TOWNSHEND TOWN PLAN

Contents

I. INTRODUCTION

Townshend is a great place to live! The Town enjoys an attractive natural, as well as man-made environment which spells "Vermont" to much of the world. Since the most recent Town Plan[1] (2017) a number of things have changed in Vermont, and in our Town. The updated Town Plan you are reading will include, address and contemplate these changes.

Somewhere around 80% of the Towns in Vermont have a formal, adopted Town Plan. While the state doesn't require it, there are many benefits[2] to have a formal plan in place. These include the state and others requiring an adopted Town plan to apply for some grants. And importantly, an approved town plan is the vehicle for towns to provide guidance on town criteria for reviewing Act 250 development, Act 248 utility generation facilities and Act 248(a) telecommunication permit applications. The new State Enhanced Energy Planning provides "***substantial deference"*** to formally adopted Town plans with compliant energy sections in siting new electric generation facilities in the Town.

As you read this Town Plan, you will note it is both practical and aspirational. As a practical matter, there are all sorts of external events beyond our control (i.e. pandemic) further, Town demographics project an aging population with only a small growth as in the recent past.

The many intricacies and statutory requirements of municipal planning means that we rely on the Windham Regional Commission to help advise us in this planning process. They are the experts and provide important services, such as map making.

We intend that foresight and appropriate planning will guard the qualities of Townshend which attract people to visit and settle here.

PURPOSE OF THE TOWN PLAN

The Town Plan identifies the means by which the Town proposes to guide its future. The official adoption of the Plan represents a community decision towards the Town's future character, its priorities. The Town Plan sets forth goals and policies that establish a standard for review in Act 250 proceedings, Act 248 and other state regulatory processes. Its language is intended to be

[1] https://www.vermontpublic.org/programs/2020-03-02/whats-the-town-plan

[2] A municipality must have an adopted municipal plan that aligns with state regulations (e.g., 24 V.S.A. chapter 117, subchapter 5)

To receive State of Vermont town grants, Vermont towns, cities, and incorporated villages must typically be general purpose units of local government and meet specific eligibility requirements for each grant program. These often include having an adopted municipal plan, meeting population and income thresholds, and ensuring projects benefit low-to-moderate income populations. Grants may also require a minimum match of project costs, as well as specific reporting requirements after the grant is awarded.

sufficiently clear for any citizen to understand and be guided accordingly. It can be amended at any time during the life of the plan, which is 8 years after adoption.

The Town Plan will help the community achieve its goals, as well as to increase the amount of local control over the future of Townshend. It directs state agencies to take only those actions in Town which are compatible with the goals and policies of the Town Plan. Therefore, the Plan is an obligation and a commitment by appointed and elected officials at all levels of government to resolve issues according to the direction that has been established in the Town Plan by the people of Townshend.

INTERPRETATION OF THE TOWN PLAN

Interpretation of this Town Plan and a proposed project's conformance or non-conformance to it is to be made by the Town through its Planning Commission and Selectboard. Sections of the Town Plan that contain the language "should" are recommendations only. The language "could" or "may" are only suggestions as to the direction a project may or could take. The language "shall, will, or must" is mandatory. Its provisions shall be "mandatory in nature" as defined by the Vermont Supreme Court rulings (Nov. 1995). Nothing in this Town Plan shall commit the residents to expend funds, and no condition shall be put into a permit under this Town Plan that can cause the taxpayers to expend funds without their approval at a duly warned Town Meeting.

II. TOWN PLAN GOALS

Statement of objectives, policies, and programs of the town to guide future growth and development of land, public services and facilities, and to protect the environment.

1. To maintain a continuous planning program that will entail active participation among members of town boards, commissions, and residents to update the Town Plan and ensure that land use decisions are based upon open, transparent debate that includes participation of town residents in decisions affecting the future growth of Townshend.
2. To encourage policies that promote a diversity of employment opportunities that provide jobs and wages that support working families.
3. To maintain a sustainable pattern of settlement typified by villages within a rural setting surrounded by contiguous undeveloped corridors to preserve forests and agricultural soils.
4. To plan the town's future in a manner consistent with the town's ability to provide and pay for public services such as education, highway maintenance, and fire protection, without placing an undue burden upon taxpayers or otherwise leading to excessive increases in the town tax rate.
5. To support a healthy diversity of housing to meet the needs of low and moderate-income households.
6. To prohibit incompatible and uncoordinated development that could jeopardize the character of the community and the balance of public and private interests.
7. To encourage the continued use of lands for agriculture and forestry purposes for promoting

a long-term sustained yield of crops and timber products, which will preserve the rural character of the community.

8. To address issues of compliance with the Americans with Disabilities Act (ADA).
9. To require that, where possible, public utilities and transmission or distribution facilities share the use of corridors in order to minimize the impact on the environment and to assure desired development patterns, minimize their visual impact on ridgelines, slopes, and open areas, and avoid important natural and historic resources.
10. To protect significant natural areas and locations of special educational, scientific, historical, scenic, architectural and archeological significance from adverse development through appropriate conservation measures.
11. To assure that any project for increasing the capacity of any existing highway or developing any new highway is consistent with the land use policies of this Plan and that consideration be given to the secondary growth that results from transportation infrastructure improvements.
12. To establish a plan that addresses the Act 250 criteria and other state regulatory processes as a standard for review of development applications and other changes in land uses.

III. COMMUNITY PROFILE

HISTORY

New Hampshire Governor Benning Wentworth's grant of the Town of Townshend is in the form of a charter dated June 20, 1753. The Townshend charter grants to the named subjects of King George II, and to their heirs and assigns,74 equal shares in a tract of land to be named Townshend. It is to measure six miles square and to enclose 23,040 acres. Each share or allotment of land equals about 313 acres. Charles Townshend, for whom the town is named, is best remembered as the British Chancellor of the Exchequer responsible for the burdensome taxes imposed on the colonists. Known as the Townshend Acts, the levy on imported tea led to the dumping of tea into Boston harbor, the Boston Tea Party.

The Townshend proprietors were men from Sutton, Upton, Uxbridge and Mendon, Massachusetts. Their first meeting took place on July 24, 1753 in Worcester, Massachusetts. At that meeting town officers were elected: a town clerk, five selectmen, two assessors, a treasurer, and a constable-tax collector. The selectmen were to visit the land and have boundaries and parcels surveyed, mapped and marked. Because of the intervention of the French and Indian War, the town was not settled until the charter was renewed in 1762.

Early settlement in Townshend was concentrated near the West River and its tributary brooks. West Townshend was the main settlement, but the center of town gradually shifted to the Townshend East Village, with the Church on the Common (1791), the Baptist Seminary (1835), and the Second Baptist Church (1837). A short distance from the Townshend Common the settlements of Harmonyville and Simpsonville were important business centers. Farming,

lumbering, and the production of potash, together with related enterprises: sawmills, lumber yards, grist mills, harness shops, tanneries, tinsmiths and blacksmith shops were the means for making a living.

The first town meeting was held May 30, 1771 and the first census of Townshend was taken the same year. It shows 25 heads of families; males under 16 years of age 33; males above 16 and under 60 years - 40; males over 60-1; females under 16 years of age - 35; females above 16 years - 26; and blacks above 16-1. Total inhabitants numbered 136.

In 1840, the town of Acton, containing 5046 acres, became part of Townshend. The union, called "The Wedding of the Towns," was celebrated in the Baptist Church in February 1841.

TOPOGRAPHY & ACREAGE

The topography of steep hills and narrow valleys limits farming and development, but enhances the town's natural beauty. The elevation at the Townshend Town Hall is 547' and the highest peak located on Acton Hill is 2,017'. The town is calculated to contain 27,334 acres. The land, its water and its mountainous beauty is still the town's principal resource.

Townshend U.S. Census Year 2020

The U.S. Census shows the total population as 1,291, an increase of 4.7% between 2010 and 2020. The annual growth averaged less than ½ of one percent per year over the last decade with all the growth occurring in the over 65 age category. The slow growth and ageing population will cause a change in community needs and services. The chart tracks the population changes from 1990 to 2020.

Age	1990	2000	2010	2020	Change 1990-	Change 2000-	Change 2010-
18 years and younger	235	295	258*	225*	26%	-13%	-13%
19-64 years	617	665	733**	677**	8%	10%	-8%
65 years and older	167	189	241	389	13%	28%	38%
Total Population	1,019	1,149	1,232	1,291	13%	7%	5%
Median age (years)	38	42	48	52	10%	14%	8%

* 2010 and 2020 Census data categories are for 19 years and younger;
** 2010 and 2020 Census data categories are 20-64.

Throughout its history, Townshend has always had considerable economic diversity with workers in many trades and professions. It is often referred to as "the hub" of the West River Valley towns. The presence of Grace Cottage Hospital, Valley Village Senior Housing and Assisted Living, and Leland and Gray Union High School contribute to the diverse mix.

IV. LAND USE

Existing Land Use

Settlement Pattern

A traditional landscape of small compact communities, clearly separated from the surrounding rural countryside, distinguishes Vermont from many other states. Townshend's settlement began on the plains of the West River in West Townshend and, from there, along the brook plateaus. This led to distinct villages with homes separated by natural areas. These villages are the centers around which much residential, commercial, civic, and cultural activity occurs. Connecting the villages are roadways like Route 30 and Route 35, which have significantly shaped the land use pattern of the Town (see Existing Land Use Map for further context).

Townshend's existing settlement pattern creates distinct opportunities to promote local values, strengthen community character, and forward town development goals. The clearly defined landscape of moderately dense villages separated by rural working lands and scenic natural areas defines Townshend and makes it an attractive place to live, work, and visit. The Town's existing land use encourages compact settlement in the village centers while leaving working lands, forests, and open spaces largely undisturbed. Challenges persist, however, like rural sprawl, which creates pressure on working lands and forests. Efforts to minimize and mitigate the impacts of sprawl should be pursued.

Land Use Plan

A land use plan should have considerable influence on the future development of the town and its land. Therefore, it is important through the Town Plan, and any other regulations and ordinances, to seek the best possible solutions to provide for responsible growth while maintaining the rural character of the town and its recognized village centers. Townshend has no zoning regulations except for building restrictions in flood plains. The lack of zoning limits the enforcement of land use policies. Town intends to address the character and impacts of various land uses by following the general and specific policies in this Town Plan.

General Land Use Policies:

1. The location of businesses, such as offices, retail stores, service facilities, etc. shall be governed by the concept that the rural character of the town should be preserved while providing services to the residents within clearly defined village centers.

2. The traditional Vermont village, of which Townshend, Harmonyville, and West Townshend are examples, is an important social and economic asset to the town and should be maintained and promoted.

3. Encourage the restoration and preservation of structures that contribute to the architectural and historical character of Townshend. When such buildings become obsolete, new uses

should be found for them that will preserve their value.

4. Support a mix of rural land uses, including forests, agriculture, housing, home businesses, small-scale commercial and industrial uses and outdoor recreation, so long as these uses do not cause excessive noise, pollution, traffic congestion, or additional cost to the town for infrastructure and services.

5. Support cluster development in areas outside village centers in order to prevent fragmentation of land into small parcels and in order to provide efficient use of utilities, roads and town services.

6. Support preservation of open farm land and agricultural activities consistent with environmental concerns regarding fertilizer and pesticide run off, and soil erosion.

7. Support long-term management of forest lands for multiple uses, including wildlife and sustained yields of timber products.

8. Mountain ranges and steep valley walls are hypersensitive to development. Ridge tops and steep slope highlands are designated to accommodate only very limited development. Land development in this kind of location shall be limited to the proposed site's physical limitations.

9. Proposals for land development should include a statement of the immediate and long term impact on all public facilities and services and the environment.

10. Lands adjacent to or including areas of historical, cultural, scientific or architectural value shall be used in a manner that will not reduce or destroy the value of the site or area.

11. The town should consider purchase or donation of property that has high public value.

Specific Land Use Policies:

There are certain land uses that present distinct potential threats to the resources, including the character and the environment of the town. In order to protect the town, the following policies shall apply to proposed recycling/metal recovery/salvage yard facilities and communications towers. For siting guidelines for solar energy facilities and wind energy towers, refer to the Energy Element of this Town Plan.

Recycling, Metal Recovery/Salvage Yard Facilities Policies:

1. Require that proposals for these facilities demonstrate that efforts have been made to minimize noise, contamination, runoffs, leaks and any adverse effects on aesthetics, surface waters, groundwater, air quality, adjacent properties and the character of the area.

2. Ensure that these facilities have site rehabilitation plans that are reviewed for approval by the Planning Commission and the Selectboard, and are implemented with bonding assurance.

3. Ensure that site planning for recycling/metal recovery or salvage yard facilities include design, management and material disposal, and addresses public health issues, environmental quality and impacts on adjacent and nearby land.

4. Work with the District Environmental Commission in Act 250 land use permit applications to address management of recycling/metal recovery or salvage yard facilities.

Priorities for Action:

1. Support a local ordinance to regulate commercially operated recycling/metal recovery or salvage yard facilities.

Communications Towers Policies:

1. The development of new sites, towers, and structures for transmission and receiving equipment for broadcasts, satellite transmission and other wireless telecommunications shall be in compliance with the Townshend Telecommunications Ordinance (2001).

2. Encourage siting, design and access of towers and structures, in all cases, to minimize negative impacts on natural and scenic resources.

3. Ensure that provisions are made for removal of towers or structures as set forth in Townshend Telecommunications Ordinance (2001).

4. Ensure that new and existing telecommunication facilities comply with FCC emission standards in order to protect public health.

Proposed Land Use Districts:

In order to continue the historic settlement pattern and to protect the various resources of Townshend, this Town Plan classifies five categories of land use areas in the town. The districts are: Villages, Health Care Services, Rural Residential, Productive Rural Lands, and Resource Lands.

Village Districts

Townshend Village, Harmonyville, and West Townshend Village constitute the Village Districts. These areas are comprised of moderately dense residential, civic, and commercial uses. Townshend's Village Districts are integral to the community. These areas host some of the Town's most important facilities and community services, while allowing for relatively dense housing and commercial enterprise. Townshend's villages are also of immense symbolic value to the community, serving a significant historical and cultural role. To promote the vitality and protect the character of these areas, the town adopts the following polices for the Village Districts. The boundaries of these districts are shown on the Proposed Land Use map.

In 2002 the state created a "Village Center Designation" that would recognize and encourage local efforts to revitalize Vermont's traditional village centers. Benefits include a town receiving priority consideration for community grant proposals administered through the State's Municipal Planning Grant Program and the Consolidated Plan for HUD funding, including the Community Development Block Grant (CDBG) program, as well as tax credits for private business owners who improve village properties, and/or municipal or private historic building preservation.

In 2024, the state began a process that would implement changes in the state designation program. A program and designation that the town should be taking advantage of. This program conveys opportunities for enhanced technical assistance, tax credits and priority for certain state grants. The program also enables eligibility for state placemaking grants and for the creation of Neighborhood Development areas. The application process for achieving state designations will be eliminated in favor of allowing towns to work with their Regional Planning Commission for inclusion of the village center(s) on the regional future land use map. These changes also mean that the town will not need to re-apply for the designation, lowering the regulatory burden on towns with limited capacity.

The state defines a "village center" as mixed-use centers bringing together community economic activity and civic assets. Townshend, as stated, has three distinct village centers of Townshend, West Townshend and Harmonyville. Each of these locations has unique circumstances and would benefit greatly from increased investment and individual plans for each.

Village District Policies:

1. Promote the economic and community vitality of the central business districts in Townshend, Harmonyville, and West Townshend.

2. Promote the attractiveness of village centers through quality building, landscaping, and by maintaining public open spaces for scenic and recreational pleasure.

3. Concentrate growth in village centers to minimize sprawl. Use and maintain existing historic structures whenever possible.

4. Encourage the appropriate and compatible rehabilitation and use of under-utilized land and buildings in village centers.

5. Maintain the character of Townshend's villages by ensuring that any additional commercial and residential development within the Village is compatible with existing types of uses and architectural styles.

6. Target federal, state or private funding to support infrastructure improvements, bridge and highway repairs, installation of sidewalks and lighting, housing, recreation, or any other identified village need.

7. Establish and maintain village boundaries in order to prevent rural sprawl and strip development along highways and to preserve historic settlement patterns.

Priorities for Action:

1. Support the development of utilities, such as municipal water or wastewater treatment facilities, when needed to protect health and ground water resources and to allow full use of lands within villages.

2. Work with the Windham Regional Commission to ensure inclusion of the three villages on the future land use map of the regional plan.

Health Care Services District

There is a significant cluster of health care services in Townshend Village. We recognize this area's importance to the Town, and want to support the vitality of health care services in Townshend while protecting the character of the village. It is recognized that this district represents a major employment center in town, and as such, is one of the largest drivers of the local economy. The primary institution occupying the district, Grace Cottage Hospital, has begun planning for a major new physician's office further enhancing the district and its importance to the town and

region. In addition to serving as an employment hub, the district also attracts visitors who are either direct patients at the facilities in Townshend, or family members of patients. Dialogue between the operators of these facilities and the town is critical to the functioning of this district, and supports the wellbeing of not only the village district, but the town itself. Expansion of Grace Cottage Hospital and related facilities or structures should be located in the Health Care Services District. This area consists of certain lands to the north of the Common along Route 35 and is shown on the Proposed Land Use map.

Health Care Services District Policies:

1. Direct new health care services growth in the form of jobs, housing, commerce, facilities and utilities, to the Health Care Services District.

2. Encourage cooperation between the institutional health care services providers, neighbors, and the Town on issues related to health care services development, related impacts, and financial issues.

3. Town officials should be active participants in Grace Cottage's long-term plans, which may call for capital improvements to occur inside or outside the Health Care Services District.

Priorities for Action:

1. The Town's officials should encourage compatibility of the goals and policies that would occur in any long-range plans or reports from Grace Cottage Hospital with goals and policies in the Town Plan.

2. Town officials should periodically reach out to operators within this district to discuss any new plans or projects that would be located within the district.

Rural Residential District

There is demand for rural housing outside the defined Village Districts. The Rural Residential District is intended to accommodate this demand in the most appropriate areas, minimizing costs to the town and maximizing protection of resources. These areas are shown on the Proposed Land Use map.

As demand for housing grows in Townshend, there is increased pressure on natural resources, and also an increased burden on town services, mainly in the form of plowing and other types of road maintenance. Where possible, housing developments should be located on existing roadways, and in close proximity to other services.

Rural Residential District Policies:

1. Encourage a mix of rural land uses including: housing; home businesses; small-scale agricultural or commercial uses; and outdoor recreation, as long as these uses are compatible with one another and do not cause excessive noise, disturbance, pollution, and traffic congestion or safety issues.

2. Ensure that any development of Rural Residential lands will be at densities that will serve to contain rural sprawl and that are compatible with existing land uses and sensitive to the limitations of the land.

3. Ensure that new development avoids important natural resource areas located within the Rural Residential lands.

4. Direct new rural residential development away from areas that provide critical access to wildlife habitat and ensure, through planning, that wildlife habitat does not become fragmented by the elimination of connecting parcels between wildlife areas.

Priorities for Action:

1. The Planning Commission shall support and encourage conservation organizations that work with the Town to identify and preserve lands that are considered as conservation priorities.

Productive Rural Lands

There are significant areas in Townshend where the most appropriate use of land is for agricultural and forestry production (showed on the Proposed Land Use map). Low density, low impact rural residential development is also accommodated in these parts of town. As of 2022, the Current Use Program included 100 parcels in Townshend, totaling approximately 13,500 acres or roughly 50% of the towns total land area. This mechanism allows property owners to lower their property taxes; with the State paying the difference to the Town, in return, the property is kept productive and conserved. The Current Use Program incentivizes property owners for investing in land conservation efforts, reducing the threat of forest fragmentation in Townshend. While properties can be removed from the program, there is a tax penalty if the property is ever developed by anyone. This has a number of impacts on Townshend and its property owners. As each parcel enrolled in the program must have a management plan created and implemented by a professional, there is a regional economic development component as well. Keeping these lands in some sort of production contributes to the overall rural character of the town and provides economic opportunities across several sectors.

Productive Rural Lands Policies:

1. Support a mix of rural land uses including agriculture, housing, home businesses, small-scale commercial and industrial uses, commercial forestry and outdoor recreation, so long as these uses are compatible with one another and do not cause excessive noise, pollution, traffic congestion, or disturbance.

2. Ensure that new development reflects existing settlement patterns, is low in intensity, and does not conflict with the use and management of forest, agricultural and mineral resource

lands, but rather sustains these natural resource commodities.

3. Support long-term management of agricultural and forest lands for uses that promote a sustained yield of crops and timber products.

4. Encourage the use of innovative land-saving techniques such as cluster development, fixed area density allocation to protect agriculture, forest and mineral resource lands from development and fragmentation.

5. Encourage protective buffers along streams and rivers and protection of other important lands that are valued for trails, open space, wildlife habitat and scenic enjoyment.

Priorities for Action:

1. For all large residential developments that meet Act 250 review threshold criteria, the Planning Commission should advocate that, where feasible, dwelling units are clustered to avoid fragmentation of forested lands and wildlife corridors.

2. The Planning Commission shall encourage the use of innovative land saving techniques to protect agriculture, forest, and mineral resources lands from development.

Resource Lands

The Resource Lands District contains natural resource that have been identified as having critical importance to Townshend, which must be protected. This area includes productive agricultural lands, forested areas, (including priority and high-priority forest blocks and habitat connectors), mineral, stone, and sand deposits, streams, high elevations and steep slopes, wildlife habitats, and other areas of significant ecological value (see Proposed Land Use map). These irreplaceable natural resource areas provide enormous benefit to the Town, including economic vitality through forestry and recreation, carbon sequestration and storage, and the promotion of biodiversity and healthy ecosystems. In addition, the Resource Lands District contributes to the Town's overall character, and is vital to town identity. Conserving or otherwise protecting these lands should be considered a priority.

Resource Lands Policies:

1. Ensure that new development is low impact, and does not conflict with the natural resources, but rather sustains them.

2. Protect fish and wildlife habitats; federally identified endangered and threatened species; unique and fragile natural areas; wetlands; shore lands; floodplains; aquifer recharge areas; steep slopes and high elevations; ridgelines; and essentially undeveloped forest lands that have limited access to an improved public road from development that would negatively impact the resource.

