible Constraints' were overlapped with renewable resources to highlight where there are potential complications for developing generation facilities.

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The Town of Westfield has added three categories of possible constraints to the GIS analysis:

- Actively farmed agricultural lands: Open agricultural fields or contiguous fields (separated only by hedge rows, fence lines, drainage ditches, roads, etc.) larger than five acres should not be used for solar facilities. The local constraints map shows examples of these fields, but not all of these lands;

- Scenic viewsheds along North Hill Road: One of the most photographed areas of Westfield, North Hill Road contains some of the most iconic viewsheds, and solar development in this area will be held to a higher standard in order to minimize visual impact; and

- Maiden Hair Fern habitat

Remaining resource areas that do not overlap with any environmental constraints are considered **'Prime'** resource areas, and resource areas that overlap with Possible Constraints are called 'Secondary' resource areas.

Preferred Sites

The following areas are specifically identified as preferred areas for solar facilities, as they are most likely to meet the siting and screening requirements:

- Roof-mounted systems;
- Systems located in proximity to existing commercial or industrial buildings;
- Areas with no known or possible constraints that are near existing hedgerows or other topographical features that naturally screen the entire proposed array;
- Former brownfields
- Facilities that are sited in disturbed areas, such as gravel pits, or former quarries;
- Working farms, where more than 50% of the energy generated by the solar development is used by the farm.
- Other preferred areas as mapped on Westfield's solar resources map.

The importance of roof mounted solar cannot be understated. Using conservative estimates of one out of every ten residences, Westfield could generate as much as 188 MWh by 2050. With the experience of the first barn roof solar installation, we estimate suitable agricultural and commercial buildings could accommodate enough solar panels to produce 183 MWh with current technology. Anticipated improvements in panel design could increase generation from these roofs.

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Siting Standards for Renewables

All ground-mounted solar facilities shall be sited and screened so that visual impacts are mitigated when viewed from public streets, scenic viewpoints, and/or adjacent properties. Screening shall be year-round. If topography alone does not provide sufficient screening, a combination of materials (such as trees and shrubs) shall be used to create a naturalized screen rather than a large expanse of uninterrupted, uniform material. Plantings that die or become diseased shall be replaced within six months.

Screening for solar development projects along North Hill shall be held to a higher standard. Solar projects shall not be visible within a thousand feet of a passenger vehicle travelling on North Hill Road. All mid-scale proposed solar projects proposed in this landscape area shall have a landscape impact analysis completed by a certified landscape professional.

Although the Town does not support the siting of commercial energy development on agricultural lands, it supports *the integration of on-farm solar generation into active agricultural uses that can help farms reduce expense, generate extra income, and remain viable.* The town supports siting solar on existing farm structures, or the creation of buffers between organic and non-organic production areas, or in a manner that does not degrade soil or water quality.

All utility scale solar facilities shall be sited only on preferred sites.

Westfield's high elevation lands are deemed unsuitable for large-scale commercial and industrial development, and only small-scale and mid-scale wind power generation is appropriate in the town. Small-scale systems are appropriate at homes, businesses, schools, and other institutions. Mid-scale wind turbines are only appropriate for the purpose of supplementing onsite energy consumption for farms and other businesses.

Challenges/Opportunities:

Westfield is located in the Sheffield-Highgate Export Interface (SHEI), where several existing generators are frequently curtailed by the grid manager, ISO New England. While the Town encourages appropriately scaled renewable energy development, we have a commitment to ensure that such development is sustainable and feasible, and does not merely substitute one renewable resource with another. This plan therefore supports energy development that will not exacerbate curtailment at issue within the SHEI. Additionally, we will expect project developers to work with utilities and other stakeholders to explore innovative strategies that shift generation away from the hours when generation exceeds load within the SHEI area or otherwise avoids exacerbating congestion on the grid. An example of such a project would pair a battery with a solar facility to control when the project's power is exported to the grid.

The VEC Community Solar project is a way for Westfield residents to access renewable energy without building it.

Dairy farms may be sites for heat recovery from composting to heat water.

The food we eat has a profound impact on our region's energy use and carbon footprint. 23 survey respondents indicated they produce some of their own food, six are part-time commercial producers, and three are full time farmers/producers. Increasing the amount of food produced and consumed locally, and promoting practices that improve soil health and

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carbon sequestration can further reduce Westfield's carbon footprint. These same practices increase the land's resilience –its capacity to withstand more erratic and extreme weather.

With easy access to wood fuel, Combined Heat and Power (CHP) systems could be a good fit for Westfield businesses, or for district residential heating and electrical generation, if smaller systems become available.

Goals

- Encourage energy conservation and the use of energy efficient products.
- Reduce reliance on automobiles and vehicle miles travelled.

Recommendations:

- Conduct a survey to get a more accurate count of total miles driven per year.
- Establish and support an Energy Committee that can disseminate information about energy saving opportunities.
- Consider participating in Efficiency Vermont's Button Up! Challenge.
- Make information available about lending programs that can improve the efficiency of older housing stock, such as Efficiency Vermont's "Heat Saver" loan and USDA Direct and Guaranteed Loan Programs, for single homes and multi-family homes.
- Research grants to finance solar energy installations for town buildings.
- Consider lifetime costs including gas mileage, energy efficiency, useful life expectancy, and operating costs when purchasing vehicles or other Town equipment.
- Consider access to sources of renewable energy (solar, wind, and water) when reviewing zoning ordinance.
- The development of small-scale renewable energy resources is encouraged.
- Provide technical resources for adding wood heated domestic water to existing wood heating systems
- and installing solar water heating.
- Provide information about zero energy construction as part of permits for new construction.
- Explore option of Town buying into VEC Community Solar project for the Town's electricity use.
- Site a park & ride along Route 100.
- Provide information to residents about ridesharing.
- Explore options for the Town to help improve internet connectivity.
- Establish public charging EV stations in the village. These are available through the Electric Vehicle Supply Equipment Grants (available to designated Village Centers.)

