

September 24-26, 2024



# Homes for Us!

## The DAT Program

Communities all over the world are struggling to build effective strategies to address their key challenges: from climate change and equity to housing and revitalization. The Architects Foundation's Communities by Design (CxD) program provides a ready, applicable model to overcome these challenges and provide communities with a path to success. Through decades of work in hundreds of communities with tens of thousands of volunteers and community members, CxD Design Assistance Teams have proven that communities are at the heart of solutions to the world's most pressing issues. Every project is community-driven with meaningful public participation and an intensive process to match professional expertise with public values and aspirations for a place. Design Assistance Teams are made up of volunteer architects, planners, and other professionals with expertise customized to fit the local community context. The DAT program is honored by the opportunity to work with the citizens of the Windham region to work on a plan for the town's revitalized future.

## CRM

The Center for Resilient Metro-Regions works with communities to advance community engagement, climate resilience, sustainability, placemaking and livable cities, equity, affordable housing, and economic development. These are synergistic goals to support our communities and our most vulnerable populations.

CRM is embedded in the Department of Landscape Architecture and Regional Planning at the University of Massachusetts, Amherst.

## Disclaimer

This project was sponsored by the Windham Regional Commission with Housing Navigation Funding from the Vermont Department of Housing and Community Development. The ideas represented in the following report are those of the project team, based on our observations of the participating communities and existing plans, the insights gleaned from government officials and residents, and the ideas shared with us about the area and the aspirations for it during the team's tour. This report represents our best professional recommendations in the public interest. We do not serve a client in this endeavor. The report, and the process that produced it, is a public service to the community.

The ideas captured here represent three intensive days of work (September 24-26, 2024) and the information available to us at the time of this writing. We do not expect this report to be followed as verbatim, prescriptive advice. This work represents a beginning – we hope a new beginning – for the area. It should be understood as a developmental tool, and we expect the community will expand on these ideas and amend them as you make it your own. This report serves as an opening mechanism to begin the necessary public work and we expect the ideas to evolve and change as you utilize it and as the vision for the community begins to take shape through public processes to follow.



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# Overview

## Introduction

The Windham Regional Commission heard from numerous towns within its region that the affordability of housing to residents and workers earning Vermont wages is one of the biggest challenges to their livability, quality of life, and the economy. Residents and businesses that want to remain in or locate to the region are unable to because of the lack of housing and the resulting lack of labor.

Adding to that housing availability stress is the loss of some housing and the clear limits on where new housing can occur because of climate change, flood hazards, sewage disposal capacity, and other site constraints.

The Commission is supporting its member communities on these issues, helping them plan, recover from and plan for future storm events and floods, and supporting shared sewage disposal systems in some of the villages.

Four abutting communities within the Windham Regional Commission area - Jamaica, Londonderry, Weston, and Winhall - are especially impacted by these issues. Recent flooding devastated the region, and the ski areas that are huge players in the area's recreation and economy have also helped drive up the demand for second and seasonal homes and short-term rentals, creating huge challenges for local residents to find housing.

With each of those towns working to address the issues, Windham Regional and those four towns identified the opportunity to examine regional opportunities.

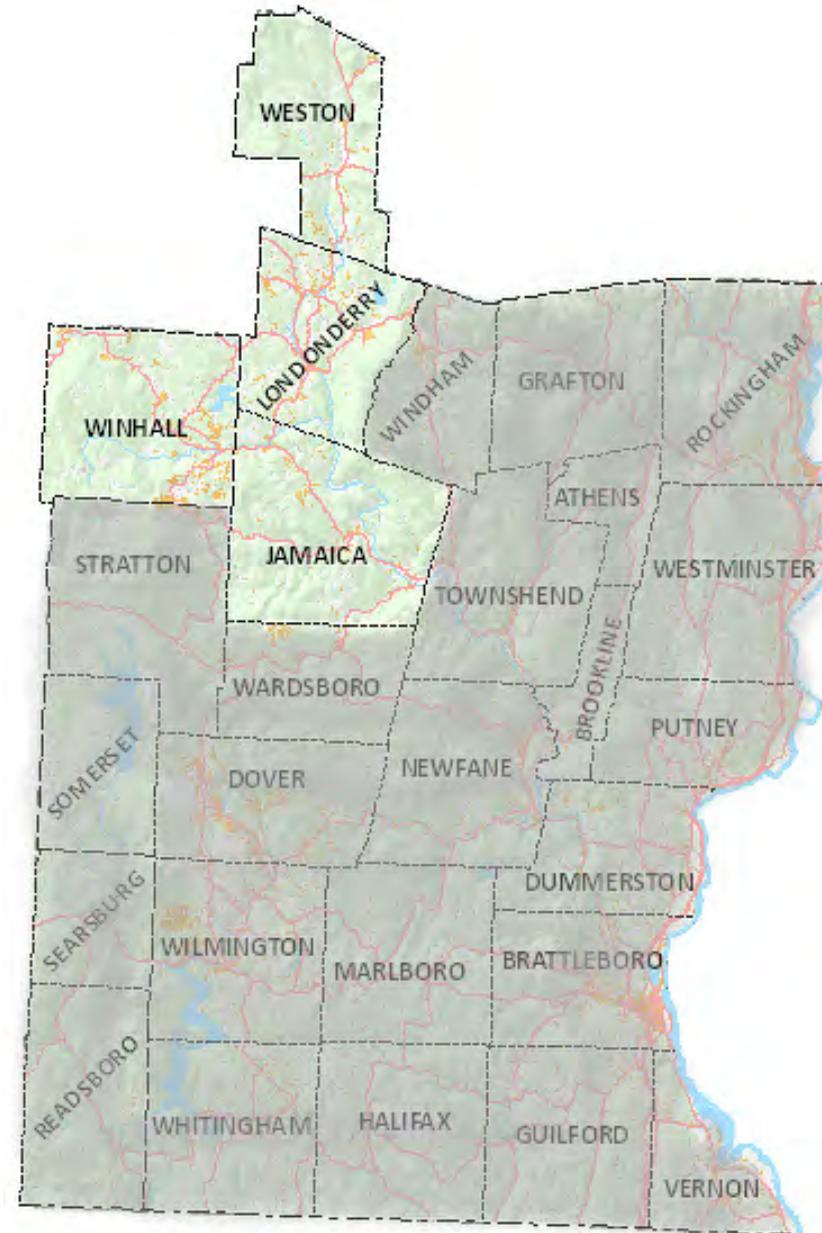
Using state housing navigator funding, Windham Regional asked the **Center for Resilient Metro-Regions** at the University of Massachusetts, Amherst, to assist with the project. The project consisted of two phases:

First, developing a regional housing needs assessment for the four towns.

Second, CRM in partnership with the **Communities**

**by Design** program at the Architects Foundation, conducted a three-day charrette, or intense design process, with community participation, to identify those potential housing opportunities which can be adopted at a town-by-town scale and at a regional scale.

There are opportunities to implement major projects. In order to do so, however, communities and area non-profits need to develop the capacity to focus on improvements and there need to be local champions to move projects forward.



Windham Region, showing the four study area towns.

## What We Heard—Homes for Us!

In stakeholder meetings with town officials, an opening public forum, and a final forum where the team presented their initial recommendations, we consistently heard the community stressing the need to find “Homes for Us.” Residents stressed that housing is available for buyers purchasing second homes or seasonal residences and through short-term rentals, but increasingly is unavailable for people who live and/or work in the region.

Top lessons (prioritized by participants):

- There is a disconnect between housing and housing availability and incomes and the labor market. We need affordable and attainable housing for all.
- The environment is changing, expanding our challenges.
- There is a need for more transportation choices, including micro-transit.
- The ski industry is ever-present, creating both opportunities and challenges.
- Housing should fit into the natural environment and amenities, and also be energy efficient.
- There is a need to ease transitions for people who have lived long term on one property.
- Need to keep a focus on the sense of community, connections, and social needs.

See Exhibit A. Stakeholder Sessions and Public Forum summary notes for more details.



## Residents Said

- “There is no housing we can afford.”
- We need “housing that is affordable to those earning median income...the missing middle and entry level housing.”
- “Creating community is also important...we have the opportunity to create connections”
- “...I moved here to buy a house...I needed someone to die for a house to become available.”
- “I retired, moved here, built a house, and now I’m going to die here...my plans are to stay.”
- “Housing in the village centers is nice, but we need affordability [even] over walkability.”
- “Vermont wants to encourage housing in village centers, but that is only going to happen with state policy changes...such as Act 250 changes.”
- “Ski areas are the elephant in the room. They are responsible for the housing shortage.”
- “It’s embarrassing that a teacher can’t afford to live in my town.”
- “We are all living through the same issues, so being able to talk about it collaboratively [and regionally] instead of in silos is encouraging.”



## A Problem for Vermont

Statewide, Vermont has a problem with the affordability of housing. Many residents pay more than 30% of their incomes for their housing and more than 45% of their incomes for their housing plus their transportation, the generally accepted standards for determining who is housing burdened. In the first six months of 2024, the state reports that the price of housing rose 5% statewide, with no slowdown in market demand. For those who can afford it, the Vermont real estate market is hot, but not so hot for the lower half of the market.

Even with those expenditures, many residents have a hard time finding housing, and it is part of the reason that residents and especially their children leave the state.

Besides the obvious problems with housing affordability, it is one of the biggest challenges to economic development in Vermont, as businesses who can't find qualified workers forgo locating, expanding, or remaining in Vermont.

Solutions to the housing crisis require actions at the federal level, state level, local level, and within the private sector.

The Housing Needs section of this report discusses some of these figures in greater detail for Jamaica, Londonderry, Weston, and Winhall.

Vermont has acknowledged that it needs to do more to solve the housing crisis. (See, for example, Harrold, B. 2021. ["Affordable housing: barriers and incentives in Vermont towns."](#) Vermont Housing Finance Agency.)

Vermont has taken a number of actions to address this significant challenge to the affordability, quality of life, and economic vitality.

Because solutions are dependent upon local actions, especially regulations and land use policies, banking lending policies, and community acceptance, Vermont has built an education campaign to encourage

communities, builders, lenders, and the public to promote the necessary housing stock. This includes, for example:

- [The Vermont Homes for All Toolkit: A "Design and Do" Toolkit for Small-scale Home Builders, Investors, and Community Lenders.](#) (Vermont Department of Housing & Community Development, 2024)
- [Enabling Better Places: A Zoning Guide for Vermont Neighborhoods.](#) (Congress for the New Urbanism and Vermont Department of Housing & Community Development, 2020)

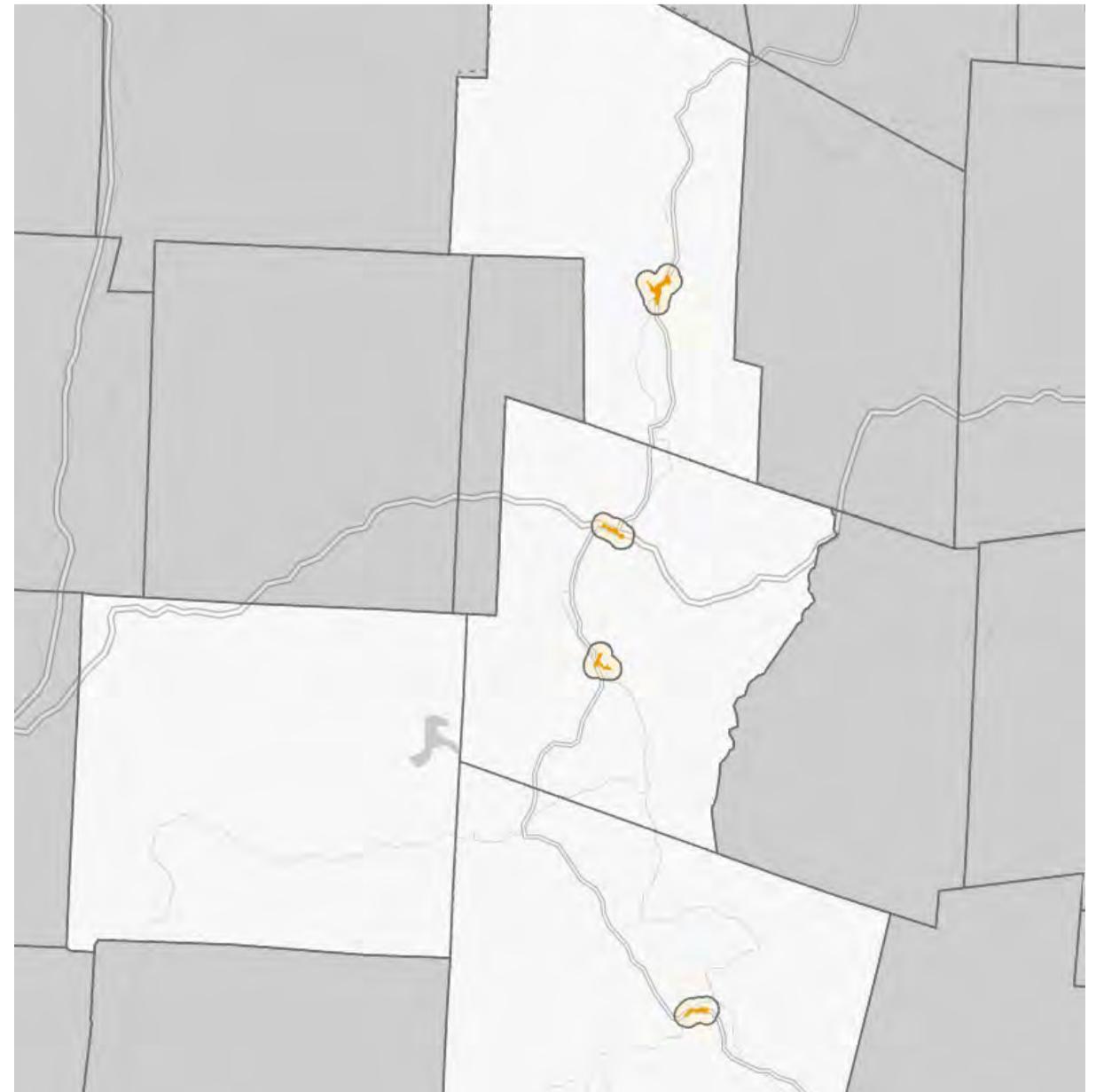
Acknowledging that the state can do more to help, the State has been examining its own role in solving the housing crisis.

- Exploring better coordination of state funding for housing, and related services such as transportation and social services.
- Amending Act 250 in 2024 to create exemptions for downtowns (Tier 1A) and villages (Tier 1B) to reduce the regulatory burdens for development in those areas, the preferred development areas.

It has always been odd that the easiest development in Vermont can be development which is most harming to Vermont's environment and landscape, ie: sprawling development outside of town and village centers deliberately designed to stay below the Act 250 regulatory thresholds.

The new downtown and village Act 250 exemptions help move some village development to an even playing field. To be eligible for the village (Tier 1B) exemptions, a village center must be:

1. Designed Village Centers and a buffer within ¼ mile of the village;
2. Have a Town plan;



Designed Village Centers and a ¼ mile buffer.

3. Have zoning and subdivision bylaws in effect;
4. Have adequate water and wastewater or soils for a community wastewater system;
5. Not be in flood hazard/fluvial erosion areas (except limited infill);
6. Apply to projects with 50 or fewer housing units located on 10 acres or less.

These restrictions are achievable for most of the villages in the study area, once a few more steps are followed. Moving forward on qualifying as Tier 1B villages will ease the development of new housing.

1. Designation of Bondville as a village center;
2. Documentation of adequate sewage disposal or moving forward on planned community wastewater systems;
3. Completing the gap in zoning (Jamaica) and planning.

Vermont’s statutory and regulatory systems have evolved over time, most recently with the Act 250 amendments of 2024, discussed above. There are, however, always opportunities to improve the regulations to preserve their strong environmental focus while removing some of the unnecessary constraints to development. Obviously, the small towns in the study area have limited ability to lead with these changes, but they can add their voices, especially through Windham Regional Commission, urging some of the changes.

**Act 250 -- Opportunities for Statutory Changes**

The 2024 Act 250 amendments, discussed above, reduce one of the most significant regulatory barriers to new housing in Vermont’s villages and town centers. Unfortunately, in many of Vermont’s valleys, and in all towns discussed in this report, flooding, fluvial erosion, soil suitability, steep slopes, ledge, and infrastructure

availability limit the ability of existing villages and village expansion areas from accommodating sufficient new growth to accommodate necessary housing and development.

New villages can be developed, but they will not be exempt from Act 250 until they are developed with mixed use (residential and commercial) and adequate density and infrastructure to qualify to be designated as a village center.

Ideally, building on the 2024 Act 250 amendments, the legislature could create a **New Planned Village Act 250 exemption** tier for planned villages that do not yet exist where:

1. There is a master plan for a new village which is consistent with and incorporated into the Town plan.
2. The Town adopts mixed use village center zoning for that village which allows mixed use consistent with village center designation, with:
  - A minimum density threshold (e.g., a minimum of eight dwelling units per acre for residential lots, excluding road rights-of-way, public land, and commercial development), and
  - A requirement that maximum density be not less than a prescribed threshold (e.g., not less than 12 dwelling units per acre with no required maximum).
3. There is site control of the village site by a single entity or a consortium with a consortium agreement such that the development is possible.
4. There is adequate water and wastewater or soils for a community wastewater system.
5. Development is not in flood hazard/fluvial erosion areas (except limited infill).
6. A phasing plan is developed so that no more than a certain number of residential units are developed prior

to a commercial or community center.

**Wastewater System Rules -- Opportunities for Regulatory Changes**

The *Vermont Wastewater System and Potable Water System Rules* (promulgated under authority of the Vermont Statutes, Title 10, Conservation and Development) include the standards for on-site (soil absorption systems or “septic” systems) wastewater (sewage) disposal.

Along with other site constraints such as flooding, fluvial/stream erosion, and steep slopes, wastewater disposal represents one of the biggest environmental challenges for housing.

Over time, Vermont has updated these regulations to provide additional options to cope with Vermont’s shallow bedrock, high water table, and steep slopes. There are, however, some opportunities to make it easier to develop small housing development in the study region. If the region wants to advance these changes, it might want to work with the Vermont inter-agency Village Wastewater Solutions Initiative (coordinated by the Department of Environmental Conservation), the Windham Regional Commission, and their legislative delegation.

**Design flows for small and tiny houses.** Generally, wastewater systems are required to be sized based on the number of bedrooms in dwelling units. There are lower required design flows for larger homes because they have on average fewer persons per bedroom. There are also lower required design flows when more dwelling units share a system because they have less flow variation with households with large water use offset by other households.

For a single family home, however, the minimum design flow “shall be calculated based on a minimum of two bedrooms, regardless of whether the residence will contain only one bedroom” (§1-801(c)), with the design assuming “a minimum occupancy of two persons per

bedroom” (§1-801(d)(1)(B)).

Unfortunately, this means that one bedroom small and tiny homes, which almost always do not house more than one or two people, must have a system designed for four people. Given that the fastest growing demographic in Vermont is single residents and couples without children, this makes one potential solution more expensive and land extensive.

Lower design flows are already allowed for senior housing (not assisted living or nursing care) of 1.5 persons per dwelling unit (§1-801(g)(1)).

Adopting a design flow of 1.5 or two persons for a one-bedroom house with its own wastewater disposal system would lower the cost and lot size for such homes. Obviously, provisions for disclosures to innocent purchasers and prospective purchasers can be required.

**Community wastewater system design flows based on actual use.** Systems are designed based on assumed design flows contained in the rules (§1-801). Once a system is built, there is not a provision for reevaluating whether that design flow is necessary. Water use obviously varies dramatically, with average water use higher, on average, for homes that are both occupied year round and are higher priced homes serving wealthier residents (which are more likely to utilize water spas and higher water flows). Design flows are generally based on averages, not actual use.

The regulations allow non-residential uses to have well-justified design flows, based on water meters and other documentation, other than the default specified in the rules (§1-804)

The existing provisions for non-residential uses, with some variations, could be applied to residential uses.

After shared community systems are built, if they have metered water use or metered wastewater use (based on pump cycles or other measures), the rules could include

## Jamaica, Londonderry, Weston, & Winhall

provisions to allow new users to connect to the shared water system based on actual water/wastewater usage, with a safety provision still built into the calculations. For village shared systems, this would allow additional connections to serve new community housing and economic development.



*Proposed Londonderry Wastewater System.*



*Jamaica Village School.*

## Partnerships & Regional Approaches

Jamaica, Londonderry, Weston, and Winhall are blessed with a large number of state, municipal, regional, foundation, non-profit, and for-profit entities working to help solve the housing crisis and connect housing to services. Resources will always be limited, but partnering allows resources to go further.

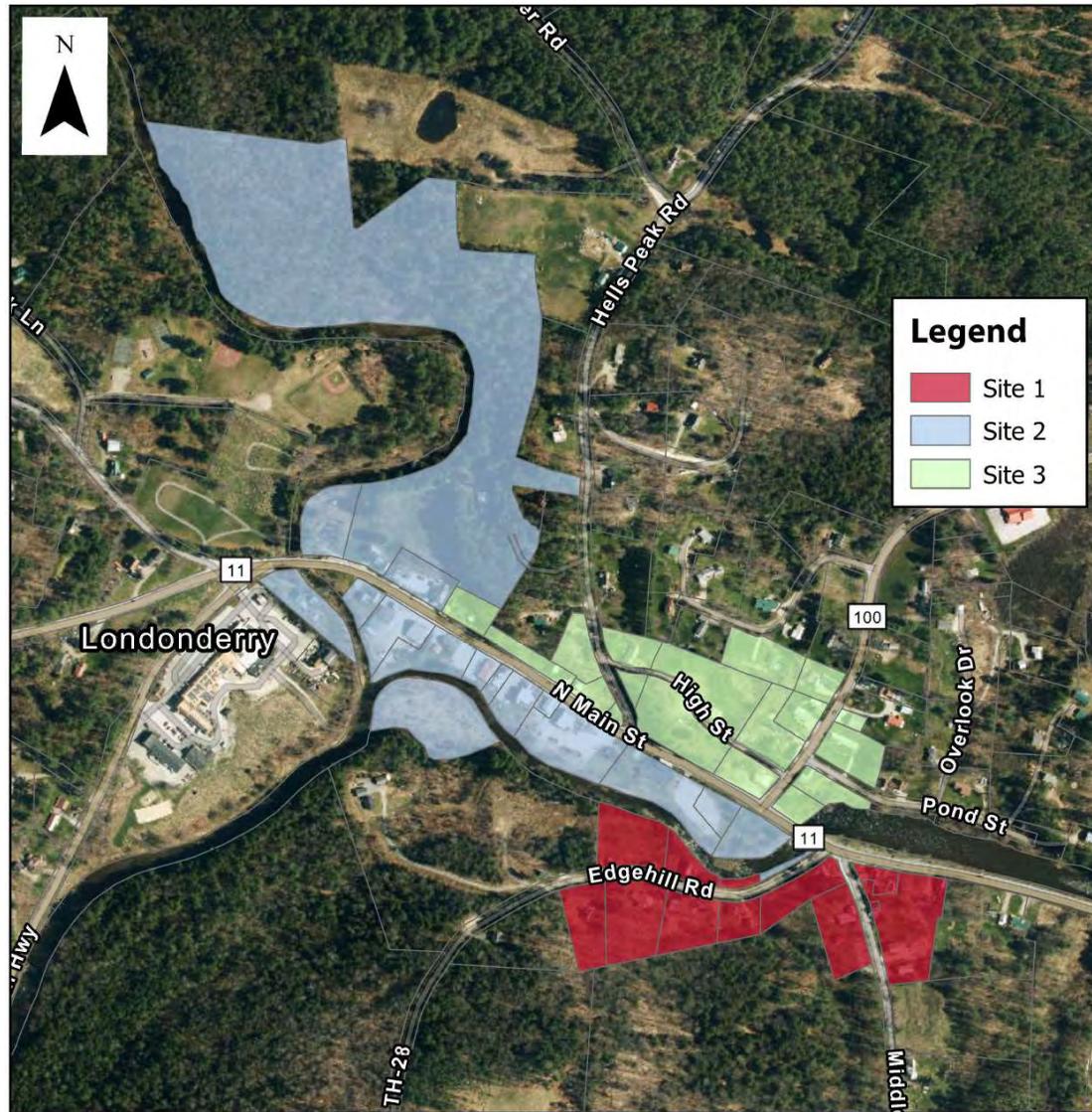
The housing, job, and shopping markets all cross town boundaries freely. Jamaica, Londonderry, Weston, and Winhall can all benefit from regional partnerships, although of course there is no magic about this particular four town partnership.