3. Encourage protection of green space, particularly along streams and rivers, and other important lands that are valued for trails, open space, wildlife habitat and scenic enjoyment.

4. Avoid extension of roads, energy transmission facilities, and other services into and through Resource Lands.

5. Construct corridors for new energy transmission facilities only when needed and then adjacent to and parallel to existing operational energy transmission facility corridors. Minimize their visual impact on ridge lines, slopes and open areas and avoid important natural resources.

6. Wildlife corridors that join large tracts of resource land shall be protected to avoid the fragmentation of wildlife habitat.

Priorities for Action:

1. The Townshend Planning Commission and Selectboard should improve resource mapping and identification to raise awareness among residents and town officials of key resources in Town.

2. The Town should consider conducting a natural resources inventory to identify natural areas and forest blocks that should be preserved and protected.

3. The Planning Commission should encourage landowners to manage their lands in ways that protect valuable resources.

4. The Town shall work with the Vermont Land Trust or other appropriate non-profit organizations to encourage the voluntary protection of productive agricultural and forest lands. Techniques such as conservation easements or donation of land should be explored.

5. The Town should consider forming a Conservation Commission for the purposes of implementing the above recommendations for protecting the natural resources of the Town for the benefit of all.

V. TRANSPORTATION

Existing Transportation System

Road Networks

The majority of Townshend's transportation infrastructure includes Town roads and State highways. The closest federal highway is Interstate 91, which passes through Brattleboro about 15 miles southeast of Townshend on Route 30. Regional access to Townshend from State maintained roads is provided by Vermont Route 30, with 7.3 miles of State Highway running through Town. A major travel corridor for Windham County, VT 30 runs in a northwest-southeast direction through the region connecting the Towns of Winhall, Jamaica, Townshend, Newfane, Dummerston, and Brattleboro.

Table 1: Town and State Road Mileage in Townshend[3]

Town					State
Class 1	Class 2	Class 3	Class 4	Legal Trail	State Highway
0	10.62	44.88	5.59	0.91	7.36

No state appropriation is made for maintaining Class 4 roads. These roads are seasonally functional for normal vehicular traffic and have a gravel surface. Like many Vermont communities, Townshend has Class 4 roads and legal trails that are now mapped on the VTrans Highway Maps. Vermont statute requires the accounting of mileage and mapping of Class 4 roads and legal Town Trails. The current maps show 5.6 miles of Class 4 roadway, and 0.91 miles of legal Town Trails.

Traffic and Safety Factors – Route 30 and Route 35

Route 30 is classified as a rural minor arterial which links the West River Valley towns and major resorts west of Townshend. Route 35 links the valley towns with Athens, Grafton and Rockingham. The average daily traffic in 2012, at the Newfane Townshend line was 4600 vehicles, where in 2023 the count in the same location was 4900. The Vermont Agency of Transportation conducts traffic counts periodically along Route 35 (Grafton Road), Athens Road and regularly on Route 30. The 2022 average daily traffic was 1,125 vehicles along the Grafton Rd. portion of Route 35 just south of Deer Ridge Road in Townshend. The Athens Rd. section had less traffic with an AADT of 470. This shows that less traffic moves north along 35 into Athens and more is diverted along Grafton Rd towards Grafton. It is possible that much of the traffic counted was generated by activity at Grace Cottage Hospital. This is a significant amount of traffic being generated around a small compact village area that has noticeable pedestrian foot traffic as well.

[3] Source: Vermont Agency of Transportation, 2017.

Traffic volume has been increasing and safety concerns remain important for town officials who want to assure the safety of pedestrians and school populations in the village area. On the Route 30 hill to Harmonyville, speed and road conditions contribute to safety concerns. With increased development at Stratton Mountain Resort and points west, traffic continues to be a perennial concern. All options for increasing safety at the Townshend Common intersections should be explored, including the long-range possibility of rerouting through traffic around the center of Townshend, further developing pedestrian crossings and other bike/ped safety projects. As the villages continue to develop, conflicts between pedestrians, cyclists and vehicles will arise and road projects of all types should incorporate safety measures for pedestrians and cyclists.

Harmonyville Path Sidewalk Study

In 2000, the Town of Townshend and the Windham Regional Commission selected Summit Engineering LLC to conduct a feasibility study for pedestrian facilities connecting the village of Harmonyville with Townshend Village at Leland and Gray High School. The planning study involved soliciting adjacent property owners for feedback on pedestrian needs, as well as identifying any opportunities or constraints for development. The recommendations of the study concluded that a sidewalk alignment was feasible along the east side of Rt. 30 that would entail constructing four separate retaining walls for a total of approximately 1,788 ft., two eleven-foot travel lanes with two-foot shoulders on both sides as well as a five-foot sidewalk on the east side.

The Town formed a Harmonyville Path Study Committee to study this recommended option as well as other alternatives. The Study Committee recommended the Selectboard accept the findings of the Sidewalk Study and continue on to surveying and design studies. However, there were several landowners who voiced concerns about any construction affecting their properties, The Town was also concerned with the costs associated with constructing retaining walls along the corridor. Due to the expected costs and concerns voiced by landowners, the Town has not proceeded any further on this issue to date.

Alternative Transportation

Currently, there is no fixed service commuter bus routes that run along route 30 through Town. A feasibility study was completed and a number of interested parties are working on developing a Congestion, Mitigation and Air Quality (CMAQ) grant application to fund such service.

At the time of this writing, 2 organizations provide “Demand Response” Service. This service is available for medical appointments for residents and possibly other situations. These 2 organizations are currently working on partner agreements.

Moover (www.moover.com, 802 460-7433, ext. 3) provides free door-to-door transportation for riders over age 60 or over, and for persons with ADA defined disabilities for example: non-emergency medical trips, including prescription pick up; critical care, trips for kidney dialysis, and cancer treatment; personal care trips, etc. Trips must be scheduled at least 2 business days in

advance. In 2024 the Moover provided 1,569 trips for 72 residents living in Townshend. Most of these were for medical appointments.

Neighborhood Connections (www.ncvermont.org, 802 824-4343) also currently provides transportation, with no age or income criteria, for the following: medical and other essential appointments, shopping for food and other necessities and other possible transportation hardships. Trips must be scheduled at least 2 business days in advance.

These alternative transportation services operate principally on grants, and the service may vary from time to time with grants having alternative criteria.

The Go Vermont program of VTrans is a resource for Vermonters who want to reduce the cost and environmental impact of driving. It offers free carpool matching and vanpool services and statewide bus routes, as well as free Go Vermont resources to help promote more efficient travel options at work or at home. Call its Q/A hotline at 800-685-7433 and a real person can answer your transportation questions. This program provides a database of other commuters in nearby areas who are looking to combine trips. The Go Vermont program has an easy online form that residents can fill out which will enter them in a statewide database to help match the resident with carpool partners in the area. The cost savings of carpooling to work, especially for residents in a largely rural area where commutes can be lengthy, are potentially quite large. The Go Vermont website can be accessed here: http://www.connectingcommuters.org/ and provides a cost savings calculator for residents looking to find out how much money they will save by carpooling to work.

Table 2: Townshend Commuter Data (Workers 16 Years and Over)

Means Of Commuting	2010 Number of People	2020 Number of People
Car, truck, or van – drove alone	364	363
Car, truck, or van – carpooled	49	29
Public Transportation	0	0
Bicycled	32	16
Walked	42	27
Other Means	0	0
Worked at Home	70	184
Avg. travel time to work (min.)	18.4	23.9

(U.S. Decennial Census. 2010 and 2020).

In Townshend, there are currently pedestrian sidewalks only in the Townshend village area and none along Route 30 or Route 35 outside of the village area. Generally, the road rights-of-way are narrow, affording pedestrians little shoulder width. This, combined with topographical difficulties along areas of Route 30, make sidewalk creation difficult. The existing road network is used for recreational bicycling, however weather conditions, automobile-oriented development patterns, and the difficult terrain combine to keep it from serving as a significant mode of transportation in Townshend. On roads with no shoulders, cyclists share the road with vehicular traffic.

Specific Concerns List:

1. The Townshend Common intersections - Route 30 by Leland and Gray and Route 30 by Common Road (near the elementary school).

2. The intersection in West Townshend where Windham Hill Road enters Route 30.

3. Inadequate parking space in the village of Townshend.

4. Lack of a sidewalk or shoulder from Townshend to Harmonyville.

5. The intersection of Route 30 at Depot Road and the Harmonyville Bridge.

6. Speeding through the village of West Townshend on Route 30.

7. Pedestrian safety along Route 35 from the village to Simpson Brook Rd.

Transportation Policies:

1. Pursue options such as dynamic striping, that would enhance safety at the Townshend Common intersections of Route 30 and Route 35.

2. Pursue options that would enhance safety at the intersection of Route 30 and Windham Hill Road. Continue with dynamic striping where appropriate.

3. Control the impact of site development on Routes 30 and 35 by careful review of traffic growth in development or expansion proposals, and by use of techniques such as shared highway access point, landscaping, and signage.

4. Integrate the use of energy efficient and alternative modes of transportation such as public transit, ride-sharing, van pools, bicycling, and walking into community plans and private development, whenever possible.

5. Maintain the rural, historic, and scenic character of Townshend by retaining the current system of paved/unpaved roads with no increase in paving activity unless public safety or

the State of Vermont requires it.

6. Support the design of transportation improvements that provide for access, mobility, and safety of users; compatibility with environmental contexts; and avoidance of "over-designing" in terms of scale and capacity. Add sidewalks and bike paths to existing infrastructure whenever possible and maintain existing crosswalks.

7. Post and enforce speed limits.

8. Retain all present public rights-of-way whether or not they are presently being maintained by the town. No tract of land shall be allowed to become "land-locked" by the relinquishment of a public right-of-way.

9. Discourage development in remote areas of town, off main roads, in order to minimize the need for more road construction, maintenance, and consequent increased cost to the town.

10. Work with the VTrans, the Windham Regional Commission, and state or regional agencies to solve traffic safety problems.

Priorities for Action:

1. Support the Townshend Parking Ordinance (2014) and consider options for additional off-street parking spaces in Townshend village.

2. Cooperate with other towns, especially towns along the Route 30 corridor, the Windham Regional Commission, and VTrans in developing solutions to the traffic problems along Route 30. A Planning Commission member and Selectboard member should attend monthly Road Foreman meetings to keep up to date on transportation and infrastructure issues in the region.

3. Enforce overweight permits on local roads and bridges in coordination with appropriate officials, local and state.

4. Pursue funding options such as Transportation Alternatives Program grants to help design and implement a plan for pedestrian and traffic safety at the Townshend Common intersection of Route 30 and Route 35.

5. Consider adopting a Class 4 Road and Trail Policy to assure clarity when maintenance or improvements are proposed along a legal Town Trail.

6. Maintain Radar Speed Feedback signs and review quarterly reports.

VI. COMMUNITY FACILITIES, SERVICES, AND PUBLIC RECREATION

The community facilities and utilities are the infrastructure provided by the Town of Townshend, or provided in cooperation with the town, for the health, safety, benefit and enjoyment of the general public. These include municipal government, emergency services, schools, solid waste disposal, and recreational facilities. Townshend benefits from a robust network of public facilities and services, which is rare for rural towns in Vermont. These assets contribute to the public good of the Town, and increase local resilience, independence, and quality of life.

Community Facilities

Municipal Government

Town officers include a Board of Selectmen, Town Clerk, Town Treasurer, Constables and Listers, all elected positions. Cemetery Commissioners and Library Trustees are elected, among others, at Town Meeting. Planning Commissioners are appointed by the Selectboard. The municipal government is responsible for all aspect of town governance from collecting taxes to making sure that the town roads are in good shape and safe to drive on. The town currently has 4 full time employees encompassing the road foreman and crew as well as 6 part time employees. The treasurer and town clerk are elected salaried positions while each of the selectboard members receive a small stipend for their time. The focal point of the municipal government is the town hall, described below.

Town Hall & Opera House: Built in 1921, the Townshend Town Hall & Opera House is a historic building which was donated to the Town by Kate Dutton. It has been the site of many town functions, including The Annual Town Meeting, elections, banquets, wedding receptions, and cultural events. It houses all of the town offices and, as a result of an extensive study done by the Planning Commission, necessary upgrades are underway and additional work is being planned, including ADA compliance. Currently Town Meeting is being held next door in the Dutton Gymnasium but, once ADA upgrades are completed Town Meeting will again be held in the space.

Town Garage: Located on Route 35, the Town Garage houses vital equipment used to maintain the Town's roads, bridges, and culverts. The Town Garage supports the ongoing functionality of all of Townshend's transportation infrastructure. It also serves as the site of the solid waste compactor and recycling center.

Townshend Public Library: Located in a building next to the Townshend Post Office, the Library provides a meeting place for community groups. With over 10,000 volumes of books and tapes, and interlibrary loan service, the collection serves many adults and children. Support for the Library comes from taxes, gifts, grants, and fundraising efforts. It is accredited by the Vermont Department of Libraries. Internet access stations are available and extensive public programs are available.

School Facilities

Two of the West River Modified Union Education District (WRED) school buildings are located in the Village of Townshend. Townshend Elementary School serves children in grades Pre-Kindergarten through 5, and Leland and Gray Union High School. serves students in grades 6 through 12. (See Education Chapter for detailed descriptions).

Municipal & Privately-Owned Waste Water Disposal Systems

State regulations require property owners to acquire a permit from the State for any new waste water systems. There have been two studies that have described the issues involved in dealing with the topography of the village area and the constraints related to allowing municipal or privately-owned waste water disposal systems. A 1992 Sewage Disposal Capacity Study for Townshend village conducted by the Windham Regional Commission, and a 1971 study conducted by Dufresne and Henry address waste disposal in Townshend village, and are both on file in the Town Hall. The 1992 study Conclusion Section states: "The need to locate replacement systems in the villages may be forthcoming. Many of the septic systems in the villages are advanced in age and because they were put in before the enactment of the sewage ordinance it is unknown under what specifications they were built. Contamination of wells is a health concern for the town and small parcels are especially susceptible. It is recommended that the Town give serious thought to future sewage disposal options and begin planning at this time when there are options available for these two villages…" The Town could consider ways to support proper maintenance and extend the lives and expand the capacity of existing septic systems.

Given that the villages of Townshend feature primarily smaller to medium-sized lots, the likelihood of contamination is higher than in the more rural areas of town. The public health aspect of this issue cannot be understated and should be addressed. There are both housing and economic development aspects of this issue as well. No housing can be built at scale without the proper infrastructure to do so and the addition of a town owned sewage system. Larger entities like Grace Cottage Hospital, the school district, and Valley Village have separate systems, but would benefit from increased sewage capacity.

On July 14, 1970, the Town of Townshend leased a parcel of land to Leland and Gray Union High School for a period of 99 years, with what buildings were there. It is now used for playing fields. The terms of the lease have the following constraint:

"The Lessor reserves the right if it should be necessary during the term of this lease to construct and maintain a municipal sewage disposal system, sewage treatment system, and/or municipal sewage line for the Town of Townshend on the leased premises, provided:

A. That such system, plant or line does not in any way interfere with the operation of the school facilities; and

B. That such arrangement meets approval of the State Board of Education, at such time as a proposal for the above system is submitted to Lessee by Lessor."

Leland and Gray Union High School maintains its own waste disposal system.

Privately-owned large capacity waste disposal systems are vitally important to the economy and public health of Townshend village. Currently, there are two such systems:

One serves buildings on the south side of the Common from Oakwood Cemetery Road to the house just south of the former Townshend Pizza. This system has a leach field on town-owned property on the south side of Route 30. At one time, the Townshend Elementary School tied into this system (see Existing Conditions map).

The second, serves the Grace Cottage complex, the Townshend Elementary School, and the Townshend Church parsonage. The leach field is located on town-owned land next to Oakwood Cemetery, where the ball field is located. (See Existing Conditions map).

Community Services

Health and Emergency Services

Townshend currently depends on organizations located inside and outside of the community to provide necessary health care and emergency services. There are medical professionals located throughout the West River Valley. Hospitals both in Town and outside the community serving residents are Grace Cottage Hospital in Townshend, Brattleboro Memorial Hospital in Brattleboro, and Southwestern Vermont Medical Center in Bennington and Dartmouth Medical Center in Hanover, New Hampshire. While the regional centers provide options outside of Townshend, most residents rely on Grace Cottage as an immediate asset for providing medical services for residents' healthcare and well-being.

Grace Cottage Family Health & Hospital has 19 patient beds, an outpatient lab, an X-ray department and Messenger Valley Pharmacy. The Wolff Outpatient Clinic associated with Grace Cottage supports numerous outpatient services, among them physical, occupational, and speech therapy.

Valley Village development provides seniors with 24 Independent Living units and 40 Assisted Living Units.

RESCUE Inc. is a non-profit ambulance service located in West Townshend that serves the West River Valley area. Their mission: "To serve a key component of our rural healthcare system and to provide the highest quality, risk appropriate rapid response emergency medical care and transportation services in our region." This organization has recently added a regional training center for EMS and other health education.

Fire Departments

The Town is served by the Townshend Volunteer Fire Department. The Townshend Volunteer Fire Department is located at 208 Grafton Road and currently consists of 18 active members. In many cases where large or multiple incidents occur in Town, the Volunteer Fire Department response is supplemented by assets provided by NewBrook Fire Station in Newfane, as well as fire departments and EMS from the neighboring communities of Grafton, Windham, Wardsboro and Jamaica.

The Townshend Volunteer Fire Department is a member of the Southwestern New Hampshire District Fire Mutual Aid system, sometimes referred to as "Keene Mutual Aid" for short, since the central dispatch is located in Keene. This system dispatches personnel and equipment to neighboring towns, as needed, and encompasses one hundred and twenty-six fire departments across three counties; Bennington and Windham Counties in Vermont, and Cheshire County in New Hampshire.

Police Services

Police protection is provided by the Vermont State Police on a limited basis. The Town is part of the Enhanced 911 state service. Elected Constables serve the community in a limited capacity *on a part-time basis*.

Child Care

Child care is a concern for many working parents and employers. The accessibility, affordability, and quality of child care effects parents' ability to enter the workforce, be productive while at work, and remain employed. Pre-K and kindergarten are provided by the school district at the Townshend Elementary School. According to the Bright Futures Child Care Information System, a service of the Vermont Department for Children and Facilities as of November 2024, there are 14 registered child care facilities in Townshend or within 10 miles of Townshend.

Community Facilities and Services Policies:

1. If the capacity of community facilities or services (e.g., sewer, water, fire, police protection, schools, etc.) cannot be expanded without incurring significant capital expenditure for the town, then a fair share of the burden for required services or facilities shall be borne by the beneficiary of such services.

2. Townshend should maintain a certified solid waste transfer and recycling facility' for Townshend residents and encourage residents to recycle waste materials and to take advantage of hazardous waste disposal days.

3. The town should not accept, by gift or other means, the responsibility for privately- owned utilities, facilities, or services unless the cost of owning, operating and maintaining such utilities, facilities and services are provided for in the town's budget and the town's annual operating budget is not significantly increased.

4. Support the town's contracting for police services.

5. Encourage the provision of safe and affordable childcare in Townshend.

6. Ensure that the emergency service personnel, facilities, and equipment needed to effectively service new development are available to avoid placing undue demands on existing personnel, equipment, and facilities.

<u>Priorities for Action:</u>

1. Support forming a committee to make recommendations on the use of the town-owned property on Route 30, Taft Meadow.

2. Assess the need for replacing the present fire department station, which lacks enough space for equipment and lacks sufficient parking space.

3. Support improvements, including ADA improvements to the Town Hall & Opera House to permit its continued use as an important community center.

Recreation

Many options for recreation are available in Townshend. There are ample opportunities for hunting, hiking, biking, fishing, and swimming. For example, the tennis courts at the Leland and Gray Elementary School playground are open to the public and have recently been relined to provide pickle ball play. In addition to the above, there are two government-managed recreational areas, occupying over 2,000 acres. They are:

Townshend Flood Control Dam

The Army Corps of Engineers (ACOE) manages a flood control dam built in the West River in 1961 at a cost of $7.5 million. It is part of a network of 32 flood control projects in the Connecticut River Basin. Townshend Lake reservoir can store up to 11 billion gallons of flood water. At one time, the lake provided a safe swimming area, with a sandy beach, changing facilities, and restrooms. This was considered an excellent area amenity, and many in town express regret at the loss of this recreation option. If feasible, the Town should work with the Army Corp of Engineers to reopen this facility for area residents and visitors.

Located in an area overlooking the lake is a wooded picnic area that provides 120 tables, 50 fireplaces, and several covered shelters. Reservations for shelter use may be made with the Corps of Engineers. Hiking trails are marked and maintained in the 951-acre area. Trail networks are a significant asset to Townshend, attracting visitors, promoting public health, and supporting growth of the local outdoor recreational economy.

Townshend State Park

The Townshend State Park, which is located within the 1,244-acre Townshend State Forest, provides lean-to shelter facilities and tent areas for camping, but no RV spaces. A forester and summer interns supervise the park. The stone building that houses the park headquarters was built by the Civilian Conservation Corps during the 1930s, and is now on the National Register of Historic Places. The Park is the trail head for a nice hiking trail to the top of Bald Mountain that provides scenic views of the surrounding area. However, the bridge across the brook and the trail were damaged by storms and are in need of restoration.

West River Trail

The West River Trail is a multi-use intermittent trail that runs along the old right of way of the West River Railroad. The Friends of the West River Trail have plans to connect all the sections of the trail along the entire 36-mile route. A three-mile section of the trail runs from Townshend Dam to East Jamaica. The trail features scenic views of the West River, and is popular among hikers, bikers, snowmobilers and pedestrians. The Town supports efforts to improve and expand the trail network.

Recreation Policies:

1. Support the West River Trail Project for hikers, snowmobilers and bicyclists. There are plans to construct a connected trail from Brattleboro to South Londonderry with segments of the path now running through Brattleboro, Dummerston, and Jamaica State Park. Encourage expanding the areas that are wheelchair accessible.