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10. WILDLIFE HABITAT and SIGNIFICANT NATURAL and HISTORIC FEATURES

Forests

The benefits of forestland are gaining recognition and broad societal value in addition to long-understood economic, recreational, and wildlife habitat value. Westfield residents have reasons and opportunities to ensure the Town's forestland and wildlife resources are well managed in the present, and for future generations. In the last decade the value of protecting forest function, particularly upland forests, has broadened to include species adaptation to changing weather patterns, and for stormwater management to adapt to more erratic and severe weather.

We can't know what future generations may need from forests. With 85% forest cover, Westfield's legacy is to keep forestland productive, intact, and healthy through thoughtful land management and development goals.

The components of a forest or woodlot serve multiple functions. Westfield residents use forests predominately for firewood, timber, wood chips, and maple sugaring. Forests are home to wildlife; they foster biological diversity and serve a critical function to maintain air and water quality. Upland forests provide flood control through water infiltration and retention capacity that also recharges ground water, the source of most drinking water in rural areas.

Vermont's 21st-century forests face significant challenges: aging landowners, increasing rates of development (new buildings and roads), rising land prices, climate change, and invasive pests and plant species. The median age of Westfield residents is 46.5 (American Community Survey 2012 – 2016). As the population ages and land costs increase, subdividing or selling land becomes an attractive option. Yet the forests have great community value to citizens for their natural beauty, their role in promoting clean air and clean water, habitat for wildlife, and their value for tourism and recreation. They distinguish Westfield's landscape and shape its culture. Ensuring the viability of the forest-products industry and the continued existence of forests and woodlots is central to Westfield's future.

Changes in forest species composition are notable for the increase in red oak seedling success observed. Oaks have been identified as a species better able to compete under predicted climate changes: warmer, wetter, and more extreme drought and precipitation. Oaks are a high-quality hardwood useful for wood products, such as interior finish work, furniture. and firewood.

Wildlife Habitat

Hunting, fishing and wildlife watching are a way of life, not only as recreation, but to put food on the table and to pass on age-old skills and a love of nature from generation to generation. These activities are cultural and economic drivers for residents and visitors. Wildlife requires certain

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conditions, including unfragmented forest blocks and clean rivers and streams, to thrive. Planning that maintains or improves these conditions may require new ways of thinking about the role and benefit of wildlife habitat.

Westfield's large block of unfragmented forestland provides ample opportunity for wildlife habitat and travel. Fragmentation occurs when human settlement segments large blocks of land into smaller and smaller areas. By creating gaps between blocks, fragmentation results in the direct loss of habitat. The smaller the habitat block, the smaller the number and diversity of species that can survive there.

Natural connections (or corridors) between habitats allow safe access within habitat range for many species. The pattern of large and well-connected forest blocks in Westfield provides several high important areas for wildlife habitat. Local gravel roads have light residential traffic and do not significantly restrict travel for most species of wildlife. Route 58 at the southern end of the forest block, and State Route 242 at the northern end have higher average annual daily traffic (AADT), which limits wildlife movement. Westfield has many wildlife road crossings that connect forest blocks and maintain the network of connected lands. Places where forest blocks are close to both sides of roads are likely to be important wildlife crossings. Numerous road sections are identified in the Vermont Agency of Natural Resources BioFinder and further study is needed to determine which in this list are most important for wildlife movement.

Bears provide a good example to demonstrate the importance of wildlife road crossings in Westfield. Bear require 10,000 – 20,000 acres per individual, spanning several different forest blocks to meet their life needs; food, water, shelter areas for breeding and travel between seasonal habitats. Bear find protection from highway and residential development in areas rich with American beech stands, high elevations, or wetlands. Westfield is part of a region that supports relatively high densities of cub-producing female bears. Black bear, fisher, moose and bobcat, are all found in Westfield, and need corridors to travel seasonally between habitats.

Deer herds require protected habitat to endure winter weather and heavy snowfall. Deer wintering areas provide two important features to white-tailed deer survival: shelter and food. Wintering areas, while a small fraction of a yearly range, can be used by generations of deer over several decades if appropriate habitat conditions are maintained. Without this habitat, the deer population would virtually die off. Westfield has no mapped deer wintering areas. However, areas of dense softwoods and beaver bogs throughout the upper elevation forest block provide ideal wintering areas. Common features of deer ranges include edges between fields and forests, wetlands, and broadleaf and coniferous forests.

Fisheries are indicators for clean water and diverse and productive aquatic habitat. The Upper Missisquoi River designated a National Wild & Scenic River extends from the North Troy Dam to Westfield-Lowell town line, and has native populations of Brook, Rainbow, and Brown Trout. Snider and Taft Brooks have Brook Trout, and Mill Brook has native populations of both Brown and Brook Trout.

The Missisquoi flood plain is a valuable stretch of habitat for wildlife species that depend upon the water system for food, travel, and shelter. The forests and higher elevations on the west side of town provide relatively uninterrupted habitat and travel corridors for upland wildlife.

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Animals of all sizes need other protections to support their populations. Noise and sound can force re-routing of migratory routes for birds and game. Noise has a significant impact on many birds. Animal sensitivity to certain noises and frequencies has been linked to birth defects, breeding complications, physiological effects, and other disturbances to wildlife and livestock. Noise is also a barrier to the movement of many reptiles, amphibians, and mammals. Development that adversely affects birds and other animals through sound are strongly discouraged. More information is available at the Federal Highways Administration website: http://www.fhwa.dot.gov/environment/noise/noise_effect_on_wildlife/effects/effects.pdf.