The opportunities for regional cooperation are nearly limitless and can be customized to meet local needs. For example,

- The Windham Central Supervisory Union, if they close the Jamaica Village School, could mitigate the impact to Jamaica by dedicating the school site for community housing needs.
- Communities can partner across town lines for housing preference to their teachers and municipal employees to help recruit and retain staff with a nearby community that has real estate available for housing.
- Communities with surplus sewage disposal needs can dedicate that surplus capacity for a combination of economic development needs and community (not high end) housing.
  1. Winhall if they tie into the Stratton Mountain sewage disposal system;
  2. North Londonderry's small surplus capacity once their village wastewater project is completed;

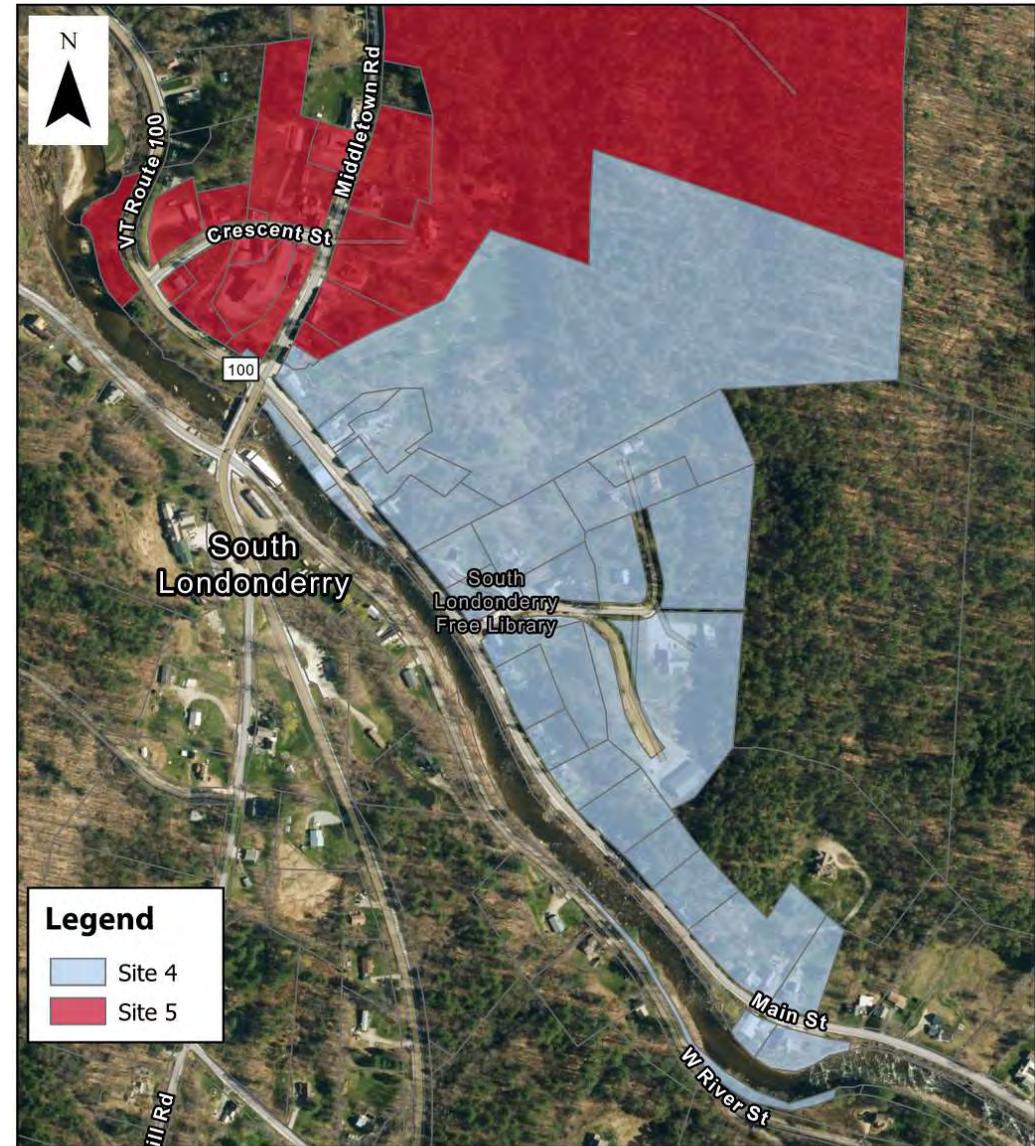
3. South Londonderry's surplus capacity if the second phases of their village wastewater project is completed. This dedication should also increase the potential grant sources for that phase 2 project;

4. The private wastewater disposal system at the base of Magic Mountain Ski Area, which requires private and not town approval.



0 250 500 1,000  
Feet

Londonderry future wastewater soil-absorption system (SAS).



0 250 500 1,000  
Feet

Organization and Purpose	Opportunities
<b>Sample Local and Regional Government Partners</b>	
Jamaica, Londonderry, Weston, and Winhall towns and town committees, and other abutting communities	Partner for regulatory changes, surplus public property if any, regulatory approvals, wastewater disposal when available in town shared septic tank soil-absorption system (ST/SAS), and advocacy with other agencies.
<a href="#">Windham Regional Commission</a> supports local governance, planning, and collaboration to address regional issues	Planning assistance
<b>Sample Housing and Land Trusts and Housing Development Organization Partners</b>	
<a href="#">Brattleboro Development Credit Corp</a> Invests in the drivers of the regional economy	Potential investor in projects with economic development component
<a href="#">Earth Bridge Community Land Trust</a> Ensures long-term housing affordability by holding land under housing in trust.	Can share lessons learned. Potentially could expand to western Windham region.
<a href="#">Mountain Towns Housing</a> works to create affordable housing (1 project at a time), Londonderry centered	Housing opportunities, scaling up
<a href="#">NeighborWorks of Western Vermont</a> Promotes safe, efficient and stable housing and community projects	Potential partner for home ownership housing projects
<a href="#">One Londonderry</a> non-profit supporting a vibrant Londonderry including housing, with a fundraising arm, Community Fund for Londonderry	Partner for volunteers and advocacy
<a href="#">Preservation Trust of Vermont</a> works to save buildings to help communities keep gathering places alive	Potential partner for project adding housing compatible with historic resources
<a href="#">Trust Public Land</a> protects land for open space and has partnered for housing	Develop park/conservation limited housing development projects
<a href="#">Vermont Land Trust</a> assists in conservation land preservation	Explore interest in conservation limited housing development projects
<a href="#">Vermont River Conservancy</a> preserves rivers and has partnered for housing	Develop river conservation limited housing development projects
<a href="#">Windham and Windsor Housing Trust</a> Provides permanently affordable housing solutions in South-eastern Vermont	Find new partner opportunities in the western Windham Regional Commission area
<b>Sample State, Federal, Non-Profit, and Foundation Funding Partners</b>	
<a href="#">Stratton Community Foundation</a> Focuses on children in need and health, safe and learning opportunities	Potential partner for social service housing needs
<a href="#">USDA rural housing, US HUD rural housing</a>	Funding focused on rural housing units
<a href="#">Vermont Agency of Commerce and Community Development</a> downtown and village tax credits and housing improvement program	Tax credits to create and improve rental housing, restore buildings, and revitalize communities and for new housing construction and improvements
<a href="#">Vermont Community Foundation</a> A collective of more than 1,000 funds and foundations	Information clearinghouse to explore the Vermont foundation environment
<a href="#">Vermont Community Loan Fund</a> financing for businesses, affordable housing, and community organizations	Funding source for housing and community development

<a href="#">Vermont Housing and Conservation Board</a> quasi-public state agency grants and loans funding affordable housing and land conservation	Significant funder for many needed housing projects
<a href="#">Vermont Housing Finance Agency</a> state agency funding housing with state and federal housing tax credit and other sources	Significant funder for many needed housing projects, with tax credits as the single largest funding source for affordable housing
<a href="#">Windham Foundation</a> grants to local organizations	Potential funding partner
<b>Sample Community Development Corp., Social Services, and Transit Partners</b>	
<a href="#">Neighborhood Connections</a> social services and Mountain Town Connector for transportation	Support social service and transportation needs of underserved residents
<a href="#">Southeast Vermont Transit</a> provides bus service to southern Windham County	Potential connections for transit to the region.

# **Site Opportunities – Village Housing**

## Housing Site Opportunities

Planning and design for housing in small Windham County towns starts with the recognition that this is a unique place. The region needs housing, but not at the expense of the charming character and quality of life of the villages. And not at the expense of the character of the natural countryside and working landscapes.

At the same time, it's clear that the traditional focus on single-family housing –which continues to dominate both village centers and rural areas – no longer provides homes that are affordable for most families. Building housing that people can afford at a meaningful scale means looking at multi-family housing models. Where are sites that would allow for multi-family housing to fit into the traditional landscape of Vermont? And how can the design of that housing enhance the community character?

The challenge is finding sites and design approaches where housing can:

- Protect historic resources and visual character;
- Help maintain a high quality of life;
- Repair the social fabric and build community;
- Enhance economic opportunity.



Modest Multifamily: Safford Commons, Woodstock, VT (courtesy Twin Pines Housing).

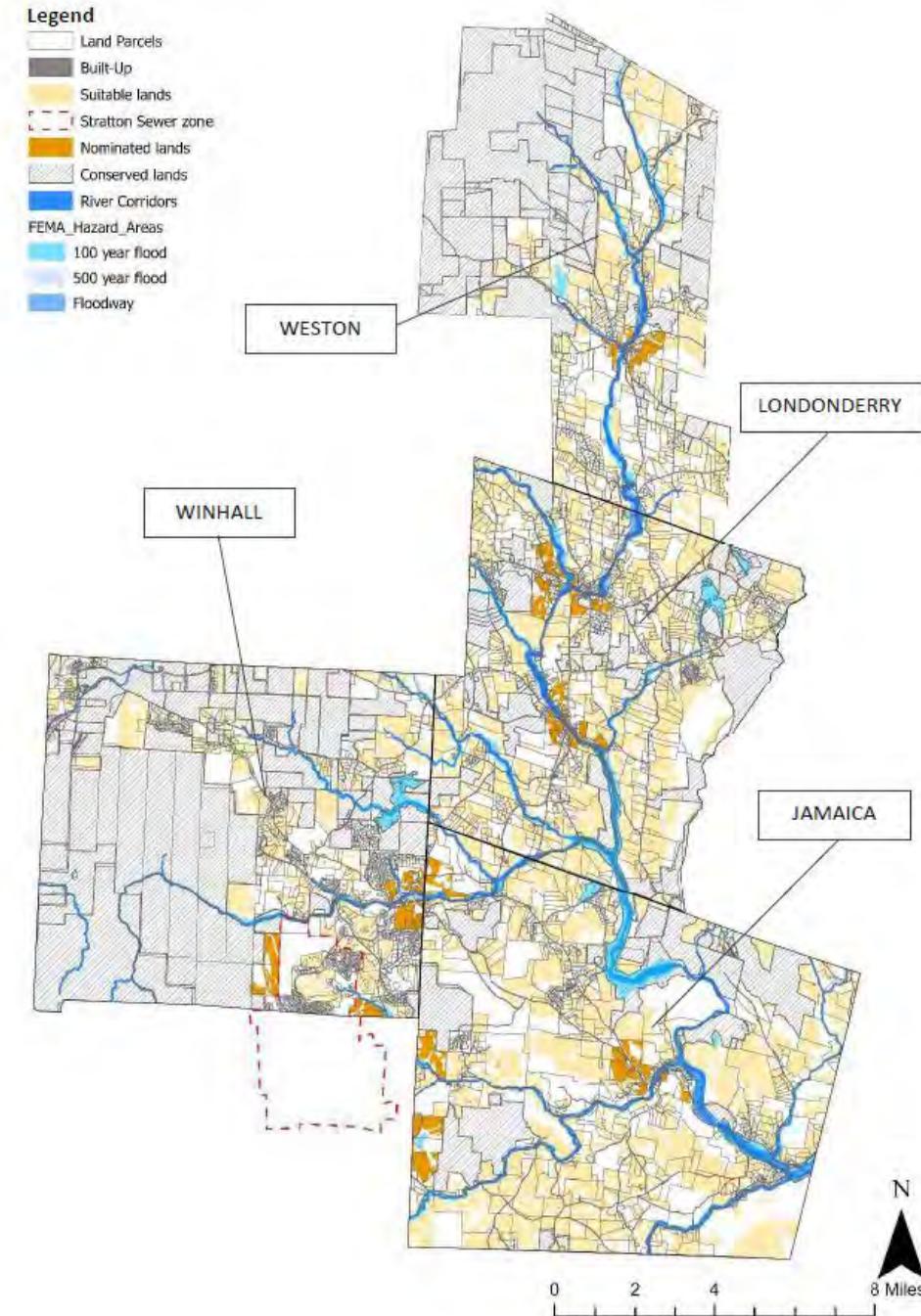
### Identifying potential housing sites

Successful housing plans start with identifying sites where construction will avoid undue impacts on important natural and cultural resources. It also means finding site locations that take advantage of existing infrastructure and community services. In the *Housing Needs Assessment* report prepared by the UMass Center for Resilient MetroRegions, the Center developed a GIS assessment to identify the most suitable areas for housing in each of the four towns. They first eliminated lands that are in conservation, as well as land that is too steep, wet, or floodprone to be developed. These were identified as “suitable lands” on the resulting map (right).

Using the resulting map of lands that are potentially developable, the Center prepared a secondary assessment to identify those areas most suitable for housing. Factors include whether a parcel is close to a village center, accessible from existing roads, or serviced by existing (or planned) water and/or wastewater treatment systems. The resulting layer, depicted as “nominated land” on the map, also reflects the area (calculated at 1/4 acre per unit) needed to meet each town’s potential housing demand.

The mapping exercise demonstrated that the availability of suitable land is not the problem – rather it is a combination of other factors that reduce the economic feasibility of housing, including:

- Frequently poor soil conditions for wastewater disposal, and the absence of municipal water supply and wastewater systems.
- High construction costs due to relatively small regional construction industry, support and logistics.
- High land cost.
- Seasonal economic conditions that distort home values and impact the availability of labor.



**Locally identified Site Opportunities**

The team met with representatives from each of the four towns and conducted interviews with key local stakeholders. Local partners were able to identify a number of promising sites, many of which have “been on the radar” for some time. These included potential town-owned sites in each town, which have the advantage of minimal acquisition cost, and are often located close to other services. They also included vacant or underutilized properties, as well as sites with willing property owners that would be happy to sell their land to support town goals for housing. Site visits were conducted to each of the village centers, as well as the most promising of the sites identified in the interviews.

After some deliberation, the project team identified interesting housing sites in each of the four towns, and narrowed these down to some fifteen sites that would serve to demonstrate the housing opportunities across a range of site types. The team intentionally looked for sites that represent different conditions in each town. These include:

- Filling in the gaps within villages;
- Expanding villages around the edges;
- Creating new villages.

Each type of site represents a different kind of design challenge. Within a historic village center, for example, it might make sense to fill gaps along the street with new structures that closely follow the scale and architectural detailing of existing homes in the neighborhood. For a site on the edge of the village it may prove more important to protect views, farms and forested land, and work to blend buildings into the landscape. For a site outside of an existing center there might be an opportunity to design a completely new village – hopefully one based on traditional principles of mixed use, diverse housing types, walkability, access to open space and community focus. In fact, the team was told about a group of people working on a new “off-grid” community on the Jamaica town border. There may

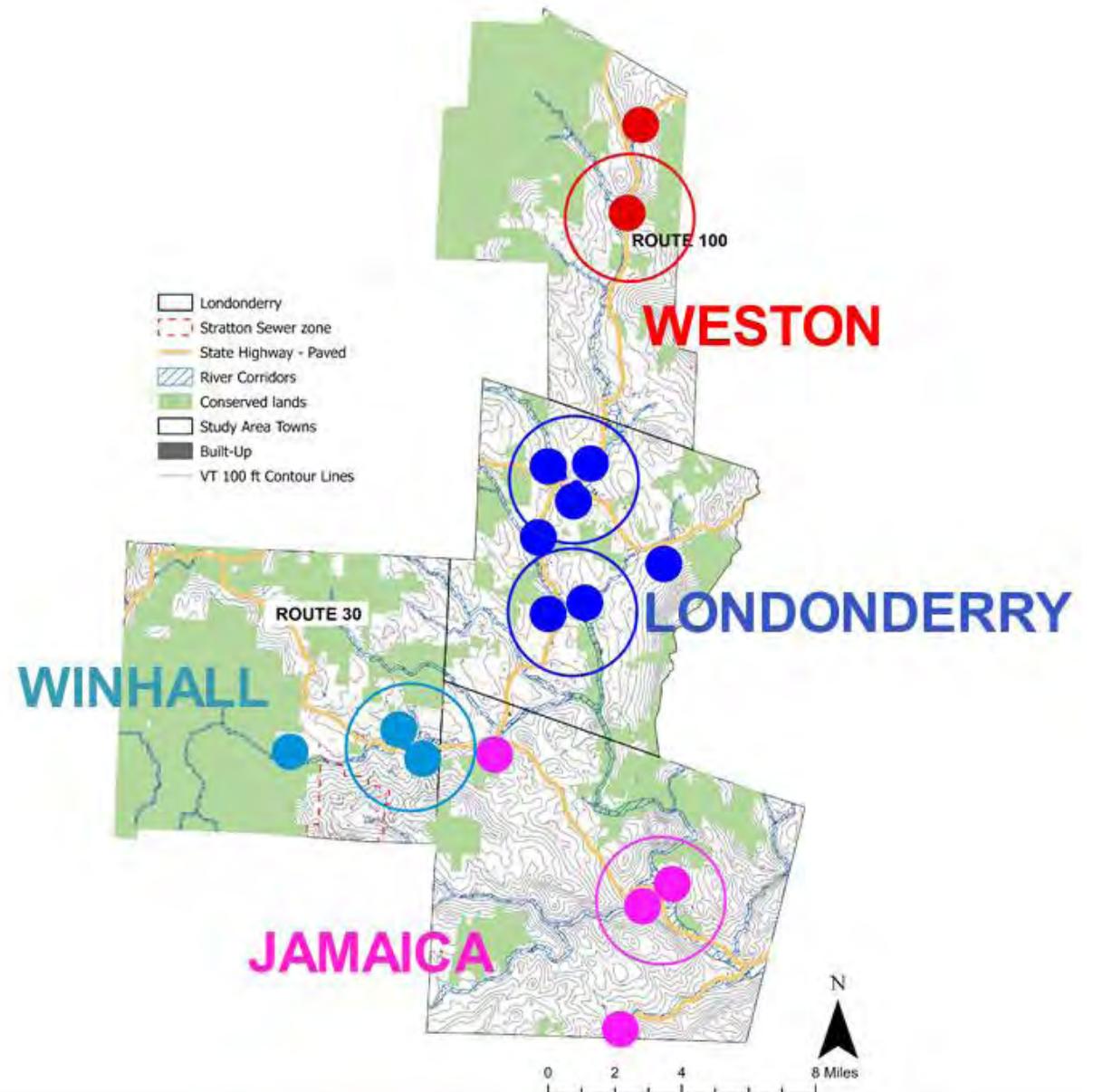
be opportunities in this new development to provide affordable housing that would benefit the entire region. Outreach to this community should be considered.

For a variety of reasons, zoning and development regulations have favored a “one size fits all” approach to development– typically with large house lots fronting on an existing road or a new cul-de-sac. The resulting pattern just doesn’t fit in well with the traditional landscape of Vermont – being too dense to fit into the countryside and too diffuse to fit into historic village centers.

Based as it is on an alternative approach to development, multifamily housing provides an opportunity to move beyond the constraints of traditional zoning and think about what kind of design approaches actually make sense. To be successful, designs must respond to the unique character of a site and its context. Thus housing on the town common in a historic center can and should be designed to respond to the surrounding historic context. Housing tucked into the edge of a village might be very different.

The following site studies explore these issues with real sites in each town. The goal is to demonstrate how housing could be created on each type of site while balancing the twin aspirations of developing enough housing to be meaningful while at the same time respecting the unique character of our small towns. The limited project time did not allow for the creation of detailed plans for every site, but a “test fit” demonstrates how many homes might fit on a site and how they might best be arranged. For some properties, this report provides more detailed plans that include ideas for design and layout of structures, parking and open space.

Hopefully, these studies demonstrate that multi-family housing does not need to be the enemy of historic character and small-town quality of life. Indeed, with design that responds to the unique setting of each project, housing can enhance that character while bringing new life to small towns.



## A Place to Start: Multifamily Housing in Village Centers

Small scale multi-family housing has always been part of life in the region. Whether in a rambling farmhouse with multiple generations under one roof, or a large home in the village, combining a number of households within a single structure was sometimes a necessity, but always a relatively simple way to make limited resources go farther. As communities work to create more housing opportunities, it can be instructive to look for local examples of modest multi-family dwellings, and opportunities to create more through renovations and additions to existing structures. In most towns there are examples of houses that are larger than needed by today's smaller households. There are barns and outbuildings that are no longer needed for the sheltering of horses and horse-drawn conveyances. There are also many structures in the village centers that could have apartments built above the ground floor commercial uses - and may have done so in the past.

Obviously the lack of shared wastewater systems hampers redevelopment within the village centers, much less handling increasing demand driven by additional housing. But as Londonderry and other towns move forward with plans for shared treatment, opportunities open up for redevelopment of older structures and construction of new structures on what are now vacant sites. The advantage of this approach - in addition to relative ease in permitting compared to development of a new subdivision on the edge of town - is that it fosters growth of a scale and character that easily blends into the historic pattern of the village centers.