2. Work with neighboring communities, the Windham Regional Commission, and state and federal agencies to stop the degradation of the West River and the damage to fish population that results from fluvial erosion of the river banks and release of silt from Ball Mountain Reservoir.

3. Support the restoration of the native cold-water fisheries in the West River.

4. Work with the Army Corps of Engineers and Federal authorities on the master plan for the Townshend Lake to bring back water recreation activities.

VII. NATURAL RESOURCES, NATURAL & FRAGILE AREAS, AND SCENIC RESOURCES

Townshend prides itself on the quality of its natural environment. The purity of air and water, the abundance of wildlife, and the integrity of land resources are critical contributors to Townshend's strength and character, as well as to the health and welfare of all Townshend citizens. Unless the location, type, and quality of development receive careful attention, these resources will degrade.

The wise use of Townshend's hills, forests, streams, rivers, lakes, and roadways, and the protection of the landscape's beauty are matters of public good. Special areas are lands and resources with unique, irreplaceable qualities which are so valuable that their protection and preservation is a high priority in all land use planning efforts.

Forest Lands

Townshend has an abundance of forested land and there is much less development pressure than in the more urbanized sections of the state. According to the National Land Cover Data around 87% of Townshend's 27,334 acres are forested. In contrast, state wide forests cover only 74% of the land today. At the time of the first European settlements, forests covered almost all of Vermont. Wide scale clearing began in the early 1800s and reached its peak in the mid to late 1800s and reduced forest cover to about 35% of the state. Over the last century, westward expansion, the decline of the sheep industry, and reduced timber harvesting contributed to the steady natural regrowth of Vermont's forests, although, the impact varied across regions of the state based on topography and economic factors. The Champlain Valley had more flat fertile land than did Townshend and hence retained more open farm land. The North/Western area of the state also had water access to New York City and superior rail service that kept it as an important economic center. Townshend was a rural agricultural area lacking major transportation connections to markets and as a result experience greater reforestation on abandoned farms.

There are growing concerns today that the trend is reversing and the state is losing forest lands with increased commercial and residential development. A 2017 report from Harvard University/s Forestry Department indicates that Vermont is losing 1,500 acres of forest land annually.[4] There is no data available on a town basis but anecdotal evidence is that Townshend is not experiencing the same loss of forest lands and will continue to be heavily forested. A significant portion of Townshend's forest lands enjoy the benefit of restrictions on development, due to government ownership - 8.5%; conservation easements -6.7%; and enrollment in State's Use Value Appraisal program – 48.9%. In total 59%[5] of the land in Townshend has some restrictions on development with much of the remaining land in smaller parcels in the villages or along roadways. It seems assured that Townshend will continue to be heavily forested in the future.

[4] Foster, D., Lambert, K., Kittredge, D., & Donahue, B. (2017, March). Wildlands & Woodlands. https://wildlandsandwoodlands.org/.

[5] Individual Percentages don't equal total because of overlapping categories.

Forests are valuable as a timber resource, wildlife habitat, for recreation and hunting, as a retreat, and a scenic resource. Vermont's Use Value Appraisal Program, or "Current Use Program" enables landowners who choose agriculture or forestry as long-term uses of their property to have that land taxed accordingly if they provide a 10-year forest management plan. The State provides the Town with the difference in tax revenue between market value and use value. The programs intent is to encourage continued and productive use of Vermont's agricultural and forest lands. This is Vermont's best tool for assuring that land is continually used and preserved for forestry and agriculture. The program sees significant participation in Townshend, (with nearly 13,500 acres taking part), which has helped to prevent the more visible forest fragmentation that has occurred in other parts of the state.

Forest Blocks

In a larger statewide context, Vermont's forests are being fragmented by rural sprawl. It occurs incrementally, beginning with cleared swaths or pockets of non-forest within an otherwise unbroken expanse of tree cover. Over time, non-forest pockets tend to multiply and expand. Eventually the forest is fragmented and reduced to scattered, disconnected forest islands. The remnant forest islands resulting from this fragmentation are surrounded by land uses that threaten the health, function, and value of them for animal and plant habitat, and for human use. As forest fragments become smaller, practicing forestry can become operationally impractical, economically nonviable, and culturally unacceptable. In turn, we lose the corresponding and significant contributions that forestry makes to our economy and culture.

Townshend has an abundancy of forest cover with numerous large connected blocks of land. Most of Townshend is classified as "high priority" or "priority" forest blocks. Townshend has healthy blocks of unfragmented forest tracts as it hasn't experienced the development pressure seen in other areas of Vermont. The challenge for Townshend is to preserve the existing situation and prevent the fragmentation seen in other areas of the state. Townshend has a thriving forest products sector which provides economic benefit from forest lands and offsets some of the pressure for development. The various land protection from public lands, conservation easements and UVA enrollment will work together to maintain a healthy forest blocks. The forest blocks form plenty of opportunity for wildlife to move within town but also provide connections and links for the greater region.

Habitat Connectors

Habitat connectors are lands or waters that link larger patches of habitat within a landscape, allowing for the movement, migration, and dispersal of plants and animals. They can be forest blocks, riparian areas, or specific road crossings that wildlife repeatedly uses. Habitat connectors should be considered at two scales: landscape and local. Landscape scale connectivity is important for connecting populations of wildlife over large areas or within a region. This allows for genetic variability and ensures migration. Habitat connectivity at the local scale occurs where roads overlap with the network of connected habitat. In some cases, fish and wildlife movement associated with specific road crossing areas is seasonal, in other cases, movement could be simple

happenstance of an animal curious for new food sources on the other side of the road. Many species of wildlife are selective to specific habitat conditions along roads and are faithful to crossing them in the same place as long as those habitat conditions persist.

The effects of forest fragmentation are minimized by maintaining an ecologically functional landscape. In Vermont, an ecologically functional landscape is one with large areas of connected forest, riparian areas, wildlife habitat, and natural communities. The central part of Townshend from Townshend Village north over Rattlesnake Mountain, Ober Hill and Acton Hill to the Graton town line is one large north south forest block that isn't crossed by improved roads. This large area provides an important habitat connector. Also important is the area on the eastern side of Townshend along the Brookline boundary from Crane Mountain north to the Athens line. The ecologically functional landscape also provides additional environmental benefits to humans and natural communities, including improved air and water quality, carbon storage, and flood resilience. These co-benefits create substantial external value, but are also essential to the continued ecological viability of local forests blocks, habitat connectors, and other natural resource areas.

Forest Land Policies:

1. Support the development of local industries which produce "value added" agricultural and forest products.

2. Timber harvesting should follow a professionally prepared management plan. Timber harvesting practices must protect surface waters, shorelines and stream banks and should minimize all adverse short-term and long-term environmental impacts, including those on neighboring properties.

3. Townshend's forestlands should be managed so as to maintain and improve forest blocks and habitat connectors.

4. Roads, driveways, and utilities shall be designed to avoid the fragmentation of identified forest blocks.

Forest Lands Recommendations:

1. Encourage the use of cluster development as a measure to prevent the fragmentation of large tracts of forest land and to protect locally significant forest land within those tracts.

2. Integrate forest blocks and habitat connectors into the Natural Resources Map.

3. Periodically examine the Proposed Land Use Map to see if updates should be made to preserve highest priority forest blocks and highest priority connectors.

Scenic Resources

Townshend's scenic landscape, including the back roads and trails, the open lands, water bodies, and wetlands are widely appreciated by residents and visitors alike. The landscape itself is a valuable economic resource drawing visitors to the region at all times of the year.

Maintaining the overall scenic quality of our town is one aim of this plan. Special attention should be given to particular components of Townshend's scenery (see below). Conservation of scenic resources need not preclude development, nor cause economic hardship; rather, it should be an important consideration in the planning and design of development to ensure enjoyment of living in our town.

Scenic Landscapes and Views

The rocky cliff face of Peaked Mountain, at 1,280 feet above sea level, 750 feet above the Townshend Common, is a striking view when traveling north on Route 30. Its profile resembles a sheep's back. From the top there is a panoramic view of the valley, as well as of Stratton Mountain in the distance. Peaked Mountain is mentioned in the 1869 Beers Atlas of Windham County, along with Bald Mountain, also part of the vista seen from Route 30.

Ridge lines and hilltops and their upper slopes are visible for great distances and give the landscape form and coherence. Development may have a great visual impact and should be sited and landscaped to minimize incompatibility with the natural landscape.

Open meadowlands provide contrast with the predominant forests, reminding one of the agricultural activities of the past. The impact of development can be minimized on meadowlands by careful grouping of structures and sensitive alignment of access roads.

The list below incorporates a number of the special scenic areas in Townshend:

1. Route 30 - the entire length within Townshend's boundaries;

2. Townshend Common and views surrounding the common;

3. Route 35 – village and outlying district;

4. Mountain vistas as seen from Routes 30 and 35, Townshend Acres and East Hill in Townshend, Back Windham Road and Windham Hill Road in West Townshend;

5. Townshend's system of back roads, such as Deer Valley, Simpson Brook, West Hill, State Forest Road and Back Windham Road;

6. Scott Covered Bridge;

7. Vermont's largest sycamore tree – located in Harmonyville next to the bridge;

8. Follett stone arch bridges (see Existing Conditions Map).

9. Bald Mountain peak with views to the North and South which has public access through Townshend State Forest.

Scenic Resource Policies:

1. Give special care and attention in reviewing development proposals related to Act 250 and Act 248 hearings, that involve high quality scenic landscapes and scenic corridors.

2. Foster greater appreciation of scenic resources as a significant environmental and economic resource.

3. Improve public sites that have diminished a scenic view, particularly along state and local highways and within scenic corridors.

4. Encourage the scale, siting, and design of new development (Act 250 & Act248) to be in keeping with the landscape and to enhance it.

5. Encourage incentives for preserving scenic lands that may otherwise be suitable for development.

6. Preserve special views and protect mountain vistas against towers or commercialization. When deemed absolutely essential, minimize visual impacts of communication towers, wind generators, and other high-elevation or ridgeline structures through co-location, design, siting, and color choice.

7. Design and site communication and other high elevation towers so that they do not require night-time illumination.

8. Provide for removal of towers, at owner's expense, when no longer in use per Townshend's Wireless Telecommunication Facilities ordinance.

9. Illuminate structures and exterior areas only at levels necessary to ensure safety and security of persons and property. Illumination of prominent physical features, landscapes, buildings and towers should be designed so as to not unduly distract from the night-time horizon or night sky.

10. Encourage careful planning of new or improved roads to maintain or enhance scenic resources.

Natural Areas, Fragile Areas, and Wildlife

Fragile Areas are designated and managed by the Secretary of the Vermont Agency of Natural Resources, while Natural Areas are designated and managed by the Commissioner of the Vermont Department of Forests, Parks & Recreation. Both resource areas should be recognized and protected. A function of Natural Areas and Fragile Areas is to protect plant and animal species and their ecosystems. In 1991, a wildlife habitat survey was completed on a 4,600-acre tract of land owned by about 40 contiguous landowners in Newfane, Townshend and Wardsboro. Also included in the survey were 1,100 acres of the Townshend State Forest bringing the total acreage to 5,700 acres. The Town could consider continuing surveying of landowners after this new Town Plan is completed. Such a survey of landowners could be accomplished by an appointed Conservation Commission, if the Town pursues such an option.

Planning so that large portions of a town, (and adjoining communities), are left forested minimizes many of the detrimental effects on wildlife, ecosystems and the fragmentation of land by dividing it into too many smaller parcels. Forests do not have to be untouched wilderness and are often better if they are not. Low density development, clustering of land uses which leave large expansions of connected wooded habitat and buffer strips along waterways, help to protect important wildlife habitat and corridors.

Natural Area, Fragile Area and Wildlife Resource Policies:

1. Protect Natural Areas, Fragile Areas, and critical plant and animal habitats, especially those of state and regional significance.

2. Protect habitats of threatened, endangered, and economically significant species and important ecosystems. Maintain or enhance the habitat resources and travel corridors required by our region's larger mammals. If necessary, protect these areas from indiscriminate publicity by mapping them in very general terms.

3. Support state, federal, and conservation group acquisition of land and/or conservation easements to protect critical wildlife habitats. Encourage designation of State Natural and Fragile Areas for significant features and resources.

4. Encourage private and public landowners to recognize the importance of protecting, maintaining, and enhancing fish and wildlife habitats and ecosystems by supporting a variety of community, regional, and state programs and incentives.

<u>Recommendations:</u>

1. Encourage the Selectboard to create a conservation commission to continually study natural resource topics and make recommendations to issues supporting town natural resources and conservation goals.

2. Add areas of land or water that has unusual or significant flora, fauna, geological, or similar features of scientific, ecological, or educational interest to the "Fragile Areas Registry"

VIII. Flood Resilience

Resilience is the capacity of a community to anticipate, adapt to, and recover from external hardship. In Vermont, resilience is of utmost significance for local communities, especially with regard to flooding. Flooding is the most common and destructive hazard in the U.S. In Vermont, flooding is a primary concern due to the state's topography and historic settlement pattern. Vermont's mountainous and heavily forested terrain means that dwellings and other structures are often confined to narrow valleys abutting river corridors. Flooding has a more profound impact in Vermont due to this trait and the fact that stormwater can pick up significant velocity as it travels from higher elevations down to the valleys, where roads, power lines, and settlements are concentrated.

In Townshend, flooding is the most common and costly natural hazard. Flooding poses a significant risk to the welfare of local residents and endangers private property, town roads, and critical infrastructure. As a result, it is vital to plan for flood events and take active measures to enhance community resilience in response.

Existing Conditions

Flooding causes destruction in one of two ways: either by inundating the landscape or causing fluvial erosion. Inundation occurs when floodwaters encroach onto the land and cause damage to structures, roads, and other infrastructure. Fluvial erosion is when the movement of flowing water causes material from the river's bank to degrade and fall into the river. Most of the destruction from flooding in Townshend is due to fluvial erosion.

Townshend participates in the National Flood Insurance Program (NFIP), which allows the Town to regulate development in FEMA-identified Special Flood Hazards Areas (SFHAs).[6] The Town has a Floodplain Administrator who oversees the enforcement of local Flood Hazard Bylaws. Residents can purchase discount flood insurance through the NFIP. According to the Agency of Natural Resources (ANR), there are 23 structures in Townshend within local SFHAs. 2% of publicly-owned facilities are in these areas.

In addition to regulating development in flood-prone locations, Townshend has adopted a municipal road ordinance that requires local roads and bridges to meet adequate safety standards. The Town also has a Local Emergency Management Plan (LEMP), which it updates annually, and a Local Hazard Mitigation Plan (LHMP), which it is in the process of updating. These actions allow the Town to take a proactive approach to reducing flood risk while identifying areas particularly vulnerable to inundation flooding and fluvial erosion.

[6] SFHAs are areas where FEMA predicts there is a ≥ 1% chance of inundation flooding occurring in any given year.

Location: Special Flood Hazard Area & River Corridor Mapping

River Corridors are distinct from federal SFHAs. River Corridors are the areas a river needs to meander to express its energy and maintain natural equilibrium. River Corridors include land adjacent to the river channel, river banks, and flood plains. These areas are identified by the Vermont Department of Environmental Conservation (DEC). While FEMA's SFHAs focus solely on inundation flooding, DEC's River Corridor maps also show where fluvial erosion is likely to occur during a flood event. Flood Hazard Areas and River Corridors often overlap each other, as shown in the Water Resources Map.

Townshend's SFHAs are considered "A zones," meaning they are low risk (portrayed as the green hatched areas in the Water Resources Map). Part of West Townshend village is in the floodplain, and so are sections of Route 30, which abut the West River. Harmonyville is the only village in Townshend that is in close proximity to a river or stream with the potential of frequent flooding. The Townshend Dam serves as a flood control mechanism for the West River–this is demonstrated by the fact that the Town's SFHA diminishes significantly downstream of the dam.

The River Corridors in Townshend lie along Stiles Brook, Simpson Brook, Tannery Brook, Mill Brook, and Fair Brook (pink hatched areas in the Water Resources Map). The West River is also a River Corridor area. Unlike the SFHAs, the River Corridor area remains sizeable downstream of the Townshend Dam.

Flood Resilience Policies:

1. Discourage new development in Special Flood Hazard Areas, River Corridors, and other flood-prone areas as identified through federal and state maps and local studies. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion.

2. Protect and restore floodplains and forested areas that enhance resilience and moderate the impacts of inundation and fluvial erosion.

3. Continually prepare for flood emergencies through multiple planning processes, including the Local Hazard Mitigation and Local Emergency Management Planning processes.

Flood Resilience Priority for Action

1. Update the town's flood plain bylaw incorporating new FEMA FIRM due to be released in 2025.

IX. HISTORIC AND CULTURAL FEATURES AND RESOURCES

Over two centuries of history has left a rich heritage in Townshend. Although few structures remain from the past, the ones that have stood the test of time are significant for many reasons. These structures and locations lie at the heart of what makes Townshend a unique and special place to live, work and visit. For example, The Town Common is home to several festivals throughout the year, often hosting several hundred to a thousand people over the weekend. West Townshend Village, being on the National Register of Historic Places, is worthy of preservation, but also investment as a community gathering space and potential smaller scale service center. It features a post office and country store, and has weekly dinners and music during the warmer months. Harmonyville also features a country store, and harbors the largest sycamore tree in Vermont. These types of places knit the town together to form a cohesive community, and help to unify people around food, music, art, and shared history.

List of Local Historic Resources

Townshend Common and Fountain - land area of 2 3/4 acres leased to the inhabitants of Townshend from Ephraim Wheelock in 1803. In 1893, the fountain was erected at a cost of $526. The gazebo was constructed for the movie, "Funny Farm," filmed in 1987. In 2024 the gazebo was removed and replaced with a more durable version. The Town received title to the property in 2024 through a quit claim deed.

Townshend Town Hall and Opera House was built in 1921 and is described as a Classical Revival building. The structure and clock-tower clock are the gift of Mrs. Dutton in honor of her husband, Col. Henry R. Dutton, and her son, H.R. Dutton, Jr. The second floor of Town Hall is an opera house in need of significant upgrades to meet current needs and ADA accessibility requirements despite prior repairs including additional insulation, fire doors and an alarm system.

The Painted Stage Curtains at Town Hall were painted by William R. Stuart, and are considered national treasures. In the early 20th century, these curtains served as the backdrop for many plays that took place at the Town Hall, which at the time, was the central cultural institution of the community.

Bridges - Scattered throughout the town, are six small stone arch bridges, fine examples of handcrafted stone masonry. These bridges were built between 1894 and 1910 by James Otis Follett, a local farmer turned stonemason, using the "keystone" rock at the top of two arches. Follett reportedly built as many as forty stone bridges throughout the region of southern Vermont and New Hampshire, of which only eleven are known to remain. The West Townshend bridge was restored in 2024 with a combination of grants and town funds. These remaining bridges may be preserved through grants (see locations on the Existing Conditions Map).

Townshend used to have four covered bridges, but now Scott Bridge on Route 30 is the only one

still standing. Scott Bridge remained in service for over 80 years, until it was seriously weakened by two heavily loaded trucks crossing together. In 1955, the bridge was closed to vehicular traffic. It was donated to the Vermont Historical Site Commission, responsible for its maintenance, and is listed as a State Historic Marker site. VTrans rehabilitated it for pedestrian use.

1. *Woods-Wheelock House* - south on Route 30 in Harmonyville, is listed in the National Register of Historic Places.

2. *West Townshend Village* - is on the National Register of Historic Places. It consists of the aggregation of historic buildings in West Townshend Village plus adjoining farmsteads. The National Historic Register has stated that: "Compared with similar villages (and historic districts) in VT, West Townshend retains a higher proportion of historic buildings and displays fewer actual intrusions than most of its counterparts and belongs among the small number in the state without any modem commercial buildings near its center." The architectural style is primarily Federal with two buildings in the Greek Revival style.

3. *Fletcher Grave Site* - is situated in the back yard of a private residence in West Townshend. Townshend and the Founding of Vermont, a town history published by the West Townshend Historical Society (1991) sets forth General Fletcher's efforts in the campaign for Vermont becoming an independent state, sympathetic to the American Congress in its war with England, but sovereign in itself. General Fletcher's career and accomplishments are fully described in the Townshend Historical Society's book A Stitch in Time: Townshend, Vermont, J 753-2003.

4. *Aaron Taft Homestead* - Aaron Taft and family came to West Townshend in 1799 and established a farm on 100 acres. Aaron's grandson, Alphonso, born in Townshend in 1810, afterward moved to Cincinnati, Ohio, where his son William Howard Taft was born in 1857. William Howard became President of the United States and Chief Justice of the United States Supreme Court. A Vermont historic plaque honoring the Taft family is located in West Townshend on Route 30 at the site of the West Townshend General store.

5. *Cemeteries* - There are 17 known cemeteries maintained by both private and public funds. Wiswell Cemetery is the location of the earliest carved stone, dated 1786. The oldest stone at Oakwood Cemetery is dated 1792. A cemeteries brochure with map is available free from the Town Clerk. 14 of these known locations are shown on the Existing Conditions map.

6. *Historic Barns and Agricultural Structures: A* survey approved by the Vermont Division for Historic Preservation Townshend was conducted in 2009. The Townshend Historical Society is endeavoring to document and preserve those structures that remain. The Historical Society offers maps and other information about 18 of these structures in Townshend and West Townshend including one repurposed as an inn.

7. *Clarina Howard Nichols Plaque* was a journalist and lobbyist involved in the temperance, abolitionist and women's movements. She was the first woman to address the Vermont Legislature and an historic plaque honoring Clarina Nichols is located in West Townshend near the West Townshend Country Store.

8. *Leland and Gray Seminary*: The "Leland Classical and English School of Townshend," a private school, was incorporated by the State Legislature under the auspices of the Baptist Association in 1835, with the Hon. Peter Taft as President of the Board of Trustees. To honor Deacon Samuel Gray, who made an endowment of $500, the name was changed in 1860 to "Leland and Gray Seminary." In 1970, the old Seminary building was taken down along with the general store and Baptist Church to make room for Leland and Gray Union High School.