Natural Heritage Sites

Westfield is home to several rare, threatened & endangered species & significant natural communities identified by the Vermont Natural Heritage Program. Rare species can play crucial roles in ecosystems, with other species relying on them for their survival. Many of these species are admired and appreciated by people for their beauty, sounds, or mere presence on the landscape. Most of these species are rare because they are on the edge of their range or they are separated from the main population by a large distance. Because the planet in general, and possibly Vermont specifically, is experiencing the loss of species at a rate never before experienced in the history of the earth, those species most at risk of extinction, extirpation, and endangerment serve as barometers of the state of the environment. Westfield seeks to maintain, restore, provide stewardship for, and conserve habitats and natural communities that support rare, threatened, and endangered species.

The Hazen's Notch Natural Area is within the 273-acre Hazen's Notch State Forest, and known for its cold calcareous cliff community; this type of community occurs in less than 10 sites statewide. The area includes rare plant species, and a peregrine falcon nesting site, first identified in 1937. Another area of significant importance is near the confluence of the Missisquoi River and Mineral Spring Brook. This floodplain forest is the site of several rare plants. Inside Jay State Forest is a boreal outcrop on the top of Jay Peak. This high elevation forest is a home to the now rare Bicknell's thrush.

Burnt Mountain, with land in Westfield, Montgomery, Lowell, Eden and Belvidere was formally conserved as a 'wild area' by The Nature Conservancy in 2018. The 5,500-acre parcel abuts other conserved land including the Hazen's Notch State Park, for a total conserved area of 11,000 acres. Ecologists assessing the Burnt Mountain area found high quality forest types, rare in that part of the state. It includes "rich northern hardwood forest" — an ecological community dominated by sugar maple. Logging is not allowed. Hunting and non-motorized recreation (eg. hiking, skiing) is allowed on the property. Only a small portion of the 5,500 acre parcel is in Westfield.

A state-threatened plant species, the Great Laurel or Giant Rhododendron grows near the Westfield - Troy line. Close to the Lowell - Westfield border is a serpentine outcrop community,

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Brown's Ledges, where the Green Mountain Maidenhair Fern was discovered. This plant species has a global significance: there are fewer than six known sites in the world, and all are in Vermont.

Significant Natural Features

The spine of the Green Mountains runs through the western side of town. Hazen's Notch State Park/Natural Area, a steep-walled gap, lies between Sugarloaf and Haystack mountains. Cliffs of serpentine rock support rare alpine plant species and has historically been a nesting place for peregrine falcons. Traversed by the Long Trail, these 307 acres provide relatively easy access to wilderness recreational opportunities. The Long Trail State Forest and Jay State Forest offer over 3,500 acres for fishing, hiking hunting and back-country skiing in Westfield, and connect to thousand's more in the Town of Jay.

The most well-known geologic feature in Westfield is Balance Rock, about a 10-minute walk off Balance Rock Road. The rock, estimated to weigh 100 tons, is perched on top of a ledge. It has been guarding the valley for over 12,000 years. The property is currently in private ownership.

The Missisquoi River meanders through the eastern side of Town. It is one of five Vermont Rivers with segments of known archeological sensitivity greater than 20 miles in length. The stretch that runs through Westfield is designated as a corridor of "expected archeological sensitivity." Present and past topography, exposure, slope, distance to water, availability and abundance of food and other natural resources combine to produce a strong likelihood that archaeological sites exist here.

Significant Historic Features

Noted in the Public Lands and Buildings section of this plan, the Hitchcock Museum and Library is Westfield's most treasured community landmark. The 119-year-old building holds the Town's history in photographs, documents, and objects; and natural history collections from around the world. The windows need to be repaired or replaced. The Community Center (former school) is also a historic building and in the mid-90s was renovated as a multipurpose meeting space. Prior to that renovation Westfield's town meeting was, for decades, held in the town garage. It is important for the Town to preserve and maintain these two buildings as gathering places and to anchor the village center.

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Challenges/Opportunities:

- Westfield has unique physical characteristics that attract many types of visitors - tourists, researchers, and recreational enthusiasts.
- Most fragile sites in the community are protected by other physical limitations - floodplain, rock outcrops, steep slopes, or inaccessibility.
- Balance Rock is on private property and there is concern about continued public access and landowner liability.
- There are funds available to private landowners to protect wetlands and improve river corridor habitat/riparian buffers for trout and wood turtles (directly or through easements).
- With uncertain weather patterns and more intense rain events predicted, water quality may be affected by sedimentation and runoff from logging, agricultural practices, new housing, illegal ATV use on roads and in streams, and road conditions, even with new state mandated MRGP regulations.

Recommendations:

- The Natural Heritage sites designated on maps provided by the Department of Fish and Wildlife can be used to indicate the need to contact biologists with the Vermont Natural Heritage Program (241-3700) if there is development proposed with or near the site. The Natural Heritage Program will work directly with landowners.
- Identify places of significant local value for the Town to consider possible acquisition of easements, rights-of-way; and co-operative agreements with landowners to secure long-term access, and preserve priority wildlife road crossings.
- Continue regular maintenance and upkeep of the Hitchcock Library and Museum and the Community Center.
- Ensure that the Hitchcock Museum and Library, and the Community Center, receive special consideration from grant funding sources (e.g. Dept. of Historic Preservation, Preservation Trust). This can be accomplished by pursuing Village Center Designation.
- Work with state Department of Environmental Conservation to identify priority river corridor protections and those eligible for funding to ensure protection.