*A modest multi-family home in Jamaica. When incorporated into existing homes, sometimes the only way to identify multifamily structures is from the extra doors and electric meters.*



*Another common multi-family type is this "up and down" house in South Londonderry, which appears to hold 4 or 5 apartments within a stately structure.*



*Another house type that can easily be converted into multi-family is represented by this rambling farmhouse in Weston.*



*Many villages have homes like this, a side-by-side duplex in Jamaica. Entry doors, hallways and staircases along the common wall in the center buffer living spaces, and the apartment on each side has windows on three sides.*



*While families continue to enjoy large single family homes, as needs change houses like this one in Weston could easily be divided up into two to four separate dwellings without altering the exterior character of the structure.*



*Another large house in South Londonderry appears to have a single residence, but could certainly be expanded into 4 or 5 units when the town wastewater system comes on line.*

## A Place to Start: Multifamily Housing in Village Centers

Before lack of wastewater treatment capacity became such a constraint, village centers had more mixed use buildings. These varied from a simple mom & pop storefront with an apartment over the shop, to larger mixed-use blocks with several commercial spaces and multiple apartments on upper floors. Opportunities exist in all of the village centers to renovate these existing spaces.



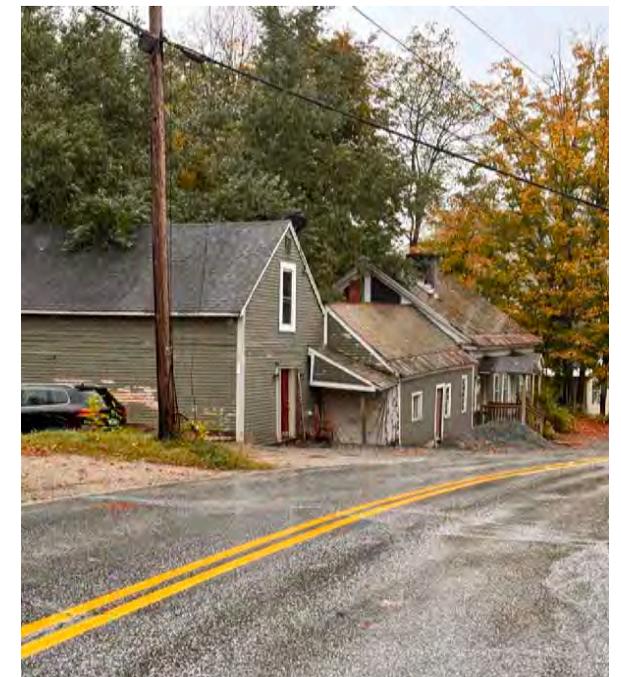
*Even relatively modest commercial structures provide opportunities for a few upstairs apartments. These buildings in Jamaica (above and right) probably started as homes before the ground floor was later turned over to commercial use.*



*The Weston Village Store, left, and the Corner Market in South Londonderry, right, probably had upper active upper story apartments in the early days. It is unclear whether the upper floors are occupied today.*



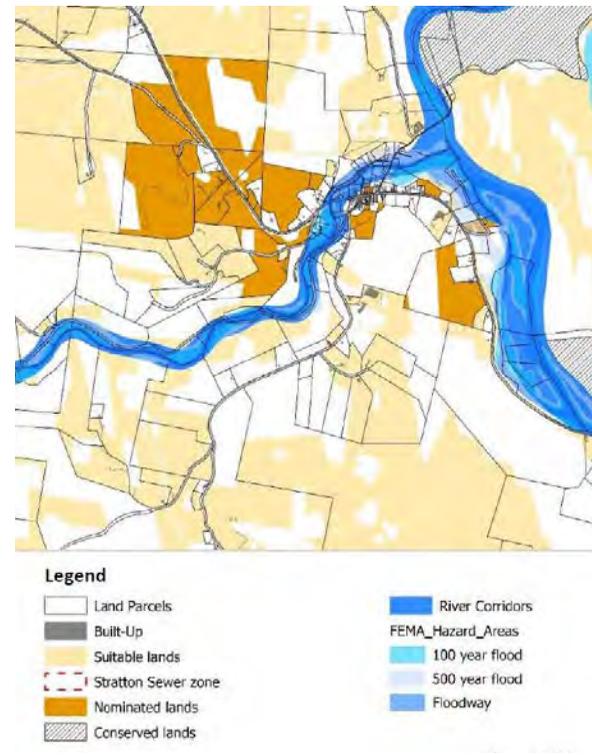
*Despite the high value of housing, there are abandoned buildings in many areas - reflecting the challenges of a seasonal economy as well as the lack of shared wastewater treatment and the impact of flooding. Some of these may be beyond repair; others could potentially be relocated to better sites. Middletown Road, South Londonderry, above and right; Depot Road, Jamaica, upper right.*



## Housing Opportunities in the Town of Jamaica

The Town of Jamaica, population 1,005, has a primary center, Jamaica Village, and a secondary crossroads village at Rawsonville. The Village of Jamaica hosts the Town Offices, Library, Post Office and Fire Department, as well as a number of homes and businesses. The village elementary school is under consideration for closure, opening up a potential site for housing. Meanwhile the Town is developing plans for wastewater treatment. This new capacity would open up opportunities for redevelopment along Vermont Routes 30/100, as well as new mixed multifamily options on the school site.

The regional GIS assessment (right) identified a number of large developable parcels that could support housing, including gap sites in the village and areas where the village could expand. Steep topography and potential for flooding along the West River corridor are the principal constraints. In consultation with local stakeholders, the team focused on two sites: the Jamaica school property and Three Mountain Inn (far right).



In the smaller hamlet of Rawsonville, traffic at the crossroads of Routes 30 and 100 supports the Rawsonville Marketplace and Sunoco Station, and a few other businesses providing a quick bite to eat, sporting goods or Cannabis. A potential redevelopment site includes the buildings and parking at the Marketplace (left). There are several condominium projects in Rawsonville, one of which, Bear Creek, provides an interesting case study on how to tuck housing in around the edge of a village. The dark-stained condos (photo, right) are set back on a terrace above Rt. 30, with preserved open space along the road. Tall sloping rooflines and a backdrop of mature trees help to reduce their visual impact.



## Jamaica Village School Site

Sadly, the Jamaica Village School may be closing. This proposal suggests working with the local Board of Education to develop the site for a much-needed mix of affordable rental and for-sale multi-unit housing types. A redevelopment project could maintain space for the PreK, the only current educational use for the 2024-2025 school year.

The 6.65-acre site is high and in easy access of the Jamaica Village Center. An adjacent wetland which occupies not quite half of the property would be protected, and the existing playground would become an amenity for the site.

This investigation suggests 40 to 50 small apartments that would vary in size from studios to one bedroom, developed in the style of the vernacular Big House/Little House/Back House/Barn with some components being two story. Parking is tucked between the buildings and along the one-way vehicular loop.

Senior apartment housing is shown fronting the community green and playground. This three-story building would have the character of some of the larger buildings in the village centers. A lower storied wing to

the north would include common spaces, eating areas and staff/support services.

The small two-story townhouse condos shown in the inner one-way loop could be affordable for-sale starter homes for young families or homes for families who are seeking to downsize. Sales of these units could help finance a proposed community building – also facing the community green – and a building that could be leased to local service providers like daycares or senior centers.



The traditional extended farm building offers an approach to the buildings that allows for a range of unit types, including single and two story apartments or townhouses.



## Potential Development Approach for Jamaica Village School Site



### Three Mountain Inn Site

Three-Mountain Inn at the corner of Vermont Route 30 and Depot Street is an established Inn on a 1.2-acre site. The team was told that the owner has interest in adding apartments. New units could be made available for staff, seasonal workers, or others in need of affordable housing.

The existing buildings are one and two story and face VT 30 and Depot Street with a parking courtyard in the rear. This proposal suggests that the two primary building footprints at VT 30 could be replicated at the rear of the property in a style similar to the existing buildings. This could add up to 10 new small apartments.

Additional parking is shown off the parking loop and to the east in front of the new buildings. Overflow parking might be managed with a partnership with the Land and Historical Society. Their rear parking is adjacent to the Inn's property. Every effort should be made to preserve the large evergreen along the eastern property line.



Development of additional housing need not alter the historic character of the village.



View of the eastern Three-Mountain Inn building that faces VT 30. Proposed new buildings could maintain this simple authentic style.



New homes could enjoy the view across the West River valley from the rear of the property..



## Rawsonville Infill Site

Jamaica’s Rawsonville Community is at the intersection of Vermont Route 30 and Vermont Route 100. This location’s proximity to all four villages of this study positions it to become a convenient hub of community service activities. These might include Community Connections, childcare, and other non-profit service providers.

The character of Rawsonville is more that of a commercial strip rather than a traditional village center. Like many similar places, it is dominated by cars and parking lots, rather than attractive places to walk and hang out. Over time, there could be options to begin to fill in the gaps and add new buildings and uses, including additional housing, which would bring new life to the village. A key part of this is connecting sidewalks and other pedestrian walkways across lot lines to make it easier to get around. Parking should be kept to the side or rear of buildings, and connected across lot lines so that it’s not necessary to pull out onto Rt. 30 to get next door. Wherever possible, driveway entrances should be shared, and unnecessary curb cuts closed off to help get cars out of the front yard.

To explore some of these ideas, the team first focused on the flat road frontage of the Bear Creek Development but soon learned that this area is protected by a conservation easement. Focus then moved to the 5.75-acre site to the east of the intersection of VT 30 and VT 100 (right). This site currently has a large service station/convenience store and a sporting goods store/outfitter. Both buildings are styled with the local vernacular but their siting and the massive parking lot between them makes it feel more like a Walmart plaza than a village in Vermont. The parcel also has a large undeveloped portion to the east.

One idea behind this scheme is that there might be options for the landowner to work with the villages or Regional Planning to develop a location here for facilities needed for community services. Illustrated are three two to three-story buildings with a total 15-17,500 sq. ft. of space. Parking is accommodated in the rear.

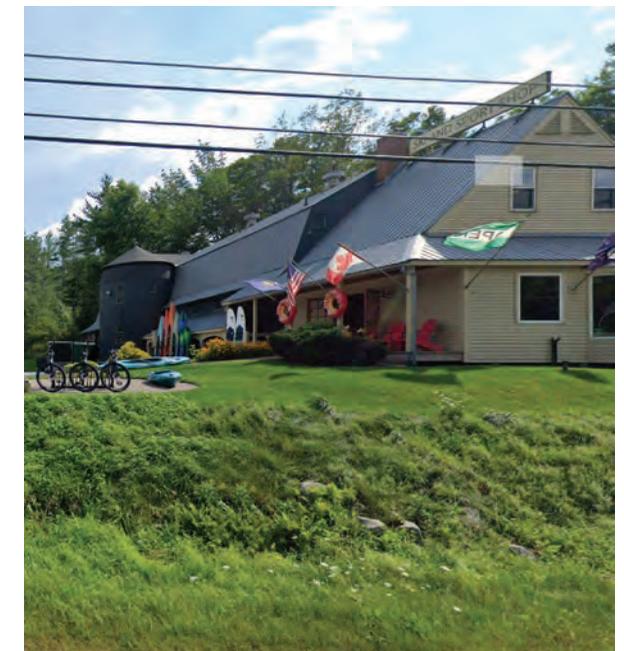
The diagram also illustrates a hostel that could be built over parking in the central parking lot between the two existing buildings. A hostel could provide affordable housing for seasonal workers, hikers, and outdoor enthusiasts and provide an additional income stream for the owner.



Entrance to Rawsonville Marketplace Convenience Store and Gas Station.



With its multiple curb cuts (and continuous curb cuts in some areas), large parking lots and utility areas, the Rawsonville Strip is functional, but not attractive. Some additional development, including community services and housing, could provide the push it needs to become a more attractive destination (photos this page courtesy Google Streetview).



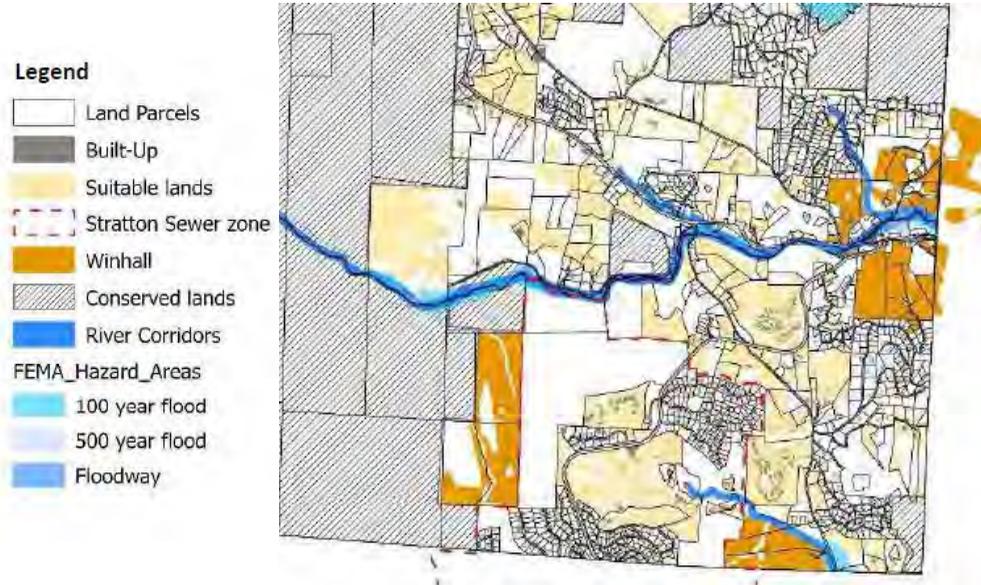
Existing Equipe Sport ski and sport outfitter.

## Housing Opportunities in the Town of Winhall

The regional GIS assessment identified a number of properties that appear to be developable, and of these there are potential housing sites surrounding Bondville, as well as adjacent to Stratton Mountain (map at right). Local stakeholders helped the team refine this list and explore additional opportunities along Route 30 in Bondville, at the Town Offices, and on Kendall Farm Road.

There are a number of development opportunities along Vermont Route 30 in the Bondville area of Winhall. The map (lower right) identifies three of those options.

- The easternmost site is a 49-acre property owned by the Stratton Corporation. It is at the Stratton Mountain Access Road and Vermont Route 30. This site may represent significant opportunities for the development of affordable housing both for local residents and seasonal workers at the Stratton resort. The Village should investigate this opportunity.
- The second opportunity is at the Winhall Town Offices and Fire House. The two parcels are not quite 5-acres. This important village location is apart from a village-center and does not give a strong sense of place. Adding housing along the road frontage would create density and a stronger sense of a village-center.
- The third site is the Town Park that is behind the Library at the intersection of Vermont Route 30 and Kendall Farm Road. This 1.46-acre site is in the floodway but might support four to six small units facing Kendall Farm Road. The units would be raised above parking allowing for flood waters to rise without entering the units.



There appears to be enough space adjacent to the Winhall Town Offices to accommodate some new homes, which could take advantage of good site access to Rt. 30 (photo courtesy Google Streetview).



## Winhall Town Offices Site

The existing Town Offices/Fire Station complex backs up on the Winhall River, but is high enough above the river to be out of the FEMA floodplain and state-designated river corridor (see existing conditions map, below left). There are wide existing access points to Rt. 30 at both the Town Office and fire station which could be better utilized if they were also used to access some housing.

The diagram (below right) shows a series of two and three-story buildings aligned parallel to Rt. 30. The footprints shown could provide 18-20 studios and one-bedroom apartments. With the highly visible location, buildings could be designed to reflect the many connected structures common in the area (see photo at right). Parking is accommodated in the rear, accessed from the existing parking lot at the Town Offices. This

allows the street frontage to be kept as open lawns, with the addition of street trees and landscaping to help buffer the new homes from the street and create a more attractive setting. In addition to taking advantage of land which is already town-owned, this approach makes



A private office building next to the Bondville Fairgrounds shows an attractive approach to building a larger structure out of smaller elements.

more efficient use of driveways, parking and utility connections that are only used when the Town Offices are open. The first step in pursuing this approach would be a feasibility study for water supply and wastewater treatment, which is probably the key factor determining whether the project is feasible, and would likely set the number of new homes that could be built.



## Kendall Farm Road Site: Existing Conditions

The Town of Winhall owns a 250-acre property on Kendall Farm Road, about two miles from the intersection with Route 30. The gravel road winds along the valley of the Winhall River past forest, farms and small subdivision roads until it reaches the site, where it becomes National Forest Road 320. Several snowmobile routes meet at the site and continue into the National Forest.

The property is made up primarily of sloping forested land, with grades that would limit construction of roads and structures. The lower slopes, however, are not as steep, and are made up of deep, well drained soils that were once mined for sand and gravel. Several old roads wind up the hillside to the old gravel pits. The largest is not far from Kendall Farm Road, and has 10-12 acres of relatively flat land. On the adjacent ridge there appears to be an old stone wall that marked the edge of an area that was open hay meadows as recently as the 1940s. Soils throughout this area are characterized by the state as well suited for sewage disposal. Visible on the orthophoto (right) is another 30-40 acres of relatively flat land. There are two more gravel pits in this area, accessible from a separate gravel road that parallels the eastern boundary of the property. This is another possible site for sewage disposal, or for construction of additional homes.

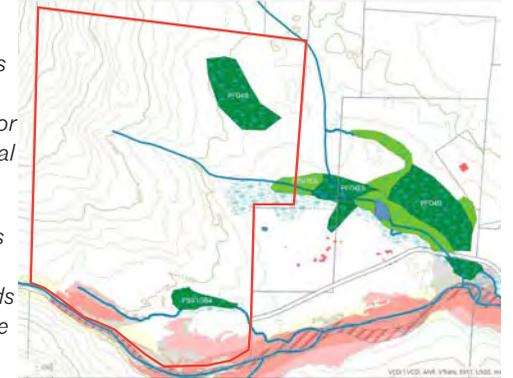
While this site is some two and a half miles from Winhall Town Hall, it is only about two miles from the base of Stratton Mountain as the crow flies, and already connected to the regional snowmobile trail system. With ample room for new homes, and decent soils for wastewater disposal, it represents an opportunity to build a new, self-contained village.



Turn-around where Kendall Farm Rd. meets the National Forest.



On the map at left, darker green colors represents soils rated well-suited for wastewater disposal systems.



Map at right shows streams and associated wetlands draining toward the Winhall River.

## Kendall Farm Road Site: Ecovillage Scenario

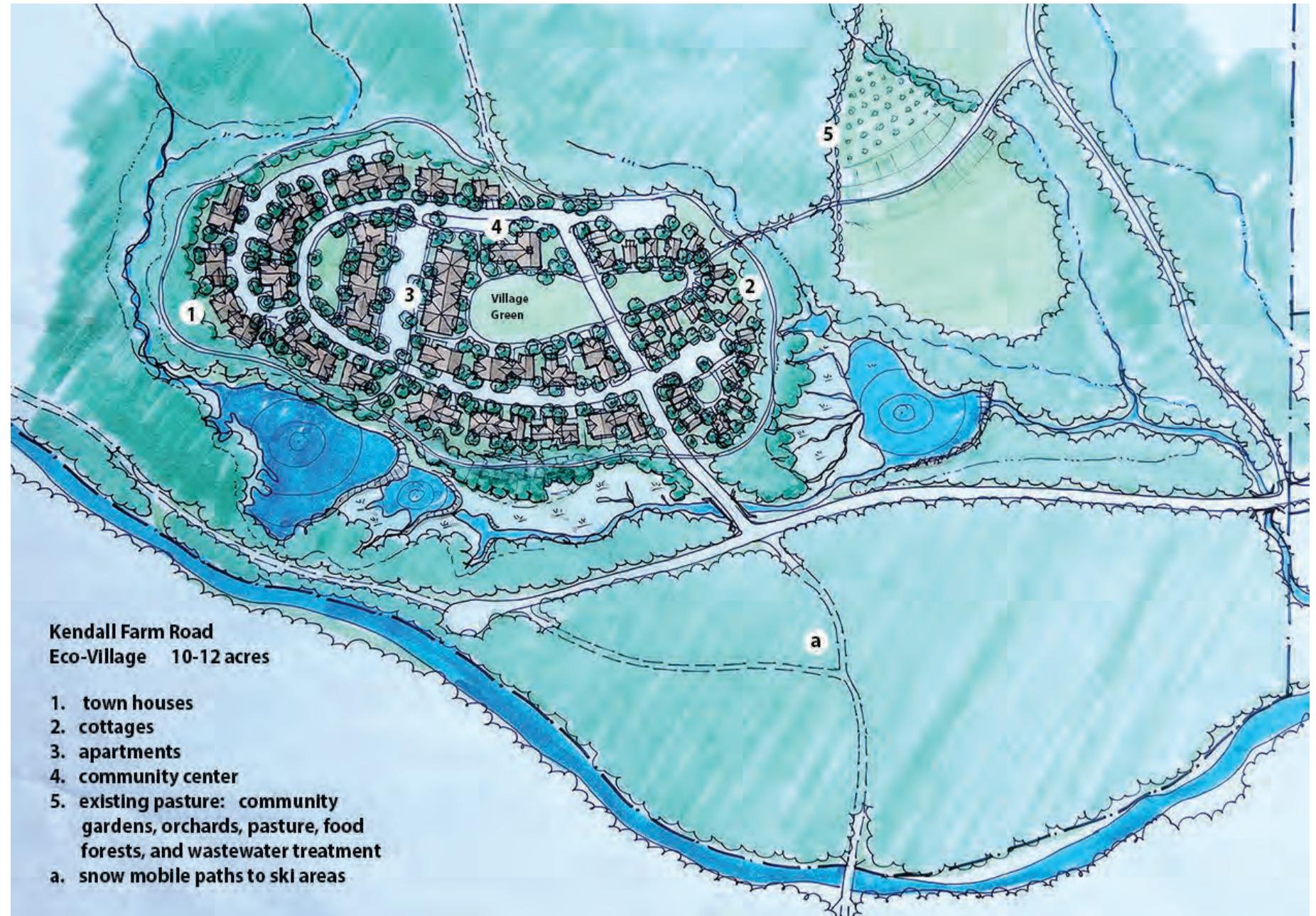
As illustrated, the Kendall Farm “Ecovillage” would take advantage of the previously-disturbed gravel pit to create a new hamlet with a mix of different housing types. The plan depicts a total of 110 units overall: 20 cottages, a 25-unit apartment facing the village green, and 65 townhouses around the outside of the loop. A community center is shown at the top of the green. This community center might host some retail/commercial like a coffee shop/café and a co-op market.

The size of the parcel and the diverse landscape could support a new village modeled on the Ecovillage, an intentional community designed and managed to foster social, economic, and ecological sustainability.

In practice this would feature shared facilities in the community center that allow residents to share resources and activities. In the landscape, a village green and other open spaces would allow for shared outdoor activity, playgrounds and community gardens.

Former pasture along an old wall to the east would be reclaimed for wastewater treatment, community gardens and orchards, pasture and a food forest. It might also support a solar array for the community.

The balance of the 250-acre property is a little too steep to be practically developed, but represents the additional amenity of a “nature preserve” for residents and for the community. The existing wetlands and beaver ponds along the road would be maintained for wildlife and stormwater management.