Cultural Activities

The community enjoys a rich heritage of art, music, drama and dance. Beginning in the 1950s, the Leland and Gray Seminary held an annual festival of the arts with elaborate original productions involving students, and many community members. Posters announcing these events were saved by former headmaster Arlo Monroe in his Jamaica studio. Participation in the arts continues to be a focus of the Leland and Gray Union High School curriculum. The Dutton Gym has been remodeled and used for plays and other artistic events for the community, as well as school sports.

Annual events with large community participation are the Grace Cottage Fair Day, the 1st Saturday in August, and in October, the Pumpkin Festival. The West River Community Project hosts a popular farmer's market at the West Townshend Country Store on Fridays, featuring live music, wood-fired pizza, and multiple produce and other vendors.

The Townshend Historical Society, a 503(c) non-profit organization incorporated in 1999, is dedicated to the preservation of documents, artifacts and places of historic interest in Townshend. Its mission is to communicate the historic and cultural story to the community through the schools; a website www.townshendvt.org; and special programs. A major project, supported by donations, grants, and volunteers, resulted in the publication of an updated history book *A Stitch in Time: Townshend, Vermont, 1753-2003.* Membership in the Townshend Historical Society is open to everyone with an interest in Vermont history.

Historic and Cultural Resource Policies:

1. Encourage community-based organizations that support art, theatre, music and other cultural programs.

2. Support preservation and restoration of historic buildings and sites, under the guidance of the local community.

3. Protect places of outstanding archeological or historical value from development that unreasonably impairs their character and quality.

4. Act 250 proceedings involving projects utilizing or near to historic structures, their architectural and historic value shall be taken into consideration preserved, and enhanced.

5. Support the Townshend Historical Society, and its educational and communication programs.

6. Support the Townshend Public Library, and its variety of cultural programs.

7. Support organizations and events that highlight Townshend's history and culture.

8. Work with the Townshend Historical Society and other stakeholders to identify significant historical structures in Townshend, create a plan for their maintenance and use and the funding sources for needed upgrades to accommodate those uses.

Priorities for Action:

1. Identify and inventory architecturally significant buildings and streetscapes (defined as a group of buildings where individual buildings in the group may be undistinguished but together, they make an important historic architectural environment.)

2. Take concrete steps towards the renovation and rejuvenation of the opera house on the second floor of Town Hall and Opera House.

3. Recognize the historical significance of Simpsonville to Townshend during the 1800's.

X. EDUCATION

Public School Facilities

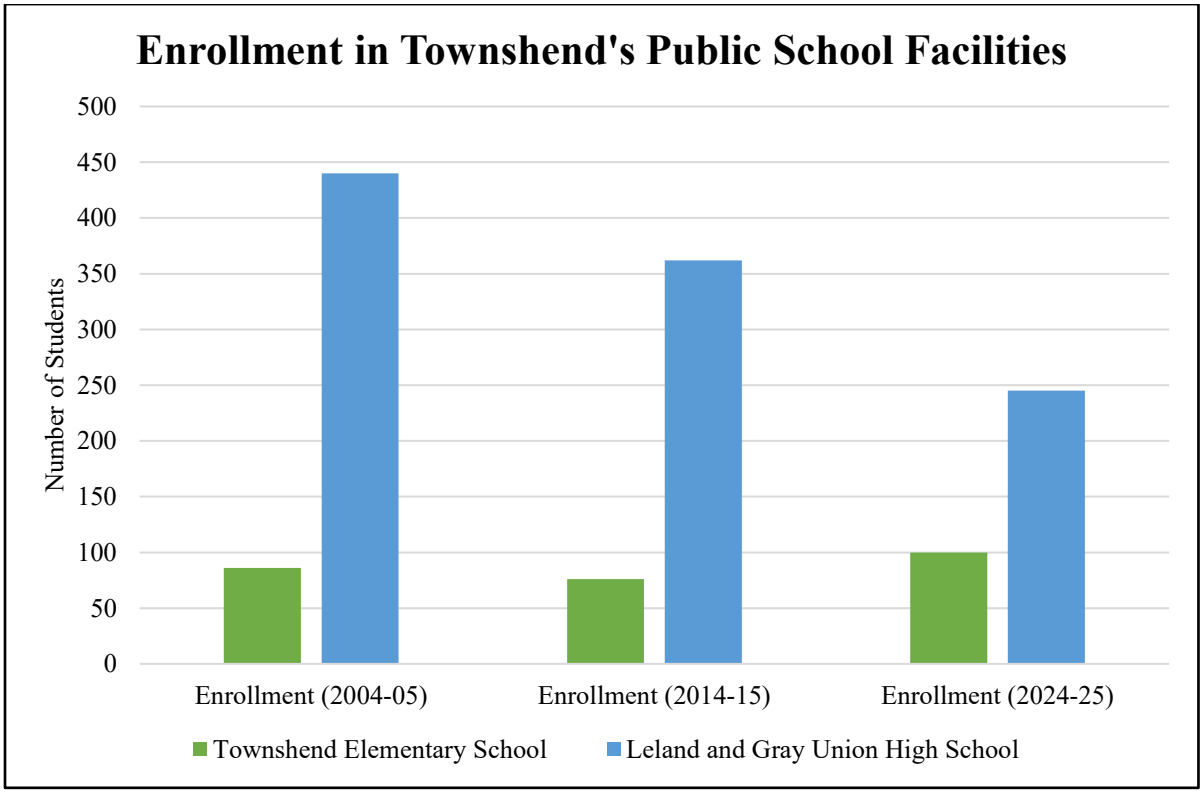
Townshend is a member in the West River Education District (WRED) along with the towns of Brookline, Jamaica, Newfane and Windham. Two of the WRED schools, Townshend Elementary and Leland and Gray Union High School are located in Townshend.

Children in Pre-Kindergarten through Grade 5 attend the Townshend Elementary School, overlooking the Townshend Common, which also serves as a place to play at recess. There is a small playground for younger children on the grounds in back of the school building. The capacity of the building is 120 students. Enrollment in the 2024-25 year was 100 students, up from 71 students in 2015-16 through the consolidation of the Jamaica and Windham Schools.

Leland and Gray Union High School was formed in 1968 replacing the Leland and Gray Seminary, a private school established in 1835. Enrollment of students for the year 2024-2025 was 245 students. Enrollment peaked at 440 students in the year 2003-2004, and has been declining since. Some students in grades 11 and 12 take advantage of comprehensive career training at the Southern Vermont Career Education Center in Brattleboro. Thanks to the support of voters in June, 2007, construction began at Leland and Gray Union High School to renovate or add spaces that will benefit students, staff, and the community. Renovations were completed in October of 2009. The renovations to Leland and Gray included one new art room, new room for experiential learning, and relocation of the woodworking room.

Below is a graph depicting the enrollment information from Townshend's public-school facilities. Enrollment data helps contextualize the Town's demographic profile, and provides insight into the types of populations moving to and from the community. The decreasing population at the WRED Schools suggests that the number of families with school age children is shrinking. Enrollment data is not a standalone metric to comprehensively evaluate local or regional migration, but it provides useful context in the discussion of public education, and the role it plays in drawing people to the community

Figure 1: Townshend Public School Enrollment



The importance of the Elementary and High School cannot be overstated. Every day, dozens of staff and hundreds of vehicles go to and from Townshend Village to drop off and pick up students. Throughout the school year, there are plays and performances, sports, and other school events that take place there, all bringing people to the Townshend Village Center. This naturally leads residents of Brookline, Jamaica, Windham and Newfane to become connected with Townshend, potentially in a very special way. This also leads to these same families and staff members being more aware of events and other things happening in the village, potentially increasing attendance. This could also lead to more usage/patronage at the library, Grace Cottage and other village businesses and institutions.

Having two schools located in such close proximity does also present challenges, safety being primary among them. With so many children walking around the town common providing a safe space for them becomes critical. Pedestrian infrastructure in the village center is lacking, with no traffic signals, limited sidewalks, and few crosswalks.

Private School Facilities

Kindle Farm School, located on Route 30 at the Newfane/Townshend border, is a day school that serves students with various emotional and behavioral learning needs. The school has 65 students enrolled with ages between 7-20. The Townshend site is for the school's organic farming program.

Another site in Newfane is used for academic work.

Educational System Policies:

1. Support public and private cooperation in offering vocational and basic skills training to employees of area businesses and industry.

2. Promote lifetime learning as a goal, supporting, whenever possible, educational programs for all ages.

3. Support the activities of the Townshend Public Library in programs for pre-school and elementary age children, and programs for adult book discussions and parenting skills.

4. Involve the Townshend business community in assisting with career fairs, special courses and hands-on job experiences.

5. Initiate and support efforts to provide pedestrian infrastructure in and around the Townshend Village Center.

6. Work with the school district to obtain mode of travel data for students in order to provide the safest and most efficient infrastructure on and around the town common.

7. Any transportation project on or around the Townshend Village Center must take into account the needs of students and staff.

XI. ENERGY

Importance of Enhanced Energy Planning

Introduction

Energy Planning is important to Townshend and its residents, since energy is a vital part of a healthy economy and energy consumption is closely correlated with standard of living. Energy has played an important role in the development of Townshend in the past and we need to plan for the availability of environmentally sound energy sources for the future that don't jeopardize the natural beauty of the town.

The objective of the energy chapter of Townshend's Town Plan is to meet the updated requirements of Act 174 which embody the energy savings and sourcing goals of Vermont's 2022 Comprehensive Energy Plan (CEP) in a manner consistent with Townshend's long-standing Natural Resources, Land Use and Economic Development policies. The people of Townshend are best suited to understand, identify and protect our natural resources and the unique characteristics of Townshend while balancing the necessity of adequate energy resources. The State of Vermont through Act 174 has provided the opportunity for citizens of Townshend to have meaningful input into the siting of energy generation facilities by granting the Town's compliant Energy Plan "substantial deference" in all Section 248 hearings.[7]

The source(s) of energy have changed over the years. The early European settlers in Townshend relied on the energy of horses and oxen to augment their own strength and for transportation. Lighting was provided by tallow candles, whale oil, camphene and later by kerosene, but the use of artificial lighting was limited and the settler's activities were mostly limited to daylight hours. The abundant forests provided the settlers with a ready source of fuel to heat their homes and for cooking. In the early 19th century hydropower generated from the many streams and brooks was a significant energy resource. The power from Mill Brook was harnessed to power the Willard lumber mill. In 1923 the saw mill was changed to wood fired steam and included a small electric generator which supplied electricity to several houses in Harmonyville. Townshend's reliance on the local energy resources - wood and hydropower - kept Townshend energy self-sufficient well into the 20th century. It wasn't until 1958 that New York Power Authority began delivering large quantities of electricity from outside of the state. The nuclear age arrived in Vermont in 1960 with the completion of Rowe Yankee across the border in Massachusetts and the 1972 completion of Vermont Yankee in Vernon. It was the era of "power too cheap to meter." However, nuclear power fell out of favor and Vermont Yankee ceased electric generation in 2014. Vermont began importing electric power in 1987 from Hydro-Quebec and negotiated new contracts in 2012 that now supply more than 25% of Vermont's electricity. In recent years photovoltaic panels have become a common sight in Townshend.

[7] Act 174 provides the town energy element "substantial deference" in 248 hearings before the Public Utility Commission. The Act defines substantial deference as "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 or policy." The level of local authority is far greater than the "due consideration" granted to Town Plans that don't comply with the Act.

The transformation of Vermont's energy sources and energy utilization, envisioned by Vermont's 2022 CEP and Initial Climate Action Plan (CAP) will take years to realize. It is hoped that implementing the plan will enhance the vitality of the state and local economy, and improve the health and welfare of citizens. This robust energy element is used as a tool to advance the economic and environmental well-being of Townshend, thereby improving the quality of life for its residents. Furthermore, these energy goals will reduce Townshend's vulnerability to energy-related economic pressures and, in the long-term, promote long-term community resiliency in a variety of contexts.

The cost of energy in Townshend, including residential and governmental use (for heating, electricity, transportation, etc.) is estimated to be $5.54 million per year (see Energy Costs & Expenditures section below).[8] Because a large majority of this energy is imported from outside of the town and Windham Region, most of the money spent on energy does not directly benefit the local economy.

While Townshend can do little to shift the broader state, federal and international policies, we can influence energy use, conservation, and production on a local level. In this energy element, we hope to address Townshend's local actions for increasing our energy efficiency and promoting suitable renewable energy generation, and overall pathways to become more resilient.

Long-Term Vision

There is a trend toward factoring the "societal costs," "life cycle costs," and subsidies into the price of energy and when this is done, there is no energy source that doesn't have some adverse consequences when looked at in a global cradle to grave calculation. However, not all energy sources including renewable energy projects provide the same benefits or present the same obstacles. With this understanding, we begin our energy planning by considering all available renewables for the benefits they potentially offer and the tradeoffs they may require. Our plan requires us to apply our knowledge and understanding of the Town of Townshend, its unique geographic features, critical natural resources and attributes to allow us to determine what may be best for Townshend and the region. The Planning Commission, in consultation with the Energy Coordinator, is responsible for preparing Community Standards for the siting and development of generation, transmission and substation facilities, for reference by facility developers and for consideration in Section 248 proceedings.

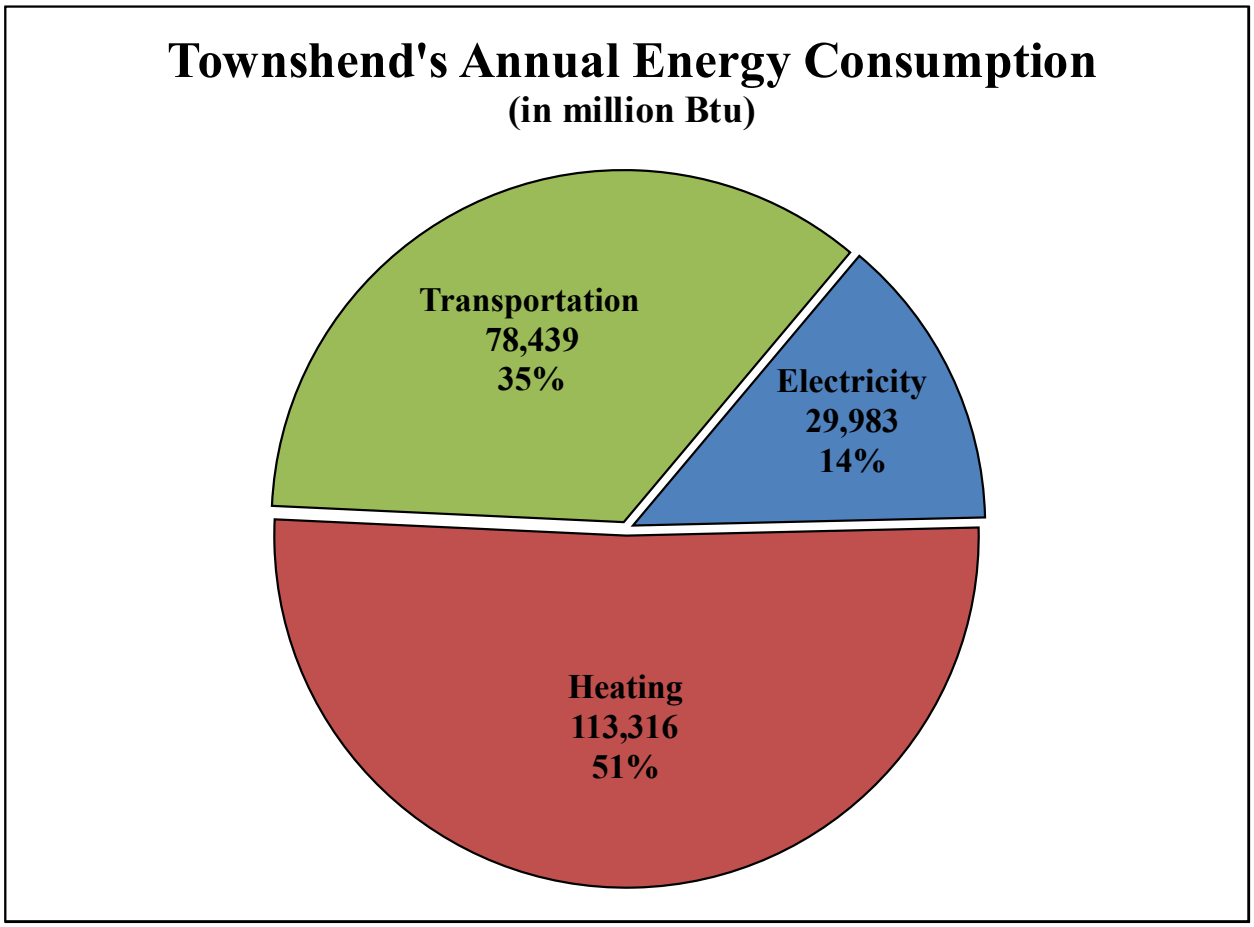
[8] Cost estimates and data analysis provided by the Windham Regional Commission based on the most up to date information from Efficiency Vermont, the US Census Bureau's American Community Survey, Vermont Department of Labor, and other sources.

Townshend's Current Energy Use

The following paragraphs describe Townshend's current energy consumption in detail. These current use estimates provide a starting point from which the town can develop informed energy policies that directly address its current context and opportunities going forward.

In order to provide a more accurate picture of the energy landscape in Townshend, energy consumption, generation targets, and efficiency targets are broken down into three distinct energy sectors. Those sectors are electricity, heating, and transportation. The sections below break down the calculations and describe the assumptions made to arrive at these final demand figures.

Figure 2: Total Energy Consumption in Townshend



Current Electricity Demand

Townshend's electric energy supply comes from Green Mountain Power.

Electricity consumption data from Efficiency Vermont (EVT) was produced for each town in the state and is the primary source of this information. This dataset combines the energy supplied from all potential utility electricity providers, but does not include off grid generation. It also separates the usage for both the *residential* and *commercial or industrial* sectors. The electricity usage in Townshend has been relatively consistent over the last several years with a modest increase from 2020 to 2021.

Table 3: Townshend's Electricity Consumption (Efficiency Vermont, 2024).

	2019	**2020**	**2021**	**2022**	**2023**
Sector	**kWh**	**kWh**	**kWh**	**kWh**	**kWh**
Commercial & Industrial	3,363,212	3,194,839	3,571,923	3,489,384	3,465,780
Residential	4,490,215	4,753,828	5,161,947	5,389,532	5,321,546
Total	**7,853,427**	**7,948,667**	**8,733,870**	**8,878,916**	**8,787,326**
Sector	**MMBtu**	**MMBtu**	**MMBtu**	**MMBtu**	**MMBtu**
Commercial & Industrial	11,476	10,901	12,188	11,906	11,826
Residential	15,321	16,221	17,613	18,390	18,158
Total	**26,797**	**27,122**	**29,801**	**30,295**	**29,983**

To translate this energy demand into dollar amounts, we can estimate a cost of $0.1788 per kilowatt-hour (Vermont state average for electricity costs across all sectors in 2024). Based on the above data, residences in town paid approximately $950,000 in 2023 for 5,321,546 kWh. Commercial and industrial facilities paid almost $620,000 for their 3,465,780 of electricity.

The Planning Commission has also observed a sizeable cohort of local households that are off-grid, meaning their electrical consumption is likely not represented in Efficiency Vermont's data. Moving forward, the Planning Commission will attempt to inventory households that fall into this category to continually improve the data analysis necessary for enhanced energy planning.

Current Transportation Use

The Public Service Department's (PSD) 2023 Municipal Consumption Tool was used to generate estimates for transportation sector energy use in Townshend. According to the 2023 American Community Survey (ACS), Townshend has 622 primary housing units, (not vacant or used for seasonal/recreational purposes). Based on the number of households, it can be estimated that there are 1,104 light-duty vehicles (LDV) on Townshend's roads, which consume 664,909 gallons of fossil fuel each year. Below is a table summarizing the averages, assumptions, and estimates used to arrive at those figures.

Table 4: Townshend Transportation Energy Use Calculation

622	Number of primary housing units.
1,104	Number of fossil-fuel burning light-duty vehicles (LDV).
13,250	Estimate of the average annual number of vehicle miles travelled (VMT) by LDV in an area (The vast majority of LDV in Vermont can safely be assumed to drive between 9,000 and 15,000 miles annually. LDVs in Townshend are estimated to travel slightly further than the state average due to the rural nature of the region.)
22	Estimate of the average fuel economy of fossil-fuel burning LDV fleet in the area, in miles per gallon (state-wide average fuel economy).
664,909	Estimated number of gallons of blended fossil fuel consumed annually, calculated from the values above.
121,259	Number of BTU in a gallon of fossil fuel, computed as a weighted average of the individual heat contents of gasoline with a 9% ethanol blend (95%) and diesel (5%).
78,439	This is the estimated total annual energy consumption of internal combustion engine vehicles in the area, in MBtu.

To estimate the cost of this consumed energy, we assumed a cost of $2.94 per gallon (Vermont state average in 2021).[9] In Townshend, consumers spent over $1.95 million on transportation related fuel costs alone.

Current Heating Demand

[9] Data source: Historical Fuel Prices in 2021, Vermont Agency of Transportation.

To account for different building types and their respective uses, the following thermal sector estimates divide energy demand into residential and commercial categories (industrial building thermal demand is not included in the following analysis). As with the transportation sector, the 2023 Municipal Consumption Tool was consulted to arrive at heating consumption estimates and organize assumptions about key data inputs.

For residential buildings, it was assumed that the average annual heating load of area residences is 110 MMBtu for both space and water heating (state average as reported by VT PSD). There are 622 primary housing units in Townshend, but according to the 2023 ACS, 22 of these are heated by electrical heating systems. Electricity used for heating is accounted for in EVT's data on electrical consumption (see Current Electricity Demand section above). To avoid double counting this category of consumption, the 22 electrically-heated households in Townshend are subtracted from the total. With 600 primary housing units left after this discount, the annual thermal energy use for town residences can be calculated to be 66,000 MMBtu.

ACS data also provides information on the home heating fuels used for both owner-occupied and renter-occupied housing units (both are considered "occupied"). Separating out this analysis by housing-tenure can help the town identify discrepancies in how these populations meet their heating needs and experience thermal energy burden. Figures 3 and 4 show the fuel types of owner-occupied and renter-occupied households in Townshend.