11. LAND USE

The first settlement in Westfield occurred on Buck Hill (or West Hill) when Jesse Olds built his family's home in 1798. The flats where Westfield Village now lies weren't settled until the early 1800s. Histories of the Town suggest that this lower land was originally too wet for development. The most recent large development in is Alpine Haven in the northwest corner below Jay Peak. In 1962, the Town of Westfield

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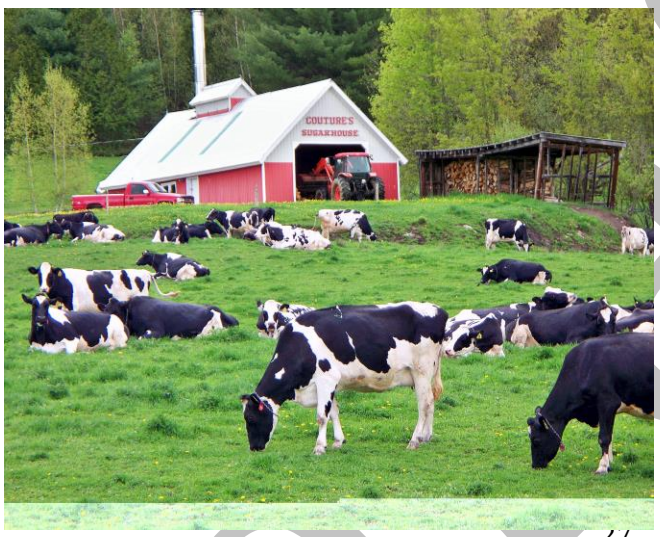
deeded 200 acres to Hubert Daberer with the stipulation that he invest $50,000 to develop the land. Daberer subsequently obtained 200 additional acres, put in a road and water system, and built a hotel and 56 chalets. Some years later 16 condo units were constructed. That complex burned in 2017.

Current Land Use

The Town of Westfield has 25,728 acres of land (Department of Fish and Wildlife). According to the 2017 Grand List, types of land use have not changed significantly in recent years. The total amount of farm and forestland has decreased slightly, and residential development has increased. Residential 1 (111) and Residential 2 (120) parcels total 231. The Municipal value of these properties is $45 million. There are 15 Mobile home properties with a total Municipal value exceeding $1.25 million. Vacation (seasonal) parcels total 102 and their value is nearly $15 million. There are 12 Commercial properties with a value in excess of $3.5 million. Finally, there are six Utility properties with a value greater than $2.5 million.



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Farms and Forests

Westfield's land use is distinguished by its vast acreages of working lands – farms, forests, and household scale food production. Farms (11 parcels with a value of nearly $5 million) and Woodlands (47 parcels with a value of approximately $6 million) comprise much of the Town's acreage. Farms include lands for crops, pasture, sugaring, and forest management. Seven of the eight operating farms in the valley – along Route 100 and Loop Road have been conserved. 44 properties are enrolled in the Use Value Appraisal (Current Use) program and this helps ensure they remain productive, working lands. Although the majority of these enrolled lands are for forestry, nearly 1,500 acres are enrolled for agriculture.

Westfield's forested land makes up 85.3% percent of the Town's 25,728 acres, and is comprised of hardwood (predominately maple, ash, beech, poplar, birch) and softwood (predominately spruce, hemlock, balsam, and pine). Forested parcels range from as small as 6.6 acres to 3,000+ acres. These areas are currently used for silvicultural practices, including sugaring, timber harvesting, firewood, chipped low value tree harvesting for heating and electricity. Many Westfield citizens supplement their primary livelihood with forest-related activities. This area has some single-family residences; however, limited year-round roads restricts housing development to the edges of the forest block that covers most of the western half of the town.

Forests include steep slopes, high elevations, and abundant wildlife. The entire western side of the Town is more than 90% forested foothills, and over the ridge of the Green Mountains from the Town's southern to northern border. In the middle of the privately-owned forest land, north to south, along the ridgeline, the state owns 3,900 acres of the highest elevation forestland

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including two named state forests: Hazen's Notch and Jay Peak, and a six-mile section of the Long Trail. This dominating landscape feature contributes to the Town's distinctive character and settlement pattern. Forested foothills and the ridgeline contribute to the scale of the built environment, the forest economy, water quality and wildlife habitat. This forested, hilly topography has a critical role in the long-term protection and quality of the Missisquoi River's upland headwaters, which feed into Lake Champlain. This area has high climate resilience and adaptation value for plant and animal species because of the size of the habitat blocks, their connection to other large habitat blocks and altitudinal belts of varying ecosystems in a short distance due to the terrain's steepness.

Currently, Westfield has 44 parcels enrolled in the Current Use Program. Of the 13,211 acres enrolled, 11,720 are forestland. This plan strongly encourages continuing this practice.

Steep slopes, current use management, local lumber markets, easily erodible soils and limited road access discourage development in these areas. Forests are a dominant element in Westfield's traditional way of life: providing timber, pulp and firewood; sugaring, hunting, fishing, camping, and foraging for wild edibles. No timber harvesting is allowed within the Long Trail Buffer Zone: 200 feet on either side of the treadway. 300 feet on either side of that is a protected zone where the State cannot harvest trees without prior approval of the Green Mountain Club, holder of the conservation easements on this land. The forests provide trails for snowmobiling, hunting, and other recreational activities. Well-built logging roads could attract future residential development. Some recent subdivisions of these lands have occurred.

In addition to long term economic benefits from sustainable forest management, the forests provide economic opportunities from recreation, tourism, and currently as a source of a renewable heat source for 50% of Westfield homes and for homeowners in surrounding towns. Woody biomass has potential as a local and regional renewable energy source in the form of wood chips, pellets and block wood for heating homes and domestic hot water and for generating electricity.

Forests have another key role in our response to climate change: They provide climate resilience. Species are more likely to adapt to climate change with access to the altitudinal belts of varying ecosystems in a short distance due to the terrain's steepness; and the forests ability to absorb and infiltrate water from more intense rain events. According to Vermont Department of Forest and Parks, one acre of Westfield's forests sequesters the CO2e emissions from 62 cars, annually. Using a conservative estimate of 15,000 acres of forestland, Westfield's privately owned forests sequester the equivalent emissions produced annually by 930,000 cars.[4] This plan encourages

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4 The Vermont Department of Forest and Parks bulletin Forest Carbon states: "Expanding areas of healthy forests will maximize carbon uptake and storage, more than any other land use. Where development does occur, planting trees will minimize carbon losses from soil, and accelerate vegetation growth to sequester additional carbon." (http://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/Forest%20Carbon-Nov2016.pdf)

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the preservation of these forests. The siting of new development is directed to minimize impacts to this valuable economic and climate adaptation resource.