## Housing Opportunities in the Town of Londonderry

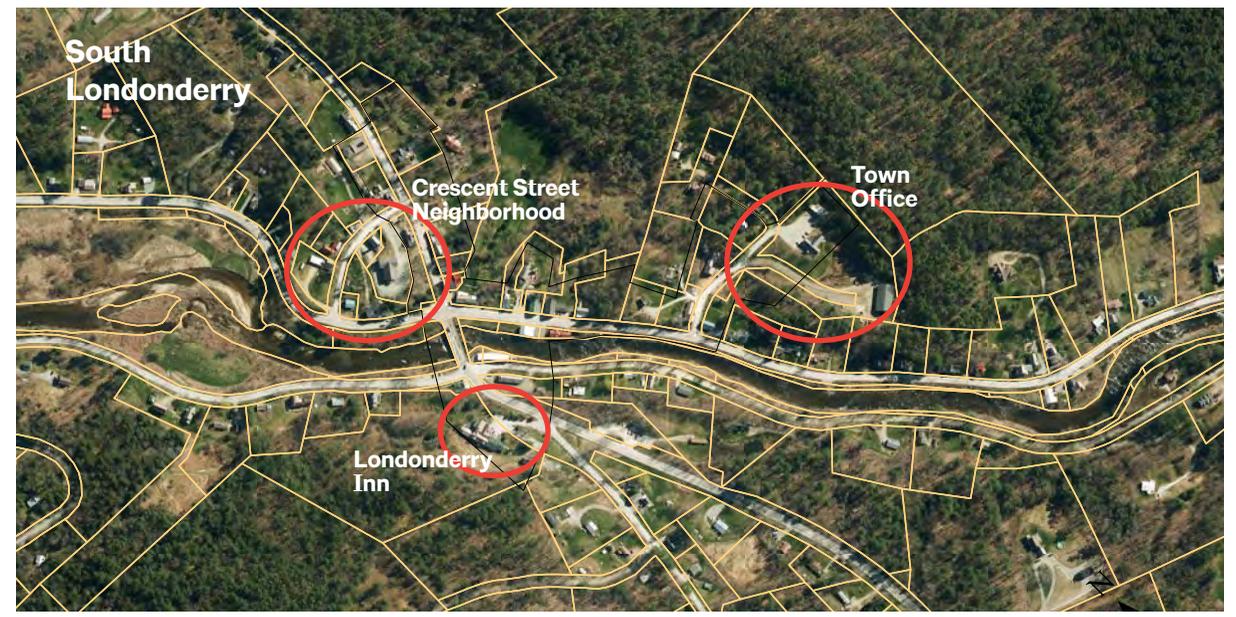
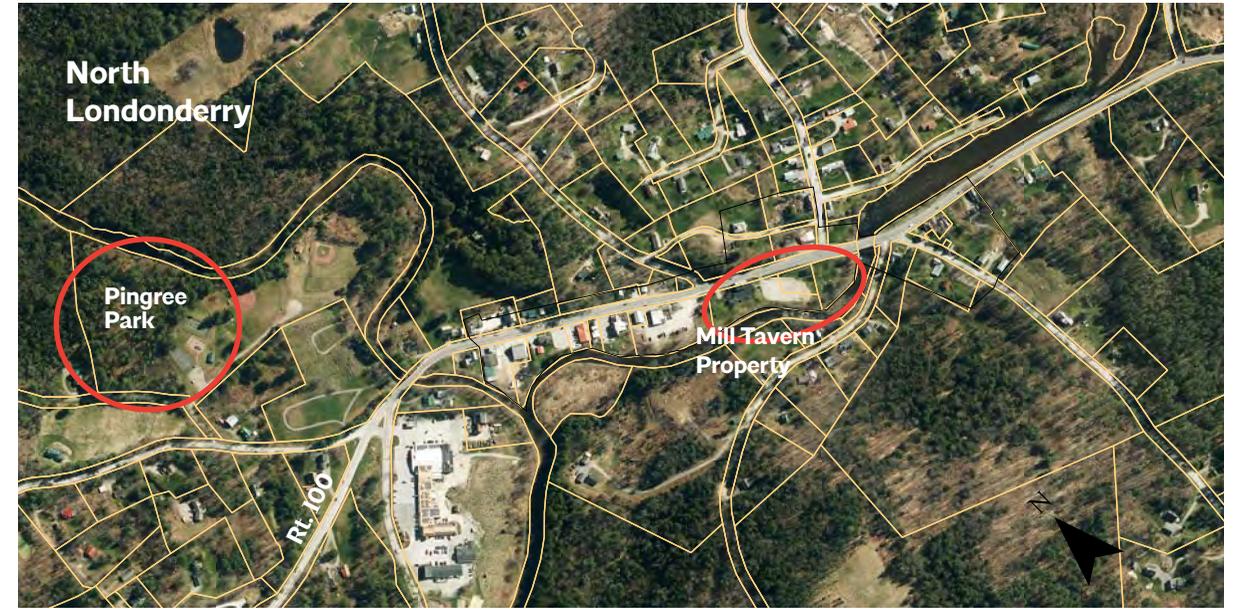
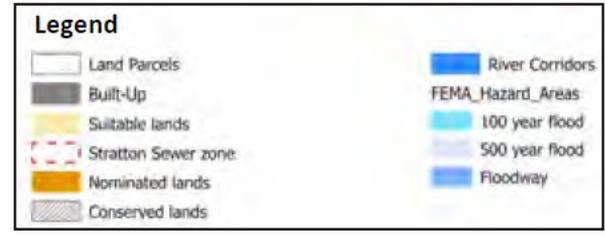
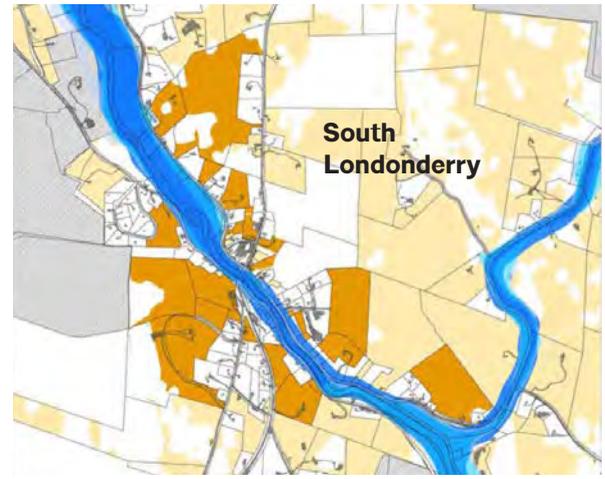
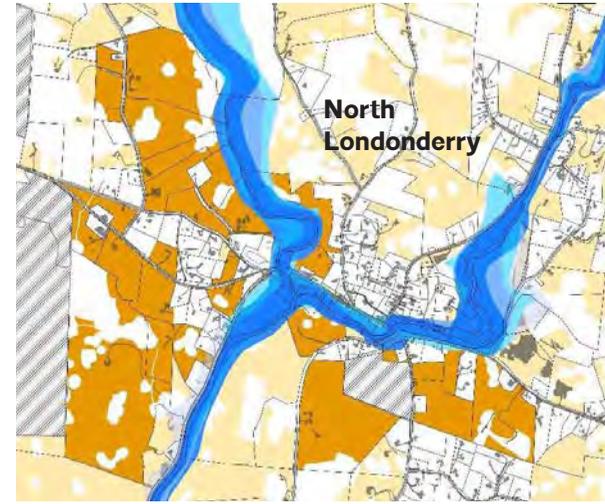
Londonderry has two distinct village centers. South Londonderry Village is a collection of charming, densely placed commercial buildings and homes that hug the road at the base of steep terrain. Vermont Route 100 crosses through the center of the village.

North Londonderry Village is at the crossroads of Route 100 and Vermont Route 11. There is a large commercial strip center that serves as a regional hub, along with a number of cafes, restaurants, and commercial establishments. Most of these businesses are in the floodway with their backs to the West River.

Londonderry is in the final planning stages for wastewater treatment. The system in North Londonderry would take advantage of a disposal site just across the river south of the village. The South Londonderry system would be located at the Prouty Property north of the village on Rt. 100. The new system will allow existing homes to connect to the new system and will create capacity for additional homes in both villages.

The regional GIS assessment of potential housing sites identified areas for new homes adjacent to both villages (see maps at right). Assuming favorable topographic conditions and the ability to connect to the new sewer system, there appears to be ample room for new housing. Both villages are constrained by floodplains in their core, but these maps indicate numerous areas within walking distance where new homes could be tucked in around the edges of the village.

A number of promising sites were investigated by the team after consultation with local partners (see maps, far right). These included both private and town-owned sites, some of them within the village centers and others on the edge. Several additional sites were explored outside of the villages, including the Prouty Property and the Dostal Property at Magic Mountain. Plans and diagrams may be found on the following pages.



## South Londonderry Housing Opportunity Sites

The team focused on three sites in South Londonderry. One is on town-owned property. The other two are on private parcels. These depictions are only hypothetical explorations of how new housing might fit on these sites, and do not obligate landowners to take action. They are intended to demonstrate how additional development on private property could fit into the existing village and contribute to meeting the housing needs across the region.

### Crescent Street Neighborhood

One obstacle to creating affordable housing is an insufficient number of units to attract a developer who can build “at scale” to reduce overall construction costs. This example explores the potential to work across several sites that are in proximity to each other but not contiguous. There is the possibility for a “laydown yard” at the Baptist Church (a place for storage of materials and equipment during construction). The church property tops the hill within the loop of Crescent Street.

The other advantage to a “scattered” site approach is aesthetic. Each site can have slight changes to the exterior character that will make the infill more in keeping with a community that grew organically and over time. This could include having different building



First Baptist Church of South Londonderry.



types from one parcel to another. For example, there are two building types in this diagram, including nine cottages on the parcel to the east and 17 small townhouses on four other parcels.

The townhouses facing SoLo Farm & Table could be for their staff or other seasonal workers. They are shown on neighboring property but intended to support the restaurant’s potential interest in the affordable housing shortage. Their own property could support several units facing Middletown Road.

Additional opportunities may exist on the Baptist Church property just to the north of this site plan. The church could perhaps develop accessory dwelling

units behind the parsonage as part of their mission to support affordable housing for their congregation, the community, and perhaps their aging congregants who would like to downsize in the heart of the village.

The vacant, three-quarter acre property to the east on this plan appears to have space for five to six vacant units. These units could be renovated, with the additional development of nine cottages on the rear of the property, all facing a common green.

The property at the corner of Crescent and Middletown is a beautiful historic home that sadly appears to be beyond retrieval. We believe three to six units could replace this home. The remaining sites are currently vacant.

### Londonderry Inn

Londonderry Inn sits on a terraces high above South Londonderry with access from Vermont Rt 100. There appears to be room for additional structures set into the slope adjacent to the entry drive. These could be accessed from the terrace on the upper side. As shown below, this location appears to be within the broad right-of-way of Rt.100, which obviously presents an opportunity for housing (public ownership) as well as a challenge (coordinating with Vermont DOT). Given the opportunity, however, this is an option worth exploring.

Shown below are seven townhouses set into the slope along the entry drive, and another unit attached to the existing Barn west of the parking area. The barn itself could be renovated for staff housing, which together with a two-story townhouse addition could provide two to four new homes. This could provide a total of six to twelve new affordable housing units as illustrated below.



### Londonderry Municipal Offices

The Londonderry Town Offices and Garage are on a 3.94-acre site above Main Street and south of the Village Center. The illustrative study (below right) shows 14 small townhouses and 30-40 apartments, including a mix of studios and one bedroom units.

It was suggested there might be room for additional housing on 20 acres behind the Town Offices owned by the South Londonderry Library Association. This property is probably too steep for multi-family development. However, it might be a good candidate for one or two single-family homes. Perhaps the Library could consider selling the property and investing the return into a trust for affordable housing. Or, consider a land-swap for a site that is more suitable for multi-family housing.

We understand there is a small wetland on this site where apartments are suggested. Discussion at the town hall meeting indicated that this wetland could be mitigated by the protection of a similarly sized wetland in another part of the region. There was also discussion in



Londonderry Town Offices (Courtesy Google Streetview)

the town hall meeting that this site was being considered for a relocation of the current Village Fire House at the corner of Main Street and VT 100, an active floodway. If this is designated as a priority, a new fire house would fit on the site of the southern-most apartment building shown below next to the Town Garage. This use would still be compatible with the illustrated housing. Additionally, this would create a new opportunity at the site of the current Fire House. It could be redeveloped with apartments over a level of parking, which can be allowed to take on water during a flood event.



### South Londonderry Town Office Site Study

- 14 Townhouses
- 30-40 Apartments

### Pingree Park

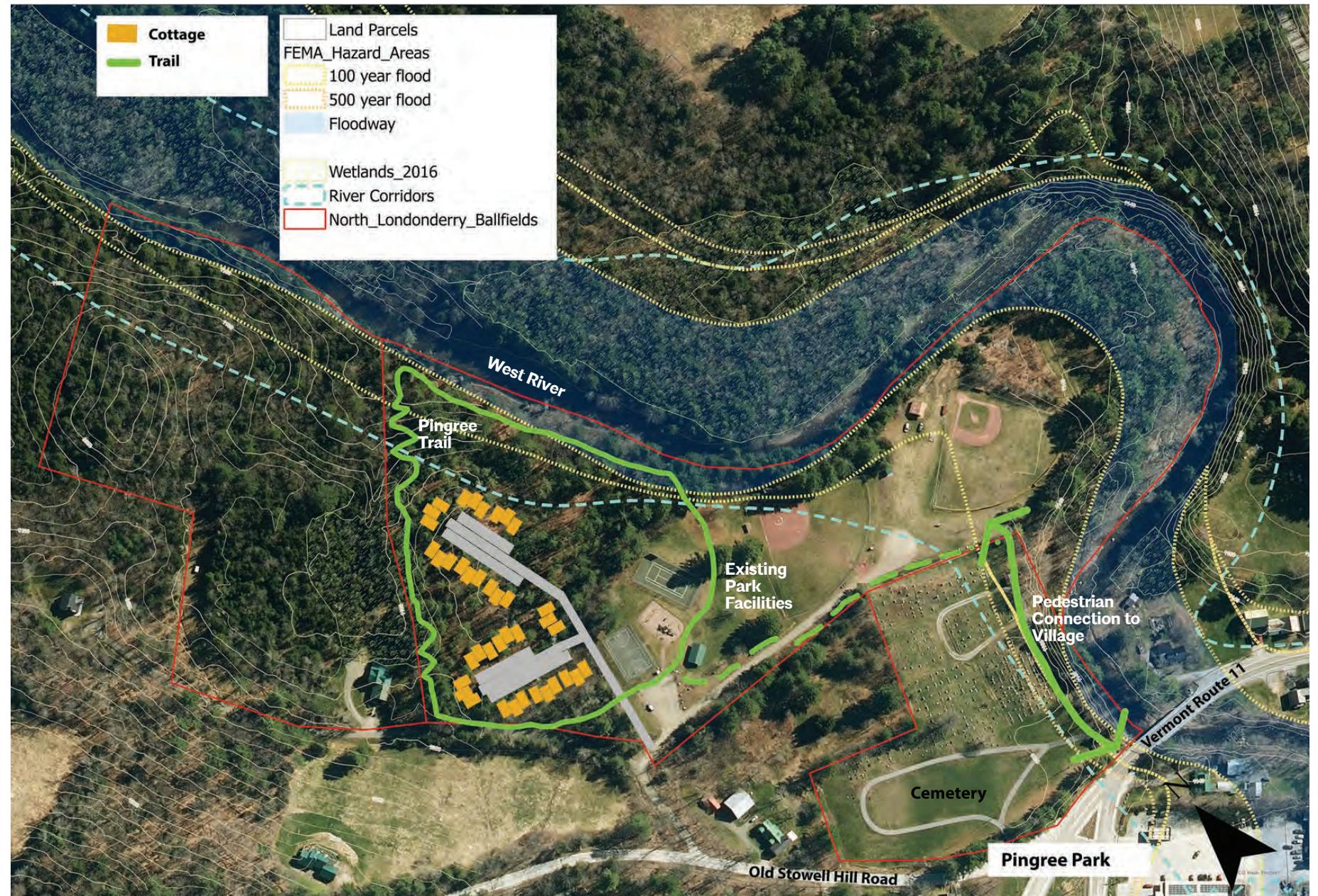
Pingree Park is north of Vermont Route 11 “above” the Village Cemetery off Old Stowell Hill Rd. There are ball fields, tennis/pickleball courts and a playground. There is a picnic pavilion that hosts occasional musical performances and movie nights. It is within walking distance of North Londonderry Village and has existing recreational trails that provide access to the West River.

The scheme shown at right takes advantage of the wooded northwest corner of the park to create two townhouse neighborhoods clustered around parking courts. This provides for efficient, centralized parking and easy walking access to each dwelling. On the opposite side, each of the homes looks out at open space, and the existing Pingree Trail loop continues to circle the property. Like the Bear Creek community in Rawsonville, the cottages would be out of sight of the rest of the village, surrounded by woods and open space, but within walking distance of shops and services.

This layout shows 39 townhouses or cottages, laid out in groups of three units within 13 separate structures. The location avoids the FEMA floodplains along the river as well as the state-designated river corridor. Preservation of a buffer of trees around the periphery of the property accommodates the existing trail while also screening the new homes from neighboring properties. The individual townhouse units, averaging perhaps 1,000 sf, could be designed to look like extended farmhouses rather than suburban-style townhouse condos.



*Pingree Park’s facilities could serve as a valuable amenity for residents of a new neighborhood, while continuing to serve residents of the surrounding village and town.*



### The Mill Tavern Property

After 50 years in business, the Mill Tavern restaurant closed in the late 2010s. The site – currently vacant and for sale – includes the buildings and a surrounding 2.4 acre parcel that includes part of the FEMA-designated floodway of the West River. The rest of the site falls within FEMA's 100-Year AE floodplain (with a flood probability of 1% in any given year). Almost the entirety of the site has also been designated part of the River Corridor by the State of Vermont.

It may be prudent to move structures out of the floodplain. However, as with so many Vermont villages, doing so in North Londonderry would only lower the density of activity and further erode the visual fabric of the village. The suggested redevelopment of this site as a mixed-use property illustrates "one" way to maintain village appropriate density with construction that anticipates and manages periodic flooding from the West River.

This type of flood-adapted development elevates the new construction over parking and out of the flood zone. The parking is designed to be cleared of vehicles as floods are anticipated and incorporates construction strategies – like pervious surfaces – that

can quickly manage water as the flood recedes. There are costs associated with this strategy, but it allows for development and density where it was no longer feasible to build in traditional ways.

The adjacent illustrations show 44 small townhouses and 10-12,000 sq. ft. of commercial space that would front VT Route 11. As shown in the cross sections (right) the structures would step down the hill, with parking on the ground floor. When flooding is likely, cars are moved to higher ground and the parking level would be allowed to flood (lower right). Anything that could be damaged by flooding, including heating and cooling equipment and other utilities, are kept on upper floors. Outdoor terraces, sloping lawns, paths and steps help to connect the buildings to the landscape.

This scheme also suggests that there are ways to take advantage of the West River as an amenity: embracing the river front versus turning backs or parking lots to the river. A river front trail is suggested as a strategy to make this new development more safely walkable to the village restaurants, cafes, market, and services. A river walk would be an amenity for the entire village.



### Prouty Property

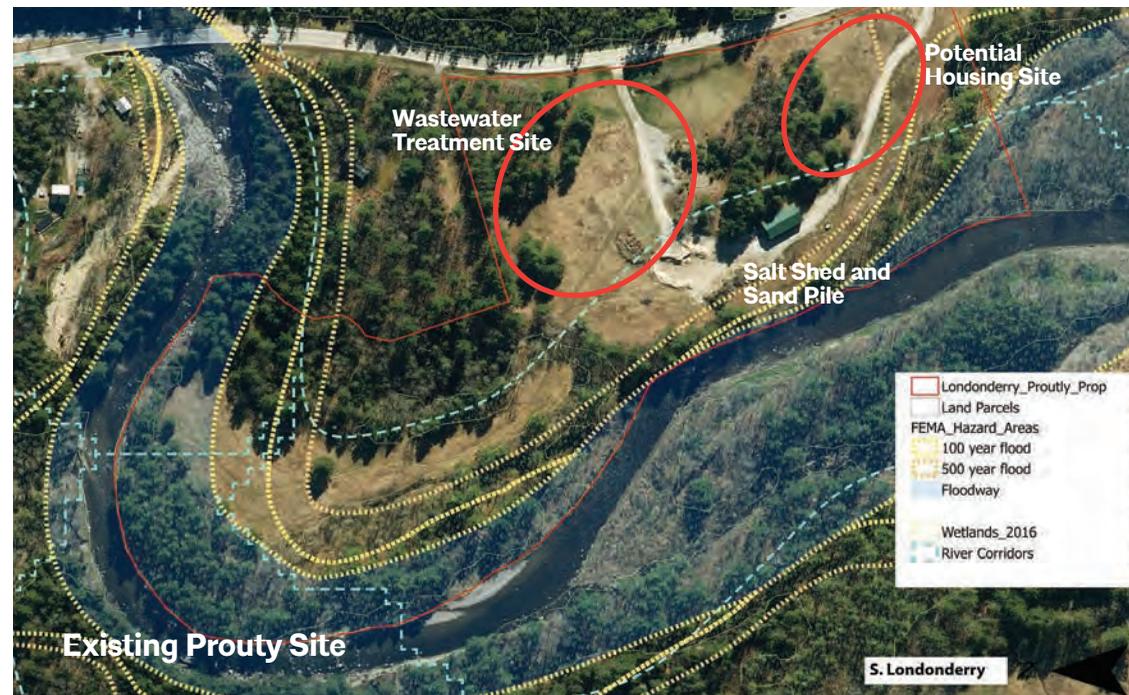
The 27-acre Prouty Property was purchased by the Town of Londonderry in the mid-1990s. Uses pitched for the site at that time included a sewage treatment plan to serve both North and South Londonderry villages, a new town office building, a high school, and storage facility for salt and sand for winter road maintenance. So far the only construction has been a salt shed that was completed in 2017. The central location and good road access continue to make the site attractive for many different uses, including wastewater treatment, and the team was told that plans are currently being prepared for a wastewater disposal facility that will serve South Londonderry.

The site is bounded by the West River, and much of it lies within the FEMA floodplains and state-designated river corridor. However the driveways, salt shed and open meadows on the upper elevations of the site closest to Rt.100 are largely out of the flood prone area.



The salt shed and sandpile (out of frame to the right) are hidden from the road by a wooded knoll.

Based on 30% design drawings for the wastewater system, and current location of the salt shed and sand pile, the area North of the salt shed is largely spoken for. There does appear to be room for housing on the south end of the property, totaling two or two-and-a-half acres.



The housing site could take advantage of the existing access road at the southern boundary of the property, and could continue through the site past the sand shed or be turned into a dead end. As shown in the diagram (below) and the sketch (right), new buildings would be laid out on either side of this access road, set into the wooded knoll on the uphill side, and built over the slope on the river side. This includes 16 two-story townhouses. These could have parking on the ground floor or in spaces in front of the building.

A larger two-story apartment building could have 25 apartments. The structure is large enough to have parking on the ground floor, accessed from a driveway that slopes down from the main access drive. Since the building as shown is built above the 500-year FEMA floodplain, the parking level would be built to allow floodwaters to wash under the building if necessary.