Figure 3: Owner-Occupied Heating Types

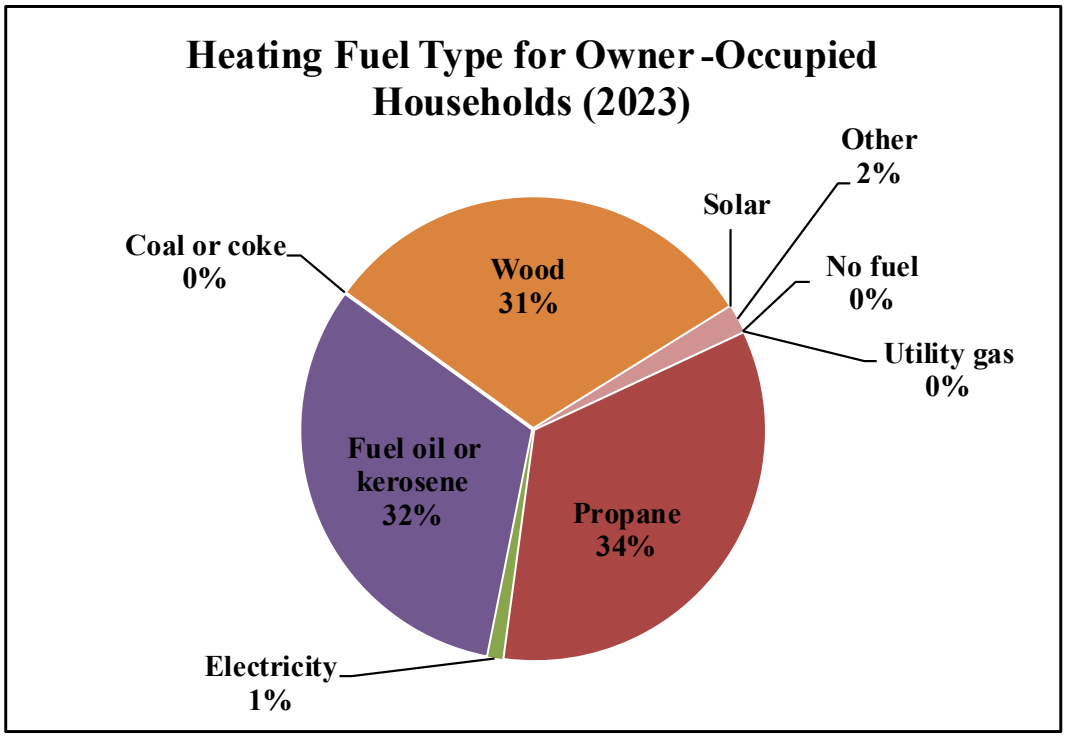
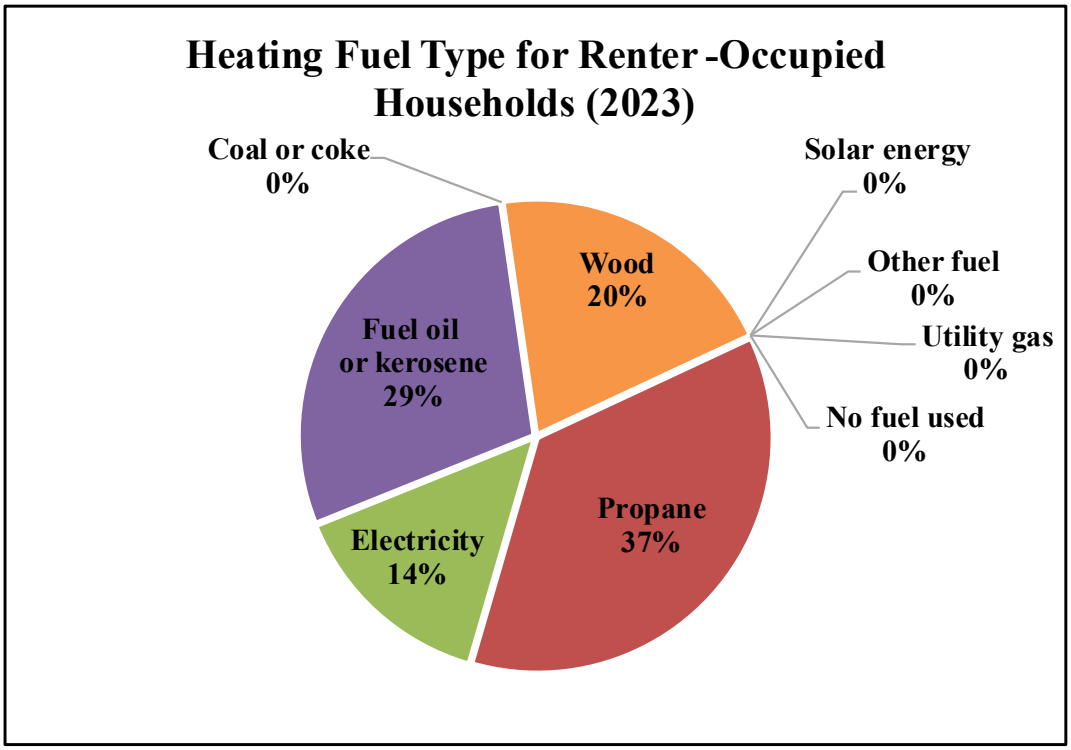


Figure 4: Renter-Occupied Heating Types



Owner-occupied households are estimated to spend just over $1.85 million a year for home heating, while rental-households pay approximately $165,000. The combined total heating cost for occupied housing in Townshend is estimated to be $2.02 million annually.[10] While renters are generally considered to be more energy burdened than owners, the above analysis suggests that renters in Townshend pay heating costs proportional to the amount of housing stock they contribute to (see *Energy Equity & Energy Burden* section for further discussion).

In Townshend, there is also a high percentage of seasonal homes (72% of housing units are primary "occupied" homes, while 28% are seasonal homes). Based on the energy model projections from the state (created by the most recent Low Emissions Analysis Platform [LEAP] model), it can be assumed that seasonal homes only use about 15% of the energy of a primary home, due to more occasional use and a presumed higher energy efficiency. With 238 secondary residences, (categorized as "vacant units" by the Census), seasonal households in Townshend use 3,967 MMBtu of thermal energy.

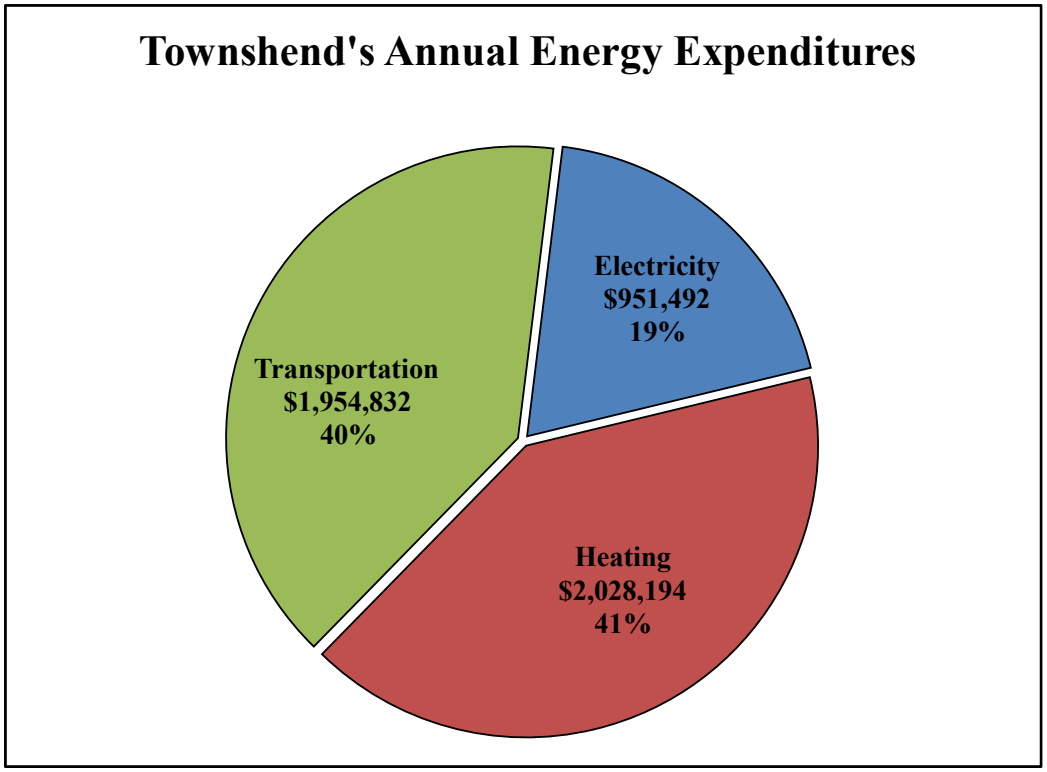
[10] Heating costs are determined using 2023 ACS data (Table B25117) and several guiding assumptions. VT PSD reports that the average amount of energy required to heat a square foot (sq ft) of housing is 60,000 Btu. Using this estimate, it is possible to determine the sq ft of local housing stock heated by each fuel type. Housing sq ft is determined using ACS Table B25010 and an assumption that there are 800 sq ft of housing/occupant for owners and 500 sq ft of housing/occupant for renters (2011 Census Bureau Housing Survey). EIA's Energy Profile on Vermont contains information on the amount of Btu/unit of different fuel types, and the average price/unit of different fuels in Vermont. These assumptions combine to form the methodology for estimating home fuel costs.

For commercial establishments, it is estimated that the average annual heating load is 1,100 MMBtu. For the state, the average is 700 MMBtu to 750 MMBtu, but the average for any given area is very likely to be significantly higher or lower, as the mix of businesses from region to region is highly variable. Based on the types of commercial buildings in Townshend, the heating load was determined to be more than the state average. With 40 commercial establishments, there is an estimated thermal energy demand of 44,019 MMBtu.[11] Since there is no readily available data on the fuel mix of town businesses, and no corresponding methodology for deriving cost estimates, commercial thermal cost burden remains an unknown figure.

Total Energy Costs

In summary, Townshend pays a large amount for energy across the three use sectors. The total estimated cost to the town for known electricity, heating, and transportation energy use is roughly $5.54 million each year. This estimate does not account for commercial and industrial thermal energy use, and in reality, is likely higher. There are real financial incentives for the town to move toward energy efficiency, on behalf of both the residents and its business owners (see *Energy Targets, Conservation Challenges, & Equity Goals* section for information about Townshend's energy efficiency and conversion targets).

Figure 5: Annual Energy Costs



[11] Data source: VT Department of Labor Employment and Labor Market Information, 2024.

Townshend's Resources, Constraints, & Potential for Energy Generation

Available energy resources within Townshend are all renewable resources: wood, solar, hydro, and wind. In order to reduce dependence on conventional energy sources, of which the costs and availability are outside residents' control (see the section above), the use and generation of alternative energy sources is encouraged.

Townshend has the advantage of having two major electrical transmission lines running through the town which offer access to the New England grid for the sale of excess electricity and for meeting electrical demands when intermittent renewable energy generation is unable to produce power. There is also access to three phase power in the southern half of Townshend running along Route 30 and part of Route 35 as well as along West Hill Road. The baseline data from 2016 estimated that 471 MWh were generated in the town. In the intervening years the total generation has jumped to 4,984 MWh (2024 data from PSD's surveys of VT distribution utilities) with the addition of the run of river hydroelectric plant on the Townshend Dam and the installations of more solar panels.[12] However, Townshend consumed 8,783 MWh of electricity in 2023 according to data collected by Efficiency Vermont, and therefore, still has a need to import electricity.

There is a possibility for photovoltaic solar, residential wind and small-scale hydro to provide avenues to produce more of Townshend's electrical needs. In addition, Townshend may share a unique resource with neighboring Jamaica in the Ball Mountain and Townshend Dams that may be suitable for a hydroelectric pumped energy storage system to alleviate the need to import power at night or other times that PV solar is unavailable. There are many hurdles to developing this potential. The current structural deficiencies and serious sediment accumulation problems in the existing reservoirs of these federally-owned facilities must be addressed and corrected before they could be utilized for pumped energy storage.

New renewable energy facilities raise complex and controversial issues regarding the potential health, visual, ecological, environmental, social and economic impacts of large-scale renewable development initiatives (wind, biomass, and solar, for instance). Even the siting of small-scale installations in certain locations has raised community concerns about the impacts such facilities may have on the health and welfare of town residents. Each proposed project must be reviewed based upon location and, impacts to the Town, natural resources and residents. Every attempt will be made to balance town policies to maximize the positive benefit(s) of appropriately scaled renewable energy with community attributes, values and natural resources consistent with 24 V.S.A. Section 4302 and the 2022 CEP.

<u>Resource Mapping Process and Policy Tool</u>

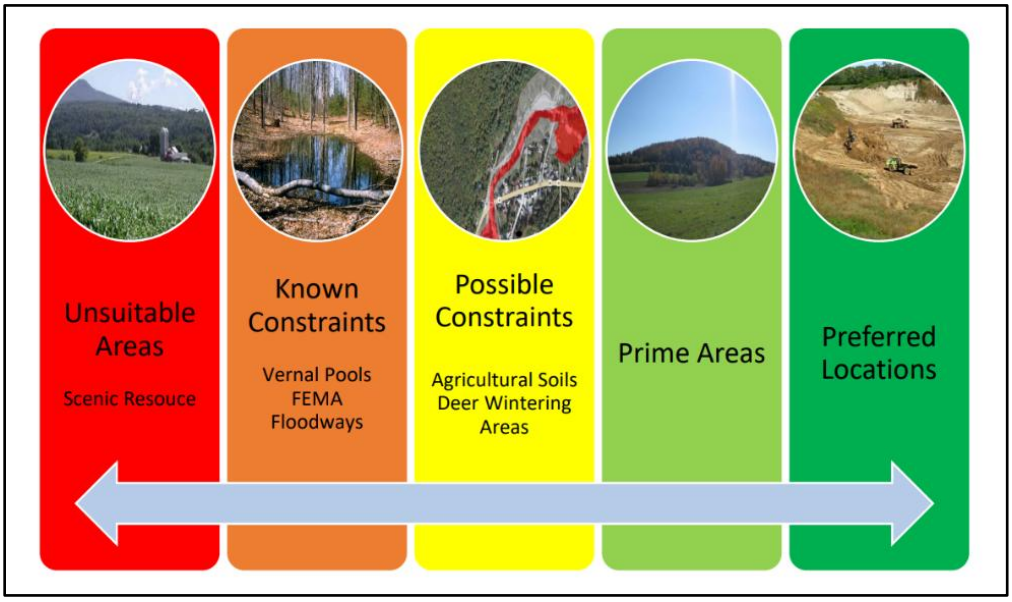
The suite of maps included with this Enhanced Energy Element were developed using statewide GIS data that modeled resource potential for solar and wind energy. Since the passage of Act 174, local and regional resource potential maps have been updated to reflect changes to Vermont's 2022 CEP, which emphasizes the value of forest lands in sequestrating and storing carbon. Acreage of DEC River Corridors and/or FEMA floodways, Class 1 and 2 Wetlands, Vernal Pools, National

[12] "Run-of-river" hydropower refers to a type of hydroelectric facility that generates electricity by harnessing the natural flow of a river.

Wilderness Areas, and State-Significant Natural Communities and Rare and Endangered species were removed from consideration for energy development. Additional acreage with potential constraints from Hydric Soils, FEMA Special Flood Hazard Areas, Protected or Conserved Land, Unconfirmed Vernal Pools, Deer Wintering Area, Vermont Conservation Design Highest Priority Forest Blocks and Areas with Agricultural Soil were eliminated leaving the acreage likely to be most suitable for energy development.

Potential siting locations can be understood to represent a spectrum that ranges from the places least suitable for development to those most preferred. The below graphic borrowed from the State's 2022 CEP illustrates this point effectively.

Figure 6: Spectrum for Siting Renewable Facilities from Least Suitable to Most



Energy resource potential maps provide energy planners and developers with a "coarse screen" method to roughly identify areas in Townshend that may have energy generation potential. These maps are not siting maps, and further site analysis would need to be done to determine if a proposed generation facility is appropriate and comports with Townshend's Town Plan policies. Instead, these maps provide Townshend planners with tools to develop sound and informed energy generation policies within this Enhanced Energy Element.

Solar Resource Maps

The attached solar Resource Map indicates that Townshend has less modeled solar resource availability as compared to other towns in the region. However, per the GIS mapping there are still 510 acres with solar potential and no known or identified potential constraints. In addition to these 510 acres, there are 13.06 acres of available rooftop area for solar development. This acreage with the best potential for solar power generation, along with the possibility for roof mounted solar panels on existing structures, provide sufficient potential to meet the electricity generation needed for Townshend. The Town encourages the placement of solar panels on the roofs of existing

structures and supports free standing solar facilities that are properly sited, where the development conforms to the siting policies outlined in this Town Plan and that will not detract from the natural beauty of the town.

Table 5: Solar Acreage Availability Analysis

Acres Available in Townshend for Solar Energy Generation	
Total number of acres in town (GIS analysis).	27,348
Acres with solar potential including areas with possible constraints and no know constraints (primary and secondary resource areas)	4,535
Acres with solar potential but with possible constraints (secondary resource areas)	4,025
Acres with prime solar potential and no known or identified possible constraints (primary resource areas)	510
Rooftop acreage with the potential for solar development	13

Solar Energy Constraints

Photovoltaic solar generation has the potential to provide a large portion of Townshend's energy needs. However, with any development it is important to consider the appropriate scale of development and site the energy facilities in locations that don't detract from the natural beauty and rural characteristics of the town. Roof mounted solar panels mounted on the existing roofs will be the least noticeable locations. However, it may be necessary to have freestanding panels in some areas. Free standing solar panels shall be setback from public right of ways by a minimum of 20 feet. The energy facilities shall be screened from public view through the use of topography, existing structures, and vegetation. The siting shall also protect the longer views from the traveled portions of state and local roadways.

Wind Resource Maps

The higher elevation ridges surrounding Acton Hill, Rattlesnake Mountain, Ober Hill, Bald Mountain and Crane Mountain provide the best conditions for wind energy generation. The bulk of these areas fall within areas of known or potential development constraints, leaving relatively few areas with prime wind potential (without constraints layered on the wind resource). Below is a table comparing the acreage of the town with the acreage identified through GIS of prime resource for the three different scales of wind development. Most notably, from the GIS analysis, there is only one acre of unconstrained land where the wind resource is strong enough for utility scale generation.

Table 5: Solar Acreage Availability Analysis

Acres Available in Townshend for Wind Generation	
Total acres in town (GIS analysis).	27,348
Total acres with potential for residential wind (possible constraints, secondary resource areas).	8,723
Total acres with potential for residential wind (no known constraints, primary resource areas)	546
Total acres with potential for commercial wind (less than 100 KW)	198
Total acres with potential for Industrial scale wind (1 MW – 2.5 MW)	1

Wind Resource Constraints

The Townshend Town Plan specifically prohibits commercial/industrial wind generation facilities, but there may be potential for residential scale wind energy generation. The locations with the best wind conditions lie along prominent hills and ridgelines that are not served by existing roads. These higher elevation areas are designated in the Town Plan as Resource Lands and also are included in the state's highest priority forest blocks. The construction of access roads, land clearing, and large foundations required for commercial/industrial wind turbines would severely alter these sensitive areas and affect the watersheds. The changes caused by construction would persist long after the projected useful life of the wind turbines. In addition, wind turbines located on these higher elevations would be silhouetted above the terrain and would disrupt the scenic vistas of Townshend's green hills that appeal to tourists and residents. Commercial/industrial wind generation is incompatible with the town's vision of appropriate development because it wouldn't preserve the unique aspects of the natural environment and quality of life that characterize Townshend.

Hydro Resources

The West River and its significant tributaries, Mill Brook, Tannery Brook and Fair Brook flow through Townshend offering the potential for generating electricity. Hydro plants, unlike solar, can generate power around the clock. The energy generated from Townshend Dam hydroelectric run of the river facility is already the single largest electric generator in Townshend. New run of river hydro facilities could be developed with no dams and low impact to river aquatic life.

Hydro Resource Constraints

Present regulatory restrictions make it difficult to capitalize on the town's hydro energy resources. Although Townshend has a number of streams, the hydroelectric potential is limited by the variation in seasonal flows and new dams and weirs that might extend the generation are prohibited. Run-of the-river micro hydro facilities are technically permissible, but no permits have been issued in Vermont in recent years. Technological advances in micro-hydro facilities combined with changes in the regulatory climate might allow Townshend to take advantage of the hydro resources at a future time.

Wood Resources

Townshend is roughly 90% forested land, which provides an enormous energy resource. The annual growth of a mature hardwood forest creates 6.75 MMBtu per acre. The forest lands within Townshend annually produce 166,000 MMBtu in wood fiber, which is almost equal to the total energy consumption in town for electricity, heat and transportation. The abundance of this natural resource explains the historical use of wood. Wood is not easily used for transportation and electricity generation but can be readily used for heating. Wood is available locally without reliance on outside sources for processing and transportation to town. The 2023 ACS indicates that 29% of the 66,000 Btu needed yearly to heat local primary residences is provided by wood. General observations indicate that over half of the structures in Townshend rely at least in part on wood for heating. Two of the larger institutional buildings, Leland and Gray Union High School and Valley Village. use wood chips for heat.

Wood Resource Constraints

Although wood is abundant and is easily harvested with basic equipment, there are other demands on the resource for timber. There is also an ongoing debate on whether wood is CO_2 neutral because the growing trees provide a carbon sink and harvesting trees removes the carbon sink and releases the CO_2 stored during the tree's growth. However, over the tree's life cycle, trees will naturally die and the rotting wood will release CO_2. Harvesting trees for fuel doesn't change the end result; only the timing.

Townshend's Preferred Locations

Townshend has defined preferred locations by a list of criteria which a proposed site must meet. The sites must conform with this list in order to achieve "preferred" status. Please see Policy 5 for specific criteria.

The Town of Townshend supports residential and community scale renewable energy generation facilities in a manner that comports with existing and proposed land use designations, does not adversely affect the landscape pattern or character of the Town, supports positive community development, and aligns with statewide preferred locations. Generally, the town promotes energy generation development in locations that are previously disturbed and do not offer significant opportunities for future development.