Forest Blocks

Forests in Westfield are divided into fifteen forest blocks (areas of continuous natural cover surrounded by roads, development and agriculture). These are mixes of public and private land that reflect current land cover rather than particular ownership, management strategies or future plans. Understanding the size and location of these forest blocks shows the larger forest pattern across the Town and hence the degree of forest fragmentation. Westfield has two large forest blocks covering the western portion of Town. While these blocks extend well beyond the Town boundaries, the blocks are 31,341 acres and 17,675 acres. Westfield's upland forests abut large forest blocks in Lowell, Montgomery and Jay, and that proximity contributes further to their habitat value. The eastern and southeastern portion of Town include all or part of 12 additional forest blocks between 30 acres and 2300 acres. In the extreme southwest of town, a portion of a 25,580-acre block occupies a small section of Town. These blocks remain connected to one another through the network of streams and rivers and wildlife road crossings. Forest Blocks to the west of Town are part of the main stem of the Green Mountains and connected as part of that network. Forest blocks to the southeast are smaller connectors between forests on the Green Mountains and the Lowell Range.

Large forest blocks support the biological requirements of many plants and animals: support viable populations of wide-ranging animals by allowing access to feeding habitat, reproduction, and genetic exchange; serve as habitat for source populations of dispersing animals for recolonization of nearby habitats that may have lost their original populations of those species; support public access to and appreciation of Vermont's forested landscape; provide forest management opportunities for sustainable extraction of forest products; provide forest management opportunities to yield a mixture of young, intermediate, and older forest habitat; help maintain air and water quality; and provide important opportunities for education and research of forest ecosystems.

Planning for Orderly Development

A stated intent of the Westfield Zoning Bylaw is to provide for orderly community growth. To achieve that end, the Bylaw establishes 3 zoning districts within the town, and lists the primary objective for each district. The zoning districts are:

- **Village District:** The district essentially encompasses the entire village center. Exact boundaries can be viewed at the Town Office. The primary objective for the Village District is to maintain the village's current character, while providing for future development. The minimum lot size in this district is one-half acre.
- **Recreation-Residential District:** This district encompasses much of the northern portion of the Town. The stated objective for this district is to allow for residential development and recreational land uses while maintaining the area's rural character.

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- **Rural-Agricultural District:** All lands not included in the Village or Recreation-Residential Districts lie within the Rural-Agricultural district. The objective for this district is to provide for the continuation and expansion of agriculture and forestry.

Land Use in Westfield can be divided into 11 discreet areas for more specific discussion of existing development patterns:

Alpine Haven is an island of development separated from the rest of Westfield by topography, the spine of the Green Mountains with limited roadway connections. The land is mountain sidehill, and its proximity to Jay Peak makes it desirable for vacation home development. Existing homes are concentrated on the north side of VT Route 242 on lots of less than one acre. There has been some commercial and light industrial development on the south side of Route 242 in recent years.

Some homeowners in the Alpine Haven development are year-round residents with children who must be picked up by school bus. The roads and water system within the development are privately owned and maintained. There is ongoing discussion among property owners about water rights. A wellhead protection area has been established for the Alpine Haven water system. The condominiums, nearly completed in 2013, burned in 2017.

North Hill's large maples form a wonderful canopy for bicyclers and walkers and contribute to the area's picturesque rural character. The presence of North Hill cemetery further adds to the peaceful environment. This part of Town has experienced a transition from dairy farming to more diversified agricultural operations of over 100 acres. A recent subdivision has created some residential lots, all greater than 10 acres in size. Homes in this area are year-round. The spring and well that supplies water to village residents are located on North Hill Road, and a designated water source protection area.

Buck Hill appeals to a range of property owners: from recent retirees, to homesteaders, and home-based business owners. The large forested area includes scattered vacation homes and hunting camps among the year-round residences. For all types of owners, lots tend to be large (greater than 10 acres). There are some maintained roads, but some side roads have only seasonal access, and some camps have no direct road access, running water, or electricity. Most of the forestland is in the State's Use Value Appraisal Program (Current Use), and is actively managed for forestry. The main road provides access to some of the wood lots in the central forest section of Town. Seasonal and logging roads are used for snowmobiling.

Westfield Village is the commercial, civic, and residential center of the Town. The main street (Route 100) passes by the general store, Community Center, hardware store, antiques dealer, two storage rental facilities, a campground, the Hitchcock Museum and Library, and the Congregational Church. The village center is anchored by an organic vegetable farm on the south end, and on the north end by an organic dairy farm with retail maple shop and B&B; and the Town Garage and Recycling Center. The Post Office is located in a private residence. The Town Office is located in a new facility on School Street. There is some rental housing, and a former community care facility. Lots in the Village range in size from less than one-half acre to several acres. The community water system is served by a spring and a well on North Hill Road. There is no municipal sewage disposal system.

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Kennison Road is characterized by an active gravel pit and farms with smaller yet more widely dispersed fields than those on the flood plain. There are year-round residences on lots of 5+ acres, some home-based businesses, and a pending bourbon distillery on the east end of the road near the Troy town line.

Loop Road runs through the flood plain, bordering Westfield's prime agricultural land and its largest dairy farms. Non-farm residences are on lots of 7+ acres, and there is some seasonal home development on the south end. Some of the land is adjacent to the now closed Troy talc mine. The mine owners have established through purchase a protective buffer to minimize negative (noise, dust) impacts to adjacent landowners.