Potential Housing on Prouty Site

## Dostal Site, Magic Mountain: Existing Conditions

The Dostal Site totals a little more than two acres with frontage on Magic Mountain Access Road. This former hotel at the base of Magic Mountain was used most recently as housing for employees at Stratton Mountain, but has been vacant for a number of years and is in poor condition. There are three existing two-story buildings on the site, constructed in a 1970s ski chalet style. Building footprints are roughly 2,000, 3,500 and 7,500 square feet respectively. According to the real estate listing, structures would probably have to be gutted and renovated, or torn down and rebuilt from scratch.

The property offers an opportunity to provide worker housing within walking distance to ski facilities and adjacent hospitality businesses, with good access to the region from Route 11. It is also one of the few potential housing sites in the area that has access to wastewater treatment. The property is part of a private, neighborhood wastewater district that includes the Magic Mountain Ski Area and several adjacent business and residential uses. According to a conversation with one of the adjacent landowners, the total capacity of the system is 34,000 gallons per day, 18.15% of which is set aside for the Dostal property, or 6,171 gallons per day. At the Vermont standard of 70 gallons per day per bedroom, this is enough to support 88 people, or 44 bedrooms.



The rear of the site contains some attractive landscape areas that could be incorporated into a redevelopment scheme.



Aerial view showing existing structures and adjacency to Ski Slopes (photo courtesy Winhall Real Estate).



Existing structures have not been maintained recently.



Aerial view showing existing structures and poor pedestrian conditions along road to Magic Mt. (Winhall Real Estate).

## Dostal Site, Magic Mountain: Mixed Housing Scenario

The plan shows 44 units (though the number and size of units could vary as needed within the total sewer capacity), laid out in three buildings. The northernmost occupies the lower terrace, with its own access drive and parking area, and is separated from the next structure by a steep bank. The two other buildings stretch back across the upper terrace on the site, with another parking lot along the southern border. There are a total of 52 parking spaces. The buildings as shown are two-story, laid out with a combination of apartments and townhouse units. The barnlike structure in the rear of the center building would be wide enough for apartments on either side of a central corridor. The narrower buildings along the street frontage could be arranged as "stacked flats," with a shared stair well providing access to sets of apartments.

Extending the buildings perpendicular to the street helps to disguise the mass of the buildings. The long east-west connected facades also maximize sun exposure and help to create entries and courtyards that are sheltered from the cold north wind. Along the street, a new sidewalk helps connect the larger neighborhood, where pedestrians currently have to walk along the road. Front yards, porches and new street trees help to soften the visual impact of the new structures and create an attractive village atmosphere. Several shared lawn areas and courtyards within the site provide social gathering spaces for residents and play areas for kids.

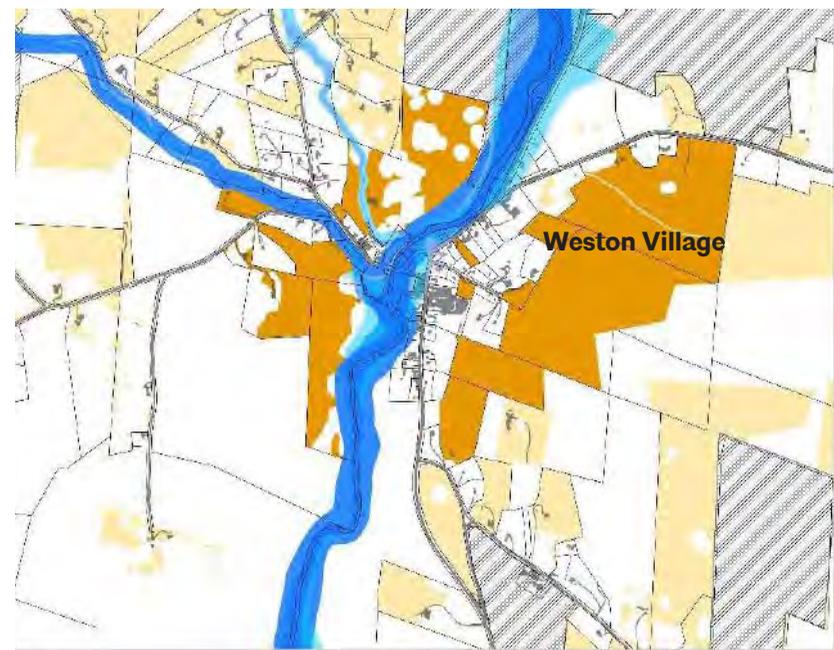


## Housing Opportunities in the Town of Weston

Weston Village is a classic Vermont village with public amenities – theaters and museums – clustered around the village green. It is also home to the Vermont Country Store which is a destination for travelers visiting the area. Serious flooding has become worse in recent years and a former mill dam will be removed to help mitigate future flooding. FEMA is also doing a buy-out of homes that were seriously damaged in recent flooding. Moving these historic homes to higher ground does not seem to be an option. Replacing housing on these sites might be possible if the living spaces were elevated to second stories with parking only on the lower level.

Outside of the floodplain, the regional GIS housing assessment identified a number of large parcels around the edges of Weston Village which might be suitable for housing (map at right). Some of these are open meadows and some are heavily forested, suggesting different approaches to designing housing in these areas: on a forested site, housing could be tucked into the trees, with muted colors to help it blend in; on a more visible site housing could be designed to feel like an extension of the historic village, with strong pedestrian connections and architecture that reflects local traditions.

Two site types were explored in Weston as options for finding locations for new affordable housing. The first is in the village center behind the Vermont Country Store. The second is on village owned recreation property north of the village center.



Legend	
Land Parcels	River Corridors
Built-Up	FEMA Hazard Areas
Suitable lands	100 year flood
Stratton Sewer zone	500 year flood
Nominated lands	Floodway
Conserved lands	



## Vermont Country Store Site

There is a large, needed parking area behind the Vermont Country Store. The team explored the possibility of making this parking more efficient, allowing new small two-three story townhouses to be tucked against the back perimeter of the parking. We are illustrating townhouse units that can house 14 to 18 studios or seven one-bedrooms or a combination of the two.

This exploration is intended as an example of “found” space for new affordable housing, particularly for businesses that need to support employees that are having difficulty finding housing they can afford. “Back of store” as well as “above the store” can be one infill strategy.

Undoubtedly there are other parking lots, underused storage sheds, and back lots that can be seen as potential infill building sites. These sites offer the advantage of infrastructure that is already in place or close at hand, but perhaps only used during business hours: access drives and parking lots, lighting, stormwater drainage, perhaps wastewater systems that can be expanded rather than built from scratch.



*The Vermont Country Store (left), Old Mill Museum and adjacent Grist Mill Building (above) illustrate traditional building forms that could be emulated for new housing: straightforward massing, vertical proportions – simple but elegant.*

### Weston Recreation Area Site

This 13-acre site managed by the Weston Recreation Club is off Vermont Route 100 on Lawrence Hill Road not quite two miles north of the village center. The Town Garage is adjacent on higher ground off Greendale Road. Amenities include a small swimming pond, tennis courts, a playground, and a basketball court.

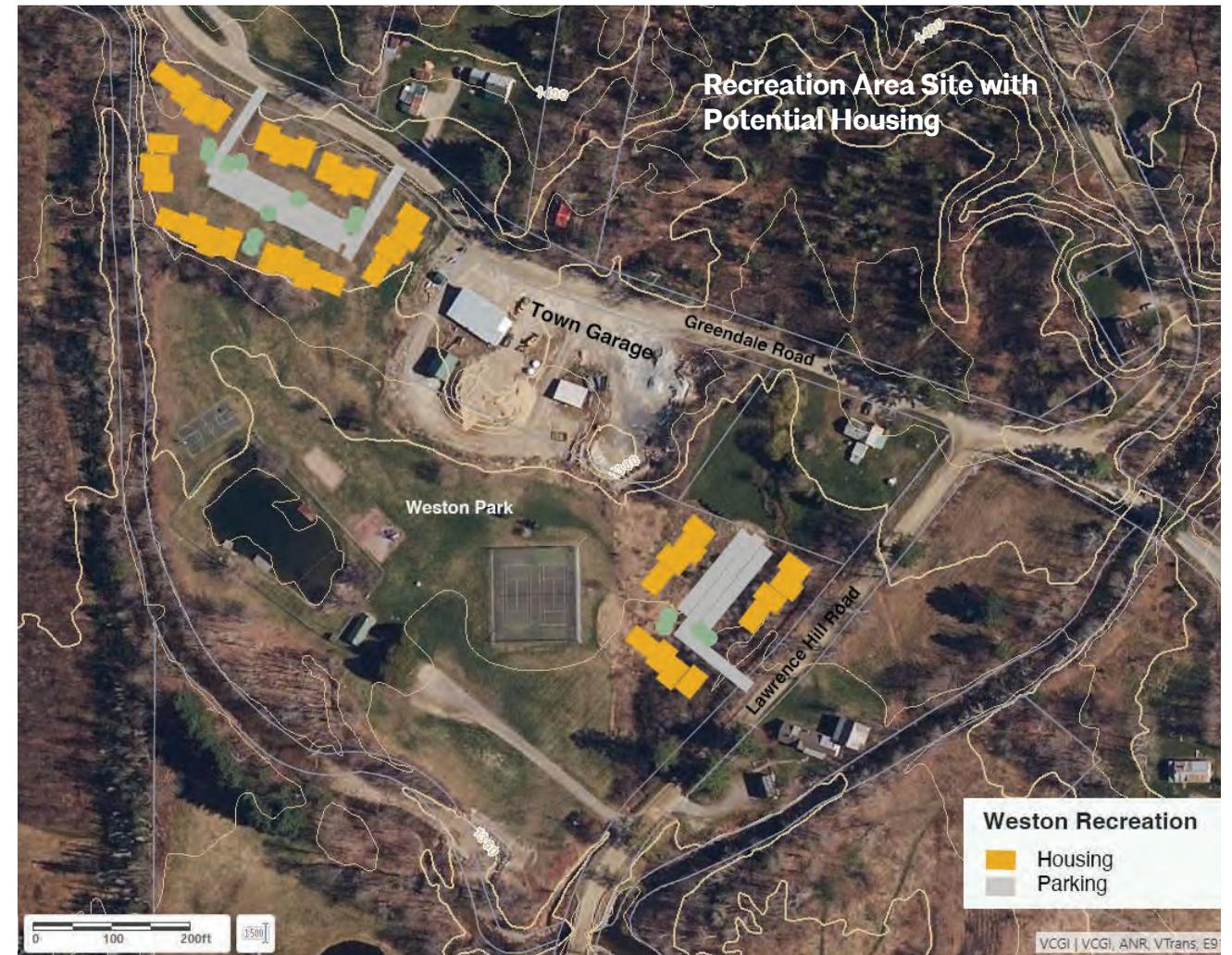
The team explored this site as an option for two sets of affordable housing. One grouping is west of the Town Garage above the park and accessed from Greendale Road. This housing includes groupings of one and two-story units that cluster not unlike the Big House/Little House/Back House/Barn vernacular as well as triplex townhouses. There are 25 one and two-bedroom units illustrated.

The second set of homes is off Lawrence Hill with a Big House/Little House/Back House/Barn type cluster facing the road and town houses to the side and rear. There are 12 one and two-bedroom units illustrated.

The Town Garage could be fenced and screened with trees and other landscaping. This scheme allows the park to continue serving all of Weston, but takes advantage of that investment to provide an amenity for residents of the new homes.



Local examples abound of the connected farmsteads that can be a model for design of multifamily housing that fits in well with the rural context.



# **Regulatory Options & Opportunities**

## Regulatory Options & Opportunities

Almost universally, residents of Jamaica, Londonderry, Weston, and Winhall identified the need for more housing that serves their residents, workers, and retirees. This housing is in very short supply, unaffordable or excessively burdensome for those working in the service sector and most local jobs, encourages an exodus of some young adults and other residents, and leads to long commutes for many of those working at local businesses. In addition, the high cost and unavailability of housing has helped create a shortage of workers for local jobs.

Households are considered to be housing cost-burdened when more than 30% of their income goes to housing (rent, mortgage, utilities, property tax, etc.) They are severely cost-burdened when more than 50% of their income goes to these costs.

In the four towns, about 80% of the cost-burdened households at or below 80% Annual Median Income (AMI) are homeowners, but low-income renters can also be severely cost-burdened. In Londonderry, for example, more than 70% of the lowest income households are cost-burdened, as defined by having to spend more than 30% of their monthly overall household income on housing costs. In many areas, households earning the median income tend to be far less likely to be cost-burdened households. In this region, because most of the housing is homeownership and housing prices are so high, even median income and above households can be cost-burdened and shut out of the housing market.

This problem will only worsen over time. Many moderate income households have owned their homes for many years, making them affordable to their owners. As their homes escalate in value far faster than overall inflation and wage gains, when those homes are eventually sold, they are often sold to high net-worth households or converted to short-term rentals, further reducing the supply of housing to median income households.

The **Housing Needs Assessment** exhibit to this report discusses these demographic trends and housing needs in more detail.

The housing market is successful, however, at providing housing for short-term visitors, second home dwellers, and high net-worth households. This housing helps support the property tax base and the economy. Unlike the experience in some resort and high tourism areas that feel overrun by visitors, very few residents objected to serving all of these populations – they just also want to ensure that local residents and workers can find housing and services to serve their own needs and those of local businesses.

Solutions to this housing crisis require an all of the above strategy, with no one action sufficient to solve the challenges. In earlier sections of this report, we explored necessary changes to regulations and statutes at the state level, to developing stronger partnerships, preparing for climate change, and using available public and private parcels of land and existing buildings to develop housing to serve these needs. Many of these steps are best served through regional action.

In addition to all of these steps, there are some opportunities for local regulatory reform to help with these challenges. Each town is going to need to decide on their own zoning and regulatory solutions, and there is not a one size fits all. The region can still work together, with Windham Regional Commission and other outside assistance when needed, to explore different regulatory changes.

Each town can identify where they fit in addressing housing needs and what they can do. Regulatory reform by itself will not solve the problem, but regulatory reform is also one of the lowest cost actions a town can take.

Income % AMI	Households which are:			
	Cost Burdened	Severely Burdened	Total Burdened	Percent Burdened
Household Income <30%	55	25	75	73%
Household Income 31-50%	30	15	70	43%
Household Income 51-80%	140	15	215	65%
Household Income 81-100%	0	0	100	0.0%
Household Income >100%	35	20	330	11%
Total Number of Units	260	75	790	33%

*Housing Cost Burdened Households: Londonderry example.*

Depending on the town and their existing code, regulatory reform can include revising:

- **Use regulations** – tiny and small homes, duplexes, multi-family housing, and mixed use developments are generally less expensive per residential unit than traditional single family homes, so allowing more uses opens up more option.
- **Dimensional regulations** – setback, frontage, height, and other dimensional controls can increase housing costs.
- **Definitions and details** – such as the definition of what a household is or other details in the zoning can encourage or discourage the creation of new housing.
- **Zoning map** – current zoning does not always provide enough land area for needed land uses.
- **Off-street parking regulations** – can add unnecessary costs and lead to over paving and faster stormwater runoff. Parking regulations should serve community needs, but when parking

demand will not affect other properties, parking regulations can be privatized, leave it to each developer to determine how many spaces they need.

- **Permitting process** – if overly burdensome, slow, or simplify creating unknowns for investors, can discourage critically needed housing and other investments.
- **Short term rental regulations** – to explore legal ways at allowing rentals that provide local income without competing for housing necessary to serve local needs.

All four towns have been working on how to address their housing needs. For example:

- **Jamaica:** The town plan recognized that second home ownership has increased and is exerting pressure on the existing market, so providing affordable housing depends on and should be encouraged by community organizations and non-profits that have access to funding that developers often do not. The plan identified the need to protect the affordability of publicly affordable units, to

direct new housing growth to areas with access to goods and services, and to encourage ADU's.

- **Londonderry:** 2023 Camoin Housing Needs Assessment, 2017 Town Plan, and the 2014 WRC Regional Plan. The plans called for encouraging housing-friendly zoning, addressing short-term rentals, providing for accessory dwelling units (ADUs), establishing a housing commission; supporting home sharing; and implementing lease-to-locals programs.
- **Weston:** 2016/2024 (update) Town Plan. In Weston, there have been no multi-family permits in the past five years. The plan discusses encouraging housing for young families, workers, and retirees, encouraging ADU's, encouraging multi-family village infill with zoning incentives, and working with non-profits on housing issues.
- **Winhall:** Town discussions included encouraging ADU's, requiring adequate facilities for new housing, addressing senior and family housing needs, and supporting efforts of non-profits and developers to create affordable housing.

These plans and planning aspirations could advance housing needs in the region. Zoning should directly express what communities want and is a critical tool in advancing housing goals. Unfortunately, the zoning in place in most of the towns in the region tells a different story and does not support the stated goals.

We identified five critical crosscutting zoning issues in multiple towns' zoning.

**1. Multifamily Housing:** Multifamily housing (duplexes and above) is absolutely critical for affordable housing. They create choice, are financially feasible to construct, and are an efficient use of limited developable land. Development of multifamily housing requires scale to be cost-effective and affordable for other than high end housing.

The zoning requirements in all four towns often make affordable multifamily housing all but impossible.

- **Minimum lot size:** Requirements for lot size of 0.5 to one acre per dwelling unit, in all four towns are not suitable for multifamily housing for other than high end housing (limited sewage disposal will curtail the benefit, but there will still be some benefits, especially when two smaller dwelling units replace what would have been one large dwelling unit.)
- **Uses by-right:** Multifamily development is not currently allowed in any district by right in any of the four towns. As soon as discretionary permits ("conditional use" approval) are required, many investors will not pursue approval because of the high costs, long time delays, and uncertainties involved in requesting discretionary approval. Developers are typically not discouraged, however, by requirements for site plan approval, approvals where the number of units and the use is not in question and the only issues before the permit granting authority are specific layout questions (e.g., landscaping)
- **Off-street parking requirement** are sometimes equal to or greater than those of single-family dwellings even, on the average, multifamily housing typically generates fewer vehicles per unit and allow greater opportunities for sharing parking spaces between multiple units.

**2. Shelter, transitional, and supportive housing:**

This kind of housing is critical to meet the needs of individuals and families who are in transition or unhoused. Those needs are present in all these communities, as they are everywhere. None of the four towns' zoning addresses these critical needs, not listing these uses by-right or with a conditional use permit.

**3. Family definition and composition:** Most of the communities define "family" as household members who are related by blood, marriage, or other operation of law,

and subsequently caps the number of unrelated people allowed in a dwelling unit. This is likely a violation of the Fair Housing Law, and that regulation interferes with congregant housing, employer assisted housing, and any other multi-family housing situation that involves unrelated individuals.

One common way to address this is to define "family" as any number of people living as a single household unit with a single kitchen.

**4. Conditional use approvals:** Conditional uses are allowed with a discretionary board approval. Conditional uses in zoning indicates maybe, maybe not, or it depends instead of "we want this." The presence of conditional use approval discourages developers and investors. If a community wants something, it needs to articulate it clearly through zoning regulations, with whatever conditions and standards they want. Multifamily housing is already too expensive and risky to develop. Discretionary approval adds another layer of risk that kills many potential projects.

Accessory dwelling units (ADUs), for example, require conditional use permits in all four towns. ADUs are the easiest way to allow lower cost housing and should be allowed by-right or with site plan approval only. The town can provide whatever limits that they want as a formula (e.g., design standards, size limits, limits on how many front doors, limits on where parking can be provided).

**5. Short-term rentals:** Short-term rentals (e.g., Airbnb, Vrbo) are dwellings that are rented for less than 30 consecutive days and at least 14 days per year. Short-terms rentals are not regulated consistently within the state or the region. Short-term rentals provide income to investors, which is especially desirable for local residents who might have an investment unit or two and provide them with an income to stay in their homes. Short-term rentals also bring in tourism dollars to the region, and they provide a critical mass for local businesses. They often, however, reduce the supply of housing or potential

new housing available for local residents and add to the housing crisis.

Each community needs to decide where they fall on that balance and how they want take action. Londonderry, for example, adopted a short-term rental bylaw and funded an administrator to oversee registration and enforcement. Potentially, there could be a regional model of a shared administrator if other communities followed Londonderry's approach.

The legal issues of communities' ability to regulate housing are still partially unsettled. Burlington has adopted a short-term rental ordinance that is currently being challenged in court as having gone too far.

One short-term rental approach is to change zoning to allow additional multifamily housing units to be created, as an incentive, but prohibit those units for being used as short-term rentals.

# **Building to Success - Precedents**

## Regional Issues in Context

The four towns in the project area are experiencing a “civic stress test” from the combined impacts of climate change, the pandemic and work-from-home impacts on housing and migration, inflationary pressures on housing costs and a range of other factors not dissimilar from other regions of the country. For instance, in 2021 one in seven home purchases across the country were by investors, illustrating the negative impact on first-time home buyers and working families who are being priced out of housing affordability by increased competition in the housing market. On the national scale, it is threatening to institutionalize inequality. Even in the Washington, DC region – one of the most expensive housing markets in the country – one in four home purchases last year were cash purchases. In 2022, 42 million households across the nation were cost burdened. These dynamics present significant challenges for all of our communities, and that is certainly the case in this region given its size, population and particular topographical and infrastructure constraints.

In a similar vein, the dramatic flooding events Windham Regional residents experienced in recent years mirror historic events happening in other communities across the country. In 2021, research revealed that a jaw-dropping 57 percent of existing structures in the contiguous US are located in climate hazard hotspots, yet we continue to build at disproportionate rates in our most vulnerable locations. A Realtor.com report found that climate risk represents a \$22 trillion challenge for the housing market – a staggering figure that continues to grow. The study identified 44.8% of US homes facing “at least one type of severe or extreme climate risk.” This year, there have already been twenty disaster events that have totaled over \$1 billion each – and as of this writing Hurricane Helene has resulted in a jaw-dropping loss of life and property damage estimates at between \$15 billion and \$26 billion according to Moodys, with a total cost of \$20 billion to \$34 billion. Some estimates run as high as \$100 million for total loss projections. Disaster events are an ever-present threat to this region, but it is a shared threat faced by communities across the US.

The challenges are daunting, and they may seem overwhelming, but they are not insurmountable. Our experience in other communities around the country is proof positive that collaborative efforts can achieve transformational results for rural communities and regions. This region is no different. Windham Regional communities here have already shown evidence that they are resilient and that together they are powerful. It is time to leverage your shared rural power to take control of your future and create the vibrant communities you desire. The following sample of community experiences illustrates what is possible when you build partnerships to address your key challenges at a meaningful scale.