These areas would include:

- Rooftops
- Mines
- Quarries
- Closed landfills
- Historic impervious surfaces with no adverse ecological impact from development
- Brownfield sites

- Gravel pits
- Municipally designated "preferred sites"

All Municipally Designated Preferred Sites must meet the following criteria:

- Minimal impact upon agricultural use
- No disruption of wildlife travel corridors or living habitat
- Lack of impact upon the scenic resources of Townshend as noted in the Town Plan
- No interference with riparian buffers
- Existing road structure suitable for installation and maintenance

In addition, Municipally Designated Preferred Sites must meet one, or more, of the following criteria:

- Town owned land, especially if it is cleared and has good solar orientation
- Proximity to 3 phase power lines to reduce utility infrastructure expansion
- Location near the end of utility distribution lines for grid support
- South facing slopes having low quality agricultural soils which allow higher density solar arrays

Extra consideration should be given to these under-utilized and previously disturbed areas that exist within the areas modeled to have prime resource potential (see *Energy Maps*), and do not conflict with existing and proposed designated land uses. Refer to the *Energy Goals, Policies, and Action Steps* section below for policy statements regarding preferred generation sites.

General and Specific Siting Guidelines for Energy Development Projects

In addition to the suitability analysis undertaken as part of the mapping exercise of this Energy Element, the Planning Commission has identified a list of generic siting guidelines to promote appropriate small-scale renewable development in Townshend that does not compromise the Town's historic and planned pattern of development, environmentally sensitive areas, and highly-valued natural, cultural and scenic resources. These general siting guidelines compliment and reflect the findings determined through the above siting analysis and accompanying policies.

Solar Energy Facilities Policies:

SITE PLACEMENT. The most critical element in the siting of a project is its aesthetic placement on the landscape. Poor siting cannot be adequately mitigated. Accordingly, all renewable energy projects must evaluate and address the proposed site's aesthetic impact on the surrounding landscape. Good sites have one or more of the following characteristics:

a. Roof-mounting;
b. Proximity to existing larger scale, commercial, industrial or agricultural buildings;
c. Proximity to existing hedgerows or other topographical features that naturally screen the proposed array from view from at least two sides;
d. Reuse of former brownfields or otherwise impacted property.

Poor sites have one or more of the following characteristics:

a. No natural screening;
b. Topography that causes the arrays to be visible against the horizon or skyline from common vantage points like roads or neighborhoods;
c. A location in proximity to and interfering with a significant viewshed. Significant viewsheds within the Town of Townshend include: the scenic corridor of Route 30 from the Newfane town line to the Jamaica town line and all of Route 35 within the town. See the Scenic Resources section above for a more complete listing.
d. The removal of productive agricultural land from agricultural use.

MASS AND SCALE. The historical working landscape defines Townshend. Rural structures like barns fit into the landscape because their scale and mass generally do not impact large tracts of otherwise open land. All commercial scale solar arrays shall also be limited in mass and scale, and/or have their mass and scale broken by screening to fit in with the landscape. Commercial solar projects larger than 150 kW are larger than any other structure within the Town of Townshend and, unless adequately screened or mitigated to blend into the town's landscape, are prohibited.

Projects found to have poor siting characteristics pursuant to the Site Placement Standards contained in Section 1, above, and/or projects found to violate the maximum Mass and Scale standards contained in Section 2, violate the Town's standards regarding orderly development.

3) MITIGATION METHODS. In addition to properly siting a project, solar developers must take the following action to mitigate the impacts of project sites:

a) Locate the structures on the site to keep them from being "skylined" above the horizon from public and private vantage points;

b) Use shorter panels when more appropriate in certain spaces than taller panels to keep the project lower on the landscape;

c) At a minimum, for all solar arrays observe at least the minimum setback requirements governing solar installations contained in 30 V.S.A § 248(s). Ground mounted solar arrays of 15 kW or less shall be setback from State or Town roads by 25 feet and from property lines by 15 feet.;

d) Use the existing topography, development, or vegetation on the site to screen and/or break the mass of the array;

e) In the absence of existing natural vegetation, the commercial development must be screened by native plantings beneficial to wildlife and pollinators that will grow to a sufficient height and depth to provide effective screening within a period of five (5) years. Partial screening to break the mass of the site and to protect public and private views of the project may be appropriate;

f) Practice a "good neighbor policy." The siting of the array should be done in such a manner that the array creates no greater burden on neighboring property owners or public infrastructure than it does on the property on which it is sited. As an example, a landowner may not site an array on his or her property in a location calculated to diminish the visual impact of the array from his or her residence, but places the array immediately within their neighbor's or the public's viewshed. Locating a solar array in a manner designed to reduce impacts on neighbors or public viewsheds constitutes reasonable mitigation.

g) Use black, gray, or earth tone materials (panels, supports and fences that blend into the landscape instead of metallic or other brighter colors).

4) HISTORIC DISTRICTS, SITES, AND STRUCTURES. Energy facilities, including wind systems and solar photovoltaic (PV) or thermal panels, that are located in the Town's two designated historic districts, or on properties with federal or state-listed historic structures, are to be sited in accordance with current Secretary of the Interior's Standards for Rehabilitation, and the following:

a. The historic character of listed properties and structures shall be retained and

preserved. The removal of historic materials, or alteration of features and spaces that characterize a property shall be prohibited unless they are required for health and safety reasons, as certified by a Vermont professional historic preservation expert and a Vermont health official.

b. Ground installations are preferred to roof-mounted installations on historic structures. Ground installations, to the extent functionally feasible, shall be installed in locations that minimize their visibility, such as a side or rear yard, and be screened from view of public rights-of-way and adjoining properties.

c. Roof-mounted systems may be placed on new construction, non-historic buildings, and additions.

d. Solar panels and other roof, or wall-mounted structures shall not be placed on primary building facades, including street-facing walls or roofs, unless there is no other suitable location on the site, or structure.

e. Roof, or building-mounted systems on an historic structure shall not physically damage the structure, alter its character-defining features, including existing roof lines, or dormers, nor obstruct significant architectural features such as overlaying windows or architectural detailing. Attachment points must be minimized and allow for future system removal

f. Roof-mounted installations are to be placed below and behind parapet walls and dormers on rear-facing roofs, where feasible. Panels should be mounted flush with and at the same angle as the existing roof surface and, on flat roofs, set back from the roof edge to minimize visibility. They should not be visible above the roofline of the primary facade. Panels and mounting systems must be compatible in color to established roofing materials to minimize their visibility.

5) DECOMISSIOINING AND RESTORATION: All projects shall be decommissioned at the end of their useful life and the property shall be restored to its pre-project condition. Developers of all projects 100 kW and greater shall provide the town with appropriate assurances to guarantee funding exists to decommission the project.

Wind Energy Towers Policies:

Wind energy turbine towers should be sited to minimize negative impacts on natural and scenic resources.

1. PUBLIC HEALTH AND SAFETY STANDARDS
    a. Noise generated by any energy facility, including wind energy systems, or by any other industrial or commercial facility or operation, shall not exceed the lesser of
        i. 45 dBA Fast Lmax as measured at any property line, or
        ii. 5 dBA Lmax above the ambient sound level.
    b. Wind energy facilities shall be sited or screened so that shadows cast by rotor blades will not result in shadow flicker on occupied buildings located within the viewshed of the project.
    c. Energy facilities, including wind and transmission towers, are not to be artificially lighted. Substation lighting should be the minimum necessary for site monitoring and security, should be cast downward, and must not result in light trespass or glare on adjoining properties.
    d. Energy facilities shall comply with all manufacturer specifications, state or industry safety and electric codes, and utility connection requirements. Documentation of code compliance may be required for facilities subject to municipal review.
    e. The maximum tower height for energy facilities including net-metered, or similar off-grid wind energy facility shall not exceed the lesser of (a) 120 feet in total height, as measured vertically from the ground to the rotor blade tip at its highest point, or (b) 50 feet in total height above the existing tree canopy.
    f. All ground-mounted small-scale wind energy facilities must be setback at least 2 times the total facility height, as measured vertically from the ground to the rotor blade tip at its highest point, from all property lines, occupied buildings on adjoining properties, overhead utility lines, public and private rights-of-way and established trail corridors, unless easements are secured from adjoining property owners.
        i. Guy wires used to support wind towers are exempt from minimum distance setback requirements, except they shall be set back at least 20 feet from all property lines.
        ii. Facility setback distances from property lines, or from occupied structures in existence at the time of application, shall be increased as necessary to mitigate identified public health and safety hazards or nuisances to adjoining property owners (e.g., noise, vibration, glare, shadowing and shadow flicker, ice throw).
    g. The blade tip of any wind turbine shall, at its lowest point, have a ground clearance of no less than 30 feet, as measured vertically from the ground to the tip of the rotor blade at its lowest point.
    h. Facility access shall be provided from existing access roads where physically feasible, and, where feasible and safe access roads and utility corridors shall be shared, to minimize site disturbance, resource fragmentation, the creation of additional edge habitat, and the introduction and spread of invasive exotic species.
    i. Public access to generation and transmission facilities, including substations, shall

be restricted as necessary to protect public health and safety.

j. Utility controls and onsite line connections shall be wireless or buried, except at the point of connection with distribution lines, transmission lines and substations.
k. Energy facilities and structures shall not be used for display or advertising purposes. Signs, except for owner and manufacturer identifications and safety warnings, which exceed one square foot are prohibited on all facilities and structures.
l. Facility operation shall not reduce or interfere with television, radio, telemetry, or other telecommunications signals, including public safety communications systems.
m. Generation facility permits or certificates must include provisions for system abandonment, decommissioning and site restoration.

2. VISUAL IMPACTS.

Applicants shall demonstrate through site planning, facility siting and proposed mitigation that the visual impacts of new and upgraded energy facilities will be minimized as outlined in the standards set forth below:

a. All energy facilities and accessory structures are to be designed and constructed of materials, colors, and textures that blend into the surrounding natural or built environment. Wind towers, turbines and blades shall be of a neutral, non-reflective and unobtrusive color (e.g., white, off-white or gray).
b. Facilities are to be sited to outside of, or to the edge of scenic views or viewsheds so that they are not a prominent focal point.
c. The facility should not extend above the background horizon line as seen from populated areas or from locally designated scenic roads, as listed above in Scenic Landscape and Views, or as subsequently designated by the Townshend Selectboard.
d. The facility should be screened from view through the use of existing topography, structures, vegetation or strategically placed tree, shrub and ground cover plantings that do not block distant views.

Existing Renewable Energy Generation

Townshend has a large amount of installed generation capacity from both hydro and solar.

Table 6: Renewable Energy Generation in Townshend

Existing Renewable Energy Generation (2024)		
Renewable Energy Type	**KW installed**	**Annual kWh generated**
Solar Installations	586.05	770,070
Wind Installations	4.7	9,264
Hydro Installations	960	4,204,800
Biomass Installations	N/A	N/A
Total Existing Renewable Energy Generation	1,551	4,984,133

Townshend's Energy Targets, Conservation Challenges, & Equity Goals

As part of Vermont's 2022 Comprehensive Energy Plan (CEP), the Public Service Department released updated guidelines to assist regions and municipalities in establishing targets for renewable generation, energy efficiency, conservation, and fuel-switching across energy sectors. The majority of the energy targets presented in this section have been derived from the LEAP model's CAP Mitigation scenario (see below), which was also updated as part of the 2022 CEP. The Windham Regional Commission assisted Townshend in developing town energy targets, which are detailed and described below. Energy targets embody the rate of progress modeled in the CAP Mitigation scenario, and as a result, are aspirational by nature. They indicate the areas where progress on certain energy issues is most needed, and can help the town identify strategies to direct local policymaking in support of state energy goals.

Energy Generation Targets

Renewable generation targets are developed at the regional level and disaggregated to municipalities using guidance from the Public Service Department. The Public Service Department assigned generation targets to each region in Vermont by disaggregating the projected 2050 statewide electrical demand (modeled in LEAP) to regions based on an even proportion of land area and population. Regions were then tasked with breaking out this analysis to municipalities to support local enhanced energy planning.

Information from the Public Service Department and the LEAP model indicates that the Windham Region currently exceeds its state-assigned generation target due to the disproportionate amount

of renewable energy generated relative to the Region's population.[13] As a result, Townshend does not have a specific number of MWh it needs to generate to help the region and state meet its goals.

In the intervening years since the 2017 town plan update, Townshend has added significant renewable energy generation from the Townshend Dam hydro-electric facility and the addition of a number of new solar installations. It is anticipated that with the ongoing adoption of rooftop solar installations, the megawatt-hours of renewable energy generation will continue to grow in the future.

Although renewable energy generation in the town is increasing and supplying its residents with reliable, affordable, and clean power, at the same time the town is challenged by the increase in electric demand because of the shift from fossil fuels to electricity. In order to minimize the amount of energy generation required, the town must first develop strategies to conserve the amount of energy consumed through improved efficiency.

Projected Energy Use: LEAP Model Results

To help inform the town's policies on energy conservation measures, the town used guidance from the updated LEAP (Low Emissions Analysis Platform) model, conducted by the Stockholm Environmental Institute as part of the state's Comprehensive Energy Planning and Climate Action Planning initiatives. The LEAP model is used to guide the state's regions towards reducing the amount of greenhouse gas emissions and consuming 90% renewable energy by 2050 (referred to as the "90x50" goal). To accomplish the state's energy goals, there are several interim benchmarks built into the LEAP model which ensure a progressive pace in attaining that "90 x 50" goal. The state energy goals are:

- Greenhouse gas (GHG) reduction requirements
    - 26% from 2005 levels by 2025
    - 40% from 1990 levels by 2030
    - 80% from 1990 levels by 2050
- 25% of energy supplied by renewable resources by 2025 (25 x 25)
- Building efficiency of 25% of homes (80,000 units) by 2020.

Incorporating those goals into the model produced energy generation, conservation, and fuel conversion targets for benchmark dates for all regions in the state, and is informed by the region's current energy profile. The Windham Regional Commission received the results from this model and was tasked with making those results relevant to its member-towns. The Windham Regional

[13] The Public Service Department's Generation Scenarios disaggregates LEAP's projected statewide electrical demand in 2050 (11,943,816 MWH) to regions. With an equal proportion of land area and population as the basis for the disaggregation, and the 25% in-state generation goal in mind, the Windham Region's 2050 generation target is 262,763 MWh annually. The Region currently generates 623,819 MWh annually.

Commission therefore divided its region-wide benchmark targets among its towns based on current municipal consumption.[14]

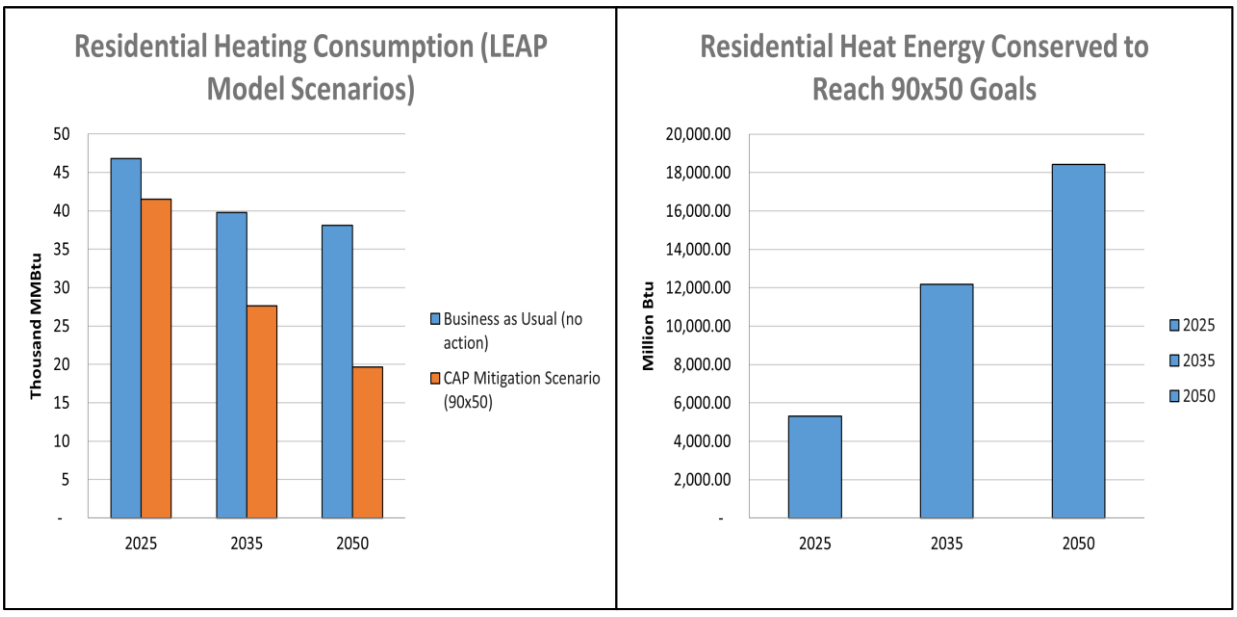
The following paragraphs and figures show Townshend's LEAP model results, and how much energy could be conserved in order to reduce the burden on energy generation facilities in the region.

Residential Heating Conservation & Fuel Conversion

The updated LEAP model produced both a "Business as Usual" and a "CAP Mitigation" scenario in order to determine how much energy will have to be conserved and/or how much fuel consumption will need to be converted to renewable sources. The "Business as Usual" scenario is meant to depict energy use over decades if no major changes were made in the town's energy profile. The "CAP Mitigation" scenario shows one pathway that communities can adopt in order to reduce greenhouse gas emissions, conserve energy, and generate renewable energy so as to meet the state's 90x50 goals. This pathway is translated to Townshend's energy profile, and is shown below. It is an estimate that is intended to help guide the town in developing its own policies for energy conservation and fuel conversion.

The table below shows the updated thermal sector targets derived from Townshend's 2022 LEAP results. In both the Business as Usual and CAP Mitigation scenarios, energy consumption is modeled to decrease (on account of technological improvements, building innovation, and home efficiency improvements).

Figures 7 & 8: Townshend LEAP Model Results for Residential Heating Sector



[14] Municipal allotment of regional efficiency, conservation, and fuel conversion targets was undertaken using a simple method based on municipal consumption in accordance with state guidance.

However, the 90x50 scenario shows a sharper increase in the amount of energy conserved in the residential heating sector. The above graph shows how much energy should be conserved, through 2025, 2035, and 2050, to help the town meet these energy goals. Not only would energy need to be conserved by building efficiency measures, but fuel conversion to more renewable energy sources would be promoted. In order to attain the renewable energy goals, the following targets have been established for Townshend for years 2025, 2035, and 2050:

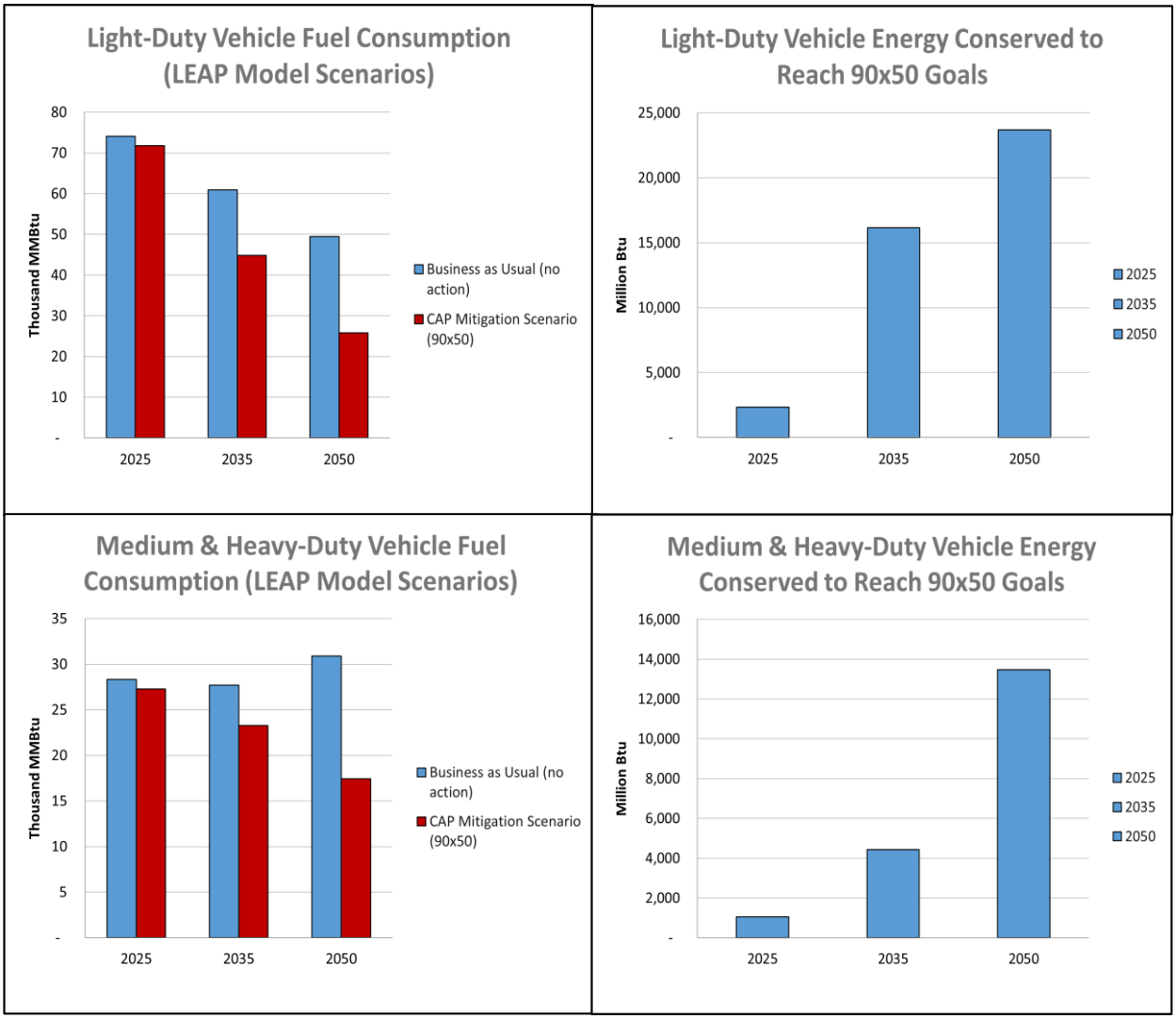
Table 7: Heating Energy Targets

Energy Initiatives for Heating	**2025**	**2035**	**2050**
Weatherized Households over benchmark years	139	300	485
New Efficient Wood Heat Systems (wood & pellet stoves)	130	79	41
Share of Residential Thermal Demand Met from Biofuel	2%	18%	16%
New Cold Climate Heat Pumps in Town Residences	148	397	585
Percentage of Heating Fuel from Renewable Energy	48%	79%	94%

Transportation System Changes

The LEAP model created benchmark targets for light, medium, and heavy-duty vehicles, assuming a difference in residential and industrial energy needs and changes over time. Below are the two interpretations of these sector's efficiencies over time.