Route 100, south of the village is dominated by dairy farms and the Benedictine Monastery with 486 acres of open and wooded land and retreat trails. In addition, there are some home-based businesses and a commercial campground along the state highway.

Route 100, north of the Village has more prime agricultural land along the highway and Missisquoi River. There are 2 large farms, a maple products and maple sugaring supplies distributor, a maple sugaring operation, and a few rental housing units. As noted elsewhere six farms along Rte 100 and Loop Road have sold their development rights, limiting development pressure along this corridor.

Hazen's Notch, with its steep ledges and unique vegetation, is a scenic and historic area of statewide significance. The Long Trail runs through the area, and the Notch has been designated a Natural Heritage Site. The road (Route 58) through the Notch is closed in winter. Most of the land is owned by the State, but there is some private ownership along Route 58 toward Lowell. This private land provides access to some of the interior forests and camps.

Jay Peak summit, is located in Westfield. This includes the Tram House and its resident apartment.

Ballground Road has experienced considerable residential development, particularly year-round homes. Typical lots range from 4 to 10 acres in size. A portion of the road is maintained by the Town, and the rest is privately maintained. The Town is supportive of residential growth in this area.

Balance Rock Road is also experiencing housing development, but this has been primarily seasonal in nature. Recently, development has been trending toward year-round homes. Typical housing lots are in the 10 - 25 acre range. The road is maintained by the Town, though it will be several more years before the whole road meets Class 3 standard.

Future Land Use

Although the majority of survey respondents believe that the rate of residential development in Town is "fine," respondents also expressed strong concern for protecting agricultural and forest lands, as well as connected forest areas for wildlife. When asked to rank the top five issues the Town should address over the next eight years, both concerns were the third most-cited. (See Figure 11.1.)

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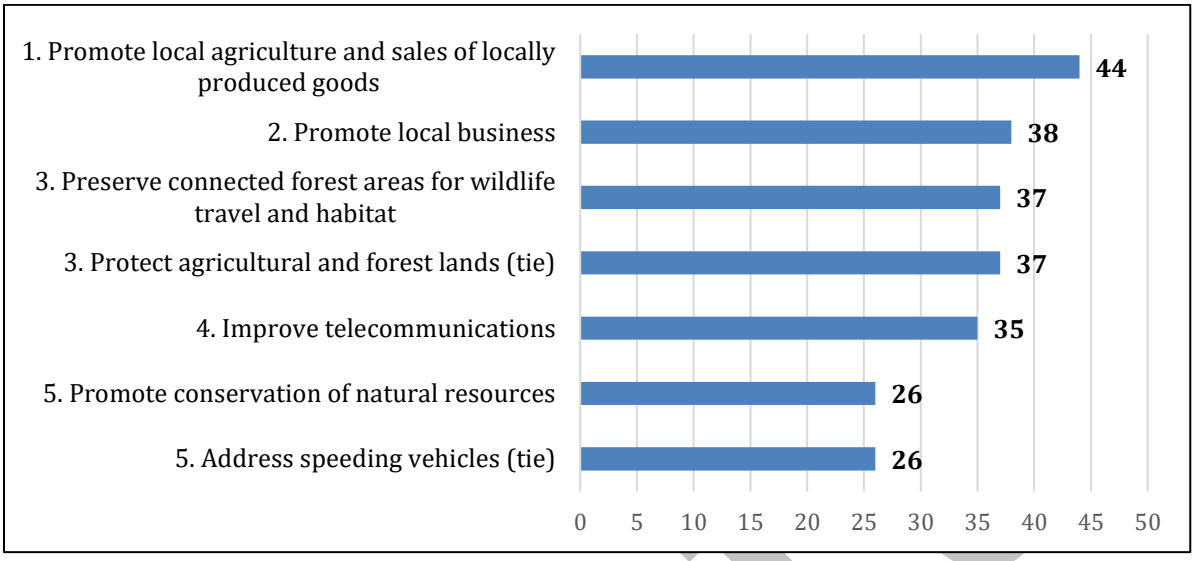
Figure 11.1: What areas should Westfield should focus on over the next eight years? (Top Five Responses out of 74)



Based on these and other survey results, residents want to maintain the existing patterns of land use – working farms and forests surrounding the village center, while providing for new development compatible in density, type, and location:

Alpine Haven: May allow some new growth, but there are concerns about small lots, water rights and road maintenance agreements. The Town would like to see controlled growth of residential, commercial, and industrial uses on the south side of VT Route 242.

North Hill: Allow additional residential development while taking steps to protect the scenic qualities of the road and wildlife corridors and road crossings. This may be accomplished by discouraging the creation of new roads, encouraging shared driveways or private rights of way where feasible, and carefully siting new buildings.

Buck Hill: - Encourage construction of residential homes in this area. Continue to upgrade roads to accommodate residential growth. Maintain productive forest lands and preserve rural character, scenic qualities, and wildlife corridors and road crossings. This may be accomplished by the above-mentioned strategies. Additionally, traditional large-lot zoning often fragments large tracts of working lands. Allowing for alternative siting standards (such as clustering) may help to minimize fragmentation.

Village: Maintain the village's character and its neat appearance. Encourage commercial and business opportunities in existing homes. Further growth is limited by conserved land on operating farms at the south and north end of the village, extent of municipal water system, and lack of municipal sewer system. Closing of the Scenic View Care facility is an opportunity to develop affordable housing units in the village center. Maintaining the vibrant mix of commercial, civic, community, and residential uses in the Village core is especially important. Village Center designation will provide incentives for maintaining the desired mix of uses. The designation (conferred by the State of Vermont) is not a regulatory one. Rather, owners of income-producing properties can apply for tax credits for necessary fit-up and rehabilitation

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projects. Westfield Village is a strong candidate for Village Center designation, and this plan recommends pursuing it.

Loop Road: Maintain agricultural land, residential use.

South Route 100: Maintain open agricultural lands, much of which is conserved. Allow some residential and small commercial development.