### What Collaboration Delivers: The Bee Branch, Dubuque, IA

Dubuque, Iowa illustrates a powerful case of a community making a major commitment to address long-standing climate vulnerability. Between 1999 and 2011, Dubuque was subject to six presidential disaster declarations as repeated flooding events occurred in the Bee Branch Creek Watershed. In 2007, the city hosted an AIA team to look at several related issues ranging from smart growth and sustainable development to stormwater management and flood mitigation. Years later, the city is seeing the outcomes of its implementation work. The City launched the Sustainable Dubuque initiative to integrate efforts across city departments and throughout the community around a common sustainability goal. It created Dubuque 2.0, a formal initiative to encourage civic partnerships across the community. It also passed a Unified Development Code, which addresses zoning subdivision, site development, preservation, and sign regulations while incorporating sustainable design and low impact development (LID) and meeting the City’s smart growth objectives. Laura Carstens, the City’s Planning Services Manager, explained:



“Sustainable design is now the expectation for development in Dubuque.” The city established a whole-of-government approach to addressing its flooding issues, bringing together agencies to formulate a coordinated strategy that could leverage partnerships at every level of government. Building partnerships set the table for funding mechanisms. In 2013, its flood mitigation initiative was awarded \$98.5 million from the Iowa Flood Mitigation Board through state sales tax increment financing spread over 20 years. In 2016, the U.S. Department of Housing and Urban Development (HUD) awarded the City of Dubuque \$31.5 million in disaster resiliency funds for the Bee Branch Healthy Homes Resiliency Program and stormwater infrastructure improvements. When combined with other state and federal grants and local donations, the City has received \$163 million to help fund the \$249.6

million project so far. The city has used creative methods to fund the initiative on a [component-by-component basis](#), working incrementally toward the realization of the full effort. It is a transformative effort that includes daylighting a creek, creating new wetlands and a greenway, neighborhood mitigation efforts like porous pavements and flood-friendly landscaping elements (raingardens and related design improvements) and house-by-house flood retrofitting. It is now not only performing well when major rainfall occurs but it has created what is arguably the city’s greatest public space. The city’s initiative is now a [national model](#) drawing visitors from other cities to learn from their experience. As their comprehensive plan notes, “Igniting our early efforts was the selection by the American Institute of Architects as one of six cities in the nation to receive a grant for professional analysis and recommendations on

creating a sustainable path to the future.” They made the community process matter. The City Manager noted that “The community is very supportive of what’s happening and how it’s happening. ...They’re appreciative of the fact that they’ve been participants in developing the plans. They’ve seen what bad is, and they don’t want to see it again. They’ve seen what good is, and they really like it.” The same kinds of opportunities for scaling impact are available to Vermont towns who work together to make the bold commitments for their communities’ futures.

### Rural Power in Action: Helper, Utah

Helper City, Utah, was incorporated in the late 19th century as a result of surrounding mines and the railroad which runs through town. It developed a thriving local mining economy in the early 20th century. The town got its name from the ‘helper’ engines that were stationed at the mouth of the canyon to assist trains in reaching the Soldier Summit up the mountain. The natural resource economy began to suffer economic decline this century, and in 2015 the Carbon Power Plant in Helper was closed. It had been in operation since 1954. The economic impact resulted in de-population and increased poverty, putting a strain on resources and capacity. The town had almost 13 percent of the population living below the poverty line. In 2017, Helper City hosted an AIA team to build a community-driven strategy for its downtown. Over 200 people participated in the process, which produced a 53-page report with recommended implementation strategies that focused on strengthening the public realm, activating the downtown and enhancing the historic fabric. At the conclusion of the process, one citizen stood up and declared, “You’ve given us hope.” In the first year of implementation efforts, the town mobilized hundreds of volunteers in a grassroots effort to remake the public realm and activate downtown. Citizens were involved directly in a series of hands-on projects that included the redesign of Main Street, pop-up retail stores, redesigned public parks, restoration of the riverfront,

and other initiatives. They also enhanced programming downtown with successful arts festivals and related events. The impact has been transformational, stimulating private investment and momentum for positive change. Helper City Mayor Lenise Peterman notes that, “The plan created from the event is driving continuous improvement in Helper City. By giving voice to the community, we have also given it hope in creating a sustainable environment which is respectful of our past, values our environmental assets and maximizes the opportunity for community engagement.” As the [Mayor explained](#), “If you were passionate about history, you could work with a group of people who were passionate about history. Or plants, trees, benches – so we kind of broke down the different categories. At the end of the day, we just said, ‘Well, let’s have the community vote on it. Let them pick. I don’t care what we do, I think it will be beautiful either way, but let’s have them vote on it.’” In 2018, Helper citizens rebuilt Main Street with their own labor, including a design that featured 27 markers reading “Welcome Friend” in the different languages that were spoken in Helper during the coal era. In 2018, Helper was recognized with a Facilitation Impact Award for its revitalization efforts. Carbon County leaders hired a consultant to do an assessment of the entire county a couple of years later. Regarding Helper, he had this to say: “I have never seen a community like this. You guys are the poster child for how to get things done... We really believe Helper is setting the Gold Standard for Utah.” That sentiment is felt locally as well. The Mayor and Steering Committee wrote that “The three-day immersion by the team has impacted, and continues to impact, our community on a daily basis. People in our community have something they haven’t had for some time, hope for a sustainable community. Key tenants of creating that sustainability include replenishing human capital (drawing young families to our city), caring for our environmental assets, and finally recreating an energy-based economy to a destination based one. And we are doing just that – everywhere in Carbon County people say it’s happening in Helper” – and it is!” As one local report noted, “Within the last 18 months,



all but one of the available buildings on Main Street has been purchased and has undergone some degree of renovation.” As Mayor Lenise Peterman wrote, the community process “was the catalyst for what we have done and is the road map for what we will do to create our best version of a sustainable community. The community, at the final presentation during the SDAT visit, literally cheered.” Helper demonstrates that being a small community doesn’t have to be a barrier if you mobilize everyone to work together. As one local [news item](#) attests, “The hard work and long days led by Peterman and the people of Helper have made a lasting impact felt on every block and street corner of Helper today.” As the Mayor herself observed, “A community with hope is unstoppable!” A 2023 [article claimed](#) that “Helper’s Main Street is now one of the most vibrant, visited and flourishing main streets in Utah.” As other communities began to see the incredible results in Helper, they have reached out for similar community processes and the ripple effect continues to spread. Our team observed the same kind of community spirit and collaborative values here in Vermont that could galvanize collective action to build momentum for your future.

## Newport, VT

In 2009, Newport, Vermont brought an AIA team to town to help build a revitalization strategy. Patricia Sears, the Executive Director of the Newport Renaissance Corporation, described the town’s dilemma beforehand: “We were the last city in Vermont to achieve downtown designation from the state. We had some of the highest unemployment in the state. We decided we were done being last. We decided, ‘we are going to be first.’” Hundreds of residents and stakeholders participated in the process. As Mayor Paul Monette said, “it wasn’t the usual political process. Everyone was heard.” Newport was able to leverage the process to build broad partnership and involvement. The city became the first in the state of Vermont to enact a form-

based code and did it through a grassroots process. “Adoption of form-based code in record time through the hard work of numerous people really proves that grassroots efforts pay off,” continued Mayor Monette. “This zoning greatly improves the ability for the city to attract development while maintaining our historic downtown. While change does not happen overnight this zoning will help initiate change and much needed growth.” It also leveraged small actions to build momentum for larger investments. For example, the team included a recommendation to create a community garden downtown. Newport created a community garden with over 32 organizational partners. They took advantage of existing capacity – a downtown parking lot that was donated – and not only created a garden but programmed it to have a transformational impact. Out of the community garden, the “Grow a Neighborhood” program was created, teaching neighborhood residents about agriculture, providing space for family plots, and engaging local restaurants in a farm to table initiative. Six new restaurants opened in the downtown during the first two years of implementation. This activity spurred new investments that included boutique hotels, a waterfront resort and a tasting center featuring regional agriculture. As they described it, the goal behind the Northeast Kingdom Tasting Center was “to create a culinary destination for all the fantastic products in the Northeast Kingdom.” The new restaurants and Tasting Center created enough connectivity to launch an annual food festival in the downtown, which provided further momentum to the effort to revitalize the main street. One of the key recommendations of the community process was to re-invigorate the connection to the lakefront and organize and program more events to spur investment and visitors. Newport organized an international speedskating competition, the Rasputitsa Gravel Road Race for mountain bikers, and the Memphremagog Winter Swimming Festival which includes an international outdoor winter swimming competition. The events have spurred visitors from all over the world and increased investment activity in the town while reinforcing local identity and the value

of place. Newport has undergone a fundamental shift in its thinking since the community process. In 2009, the public dialogue was dominated by nostalgia about the city’s past. As one resident exclaimed, “I’ve seen Newport come, and I’ve seen it go.” Two years later, the team conducted a follow up visit to assess progress in the community. The sense of change reached all levels of the community. A citizen described the civic “attitude adjustment” that had occurred: “When you have people working together, things can happen and do happen. That’s the most important change that has occurred – a change in attitude. All of a sudden, nothing is impossible.” It received a Facilitation Impact Award for the results of its process as well. Newport demonstrated how mobilizing citizens for collective impact can have dramatic results quickly.



## Vinalhaven, ME

Vinalhaven is an island community located approximately 12 miles off the coast of Maine. The island has a year-round population of about 1,300 people but receives a summer surge of an additional 3,000. Vinalhaven has been threatened by rising sea levels, inundation and increased flooding due to climate change. In 2017, the town hosted an AIA team to hold a community process to begin developing strategies to address the challenges. At the time, communities in the region had expressed frustration with the lack of federal funding available to support infrastructure investments, but they agreed to participate in planning efforts that could position them for future funding. Those planning efforts are paying big dividends today. Vinalhaven went through years of successive studies and plans to build the case for necessary interventions and was in an advantageous position when funds became available. In recent years, it has been the recipient of millions of federal and state funds that are providing resources for major infrastructure projects throughout town. For instance, the town is currently building retaining walls and raising the main street, upgrading submarine electrical cable that serves the community, and doing preliminary work on reconstruction of its pier, floating docks, and ferry to adapt them for climate change. These are big investments that require successive studies and planning efforts to accomplish, but the town has utilized that work to leverage important resources. In the same way, Vermont towns can build momentum from this community process to implement additional needed efforts and make strategic decisions that position the region for investment as funds become available.

## Envision Utah

The team applauds the Windham Regional Commission for building this pilot regional partnership among Londonderry, Windham, Weston and Jamaica. We believe Vermont's rural communities would be well-

served by additional efforts to build regionalism and cross-jurisdictional collaboration across the state. Such initiatives can serve as important mechanisms to scale existing resources and capacity and position the state and regions for additional outside investment. It also allows for the development of statewide planning frameworks that align community visions for the future. One excellent existing model of these kinds of approaches is represented by Envision Utah. As a rural state with a variety of growth pressures and environmental issues, Utah communities face enormous challenges. Envision Utah began in 1997 and has built critically important planning processes that integrate communities across regions in aligned strategies and drive key investments. As the Governor proudly noted, "In Utah, we don't believe in sitting back and seeing where growth will take us. We seek to be visionary and to actively secure our future." Vermont could benefit from similar regional and statewide efforts to address key issues like growth and housing.

## Building Momentum for Change: The Twenty-Year Vision Begins with Small Steps

"A lot can change in 20 years." That was the conclusion reached in 2012 by the San Angelo Standard-Times in looking back at twenty years of accomplishments that have followed San Angelo, Texas' process with an AIA team. The paper described a "Snowball Effect" of civic work that was spurred by the community process, with each new investment or action catalyzing additional investments. Lee Pfluger, who served as the chair of the local Steering Committee, described the conditions twenty years ago: "Back in 1991 you could have shot a cannon in downtown San Angelo on a Saturday night and not hit a soul — it was that dead — not a car in sight. The effort started with Celebration Bridge (with funds raised from the community) and the revitalization of the Paseo de Santa Angela as public space, and each success stimulated new interest in downtown. All the

vacant buildings that were underutilized in 1991 have all enhanced their utilization to a higher use." These early successes each built more momentum for larger investments. In 2002, the San Angelo Area Foundation was created. The Foundation exemplifies the partnership and civic engagement that have blossomed across the community. In the past decade, it has received more than \$92 million in donations from more than 3,500 different donors, and has distributed over \$38 million in grants. Rick Smith, a columnist with the San Angelo Times Standard, captured the community's pride and accomplishments over a two-decade period:

"We have followed many of your suggestions. Of the four "architectural icons" you designated, three — Fort Concho, the Cactus Hotel and the railroad depot and warehouse — have received extensive restoration and are in regular use. The fourth, the Texas Theatre, is the exception, though it's in good hands and well-preserved. The new San Angelo Museum of Fine Arts, Celebration Bridge, downtown residences, state office buildings in the rebuilt Monarch Tile building, El Paseo de Santa Angela, Old Town, expanded convention center, a new Tom Green County library and improvements along the Concho River all were either suggested or championed by your study. You didn't reshape downtown by yourself, of course. Many San Angeloans worked many years to transform the Historic City Center. But you affirmed our ideas, planted seeds and sketched a possible map for our future. And you gave us hope. Back in 1992, your ideas seemed like dreams. Now we are living those dreams."

Successful efforts toward community transformation begin with small steps that build momentum over time by connecting to a larger vision for the future. The towns who participated in this regional conversation should continue the dialogue and begin identifying low-cost and no-cost projects that mobilize volunteers, articulate and communicate community needs and aspirations, and build a collaborative framework that expands resources. In most cases, it will take over a decade to realize large investments in critical projects, but

volunteer projects and small interventions today will set the table for future success. Your four towns can begin a similar transformation today by thinking about your 20-year vision and initiating the first small steps to build momentum for its realization. If a snowball effect can take place in Texas, it surely can in Vermont as well.

**Quick Wins**

## Quick Wins

There are many opportunities available to expand community housing in the western Windham Regional Commission region. Both individually but generally in partnership with other organizations and other communities, Jamaica, Londonderry, Weston, and Winhall have many options for action.

Success almost always means starting and building momentum. The regions' housing problems have been many years in the making at all scales, local, state, and national, and no solution will come quickly. The first steps, however, build momentum and a consensus in the community that success can come.

Building on existing and current town planning, Windham Regional Commission's planning work, such outside teams as the Vermont Council on Rural Development's One Londonderry Plan, on this strategic opportunity assessment, each community should identify actions, identify who leads and who partners, and figure out the next steps that are possible.

In spite of infrastructure, wastewater disposal capacity, floodplains, site constraints, capacity, and resources, there are measures that can advance all of the towns' goals. The adjacent table suggests immediate actions that could be accomplished within the next year.

Action	Notes	Who Leads
Prioritize zoning and regulatory reform that can expand housing opportunities and can be approved by Town Meeting	This report, other plans, and outside reports contains some specific opportunities	Planning commissions in partnership with housing committees and with Windham Regional's help
Prioritize opportunities now for current and future wastewater disposal capacity to allow for future planning	Londonderry, private Magic Mountain system now and eventually North and South Londonderry, Winhall with a large lumpy investment to hook to Stratton Mountain	Selectboard, with assistance from housing committees, planning commissions, and Windham Regional
Examine town plans	Explore recommendations for housing	Planning commissions in partnership with housing committees and with Windham Regional's help
Identify partners	Land trusts who might take on conservation limited development, housing trusts, for profit housing developers, other communities	Everyone is needed at the table
Focus on potential housing opportunity sites, including vacant and under-utilized sites as well as sites with owners who have expressed an interest in selling their property	This report identified 15 high potential housing sites across the four towns included within this study	Planning commissions in partnership with housing committees and with Windham Regional's help
Identify low-cost and no-cost projects that mobilize volunteers and allow community members to identify and address community needs and aspirations	Highly visible and successful projects, even when small in scale, help build momentum for larger long-term success	Community members, with support from housing committees, planning commissions, and Windham Regional

# **Team Roster**

## **Wayne Feiden, FAICP, Director Center for Resilient Metro- Regions, Lecturer of Practice, UMass, Amherst**

Wayne's work includes decades as Director of Planning and Sustainability for the City of Northampton, MA. His focus includes all aspects of planning and sustainability. He has served on dozens of strategic planning teams in 20 states and five countries. Wayne's Rockefeller Bellagio residency (Italy), State Department Professional Fellowships (Indonesia and Malaysia), German Marshall Fund fellowship (Northern Ireland, England and Denmark), Fulbright Specialist fellowships (South Africa and New Zealand), and Eisenhower Fellowship (Hungary) all had a strategic planning focus. His research publications include "Urban and Regional and Organizational Strategic Planning," "Conservation Limited Development," "Building Sustainability and Resiliency into Local Planning Agencies," "Local Agency Planning Management" and "Assessing Sustainability." Wayne is a fellow of the American Institute of Certified Planners and has won professional planner and advocacy planner awards from APA-MA. Wayne has a BS in natural resources from the University of Michigan-Ann Arbor and a Master in city planning from the University of North Carolina-Chapel Hill.

Wayne also served on the Vermont Governor's Waste Disposal Task Force (1987) and piloted Vermont's first small-scale pressure distribution wastewater system that eventually led to Vermont allowing a reduction in separation to groundwater for such systems.

## **Judi Barrett, Owner & Managing Director, Barrett Planning Group**

Judi Barrett is the founding principal and managing director of Barrett Planning Group LLC. She brings 35 years of planning and community development experience as a consultant and community and economic development professional with state and local government. Judi has devoted her career to building the capacity of cities and towns to solve difficult public policy questions and to develop effective leadership and advocacy skills. She has prepared and managed a variety of projects for public and private clients, including comprehensive and strategic plans, zoning revisions, housing studies, and more. She is well known for her work in affordable and fair housing policy and inclusionary zoning. A frequent panelist at regional and national conferences and a guest lecturer for planning programs, Judi is also a technical assistance resource and trainer for city and town officials and non-profit boards.

## **Peter Flinker, FASLA, FAICP, Landscape Architect & Planner, Dodson & Flinker**

Peter Flinker joined Dodson Associates (now Dodson & Flinker) in 1987 after receiving a Master in Landscape Architecture from the University of Massachusetts, and became a principal of the firm in 1999. He is a registered Landscape Architect and in 2017 was named a Fellow of the American Society of Landscape Architects. In February 2020 he was named a Fellow of the American Institute of Certified Planners, and he has earned advanced AICP certifications in both Environmental Planning and Urban Design. Peter maintains an active portfolio of projects with public and private clients, including downtown revitalization, form-based codes, planning for greenways and open space conservation,

design of new communities, and sustainable design for housing, schools and other public facilities. The firm's work increasingly focuses on integrating all of these activities with the need to build community resilience in the face of climate change, sea level rise and other challenges.

Peter has a particular interest in preserving the historic landscapes and sense of place of New England towns while accommodating 21st Century needs – particularly continued dependence on the automobile – and adapting to a constantly evolving economic landscape. He has developed numerous training programs and award-winning publications in the areas of Smart Growth and Sustainable Development, including the Rhode Island Rural Design Manual, the Urban Environmental Design Manual and the Conservation Development Manual. He is the principal author of Village Guidance: Tools & Techniques for Rhode Island Communities, a comprehensive guide to revitalizing historic villages and developing new villages as an alternative to continued suburban sprawl.

## **Elisabeth Infield, PhD, Professor of Regional Planning, UMass, Amherst**

Dr. Infield (formerly Elisabeth Hamin and Elisabeth Hamin Infield) is a Professor of Regional Planning in the Department of Landscape Architecture and Regional Planning at UMass, Amherst. She teaches and researches in land use planning, with a particular focus on planning for climate change adaptation, climate migration and large-scale landscape planning. She has lead or co-lead NSF-funded projects on climate migration, resilient infrastructure, and off-shore wind, and also works with regional planning agencies and communities on master plans, special projects, and climate change planning. She served as Department Chair from 2013-2017 and program director for the PhD

in Regional Planning from 2003-2013 and again from 2018 – present. Her most recent book is Planning for Climate Change: A Reader in Green Infrastructure and Sustainable Design for Resilient Cities, co-edited with Yaser Abunnasr and Robert L. Ryan (2019, Routledge Press).

Prior to coming to UMass, Dr. Infield taught at Iowa State University (1995 to 2001). During her doctorate she worked in land use and energy consulting, and before her doctorate she worked in real estate consulting and development, providing financial and marketing analysis to major real estate developers across the United States.

Her reports and articles can be downloaded or at least viewed at through Google Scholar or through UMass at: <https://works.bepress.com/elisabeth-infield/>.

## **Cheryl Morgan, FAIA, Architect, Former Director Auburn University Design Center**

Cheryl is a licensed architect and Emerita Professor of Architecture in the School of Architecture, Planning and Landscape Architecture of Auburn University. In thirty years of teaching she worked with architectural programs at Georgia Institute of Technology, Oklahoma State and California College of Arts and Crafts. For the last 12 years of her teaching career she was the Director of Auburn's Urban Studio in Birmingham, Alabama. Under Cheryl's leadership, the Urban Studio's Small Town Design Initiative Program worked with over 75 small towns and neighborhoods in Alabama. Morgan practiced architecture and urban design in the San Francisco Bay Area. She worked with a number of firms including Environmental Planning and Research, Gensler, and the Gruzen Partnership. Before coming to Auburn in 1992 she was an associate with the Berkeley firm of ELS/Elbasani and Logan. Morgan's professional practice now focuses on urban

design, community revitalization and graphic design. She is also an experienced facilitator. Cheryl holds two degrees from Auburn University: a Bachelor of Architecture and a Bachelor of Arts (Sociology). Her Master of Architecture degree is from the University of Illinois, Champaign/Urbana. She is certified by the National Council of Architectural Registration Boards and is a member and Fellow of the American Institute of Architects. In 2010 she received the Thomas Jefferson Award from the Jefferson County Historical Commission as well as being named to a Woman of Distinction Leadership Award by Auburn's Women's Resource Center. In 2011 she was presented with the Alabama Chapter of the American Planning Association's Distinguished Leadership Award recognizing her as a "Friend of Planning." In 2012 she received one of Auburn University's highest awards for Achievement in Outreach. She is a member of the Rotary Club of Birmingham which honored her in 2016 with the Spain Hickman Service Award.

### **Joel Mills, Senior Director Communities by Design, Architects Foundation**

Joel Mills is Senior Director for the Communities by Design program. Joel's 28-year career has been focused on strengthening civic capacity, democratic processes and civic institutions. This work has helped millions of people participate in meaningful public processes, visioning efforts, and community planning initiatives. In the United States, Joel has provided consultative services to hundreds of communities, leading participatory processes on the ground in over 100 communities across 38 states. He has led public processes, training programs and workshops in over a dozen countries across 5 continents. His work has been featured in over 1,000 media stories and several books. Joel has served on dozens of expert working groups, boards, juries, and panels focused on civic discourse and

participation, sustainability, and democracy. He was a founding Board Member of the International Association for Public Participation's United States Chapter. He has spoken at numerous international conferences concerning democratic urbanism and the role of democracy in urban success, including serving as the Co-Convener of the Remaking Cities Congress in 2013. Joel is an Academician of the Academy of Urbanism in London and serves as a Senior Editorial Associate for Civic Green. He is the author of numerous articles on the relationship between democracy, civic capacity and community.

### **Erin Simmons, Senior Director Design Assistance, Architects Foundation**

Erin Simmons is Senior Director of Design Assistance for Communities by Design, a program of the Architects Foundation. For more than 17 years, Erin has provided technical assistance to hundreds of communities around the world, leading democratic planning processes and training workshops focused on empowering citizens to create equitable, sustainable, and resilient communities. Her work has been featured in hundreds of news articles and publications, and she has spoken extensively as a subject matter expert on the topics of participatory planning, sustainability, and community revitalization.

Prior to her work with Communities by Design, Erin worked as historic preservationist and architectural historian for an environmental and engineering firm, where she practiced preservation planning, created historic district design guidelines, and conducted historic resource surveys. She holds a Bachelor of Arts degree in History from Florida State University and a Master's degree in Historic Preservation from the University of Georgia. Erin is an Academician of the Academy of Urbanism in London, UK.