Figures 9,10, 11, & 12: Townshend LEAP Model Results for the Transportation Sector



Light-duty vehicle consumption represents a larger portion of the total amount of energy consumed by the transportation sector, and there is a large amount of energy conservation required. The LEAP model projects much of this conservation of energy comes from the electrification of the vehicle fleet, especially as market demand changes and technology improves. This reduction in gasoline consumption and electrification of the car motor comes in addition to increased cluster developments and other land use changes that improve the efficiency of our community's transportation network. The following targets for the years 2025, 2035, 2050 are set for the town's transportation fuel conversion:

Table 8: Transportation Energy Targets:

Energy Initiatives for Transportation	**2025**	**2035**	**2050**
New Electric Vehicles	26	271	637

Percentage of Biodiesel Fuel Use	5%	4%	2%
Percentage of Fuel from Renewable Energy	10%	31%	90%

Heavy-duty vehicle consumption doesn't show the same curves as does light-duty vehicles, since commercial and industrial applications for this vehicle fleet isn't anticipated to change as much. However, efficiency in this sector is achieved by changing the fuel type for these vehicles from diesel to biodiesel.

Electricity Conservation

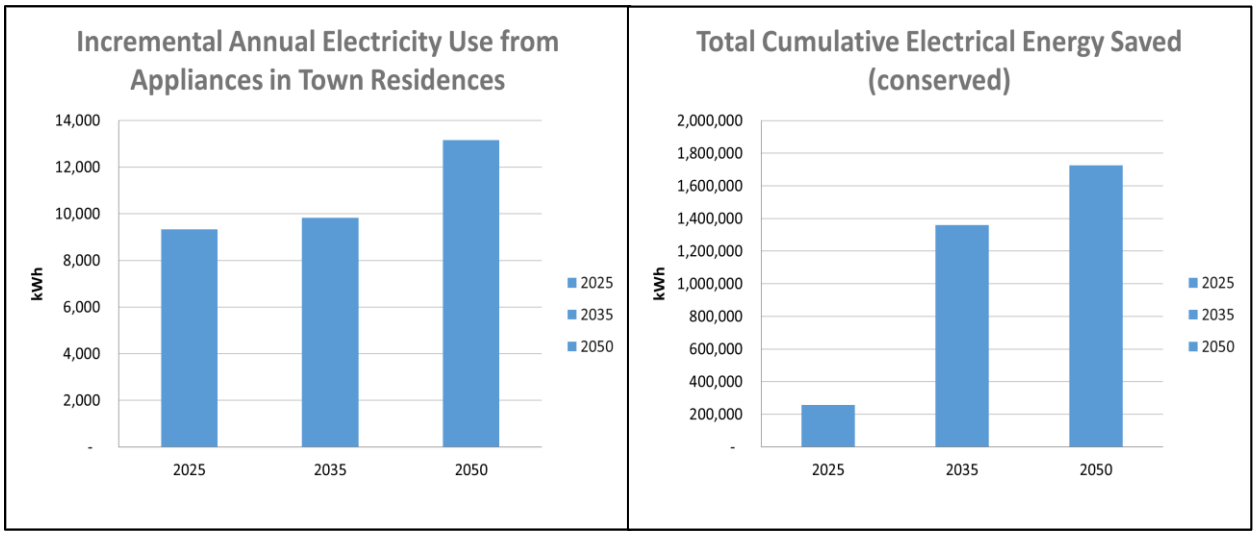
Targets for electrical efficiency and conservation are not derived from the LEAP model, but rather, the 2022 Energy Efficiency Market Potential Study. As a result, it is impossible to align the below targets with either the "Business as Usual" or "CAP Mitigation" scenarios. The Energy Efficiency Market Potential Study Data provides a proxy estimate for the amount of electric efficiency included in the demand projections embedded in the LEAP model.

Over the benchmark years, electricity consumption is anticipated to increase due to a combination of more amenities, appliances, and motors being supplied by electric power, and an increase in the number of people using those products. Electrical conservation is achieved through the use of energy-efficient appliances, lighting, and heating/cooling. Pursuing these upgrades, the town is targeted to save the following in electrical conservation measures for target years 2025, 2035, 2050:

Table 9: Electric Energy Targets:

Energy Initiatives for Electricity Conservation	2025	2035	2050
Total Cumulative Electrical Efficiency Savings (kWh)	257,697	1,360,134	1,724,858
Incremental Annual Electricity Use from Residential Appliances (kWh)	9,329	9,823	13,148

Figure 13: Electric Efficiency Results from EEU Market Potential Study



Conservation and Efficiency Strategies

With total energy expenditures in the town in excess of $5.6 million (see *Current Use,* above), there is considerable opportunity for savings from various energy conservation and improved efficiency measures. Because most of the energy use in Townshend is for private uses (home heating, commuting, etc.), savings would accrue primarily for residents. Public education is one of the most effective strategies to bring about savings through energy conservation and improved efficiency, though there are some additional policies that can also move the community in that direction.

New construction in Townshend is required to meet or exceed the Vermont Building Energy Standards (for both residential and commercial buildings) through the use of insulation, heating systems, and weatherproof windows and doors. Current building codes provide basic energy efficiency requirements for buildings; however, technology advancements will continue to improve energy efficiency. Green construction and LEED Construction (Leadership in Energy and Environmental Design) standards promote the use of natural, recycled and durable building materials, as well as energy efficiency.

The siting, design, and construction of buildings strongly influences the amount of energy needed for heating as well as the amount of electricity needed for lighting. Proper subdivision design, building orientation, construction and landscaping provide opportunities for energy conservation

such as less vehicular travel, and by designs incorporating passive solar space and domestic hot water heating, natural lighting and photovoltaic electricity production.

Energy savings can be realized by retrofitting existing buildings with insulation, installing high-performance windows and doors to reduce heat loss, weather-stripping, replacing incandescent lights with LEDs, and using energy efficient appliances. The following programs are available to residents of Townshend:

Southeastern Vermont Community Action (SEVCA): SEVCA is the service provider in Windham County that runs the Weatherization Assistance Program. Weatherization services, which include an energy audit, diagnostic tests, analysis and installation measures, are available at no cost to income-eligible homeowners and renters. SEVCA is also available to help in the event of a heating emergency. They can help purchase oil, kerosene, propane or wood. In addition, they also work with electric companies in order to prevent disconnection and help negotiate payment plans.

Efficiency Vermont: Efficiency Vermont is the State's provider of energy efficiency services. They provide technical and financial assistance to electrical consumers for the purpose of improving the efficiency of existing and new facilities.

Energy Star Home Rebates: Energy Star Homes meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and U.S. Department of Energy. Efficiency Vermont provides free financial, design, and technical assistance to help build an Energy Star qualified home. Benefits of being an Energy Star home include financial incentives such as product rebates; utility savings; higher resale value; increased comfort and air quality; and other environmental benefits.

Vermont Housing Finance Authority's Energy Saver Loan Program: Administered by Windham Housing Trust, this program offers low interest loan funding for homeowners for an energy audit and improvements specified in the audit.

Transportation-related efficiency strategies are a very significant part of Townshend's efforts, since it represents a significant portion of the energy demand. Simple changes, such as ride-sharing, combining trips and using alternative transportation, will conserve fuel and reduce wear and tear and maintenance costs on individual vehicles. Fuel efficient and electric cars will use less gasoline and emit less pollution.

Effective land use planning can promote energy conservation. Targeting new development toward areas located close to the community's major roads and existing settlements will minimize the energy consumed by residents commuting, and will reduce the energy required to deliver essential services to residents and businesses.

Energy Equity and Energy Burden

In addition to aligning local energy policies with regional and state initiatives, Townshend strives to incorporate energy equity and environmental justice principles into the town's efforts to decarbonize and conserve energy.

Among those most impacted by the price of energy (and other associated environmental burdens) are environmental justice focus populations, defined by Act 154 as any census block group in which:

- The annual medium household income is not more than 80% of the State median;
- Persons of Color or Indigenous Populations comprise at least 6% or more of the population;
- At least 1% or more of households have limited English proficiency.

Other frontline populations include older individuals, people with disabilities, and renters, all of whom experience greater vulnerability to fuel price volatility and other concerns for energy planning. Townshend seeks to improve outcomes for environmental justice groups and promote efficiency and conservation measures that prioritize these focus populations. One strategy the town can take to embody this approach is to pursue policies that reduce energy burden.

Energy burden is defined as the proportion of household income spent on home heating, transportation fuel, and electricity. Below is a table summarizing the energy burden analysis conducted for Townshend as part of Efficiency Vermont's most recent 2023 Energy Burden report.

Table 10: Townshend's 2023 Energy Burden Profile

Energy Burden Analysis (2023 EVT Report)			
Thermal Energy Burden	**Transportation Energy Burden**	**Electricity Burden**	**Total Energy Burden**
3.0%	3.8%	1.8%	8.7%

The town's total energy burden is 8.7%, which is below the Vermont average of 11.0%[15]. The national average is 6.0% but does not include transportation related energy. Townshend compares favorably on a national basis at and adjusted energy burden rate of 4.9%

Townshend will continue to support programs and organizations that provide incentives, rebates, and other awards to income-eligible residents who are a part of the town's environmental justice community (see Conservation and Efficiency Strategies section). The highest-priority measures from an energy burden perspective include fuel assistance programs, discounted rates for income eligible households, disconnection protections, and other fiscal policies.

[15] Efficiency Vermont 2023 Energy Burden Report by Justine Sears and Kelly Luci

Energy Goals, Policies, and Action Steps

1. Policy One: Townshend will reduce total energy use by promoting energy conservation and efficiency measures for space heating.
    a. Action Step 1.1: The town will encourage appropriate energy conservation and efficiency measures and renewable energy generation by individuals and organizations through public education, awareness, and engagement including convening weatherization workshops which will explore funding sources and support.
    b. Action Step 1.2: The town will promote compliance with residential and commercial building energy standards for new construction and existing buildings, including additions, alterations, renovations and repairs.
    c. Action Step 1.3: The town will promote the switching of heating fuels to wood, heat pumps, liquid biofuels, biogas, and geothermal, and will apply these switches to town buildings when economically feasible.
    d. Action Step 1.4: The town will pursue building audits and weatherization projects in town owned buildings.
2. Policy Two: Townshend will reduce total energy use by promoting energy conservation and efficiency measures for transportation.
    a. Action Step 2.1: Townshend will promote ride-sharing by promoting GoVermont! And by supporting the Safe Routes to School program.
    b. Action Step 2.2: Townshend will provide education and outreach of electric vehicles and work with surrounding towns to organize energy fairs, including EV test driving.
    c. Action Step 2.3: Townshend will implement improvement that encourage safe and convenient walking and biking.
    d. Action Step 2.4: The Town will lead by example with respect to efficient transportation, and provide opportunities for telecommuting and remote participation in town events.
3. Policy Three: Townshend shall promote land use patterns and development densities that result in the conservation of energy.
    a. Action Step 2.1: Minimize the need for new facilities and reliance on private automobiles by encouraging concentrated development, and discourage new development least accessible areas of the community
    b. Action Step 2.2: Promote land use and conservation policies that encourage ongoing forest management to maintain a local source of fuel-wood and agriculture to maintain and increase the supply of locally produced food.
4. Policy Four: The Town of Townshend will locate zones and/or areas appropriate for renewable energy generation based on resource potential and development constraints including bio-mass using local wood supplies, solar, and dispersed small-scale wind, solar and hydro-power sources.
    a. Action Step 4.1: Support the preference of active and passive solar installations specifically on rooftops, rather than larger scale ground mounted utility installations.
    b. Action Step 4.2: Support small-scale, residential wind generation facilities where there are no adverse visual, ecological, or sound effects to nearby residences

c. Action Step 4.3: Support permit-able small-scale hydro systems where there are minimal adverse effects on the geomorphic stability or ecological health of the water body.

5. Policy Five: Prohibit utility-scale and commercial wind development.

6. Policy Six: Encourage any potential commercial generation facilities to be within the areas deemed most suitable in preferred areas meeting the following criteria: former gravel pits, quarries, or other heavily disturbed areas. Existing commercial buildings or facilities with generous rooftop availability that is capable of hosting solar photovoltaic installations.

7. Policy Seven: When considering upgrades to, or expansion of, transmission infrastructure or 3-phase power lines, encourage the strategic development of energy generation facilities so that community centers and local businesses may benefit from the infrastructure upgrades, thereby maximizing positive community development overall.

8. Policy Eight: Review any renewable energy generation facilities in the designated Village Districts and the Health Care Services District that do not conform to existing land use or landscape patterns, or do not conform with the Village character.

9. Policy Nine: The Town of Townshend will demonstrate leadership by example with respect to the deployment of renewable energy by evaluating the feasibility of energy generation facilities on Town Property.

XII. HOUSING

Existing Conditions & Affordability

In 2020, the Decennial Census documented that 1,291 people lived in Townshend. Between 2000 and 2010, the Town's population increased by 83 people (7.2%). Between 2010 and 2020, the population increased by 59 people (4.7%). Townshend has experienced relatively stable population growth that has slowed gradually since the 1990s. The trend of slow growth is somewhat a standout compared to neighboring towns like Newfane, Jamaica, and Wardsboro, all of which experienced a decrease in population since the last Census. One possible explanation for Townshend's continued growth is that the Town provides multiple services to the area that continue to attract residents, like two public schools and a rural hospital.

Some key indicators from the 2020 Census suggest that the rate of housing production has not kept up with population growth. From 2010 to 2020, the total number of housing units in Townshend decreased from 784 to 760 (3%). It is somewhat unclear why this shift in the data occurred, which doesn't match local observations. A possible explanation might be that seasonal households and populations (accounted for in places like the West River Camperama) might be fluctuating from year to year. In Townshend, 25% of housing units are for seasonal, recreational, or occasional use, up from 23% in 2010. For some years, single-family units have accounted for the majority of all new housing in Townshend.

A special challenge to all communities throughout Vermont, particularly for smaller rural communities like Townshend, is the task of adequately meeting the housing needs of low and moderate-income citizens.

In Vermont, affordable housing is housing that a household, (with an income at or below 120% of the county's median income level), can afford without spending more than 30% of its household income to secure. Housing costs for renters include rent and utilities, while housing costs for homeowners include mortgage payments, insurance, and property taxes.

A household is cost-burdened when it spends more than 30% of its income on the housing costs described above. A household is severely cost-burdened when it spends more than 50% of its income on housing. In 2020, 12% of Townshend's households were cost-burdened, and 7% were severely cost-burdened. Townshend's per capita cost burden data is lower than Windham County's, where 20% of households are cost-burdened and 16% are severely cost-burdened.

The wage a household must earn in order to afford a rental unit at Fair Market Rent and only pay 30% of its income towards housing costs varies depending on the number of bedrooms in a unit.[16] The proposed 2025 Fair Market Rent for a two-bedroom unit in Windham County is $1,354. This monthly cost requires a renter to earn an hourly wage of $26.03 (assuming a 40-hour work week),

[16] Fair Market Rent is the 40th percentile and what is commonly used by the US Housing and Urban Development (HUD). Median rent would be the 50th percentile.

equaling an annual income of $54,156. For further information on occupational wage estimates for Townshend, see the *Economy Chapter*.

According to the Vermont Department of Taxes, the median purchase price for a primary residence in Townshend in 2024 (based on 11 homes sold) was $184,000, and the average price was $259,114.[17] To purchase a primary residence at the median cost, a yearly household income of $61,846 would be needed.[18] According to the Census, the 2023 median annual household income for a family of four in Townshend was $70,208. For additional information and statistics about housing in Townshend, see the Community Profile section.

Housing Needs

It is important to ensure that the Town's housing supply meets the demands of its population and that existing and future residents have access to diverse housing opportunities. Indicators from the Census suggest that in Townshend, the rate of housing production has not kept up with population growth. This challenge should be studied and addressed moving forward.

The Town recognizes a need to encourage more workforce housing to sustain community services and the local economy. In particular, the Planning Commission has identified a noticeable lack of affordable rental units in town and an absence of willing investors who want to build more affordable housing. The Town could potentially overcome this challenge by collaborating with non-profit partners, especially if projects were to leverage state or federal funding to subsidize the creation of new housing. With no municipal sewage or water facilities in Townshend, there are distinct limits on multi-family dwellings and larger housing projects. However, the Town is interested in studying the need for municipal water and sewer infrastructure and recognizes its role in constructing housing at scale.

[17] The median price of primary residences sold is the middle of selling price of all primary residences sold in ascending order for the given year.

[18] This has been calculated using the Vermont Housing Data online Home Mortgage Calculator (www.housingdata.org). It assumes a 5% down payment, average interest rates, average property taxes, average property and private mortgage insurance premiums, average closing costs, and that a homebuyer can afford to spend 30% of their income for housing expenses.

Housing Opportunities

Townshend is fortunate to have the West River Valley Senior Housing and Assisted Living development (renamed Valley Village in 2024), which was completed in October 2014 through Valley Cares and Housing Vermont. The development provides seniors with 24 Independent Living units, 28 Assisted Living units, and 12 Supportive Housing units. Most of the units are affordable to lower and moderate-income elderly.

Meals on Wheels is currently provided by Neighborhood Connections. (www.ncvermont.org, 802 824-4343) Meals on Wheels keeps high-risk, older adults, who often have chronic health conditions, safer and healthier in their own homes. As of this writing, they provide approximately 860 meals per week in Townshend. (Meals are delivered on Monday, Wednesday and Friday (may vary due to holidays). Deliveries may include more than one meal.

A person is eligible for Meals on Wheels if they are 60 or over and unable to obtain or prepare meals on a temporary or permanent basis due to a physical or mental condition (either ongoing or temporary), a lack of or inadequate facilities to prepare meals, or inability to shop, cook, or prepare meals safely. Their spouses and caregivers (of any age) are also eligible. In addition, those under 60 years of age living with a disability may receive meals. In general, those wishing to register themselves or their loved ones for meals should call Senior Solutions, at 802-885-2669. They will then be referred to Neighborhood Connections to start delivery. Those under 60 and disabled should call the Vermont Center for Independent Living at 802-224-1825 for their intake interview. For urgent start requests, such as with a hospital discharge or sudden medical issue, first call directly at 802-824-4343 to initiate next-day start-ups.

Another opportunity includes the potential to encourage more affordable housing through partnerships with community organizations and regional networks. The Windham-Windsor Housing Trust (WWHT) creates and manages affordable housing projects through various programs serving low and moderate-income residents. WWHT can also provide income-eligible homebuyers with a subsidy towards purchasing a qualifying home. In addition, homebuyers under this program have access to below-market-rate mortgages and financial assistance with closing costs. Nonprofits like Windham-Windsor benefit from subsidized project funding, offsetting the costs that would otherwise preclude development from occurring in the towns they work with. Southeastern Vermont Community Action Agency (SEVCA) provides referrals to area shelters and landlord lists and assists in completing applications for affordable housing possibilities. SEVCA also operates weatherization and fuel assistance programs for income-eligible homeowners and renters (see the Energy Chapter for further information). The Southeast Vermont Housing Rehabilitation Loan Fund provides loan funding for low and moderate-income homeowners to maintain safe and affordable housing. Townshend supports continued dialogue with regional organizations to address local housing needs, increase affordability, and identify potential sites for new housing.

Townshend's Town Plan policies also encourage accessory apartments within or attached to single-family residences. Accessory dwelling units (ADUs) are an affordable alternative to traditional rental units that help meet the needs of low-income, disabled, and elderly residents.

ADUs provide property owners with a revenue stream that would otherwise not be available. This income source can help offset mortgage costs, potentially decreasing the burden of housing costs for homeowners.

Barriers

Subsets of Townshend's population that may struggle to afford local housing are elderly residents on a fixed income and single-parent families. The 2023 American Community Survey indicated that Townshend had 162 householders living alone, 54% (87) over 65. In 2020, there were 18 single female heads of household and 24 male heads of household in Townshend, which had children living with them under 18 years of age.

In addition to these populations, the Town recognizes that high real estate costs make housing unaffordable to young couples and families. The Town's aging housing stock is particularly relevant here because high renovation costs may dissuade potential home buyers from moving to Townshend. Some possible solutions worth examining are state programs that help with home ownership and renovation, like the Vermont Housing Improvement Program, for example.

Housing Policies:

1. Future development should occur on sites capable of maintaining permanently functioning on-site sewage and water facilities.
2. Support a healthy diversity of housing to meet the needs of low and moderate-income households.
3. Encourage accessory apartments within, or attached to single-family residences that provide affordable housing in close proximity to cost-effective care and supervision for relatives, disabled individuals, or elderly populations.
4. Encourage new residential development in the villages that is compatible with existing architecture and community character. Outside the villages, development should have minimal impact on natural resources, open space, and important agricultural and forest lands.
5. Engage in continual dialogue with residents, employers, town officials, non-profit organizations, and developers to continually study the issue of housing, and identify potential sites that could support new affordable housing.

Priorities for Action:

1. Support and collaborate with Grace Cottage Hospital efforts to provide affordable housing for healthcare staff throughout the eight-year cycle of this Town Plan.
2. Investigate and support the development of a housing needs assessment to quantify shortcomings in housing availability for low-income residents, seniors, and physically disabled persons.
3. Create a housing program to address the housing needs of low and moderate-income

residents based upon findings and insights gathered from the housing needs assessment.