North Route 100: Maintain rural character along the roadway with open land, few residences, farms and small commercial development. All actively farmed open land abutting Route 100 north of the village is conserved.

Kennison Road: Maintain existing farmlands. Allow residential growth and small commercial development.

Balance Rock Road: The Town supports continued residential development in this area. While large lot development is acceptable, clustered residential development that leaves most of the acreage undeveloped is preferred.

Ballground Road: The Town supports housing growth in this area. There may come a time when the Town is asked to take over portions of the road that are currently privately maintained. The Town would consider taking over a road if abutting property owners finance the upgrading to Class 3. Currently the Town relies on the VTrans "Orange Book" to make decisions about throwing up or upgrading sections of road.

Interior Forestlands: This plan identifies forest resources, and provides planning guidance to encourage environmentally sustainable forestry practices that also provide adequate wildlife habitat and connectivity. It allows some subdivision and residential growth at edges of forest blocks along existing roads.

This plan encourages the protection and preservation of Westfield's forests and discourages large developments in forested areas. Planning for climate resilience is key to 21st-century forest management, according to Orleans County Forester Jared Nunery. "One of the most important goals is keeping forests forests," he says. "This means maintaining working forests, promoting healthy forests, and maintaining diversity within forests." Utility-scale and commercial-scale renewable energy projects are discouraged in these areas. Appropriate uses include silvicultural practices, sugaring, woodlots, wildlife habitat conservation, recreation, and primitive camps. Permanent road construction (with the exception of truck roads used in forestry operations) is discouraged in forest tracts. New roads must be built to avoid soil erosion, disturbing habitat, increasing runoff, degrading water sources or fragmenting blocks of forestland. Recreational use by ATV's is discouraged for the same reasons, and more: for the compaction damage to tree roots, affecting tree vigor; the spread of invasive plant species, and; increased costs for towns and loggers to control erosion that typically occurs with ATV traffic. The Town is concerned that damage from ATVs can lead to private land being posted for all recreational use.

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Recommendations:

- Use local and state road policies to inform the amount and type of development in each part of Town.
- Monitor and regulate curb cuts allowed on Town roads so that landowners will have to think through their overall land plan before they begin creating lots
- Ensure zoning and permitting comply with Act 64, Vermont's Clean Water Act, that is, 'the spirit of the law' even if a state stormwater permit is not required
- With more severe storms predicted, consider adding a stormwater ordinance to Bylaws.
- Consider provisions in the Zoning Bylaw that encourage greater density and clustered residential development in some zoning districts.
- In the Zoning Bylaw, define the amount, type, and scale of commercial development allowed on Route 100 outside the Village, to minimize traffic impacts and maintain the character of the village and the rural character of the area around the village.
- Consider additional development in Alpine Haven area; review permitted and conditional uses for this area in Zoning Bylaw. (e.g. Amount of growth, Type, and Density).
- Consider amending Zoning Bylaw to minimize fragmentation by driveways and new private roads in forest blocks.
- Consider allowing smaller and cluster lots in subdivisions to preserve more intact forest and agricultural land.
- Consider overlay zone for sensitive areas such as Wellhead Protection Areas, wetlands, Natural Heritage Sites, shorelines. Developments proposed in those areas should receive a higher level of review.

12. DEVELOPMENT TRENDS and PLANS for ADJACENT TOWNS & THE REGION

The Town of Westfield is bordered by five towns: Montgomery, Lowell, Troy, Jay, and Richford. At the time this plan was written, the towns of Montgomery, Jay, Lowell, and Richford had Town Plans in effect and Troy was working on updating theirs.

Montgomery

Westfield shares its western border with the Town of Montgomery. Two roads connecting the towns: Route 242, which borders Alpine Haven and Route 58, also known as the Hazen's Notch Rd. The access along Route 242 has potential to bring development into Westfield. Alpine Haven, a residential area concentrated on the border of both towns, is part of Montgomery's Village-2 District. Montgomery considers this to be one of the main centers of population in their Town. This designation has the potential to increase residential and commercial growth along the 3.7 miles of Route 242 in Westfield. However, according to Montgomery's 2010 Town Plan, only a small increase in population is expected town-wide for the next 15 years.

This implies that the potential growth pressure from Montgomery will likely remain minimal. Westfield and Montgomery delineate similar permitted and conditional uses in this area, further ensuring the compatibility of land use planning.

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Route 58 runs through Hazen's Notch Natural Heritage Area in Westfield. The land abutting the approximate one mile of Route 58 that passes through the southwest corner of Town,is zoned Agriculture/Residential (agriculture and single-family residential uses are permitted), and is a minor transportation route for Westfield. This section of Route 58 is closed in the winter, limiting access to the village for Westfield residents on the far western part of Town. Other than along these two routes, there is no foreseeable development in other areas of the Montgomery border because it is too mountainous (>1,600 ft.) and zoned Conservation Two (fences, trails allowed; no other development). Residential and commercial uses are not permitted in this area.

Lowell

Westfield borders Lowell to the south. Currently, Lowell's Municipal Development Plan encourages small business development that would not upset the settled rural character of the area. There are two major transportation routes between the two towns, and three unpaved Town roads. As discussed earlier, Route 58 connects Montgomery Center with the village of Lowell. This has the potential to bring light residential development along two Town roads: Balance Rock Road and Buck Hill Road. Route 100 is the major connector between Lowell, Westfield and Troy. This State Highway creates the opportunity for increased development but there is no current pressure. This is an area to monitor for potential future development.