## **Student Support Team**

### **Grace Kirkpatrick, Landscape Architecture & Sustainable Community student, UMass**

Grace Kirkpatrick is a junior at UMass Amherst from Concord, NH. She is an honors student studying sustainable community development and landscape architecture. Grace is passionate about using her knowledge of both landscape architecture and planning to create communities that are socially and economically resilient. Grace's favorite part of the planning process is getting to meet community members and experience new places.

### **Nicole Krantz, Sustainable Communities Development Student, UMass**

Nicole Krantz is currently pursuing a Bachelor's in Sustainable Community Development at the University of Massachusetts Amherst with a concentration in City and Society. She is passionate about walkable communities, affordable housing, infill development, and alternative forms of transportation. Her career journey includes multiple impactful internships. At the Franklin Regional Council of Governments, Nicole contributed to the regional housing plan, digital equity initiatives, and conducted spatial analyses for road safety improvements and the regional bike plan. At the Pioneer Valley Planning Commission, she specialized in transit planning and conducted surveys to assess bus stop amenities and ADA compliance. As a PVTA bus driver, Nicole's transit operator perspective more thoroughly informs her work as a planner, where she actively supports projects aimed at enhancing sustainable mobility and pedestrian dignity. Nicole is passionate

about creating livable communities and aims to apply sustainable planning solutions into her future endeavors, including her work with the Center for Resilient Metro-Regions.

### **Amelia Lavallee, Research Assistant, Center for Resilient Metro-Regions, UMass**

Amelia Lavallee is a research assistant at the Center for Resilient Metro Regions and Master of Regional Planning candidate at the University of Massachusetts. She is also a planner technician for the City of Cranston, RI. Amelia holds a Master of Public Administration. She focuses on developing plans, practices, and processes that help create and maintain collaborative, engaged, equitable, and resilient communities. Amelia has worked professionally with planners, developers, building and engineering teams, and the public on a myriad of housing projects. Most recently, Ms. Lavallee was awarded the 'Student Award' by the Rhode Island chapter of the American Planning Association for her professional and academic endeavors in the field of planning. Additionally, her department was awarded the 'Affordable Housing Achievement Award' for their exemplary work on approving hundreds of affordable housing units over the course of the past year.

### **Sara Nusair, PhD Candidate, UMass**

Sara Nusair is a Ph.D. student in the Regional Planning program at UMass. She holds a Master in Urban Studies with a major in City Planning and Design from Jordan University of Science and Technology. Sara contributed to the first phase of the Windham housing project, specifically to the housing assessment and suitability analysis report. Her working experience includes working as an urban designer at the KABAC city center

renovation in Jordan. She also served as a part-time lecturer for two years at Jordan University of Science and Technology, teaching design classes to first-year students. Additionally, she worked and volunteered as a technical advisor and workshop facilitator at the JUST-Able Project, funded by the Canadian Embassy, this project aimed to evaluate the accessibility of public spaces across Jordan, through participatory planning practices.

### **Student Young Southeast Asian Leaders Initiative (YSEALI) Fellows**

#### **Luu Nguyet Minh, Senior Economic Officer, Netherlands Consulate, Ho Chi Minh City, & Research Associate, Cardiff Metropolitan University**

Luu Nguyen Nguyet Minh is a YSEALI fellow from Vietnam. She works on economic and political issues for the consulate to support and advise Dutch businesses. She has a Master of Science in Project Management from Cardiff Metropolitan University, UK, and a Bachelor in Tourism and Hospitality Management from Can Tho University.

#### **Suriwassa (Emma) Thanyanattawit, Environmental Officer, Climate Change Coordination & Management, Thailand**

Suriwassa (Emma) Thanyanattawit is a YSEALI fellow from Thailand. She works with the UNFCCC and Thailand national agencies to facilitate Thailand's climate change focus. She has a Master in Public Policy from King's College, London, UK, and a Bachelor's in Political Science from Thammasat University, Thailand.

**Exhibit A: Stakeholder  
Sessions & Public Forum  
Notes**

## Exhibit A. Stakeholder Sessions and Public Forum notes

- Local residents and those who left and returned are priced out of the housing market
- Other costs (e.g., transportation, food, taxes) also threaten affordability of the region, even for long term homeownership
- Short-term rentals are threatening our housing supply
- Apartment renting & housemate - unable to age there (stairs)
- Sewage disposal (septic system) limits housing and apartment construction and expansion
- Climate change and flooding limits where we develop and where we will lose existing housing
- Housing purchasers who can make cash offers beat out local residents who need financing
- Many residents want to age in place and retain their love of their home and memories
- Costs and a lack of options make it difficult for those who want to downsize
- Options for increased occupancy opportunities in existing buildings is critical
- We need housing for business, who can't find workers because of the outpriced housing market
- Housing needs access to essential services
- Accessibility for aging and those with disabilities is a challenge
- Housing can be more expensive than a business property, with one participant purchasing a hotel to run because it gave them a place to live
- We are special because our area is safe, our culture traditions, our diversity and shared common ground, civic centers, schools, churches, libraries, common space, parks, shared events, mutual support, neighbors looking out for each other, and being a multi-generational community.
- Our values drive us to want housing that has walkability, low environmental impacts, adds character, promotes passive solar, community and public gardens, and provides community spaces for social and health needs
- We still need to think about parking needs, how we address snow, ice, and bugs, the challenges of increasing intense storm events throughout the year, and functionality.
- We want to think about design, how the design of buildings focuses on the street, front doors, and whether we have one design for local residents and one design (e.g., Winhall condominiums) for outsiders entering our community.

- We want walkability, sidewalks, cross walks, traffic calming, walking paths, but we need affordability which leads us to explore housing outside of village centers
- We need transit, micro-transit, and shared mobility
- Entry level shared housing (coops, co-housing, group living) with transit can help house workers
- Energy codes drive up the price of construction even if it lowers life cycle costs over the life of housing.
- We are losing the people who grew up here, our youth, unless we can address affordable housing and local school needs.
- Little in-migration of younger adults and young families

### What's Next

- Local communities need to keep the momentum going to solve the problems
- Continue discussions, hear your neighbors, talk to ten people to advance the conversation
- Focus on connectivity, social needs and benefits and transportation (e.g., Neighborhood Connections, volunteerism opportunities, community board membership)
- Identify parcels and facilities, imagine possibilities, needs, and support services
- Advance design and construction of shared wastewater soil-disposal systems in all villages
- Identify the opportunities from existing and pending planning [and this report]
- Kendell Farm in Winhall if there is infrastructure
- Caution Londonderry Prouty site might be needed for future municipal uses (e.g., fire dept)
- Regional collaboration is critical

# **Exhibit B: Housing Needs Assessment & Climate Change**

*Excerpted from the Housing Needs Assessment prepared by the University of Massachusetts Center for Resilient Metro-Regions for the Windham Regional Planning Commission. Elisabeth Infield and Sara Nusair, lead authors.*

## Overview

The Windham Region is located in the southeastern part of Vermont, a region rich with rolling hills, lush forests, and a scenic landscape that defines much of rural New England. Historically, the area has experienced its share of natural challenges, particularly with flooding. The county's proximity to major waterways like the Connecticut River contributes to the region's beauty and to its risk, particularly during the spring thaw and after heavy rainfall events.

Like much of the Northeast, year-round housing availability has not kept pace with demand in the County, resulting in significant housing price increases and difficulty for existing residents to stay local, and for newcomers to find desired housing. In particular, affordable housing and multi-unit housing are very limited, meaning that the emerging adults and moderate-income families in the region have difficulty staying local, and aging households have difficulty finding low-maintenance options for moving from their existing houses.

To address this issue, the Windham Regional Commission has partnered with four towns in their region – Jamaica, Londonderry, Weston and Winhall, – in a two-phase project with UMass Amherst's Center for Resilient Metro-Regions in partnership with Communities by Design at the Architects Foundation to explore local and regional solutions and a path forward to address housing challenges, including the best locations and types for new affordable housing (low income as defined by U.S. HUD) and attainable housing, by which we mean housing that is affordable for households earning less than \$50,000 per year. This housing needs and land suitability assessment has the following three goals, and is divided into these three parts:

- Demographics and population projections: Better understand housing needs now and in the future for the four towns by examining recent demographic trends and preparing local population projections through 2040.
- Suitability analysis: Identify land areas that might be suitable for new development.
- Case studies in rural housing: Provide examples of creative approaches to the challenges the towns face in balancing providing needed housing without placing more residents into high-flood-hazard areas.

This analysis seeks to provide enough housing to meet local needs while increasing local environmental resilience, proposing pathways that mitigate the dual pressures of housing shortages and climate vulnerabilities.

## Introduction

### Vermont State

Vermont is known for its picturesque landscapes, charming small towns, and vibrant outdoor recreational opportunities. Southern Vermont is the unceded homeland of the Elnu Tribe which is part of the Abenaki Nation (People of the Dawn).<sup>1</sup> Vermont covers an area of approximately 9,616 square miles. It is bordered by New Hampshire to the east, Massachusetts to the south, New York to the west, and the Canadian province of Quebec to the north. As of 2020, Vermont's estimated population is around 643,077 people<sup>2</sup> marking an increase of 5.63% in the population from 2000, most of whom moved into the Burlington area. The state has a mix of rural communities,



Figure 1: Map of Vermont Highlighting Windham County and Study Area Towns.

historic towns, urbanized areas and a strong sense of community and local identity. There are 14 counties in Vermont (Figure 1), with the five towns of this report highlighted in orange.

Vermont's climate has undergone significant changes over the past century. Precipitation in Vermont has increased by a whopping 21% since 1900,<sup>3</sup> and is coming as more extreme storms rather than gentle rain or steady snow. These changes are increasing flooding risks, and extreme snowfall and ice storms. Extreme heat days are also increasing, and few houses have air conditioning.<sup>4</sup>

The beautiful hills and mountains of the state create very limited locations for easy housing settlement, with major roadways in steep, V-shaped valleys often along a waterway, increasing flood risks and reducing overall resilience.<sup>5</sup> The north-south Green Mountains spine, along with the east-west valleys and the north-south ridges of the Taconic Mountains effect the movement of localized winds which in turn produces enhanced precipitation and associated flooding events, and also produces local variations in freeze and frost dates.<sup>6</sup>

Flooding is an on-going issue. In the July storm of 2023, Weston, for instance, recorded 6.8 inches of rain on July 9th to 10th. The town and its neighbors, Ludlow, Londonderry and Andover, were considered by state officials to be among the hardest-hit communities.<sup>7</sup> The flood caused inundation to buildings in Weston and Londonderry, with damage reported in Winhall along the Winhall River.<sup>8</sup> Previously, the Halloween storm of

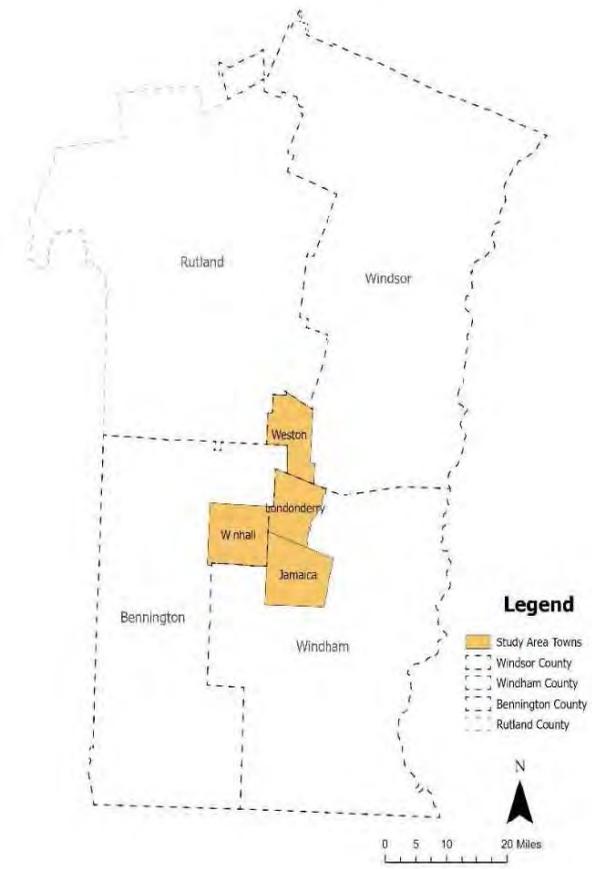


Figure 2: Map of Windham, Windsor, and Bennington, highlighting study area towns in orange.

2019 produced 3–5 inches of rain in a single day, breaking precipitation and temperature records. This led to extensive flooding and caused over \$6 million in damage to infrastructure across the state.

Another significant flooding event was caused by Tropical Storm Irene on August 28, 2011; it resulted in an estimated \$733 million in damage and three fatalities. The rain from Irene exacerbated the already high levels of soil moisture from earlier heavy rain events that year, preventing the rainfall from infiltrating into the soil and instead causing runoff directly into rivers, which contributed to substantial flooding across the state. This flooding was second only to the Great Flood of 1927.<sup>9</sup> These flooding events in Vermont can also be caused ice-jam flooding in the winter and spring seasons. Ice-jams typically happen in late winter when sudden warm temperatures bring rapid snowmelt and rainfall, causing river ice to break up rapidly and unevenly, and have caused flooding along the Missisquoi, Lamoille, and Winooski Rivers in Vermont.<sup>10</sup> To address the growing risk of floods and droughts, the Vermont Climate Action Plan recommends greater planning and investment in infrastructure for managing water, stormwater, and irrigation.

**Windham Region**

The housing assessment plan report provides an overview of regional trends in Windham County and then provides detailed analysis of the four towns that are our subject: Winhall, Weston, Jamaica, Londonderry (Figure 2). Note that Weston is in Windsor County, and Winhall is in Bennington County, but they are in the Windham Regional Commission region. Below we present county-level data for Windham.

**Regional Housing and Population Trends**

Population growth in the County was fairly steady in the years 2000 – 2020 but became negative during the Covid years. After slow but steady growth in 2000-2020, population growth in Windham County is currently practically flat, with a decline of -1.10% in 2020-2022 (Figure 3). This could be because fewer people want to live in the county, but given the strong pressures on the housing market, it seems more likely that it reflects an inability to find housing in the county – so there are in effect missing people.

**Population Trends**

The small towns of Vermont are influenced by trends in the general region, which we define as Windham County. We begin by reviewing highlights of these regional trends.

County-wide, new housing demand will outpace population growth due to declining household size. Household size declined 2010 – 2020 but rebounded during COVID. Currently the household size in the county is 2.27 people per unit and in 2022, 54.1% of households consisted of family homes – those with more than one person related by birth, marriage or adoption (Figure 4).<sup>11</sup> This is a significant decline from 2010, when 60.72% of the population lived in family homes.

This shift in living arrangements could be due to a variety of factors, such

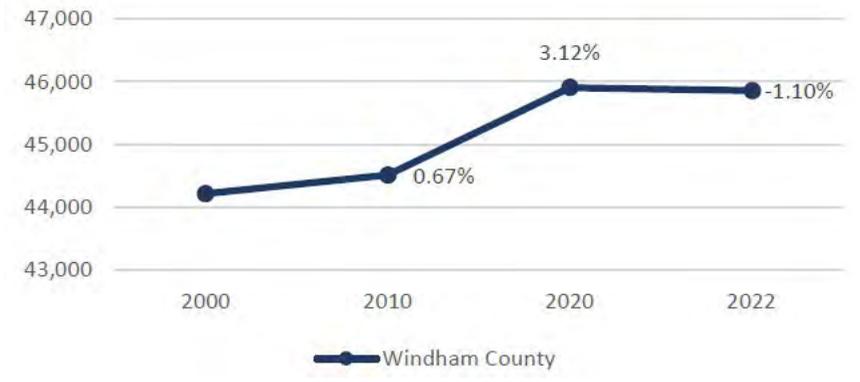


Figure 3: Windham population and population growth rate (Source: U.S. Census American Community Survey)

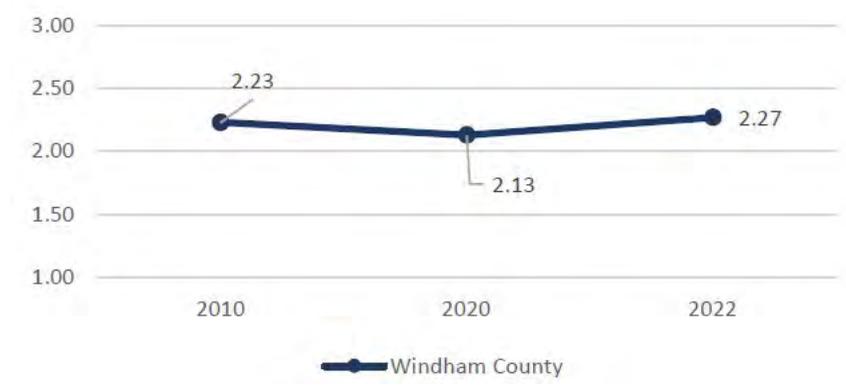


Figure 4: Windham household size (Source: U.S. Census, American Community Survey)

as younger generations delaying family formation, or as seen in older populations living longer independently, or increased single-person households.

The population is aging, which has profound implications for housing demand, including the need for age-friendly, low-maintenance homes, such as condominiums, senior living communities or assisted living facilities (Figure 5). There is a notable demographic shift towards an aging population. In 2010, 37.2% of the household heads were above 60 years old, but by 2022, this percentage had risen to 51.9% above 60 and 41.3% above 65.<sup>12</sup> The 2022 population aged 65 grew by 53% for owner residents and 61% for renters compared to 2010. Notably, the next largest cohort aged 55 to 64, who will transition into the older category, has in total remained unchanged since 2010. The biggest decrease came in the age groups from 45 to 54, while the younger age groups stayed about the same.

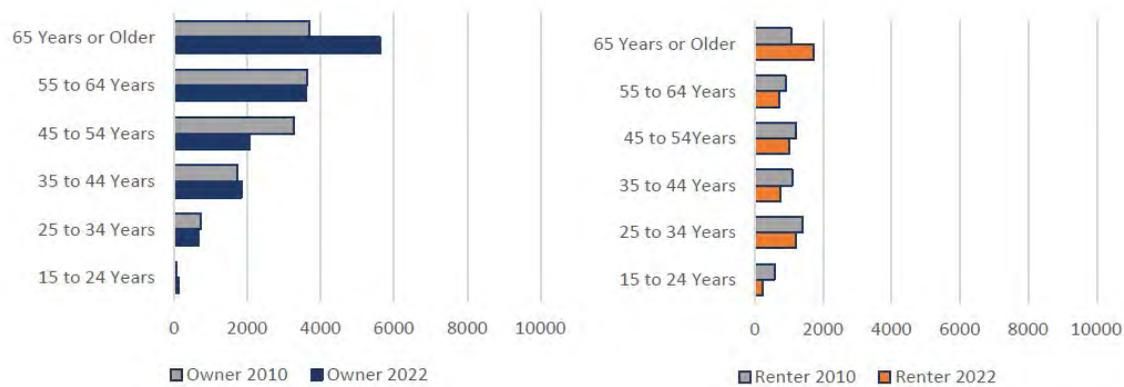


Figure 5. Windham estimated households by tenure and age of householder (Source: U.S. Census, American Community Survey and Decennial Census from Housingdata.org)

Overall, these population trends suggest a need for more housing for smaller family units and singles, and for housing options that accommodate older residents, as is further discussed below. This changing age profile also signals potential challenges in attracting and retaining working-age residents.

## Housing Stock and Affordability

There is significant stress on both the ownership and rental market. The rental vacancy rate, a crucial indicator of housing accessibility, decreased significantly from 2010, reaching a low of 3.1% in 2022 (Figure 6). Such a low vacancy rate is considered unhealthy for the housing market, suggesting limited options for renters. Owned property vacancies are also low, but not very different from previous years.

Most of the housing is in single-family units, with very few larger multifamily developments, and mobile homes are an

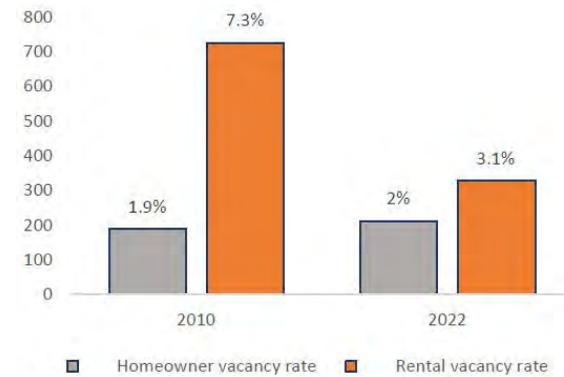


Figure 6. Windham housing characteristics, 2010 to 2022 (Source: U.S. Census, American Community Survey)

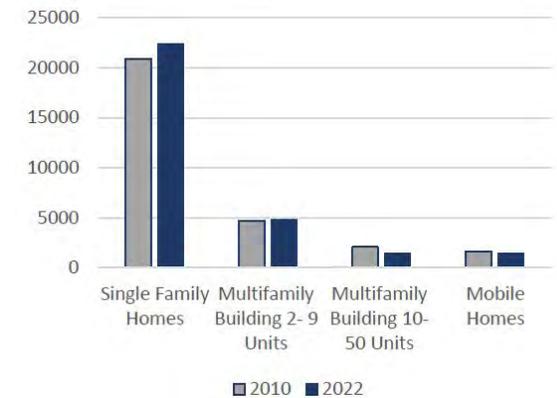


Figure 7. Housing units structures in Windham County (Source: U.S. Census, American Community Survey)

important part of the housing mix. Overall, the county saw only a net increase of 100 units total from 2010 to 2022 (Figure 7).

While the overall housing stock has increased slightly, the increase in second homes and seasonal and recreational use rentals means net less housing for permanent residents. Windham County has the highest percentage of homes that are second homes or short-term rentals in the whole state,<sup>13</sup> reaching 30% of all homes in the County in 2022.<sup>14</sup> Notably, when seasonal and recreational use rentals are excluded from the total available vacant unit's, only 177 long-term rental units will be available in 2022,<sup>15</sup> indicating that a substantial portion of vacant homes are being utilized for short-term rental, further emphasizing the impact of this sector on housing accessibility.

The housing market has brought significant affordability pressures, especially for renters, and has resulted in increased homelessness in the County. Currently, 26% of households pay 30–49% of their income for renting and 25% of households pay more than 50% of their income for renting (Figure 8). Though the situation appears slightly more favorable for homeowners, a significant portion still experience high housing costs. With a total of 19,382 households in Windham County in 2022, this translates to 9,885 households overburdened by rental costs and 4,652 households struggling with homeownership expenses. Windham County stands out for its high incidence of homelessness, second only to Chittenden County in Vermont. The number of unhoused individuals has risen steeply, witnessing a staggering 128% increase from 2010 to 2022 and a further 19% surge from 2022 to 2023.<sup>16</sup> These statistics are deeply concerning, especially against the backdrop of a stable population total. The data underscores a pressing need for more housing options tailored to the needs of year-round residents of modest means.