4. The town shall study the need for municipal water supply and sewage treatment facilities for village districts in order to maintain property values and assure public health.

XIII. ECONOMY

For a small rural town of 1,291 people, Townshend has a diverse economy. It has become a center for healthcare and supports a regional high school serving grades 6-12. A diversity of industries is represented in Town with the highest concentration of jobs in healthcare and education. Major employers are Grace Cottage Hospital, Mary Meyer Corporation, River Bend Farm Market, the Townshend Elementary School, and Leland and Gray Union High School.

Products from our forests and fields, while less than in the past, are very significant to our economy. The list includes logs for lumber, firewood, maple sugar products, Christmas trees, fruit and organic produce, cheese and other dairy products: also, bison, horses, sheep and llamas. Many of these land-based products are supported through local demand, like cord wood, which homeowners often purchase and use to heat homes locally. Markets like the West Townshend Farmer's Market and River Bend Market help foster this demand and create an important context for community agriculture.

Some of Townshend's land-based products are the result of part-time activities, but they all contribute to Vermont's working lifestyle that so intrigues visitors. Townshend's farmed and forested landscapes are vital to the community, contributing directly to local livelihoods, and attracting visitors who further stimulate the local economy.

Route 30 provides a steady stream of traffic who add to our economy and support the many businesses and services comprising the community. The natural scenic beauty of the mountains, villages, and river valleys invites visitors to stop and shop, eat and sleep, hike, bike and ski. Major ski resorts nearby offer all-season activities and provide year-round employment opportunities. Outside of the ski resorts, there are many locations ideal for winter recreation like cross-country skiing and snowmobiling. The recreational facilities at the Townshend Dam and Townshend State Park were once major draw for tourists during the summer months, providing swimming, hiking, and camping opportunities. There is steady demand for Vermont-made food and crafts, as well as for sports equipment and related services. Owners of second homes make up a considerable percentage of the Town's population (25% of homeowners), and employ building tradesmen and property management services. Townshend's scenic beauty, myriads of working-lands industries, and year-round recreation opportunities continually attract tourists, and help to form a diverse and growing economic base.

Median Household Income & Employment

The estimated median household income for 2023 was $70,208. The Townshend school system and Grace Cottage Hospital remain the largest employers in Townshend. The latest American Community Survey confirms this fact, showing that just under a quarter of employment in Town falls under the education, health, and social services industries. Other large employment sectors in Town were construction and wood products, accounting for 22.6% of employment. The below table further contextualizes the earnings of town residents, with particular emphasis placed on jobs likely to found locally.

Table 11: Wage Projections for Southern Vermont Balance of State (2023).[19]

Occupation	Median Hourly Wage	Median Annual Wage
Registered Nurses	$37.77	$78,561
Medical and Health Service Managers	$53.61	$111,508
Healthcare Practitioners and Technical Occupations	$18.07	$37,585
Elementary School Teachers	n/a	$61,310
Secondary School Teachers	n/a	$59,860
Child Care Workers	$16.80	$34,944
Carpenters	$23.51	$48,900
Construction Laborers	$20.19	$41,995
Plumbers, Pipefitters, and Steamfitters	$23.29	$48,443
Recreation Workers	$14.43	$30,014

[19] Data source: Vermont Department of Labor. http://www.vtlmi.info/occupation.cfin

Property Taxes

Townshend's homestead property tax rate is in the top 15% of Vermont Municipalities. It is a challenge to provide the necessary public services and maintaining an affordable property tax rate. A large portion of the property in Townshend is tax exempt and not part of the grand list. Townshend is home to the regional high school, Leyland & Gray, a regional Elementary School, Grace Cottage Hospital, and four churches. In addition, the Townshend State Forest occupies 1,244 acres for which the Town receives $8,290 in 2024 or $6.66 per acre. The federally owned Townshend Dam facility occupies 951 acres of what use to be very productive bottom land, for which the Town is paid $5,656.00 annually, or $5.95 per acre. Both of these properties yield revenues in lieu of taxes to the town that are below comparable acreage of privately owned land.

Economic Development Policies

1. The town favors economic development that provides diversified and stable local employment opportunities with competitive wages to enhance Townshend's rural character and protect the community's natural resources.

2. Development should not overburden existing town services and facilities, nor require expansion of such facilities at public expense. Townshend desires to balance growth and additions to the tax base.

3. All agricultural, commercial and industrial operations must adequately control wastes, be environmentally responsible, relate satisfactorily to existing land uses, and minimize traffic congestion. Activities that cause repetitive excessive noise, noxious or hazardous wastes, soil and groundwater pollution, or traffic congestion are undesirable. Architecture and signage that is not in keeping with the character of the town should be discouraged.

4. Townshend encourages cottage industries, home-based work and entrepreneurial ventures that preserve and revitalize the town's character and add to the diversity of cultural and other activities available to residents and visitors.

5. Encourage production and marketing of land-based industries such as agriculture and forest products, and development of recreation and sporting facilities.

6. Support protection of farm and forest lands by encouraging donation of development rights to local government or qualified nonprofit land trusts.

7. Encourage businesses that support tourism, provide lodging, dining, and recreational activities for visitors.

8. Support agricultural demonstration, test projects, and other programs, including agri-tourism, community supported agriculture, consumer or producer cooperatives, and

farmers' markets. The Town should also encourage restaurants and markets to obtain and supply agricultural products from within the region and Vermont.

9. Encourage civic organizations: among them Windham Regional Career Center and the Leland and Gray Education Foundation, which promote education, occupational training and scholarships, and the Townshend Historical Society that supports historical preservation, education, and communication projects.

10. Motivate the Army Corps of Engineers to improve the environmental health, natural aesthetics and recreational utility of Townshend Lake, so it will once again be a draw for tourism.

Priority for Action

1. The town shall continue to formally petition the proper authorities to obtain a substantial increase in payments to Townshend in lieu of taxes for the state and federally owned property.
2. Army Corps of Engineers (Federal Government) shall be required to abide by the agreement requiring them to provide water recreation opportunities in lieu of property taxes. Complete restoration of the lake to its original size and depth are needed.

XIV. PLANNING PROCESS GOALS

1. To establish a coordinated and comprehensive policy framework, including a capital expenditure, or 5-year plan, to help guide local decisions.

2. To encourage citizen participation at all levels of the planning process.

3. To consider the use of resources and the consequences of growth and development in Townshend.

4. To coordinate with neighboring communities to develop and implement compatible municipal plans.

XV. PLAN RELATIONSHIP TO DEVELOPMENT TRENDS & TO PLANS FOR ADJACENT TOWNS AND THE REGION

Townshend is a focal point for towns in the West River Valley because of the regional high school and the complex of health care services. We have a cooperative relationship with our neighboring towns and look forward to continued collaboration in the planning efforts with our bordering communities.

When Vermont's Growth Management Law, Act 200, was passed in 1988, Vermont set up a system for communities to work in concert with their neighbors, and with agencies of state government, to shape the future. As envisioned, decisions on local growth issues are to be made by the local communities; decisions of regional significance are to be made by the region's communities acting in consort. Town Plans are to be compatible with the regional plan and compatible with approved plans of other municipalities in the region.

Athens: Athens is working on a Town Plan.

Brookline: (Town Plan adopted March 21, 2018) Brookline is located east of Townshend and can be accessed via Ellen Ware Rd and Brookline Rd. Brookline has four land use districts which abut Townshend; they are the Town Center District, Rural Residential Lands District, Resource Lands District and Conservation Lands. Brookline's Conservation Lands are meant to encourage the retention and acquisition of public or private conservation lands to promote recreation, reforestation, water conservation, and suitable forest practices. This is compatible with Townshend's abutting land use Resource Lands District which encourages protection of green space, particularly along streams and rivers, and other important lands that are valued for trails, open space, wildlife habitat, and scenic enjoyment.

Grafton: (Town Plan adopted January 13, 2020) Grafton is located north of Townshend and can be accessed via Grafton Rd. The land uses in the southern portion of Grafton that directly abut Townshend are Productive Rural Lands, Critical Resource Areas, and Resource Lands.

The Productive Rural Lands District is composed of areas that are best used for agriculture, forestry, low-intensity recreation, and open space. The Resource Lands District encompasses Grafton's significant natural resources areas, including high-priority forest blocks, wildlife habitats, and deer wintering areas. Grafton's Critical Resource Areas are specifically identified as having supreme value to the ecological health of the surrounding area, and have the most immediate need for environmental protection and conservation. These districts are compatible with Townshend's Resource District and Productive Rural Lands, under the assumption that commercial and residential densities remain low in the Productive Rural Lands Districts in Townshend and Grafton, which are outside of the Route 35 / Townshend Rd. corridor. Townshend and Grafton should work together in the next eight-year cycle of this Plan to assure that any development of rural residential lands will be at densities that contain rural sprawl and are sensitive to the limitations of the land.

Jamaica: (Town Plan adopted in November 13, 2017) Jamaica lies to the west of Townshend and can be accessed via VT Route 30. The Route 30 corridor and Jamaica's side of the town border includes Conservation and Rural Resource Area Land Use Districts, allowing for low density development at one unit per 27 acres for the Conservation District and one unit per five acres for the Rural Resource Areas District. Townshend's bordering Land Use District is primarily the Resource Lands District, which discourages residential or commercial development, the extension of roads, energy transmission facilities, and other services. These land use districts are largely compatible. Growth is clustered along West Townshend Village which runs along Route 30 into Jamaica.

Newfane: (Town Plan adopted in July 16, 2018) Newfane lies to the south of Townshend and can be accessed via Route 30. The Land Use Districts which border Townshend are the Resource Lands District and the Rural District. The Resource District is where Newfane identifies its areas where development should be discouraged and the land should be used for low intensity recreation, open space, or forestry. These areas would be considered a high priority for long term conservation efforts. The Rural District comprises areas that are already committed to development and primarily benefits from road access along Route 30. The district policies encourage development at densities that will contain rural sprawl. These Districts abut Townshend's Resource Lands District and State Forest District. These Districts encourage preservation of open spaces, wildlife habitat, wetlands, floodplains, and steep slopes. These uses are largely compatible.

Wardsboro: (Town Plan adopted in July 9, 2019) Wardsboro lies to the west of Townshend and is south of Jamaica, which also borders Townshend to the west. Townshend can be accessed via West Hill Road through Wardsboro. The Land Use Districts in Wardsboro which border Townshend are the Resource Residential and Conservation Districts. The Resource Residential District is comprised of working lands with substantial physical limitations to development, and encompass farms, fields, and forested lands. The Conservation District areas are large, essentially undeveloped areas dedicated to forestry, low intensity recreation, and open space. Wardsboro's land use districts abut the Resource Lands District in Townshend, covering lands primarily meant to preserve wildlife corridors, open space, wetlands, and fragile natural areas. The land uses are largely compatible. The towns of Townshend and Wardsboro should further discuss the future planning and development of this section of the border.

Windham: (Town Plan adopted in January 12, 2019) Windham lies northwest of Townshend and is accessed only through Back Windham and Windham Hill Roads. The Land Use District which borders Townshend is the Rural Residential District, however, Windham has decided to add a Resource Protection Area Overlay which covers most of the border region with Townshend. Townshend's border area is designated as a Resource Land. There should be no conflict with the designated land uses in both towns.

Compatibility with the Windham Regional Plan

The Windham Regional Plan, adopted September 30, 2014, and readopted on June 29, 2021. A new regional plan is currently going through the adoption process and should be adopted on July 29, 2025 and is intended to provide guidelines for the planning and coordination of development which will allow for a shared vision of the region's future that provides for a high quality of life, defined as a composite of our economic, social, cultural, and ecological well-being. The Townshend Town Plan is generally compatible with the land use and development goals of the Regional Plan.

XVI. TOWN RESPONSE TO VERMONT'S PLANNING GOALS

Goal 1: To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.

Response: The Town Plan acknowledges that Townshend's future development should occur primarily in presently developed areas. Every effort should be made to avoid sprawl and maintain a rural countryside.

Goal 2: To provide a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities in areas with high unemployment or low per capita incomes.

Response: The Town Plan's policies in the Economy section, as well as Natural Resources address these issues.

Goal 3: To broaden access to educational and vocational training opportunities sufficient to ensure the full realization of the abilities of all Vermonters.

Response: Leland and Gray Union High School sends students to the Southeastern Vermont Career Center in Brattleboro and also cooperates with businesses for career days and training programs.

Goal 4: To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.

Response: The Town Plan policies and priorities for action in the Transportation section support paths for pedestrians and bicyclists, and advocate for measures to increase safety for pedestrians and motorists as well as safety measures at dangerous intersections. Policies also support traffic-calming methods on Vermont Route 30 as well along Route 35 to Grace Cottage Hospital.

Goal 5: To identify, protect and preserve important natural and historic features of the Vermont

landscape, including: significant natural and fragile areas, outstanding water resources and wetlands; significant scenic roads, waterways, and views, important historic structures, sites, or districts and archaeological areas.

Response: Policies that clearly address these issues are found in the Natural Resources, Natural Areas and Fragile Areas and Scenic Resources sections.

Goal 6: To maintain and improve the quality of air, water, wildlife, forests and land resources.

Response: Policies address these issues in the Natural Resources, Natural Areas and Fragile Areas, and Scenic Resources sections.

Goal 7: To make efficiency use of energy, provide for the development of renewable energy resources, and reduce emissions of greenhouse gases.

Response: Policies in the Energy Element support conservation, energy audits, and renewable energy sources.

Goal 8: To maintain and enhance recreational opportunities for Townshend residents and visitors.

Response: The Town Plan addresses this in the Public Recreation section of the Community Facilities and Services Chapter.

Goal 9: To encourage and strengthen agricultural and forest industries.

Response: Policies in the Natural Resources and the Economy sections encourage strategies to protect agricultural and forest industries, including maintaining low overall density.

Goal 10: To provide for the wise and efficient use of Vermont's natural resources and to facilitate the appropriate extraction of earth resources and the proper restoration and preservation of the aesthetic qualities of the area.

Response: Policies in the Natural Resources and Mineral Resources sections clearly address protection and restoration of such areas.

Goal 11: To ensure the availability of safe and affordable housing for all Vermonters.

Response: In the Housing section, the Town Plan recognizes the need for safe and affordable housing and seeks ways to provide it, with particular emphasis on the housing needs of elderly, low-income, and disabled residents.

Goal 12: To plan for, finance and provide an efficient system of public facilities and services to meet future needs.

Response: Policies in the Community Facilities, Services and Public Recreation section support long-range planning and a capital budget plan.

Goal 13: To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers and child care work force development.

Response: The Childcare section and related policies in the Community Facilities chapter and the Education chapter encourage provision of childcare.

Goal 14: To encourage flood resilient communities.

Response: The Flood Resilience Plan section of the Natural Resources Chapter addresses this goal.

Goal 15: To equitably distribute environmental benefits and burdens as described in 3 V.S.A. chapter 72.

Response: The Natural Resources chapter of this plan broadly addresses this statewide planning goal. This chapter generally supports land conservation and habitat restoration where appropriate and recommends the creation of a town wide conservation commission to address these issues long term.

XVII. IMPLEMENTING THE TOWN PLAN

The Townshend Town Plan is a statement of vision: it is a dynamic document which provides a new starting point in the ongoing process of planning for the future of Townshend. Used properly, the Town Plan can provide guidance to elected officials and the people for present and future decisions facing the town. The Town of Townshend supports decision-making at the most local level possible, whenever appropriate and legal. This section summarizes the "Priorities for Action and Recommendations" throughout the Town Plan and suggests who has responsibility (Responsible Party) for implementation.

Land Use

1. Support the development of utilities, such as municipal water and wastewater treatment facilities, when needed to protect health and ground water resources and to allow full use of lands within villages. (Selectboard)

2. Work with the Windham Regional Commission to ensure inclusion of the three villages on the future land use map of the regional plan. (Planning Commission)

3. Support a local ordinance to regulate commercially-operated recycling/metal recovery/junkyard facilities (Selectboard)

4. The Town's officials should encourage compatibility of the goals and policies that would occur in any long-range plans or reports from Grace Cottage Hospital with goals and policies in the Town Plan. (Selectboard)

5. Town officials should periodically reach out to operators within Health Care Services district to discuss any new plans or projects that would be located within the district. (Planning Commission)

6. The Planning Commission should consider support and encourage conservation organizations that work with the Town to identify and preserve lands that are being considered as conservation priorities. (Planning Commission)

Transportation

1. Support the Townshend Parking Ordinance (2014) and consider options for additional off-street parking spaces in Townshend village. (Selectboard)

2. Cooperate with other towns, especially towns along the Route 30 corridor, the Windham Regional Commission, and VTrans in developing solutions to the traffic problems along Route 30. A Planning Commission member and Selectboard member should attend monthly Road Foreman meetings to keep up to date on transportation and infrastructure issues in the region. (Selectboard)

3. Enforce overweight permits on local roads and bridges in coordination with appropriate

officials, local and state. (Selectboard)

4. Pursue funding options such as Transportation Alternatives Program grants to help design and implement a plan for pedestrian and traffic safety at the Townshend Common intersection of Route 30 and Route 35. (Selectboard)

5. Consider adopting a Class 4 Road and Trail Policy to assure clarity when maintenance or improvements are proposed along a legal Town Trail. (Selectboard)

6. Maintain Radar Speed Feedback signs and review quarterly reports. (Selectboard)

Community Facilities and Services

1. Support forming a committee to make recommendations on the use of the town-owned property on Route 30, Taft Meadow. (Planning Commission)

2. Assess the need for replacing the present fire department station, which lacks enough space for equipment and lacks sufficient parking space. (Selectboard)

3. Support improvements, including ADA improvements to the Town Hall & Opera House to permit its continued use as an important community center. (Selectboard)

Forest Lands

1. Encourage the use of cluster development as a measure to prevent the fragmentation of large tracts of forest land and to protect locally significant forest land within those tracts. (Planning Commission)

2. Integrate forest blocks and habitat connectors into the Natural Resources Map. (Planning Commission)

3. Periodically examine the Proposed Land Use Map to see if updates should be made to preserve highest priority forest blocks and highest priority connectors. (Planning Commission)

Natural Area, Fragile Area and Wildlife Resource Policies:

1. Encourage the Selectboard to create a conservation commission to continually study natural resource topics and make recommendations to issues supporting town natural resources and conservation goals. (Planning Commission)

2. Add areas of land or water that has unusual or significant flora, fauna, geological, or similar features of scientific, ecological, or educational interest to the “Fragile Areas Registry” (Planning Commission)

Flood Resilience

1. Update the town's flood plain bylaw incorporating new FEMA FIRM due to be released in 2025. (Emergency Management Director)

Historic and Cultural Features and Resources

1. Identify and inventory architecturally significant buildings and streetscapes (defined as a group of buildings where individual buildings in the group may be undistinguished but together, they make an important historic architectural environment.) (Historical Society)

2. Take concrete steps towards the renovation and rejuvenation of the opera house on the second floor of Town Hall and Opera House. (Selectboard)

3. Recognize the historical significance of Simpsonville to Townshend during the 1800's. (Selectboard)

Energy (Selectboard)

1. Action Step 1.1: The town will encourage appropriate energy conservation and efficiency measures and renewable energy generation by individuals and organizations through public education, awareness, and engagement including convening weatherization workshops which will explore funding sources and support.
2. Action Step 1.2: The town will promote compliance with residential and commercial building energy standards for new construction and existing buildings, including additions, alterations, renovations and repairs.
3. Action Step 1.3: The town will promote the switching of heating fuels to wood, heat pumps, liquid biofuels, biogas, and geothermal, and will apply these switches to town buildings when economically feasible.
4. Action Step 1.4: The town will pursue building audits and weatherization projects in town owned buildings.
5. Action Step 2.1: Townshend will promote ride-sharing by promoting GoVermont! And by supporting the Safe Routes to School program.
6. Action Step 2.2: Townshend will provide education and outreach of electric vehicles and work with surrounding towns to organize energy fairs, including EV test driving.
7. Action Step 2.3: Townshend will implement improvement that encourage safe and convenient walking and biking.
8. Action Step 2.4: The Town will lead by example with respect to efficient transportation, and provide opportunities for telecommuting and remote participation in town events.
9. Action Step 2.1: Minimize the need for new facilities and reliance on private automobiles by encouraging concentrated development, and discourage new development least accessible areas of the community
10. Action Step 2.2: Promote land use and conservation policies that encourage ongoing forest management to maintain a local source of fuel-wood and agriculture to maintain and increase the supply of locally produced food.
11. Action Step 4.1: Support the preference of active and passive solar installations

specifically on rooftops, rather than larger scale ground mounted utility installations.

12. Action Step 4.2: Support small-scale, residential wind generation facilities where there are no adverse visual, ecological, or sound effects to nearby residences
13. Action Step 4.3: Support permit-able small-scale hydro systems where there are minimal adverse effects on the geomorphic stability or ecological health of the water body.

Housing

1. Support and collaborate with Grace Cottage Hospital efforts to provide affordable housing for healthcare staff throughout the eight-year cycle of this Town Plan. (Selectboard)
2. Investigate and support the development of a housing needs assessment to quantify shortcomings in housing availability for low-income residents, seniors, and physically disabled persons. (Planning Commission)
3. Create a housing program to address the housing needs of low and moderate-income residents based upon findings and insights gathered from the housing needs assessment. (Selectboard)
4. The town shall study the need for municipal water supply and sewage treatment facilities for village districts in order to maintain property values and assure public health. (Planning Commission)

Economy

1. The town shall continue to formally petition the proper authorities to obtain a substantial increase in payments to Townshend in lieu of taxes for the state and federally owned property. (Selectboard)
2. Army Corps of Engineers (Federal Government) shall be required to abide by the agreement requiring them to provide water recreation opportunities in lieu of property taxes. Complete restoration of the lake to its original size and depth are needed. (Selectboard)

XVIII. MAPS & REFERENCES

Community Facilities Map
Land Conservation Map
Future Land Use Map
Existing Land Use Map
Natural Resources Map
Transportation System Map
Water Resources Map
Energy Element Maps