Troy

Westfield borders Troy to the east. Troy readopted their Town Plan in 2013. and is in the process of updating it. Their Town Plan shows that the zoning districts of Industrial, Commercial-Residential and Village Districts take up the northern half of the shared border, while the southern half is a Rural District. VT Route 100 runs through this southern half, connecting Westfield to Troy, Newport Center (8 miles), and eventually Newport (13 miles) via VT Route 105. An expansion of the municipal wastewater system for Jay/Troy has helped the development of the Jay Peak Resort. Troy is expecting future commercial development to occur that would service this resort. This could affect development on Route 100, and on Route 101 between Troy and North Troy villages. The latter parallels the border of Westfield and Troy. Development in Troy could add development pressure in the northeastern portion of Westfield and merits monitoring.

Jay

Westfield borders the Town of Jay to the north. Jay's current Town Plan, adopted in 2017, calls for land use practices which are consistent with those in Westfield. Specifically, Jay wants to preserve traditional development patterns by focusing commercial development in the village core; develop the

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recreational core at Jay Peak; allow low impact commercial and residential development where appropriate; and conserve open space, forestland and other natural areas. However, since 2010 there have been a large number of land subdivisions. This is likely due to expansions at Jay Peak Resort. The Planning Commission should monitor development and land use trends in Jay. Additional development could impact traffic on North Hill Road and operation of the Joint Jay Westfield Elementary School.

The two towns share Route 242 connecting Montgomery Center with the village of Jay. Jay Peak State Forest lies on both sides of the Westfield-Jay border, enveloping the road, and prohibiting development in this area. North Hill Road, a blacktop Town road connecting Jay and Westfield, has the potential for residential growth in the northeastern corner of Westfield.

Richford

Richford touches the northwest corner of Westfield for only a few miles. These towns do not share roads. The Jay State Forest will likely prohibit development pressure from Richford. The official zoning map for Richford shows that the land abutting the Westfield town line is in a Conservation 2 District where development is limited (forestry, agriculture, and public uses). The Richford Town Plan (adopted in Jan. 2017) appears to restrict development in the area bordering Westfield.

Regional Plan

Westfield is nestled in the northwest corner of Orleans County, just south of the Canadian border. Westfield occupies 25,496 acres (5.7% of the county) and is more mountainous than most of Orleans County. In the regional context, Westfield is considered a Village Center. This is defined as "a small, attractive New England village with a desirable environment for people who enjoy the benefits of small village living and for visitors who are attracted by the scenic and historic beauty of these villages." These Village Centers generally have a defined central core, some public utilities such as a municipal water system, commercial development, and adequate highway access.

The Village Center category is intended to guide growth in keeping with the character and settlement patterns of the area. Westfield is compatible with the overall regional land use plan designed "to concentrate residential development in growth centers while maintaining the historic character of the community; to encourage clustering of rural residential development; and to retain large blocks of open land, scenic vistas and wildlife habitat and preserve rural character".

13. IMPLEMENTATION PLAN

The Implementation Plan is a work sheet for Westfield Town officials to guide planning and land use for the next eight years. It lists recommendations and tasks from the plan sections and assigns a priority level for each action. As a working document, the Implementation Plan will always be in a draft form to remain flexible enough to adapt to changing needs, pressing issues, and emerging opportunities and challenges. Additional space is provided for further actions

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that become necessary after the adoption of this plan. If the Implementation Plan is maintained, it will simplify updates to Westfield's next Town Plan, eight years from now.

Note: general recommendations are ranked by the following:

High	Can be accomplished within one to two years.
Medium	Can be accomplished within three to eight years.
Ongoing	Initiatives with no measurable end-result or end date.

General Recommendations and Priorities

Maintain good working relationship with Town of Jay concerning the shared school and developments at Jay Peak. ONGOING

Identify land of significant public value where the Town may want to secure public access through donation, acquisition, or easements. ONGOING

Monitor residential growth in to ensure municipal services are adequate, including the school. ONGOING

Encourage communication between landowners and recreational users, and recognize the contribution private landowners make toward the Town's recreation options. Add language to Town website. MEDIUM

Investigate regulatory and non-regulatory land use strategies, such as cluster development and purchase of development rights to maintain productive land while allowing some residential lot development. MEDIUM

Contact the Orleans County Conservation District for assistance to private landowners with runoff, flooding, and erosion control issues. MEDIUM

Work with Dept. of Fish and Wildlife to identify high priority wildlife road crossings, and outreach to landowners on options to maintain crossings. MEDIUM

Work with NVDA to update Local Hazard Mitigation Plan. HIGH

Explore options for shared office space rentals with access to high speed internet. MEDIUM

Protect and conserve more wildlife habitat. MEDIUM

ZONING CHANGES - Update Bylaws to address acknowledged inconsistencies, conditional use standards, lack of clarity and emerging needs identified in this plan.

Review the Zoning Bylaw: for future building sites/additions, especially in the areas of Town most able to support new growth; to comply with state requirements, such as for energy consumption, hazard mitigation, and road maintenance; and, to address trends and changes in land use (e.g., tiny houses, portable storage structures, shipping containers used as outbuildings, livestock in village district, etc.). HIGH

Monitor development in Alpine Haven/Route 242 area. This area may be subject to increased development pressure due to proximity to Jay Peak Resort. ONGOING

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Make sure lot sizes are adequate to allow for on-site water and septic systems with required isolation distances. ONGOING

Consider overlay zone for sensitive areas such as WHPAs, wetlands, Natural Heritage Sites, shorelines. MEDIUM

Ensure flexible zoning to allow agricultural diversification and accessory use. Consider land uses such as farm stands, livestock farms, dairy processing facilities, farm tours. MEDIUM

Use survey results to guide the amount, type and scale of commercial development on Route 100 outside the Village. HIGH

Consider access to sources of renewable energy (sun, wind, water) when reviewing Zoning Bylaw. MEDIUM

Revise the current Zoning Bylaw to ensure consistency with 24 V.S.A., Chapter 117 – the Vermont Planning Statute. ONGOING

Explore options for stormwater ordinance to ensure cost-effective compliance with new Municipal Roads General Permit (MRGP) and new resilience goals. MEDIUM

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