Mobile home parks are a critical but declining part of attainable housing in the County. Mobile home parks, which in 2023 provided almost 522 units of housing in the county, are an important provider of attainable rental housing.<sup>17</sup> Despite single-family detached houses dominating the housing market (88% in 2022), mobile homes still accounted for a notable 7% of available housing types (Figure 9). In 2023, the vacancy rate of available mobile homes is only 4.4%, indicating clear demand for mobile home housing.<sup>18</sup>

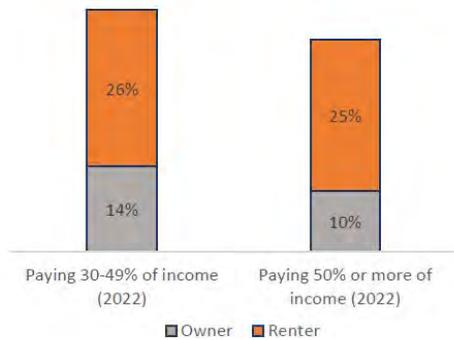


Figure 8. Windham households by housing costs as a percentage of income (Source U.S. Census, American Community Survey and Decennial Census from Housingdata.org)

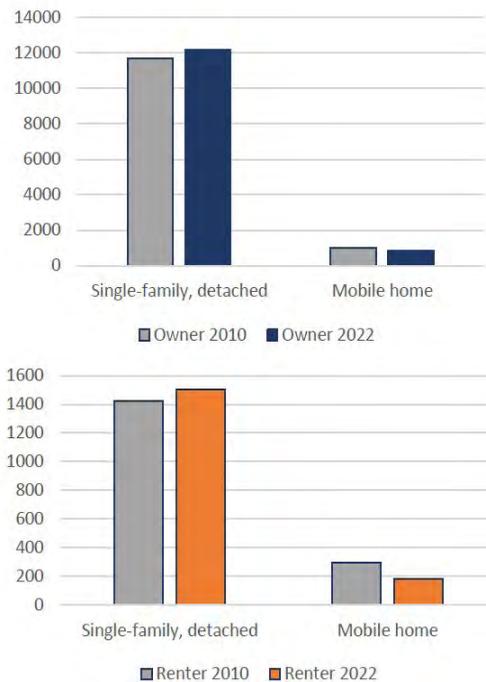


Figure 9. Windham County mobile homes, renters and owners 2010-2022 (Source U.S. Census, American Community Survey and Decennial Census from Housingdata.org)

**There are significant challenges associated with mobile home parks, particularly regarding their vulnerability to flooding.** Our risk assessment reveals that a substantial portion of mobile home units, approximately 74%, are in areas with significant flood risk.<sup>19</sup> Furthermore, seven parks in Windham County are situated in 100-year floodplains and floodways, exposing them to heightened flood hazards.<sup>20</sup> Moreover, many of these mobile home parks are aging, with structures predating 1976 and characterized by poor quality. This combination of factors underscores the urgent need for comprehensive housing assessments and strategies to address the vulnerabilities of mobile home parks in Windham County.<sup>21</sup>

### Climate Change & the Region

Climate change is deeply impacting Southern Vermont, just like the rest of the world. Already in Vermont, it's 20 hotter in summer and 40 hotter in winter, on average, and spring is coming two weeks earlier and winter starts one week later compared to the 1960s. Even more troubling has been the increase in rain – 7 inches more per year, coming down as rapid heavy rainfalls rather than the gentle rains we previously experienced.<sup>22</sup> Flood events are becoming much more frequent, especially in the last five years. Projections are for this to increase, with the area becoming hotter, wetter, stormier, and more vulnerable to floods and steep slopes more vulnerable to landslides. Practically, this means that land that was only slightly vulnerable to flooding now needs to be considered very vulnerable, and development needs to be directed toward higher, drier, not-too-steep areas, and that families will need air conditioning. Improving the water retention capacity of open space such as town greens should also be prioritized and can also provide beautiful plantings and recreational space.

Preventing future climate change is a responsibility for all of us, which means we need to reduce the use of greenhouse gas-producing energy sources and move toward low carbon heating and cooling now, not in the future. New development should use geothermal, energy efficient heat pumps, and solar to build a sustainable future. Transportation is another key

source of greenhouse gas emissions, so development that can be walkable and can access buses and/or bike lanes should be prioritized.

Climate change is also impacting where people live and may increase the development pressure in the region. Most people who move as a result of disasters tend to stay close to their old home and relocate in the same metro region, but some are moving longer distances to desirable inland regions such as Windham County. A study of movement during the Covid year of 2020 by UMass Amherst found significant in-migration to the Windham region. National studies suggest we should expect movement away from coasts and towards areas that are cooler and have freshwater such as the Windham region, but there are no good data yet that reliably projects future likely population flows from climate migration at the county level. **What towns can know is that climate migration to the area is likely, and that the best response now is to ensure there is sufficient housing for existing residents and some cushion for likely in-comers as national and regional conditions change.**

## Regional Summary and Considerations for Town Level Analysis

The overall trends above show a housing market that is in distress – too few new units being produced to meet reduced household sizes as well as new in-comers, resulting in increased rent and mortgages and for those priced out, increased homelessness, and other knock-on effects like lack of labor force in trades and service industries. In particular, given the increases in senior-aged population, there is a pressing need for housing that can suit aging populations; if the elderly could find suitable housing in or near their existing community, they would be more likely to move and thus free up larger housing units for new residents or their children.

## Town Level Population and Housing Demand Projections

To help plan for future housing needs, below we present detailed analysis of the housing market in each town and projections of future population, households, and resulting housing demand in 2030 and 2040. Census data which served as our primary information source is less dependable at the small scale of these towns, so the numbers presented below should be understood to have some margin of error. The equations that we used to calculate population growth and future number of households to project housing demand in 2030-2040, are included in the technical appendix. These projections will be used in the second part of this study to identify land areas that might be suitable for new development to meet projected housing needs.

One of the challenges with preparing population projections is that they are in part based on housing availability – if nothing new gets built, no one new can move in, even when they would have liked to have. The steep declines in vacancy rates and increases in prices suggest this is the case in the County. And when household size is declining, even with no population growth more housing units are needed. We therefore used three scenarios to suggest different outcomes of potential growth.

Our projections include three scenarios for growth. Each scenario reflects different assumptions about key trends. The first uses US Census household data from 2010 – 2020 to project forward to 2040, and can be considered

‘business as usual’, with little new building and thus little population growth. The second uses Census household counts from 2010- 2022, and thereby includes the impacts of the COVID migration into the region. We include this scenario for information, but the vagaries of that period make it less useful as a projection of the future.

The third scenario uses the 2010 – 2020 Census household numbers but also assumes that there will be some new construction so that some population growth can be housed. Along with pent-up demand from those who would have liked to move the area but could not find housing (or were forced out through price increases), we anticipate that the region may be very appealing to people from out of state who are looking for a climate-safe location, and thus this scenario includes more growth than the overall trends for the prior decade – 1% more per year.

We use Scenario C results for the housing suitability analysis, as it appears more likely and allows the region to house more of those who wish to live there, including needed local tradespeople, teachers, service workers, and the children of existing residents who would like to stay in the area. Growth would also allow aging households more choices, which could free up existing large homes for new families. Scenario C projections are explained in detail for each town below.

### Key Four-Town Projections and Summary Findings

Scenario C projections, which as explained above allow some annual growth above the 2010-2020 rate, indicate varying levels of household growth and housing needs across the four towns. The total projected growth for these towns averages to 29% by 2040, with an overall annual growth rate of 0.8% (Table 1). Because it was already on a growth trajectory, Winhall stands out with the highest annual growth rate of 1.4%. Londonderry also shows notable growth, while Jamaica and Weston exhibit more modest increases (Table 1 and Figure 10).

Town	2022 Households (HH)	Scenario C-HH Projection 2040	Needed New Housing Units	28-yr Total Percent Change	Annual Growth Per Year
Jamaica	436	550	135	21%	0.5%
Londonderry	844	1098	263	23%	0.6%
Weston	305	386	101	21%	0.6%
Winhall	313	654	353	52%	1.4%
Total/Average	1898	2688	852	29%	0.8%

Table 1: Projected households by 2040

In interpreting these projections, it’s important to know that second homes and vacation rentals make up a very significant part of the overall housing stock of the four towns – and especially in Winhall, with its proximity to Stratton Mountain (Figure 11).

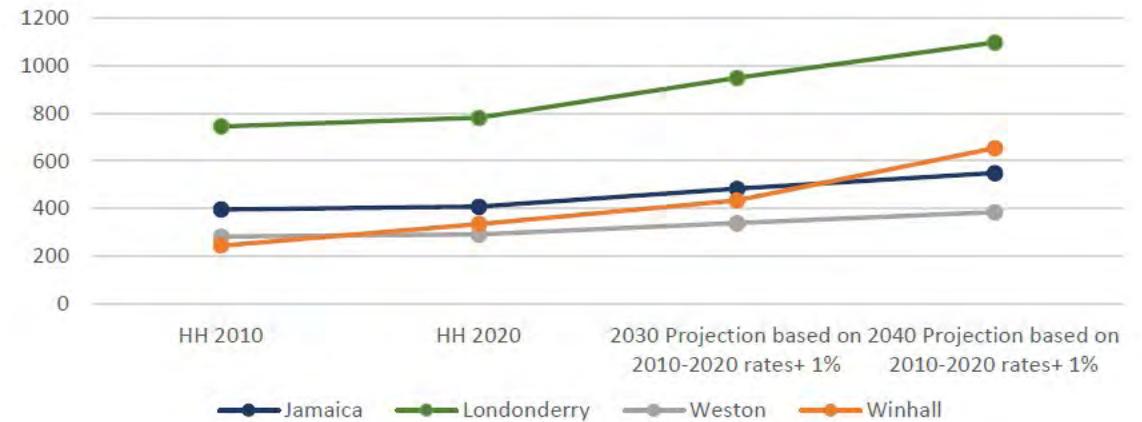


Figure 10. Projected Households by 2040

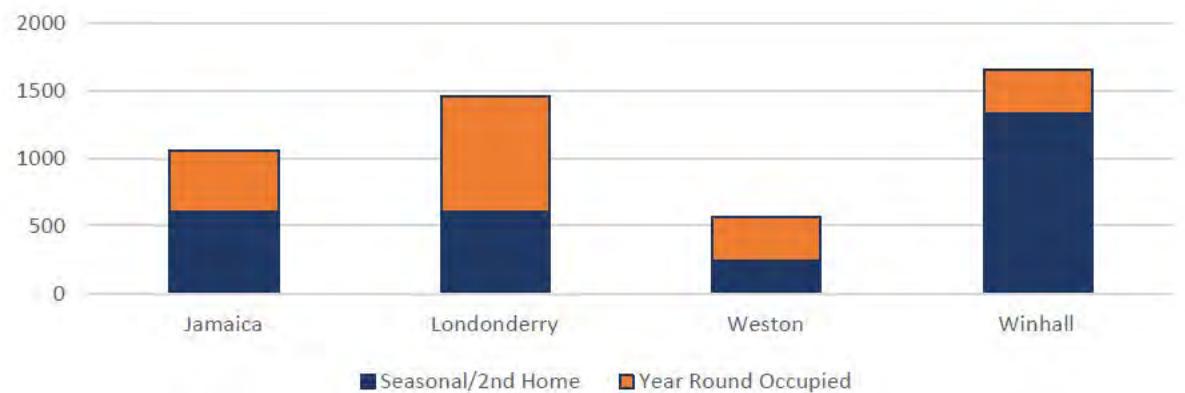


Figure 11. Seasonal versus year-round housing (Source: U.S. Census, American Community Survey and Decennial Census from Housingdata.org)

The four towns want to provide new housing that meets federal guidelines for either affordable (low income as defined by U.S. HUD) or attainable to those with modest incomes spending no more than about 30% of their income on housing. Our data show that the shortage of housing availability is leading to a housing affordability crisis. Figure 12 highlights the percentage of households in each town with incomes under \$50,000 per year. There are two ways to interpret the differences among towns. One way highlights the need for tailored housing strategies in each town. For instance, Winhall, with nearly 40% of households earning less than \$50,000, stands out as having a higher proportion of lower-income residents, which suggests the town requires significant attention to affordable housing

development to meet the needs of its lower-income residents and projected population growth. A different but also reasonable interpretation is that the higher income towns such as Weston have more responsibility to create affordable and attainable housing to do their 'fair share' for the region, and also to provide workforce housing for those employed there.

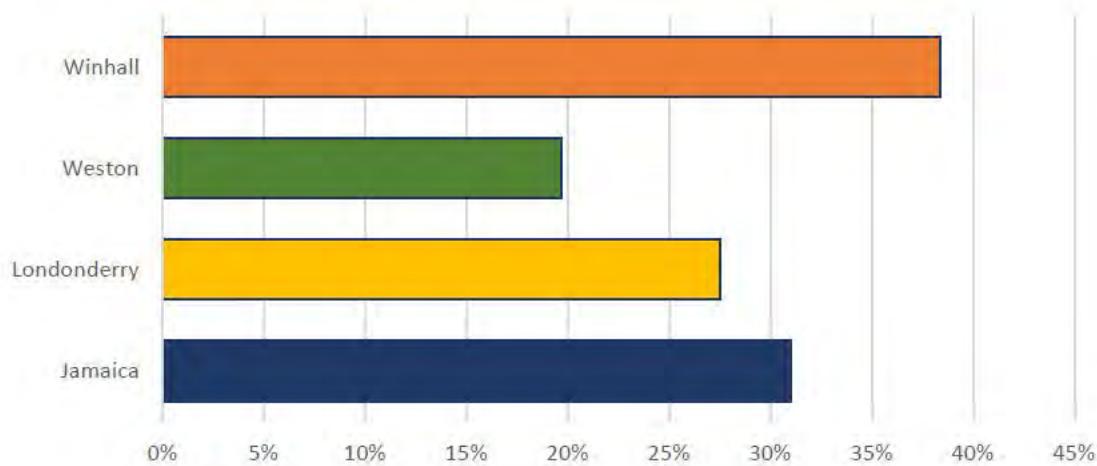


Figure 12. Households earning less than \$50,000 in 2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

Achieving affordable and attainable housing will require local acceptance of multi-family and modular housing. We expect that high-quality multi-family would appeal to older households who would like to stay in town but move out of hard-to-maintain single family residences, as well as younger households.

**Suitability Analysis.** To estimate the amount of land that would be needed to meet this demand, we divide needed housing into three types: multifamily houses, new, safe modular home/mobile home parks and single family residential. After detailed calculations we found that 0.25 unit per acre could represent the three housing types proposed (Table 2, Total Needed Area column). We then mapped land that was the most suitable for development based on not being steep, floodable, in conservation or on prime agricultural soils, and relatively near village centers. We identified more land than would be initially required to allow for ground-truthing of suitability (which will find that some parcels that mapping identifies as suitable have constraints not visible on the maps) and divided needed parcels between geographies of each town (Table 2, Nominated Lands per Area column), and a total initial suitable land found for each town (Table 2, Total Nominated Land per Town column). See Technical Appendix for exact calculations.

At first review, there appears to be enough land in each town to provide the needed housing.

	Needed Housing Units	Total Needed Area at .25 units per acre	Alternatives	Nominated lands per Area (Acres)	Total Nominated Land per Town (Acres)
Jamaica	135	34	Village Center	49.4	112.8
			Near Stratton	63.4	
Londonderry	263	66	North Londonderry	57.7	117.7
			South Londonderry	60.0	
Weston	101	25	Village Center	34.8	34.8
Winhall	353	88	Village Center	68.7	142.2
			Near Stratton	73.5	

Table 2: Needed and nominated land area to meet housing needs

We did not evaluate parcels based on access to municipal wastewater, for a simple reason: with one exception, there are no sewer systems with available capacity in the four towns. Wastewater management primarily relies on decentralized systems, including individual septic systems and small community systems. The closest sewer system to the four towns is the Stratton Sewer System, which is part of the broader infrastructure that serves the Stratton Mountain Resort and its surrounding areas in Vermont – this infrastructure crosses Winhall and is at the borders of Jamaica. The Winhall-Stratton Fire District #1, established in 1995, manages the water supply and wastewater treatment for the resort and nearby communities. The district aims to provide a consistent and safe supply of drinking water while ensuring environmental protection through modern wastewater treatment practices.<sup>23</sup> Towns do not have authority over the district, and any extension of the sewer lines would have to be reached through collaboration. Generally, it is best to assume that whatever is proposed for new construction will need to provide its own sanitary and water infrastructure. Outside the Stratton sewer system, whatever gets built will need to provide its own sanitary and water infrastructure or join any new village-wide shared system.

We also did not consider existing zoning at this stage of the analysis. For the four towns, the map below shows suitable areas for development to meet the needs of the four towns (Figure 13).

## Town Specific Profiles and Projections

### Town Profile: Jamaica

Jamaica is a small town with a rich history with colonial settlement dating back to 1780. The town is known for its foothills to the Green Mountains, with the West River flowing through it. Jamaica State Park is a notable feature, offering hiking, camping, and the scenic Hamilton Falls. The town also boasts a vibrant arts scene and local craftsmanship, combining rural harmony with a creative and adventurous spirit. This makes Jamaica a valued destination for visitors and a beloved home for its community. Jamaica has one village center and borders Stratton Mountain on the West.

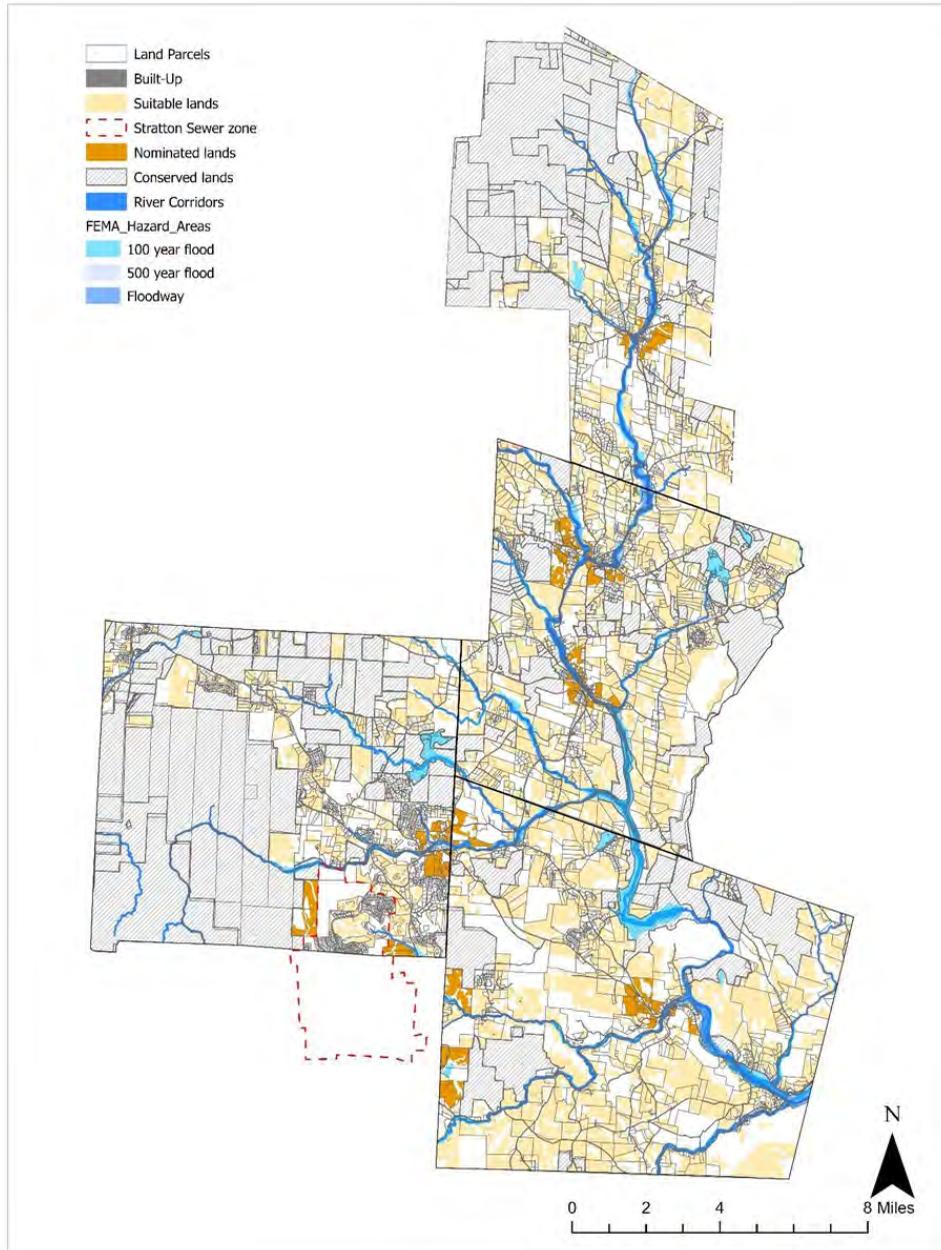


Figure 13. Suitable lands for housing

As of 2022, Jamaica had 981 residents, and 1057 housing units. Most of the housing units are single-family units—949 units—and about 79 as multi-family units as 48 as mobile home units.<sup>24</sup>

**Population and Households Trends**

**Population is expected to decline if the town fails to build new housing units.** Historically, population growth in Jamaica was slow and steady from the 1960 to 2010.<sup>25</sup> However between 2010 and 2020 the town population started declining, and if this trend continues, Scenario A projects that the town will lose an average of 0.3% of its population per year in each of the next two decades, resulting in a loss of approximately 75 inhabitants (Figure 14).

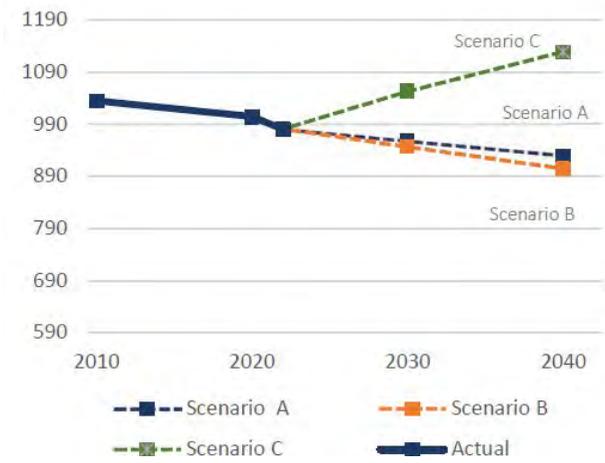


Figure 14. Jamaica population from 2010-2022 and population projections 2022-2024 (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates, with projections by the authors)



Figure 15. Jamaica housing inventory 2020-2022. (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

The population declined during the Covid-19 period. If this shift continues in the coming years, Scenario B projects that the population will decline by 0.4% per year in the coming two decades. Scenario C, which adds 1% per year growth to the 2010-2020 trends, projects an annual increase of 0.7% per year in the population growth in each of the coming two decades (Figure 15).

Just as a snapshot of the market, currently, there are no available housing units for sale, and the total available rental housing units decreased by 4% per year between 2010 and 2022 (Figure 15).

**New housing demand will escalate due to the growing number of households.** Despite the steady or decreasing population projections, the number of housing units people need is expected to increase in the three scenarios (Figure 16). Assuming the loss in population and households that scenario A and B projects, the minimum needed new housing units are expected to be 45 and 56 units in 2040 (Table 3).

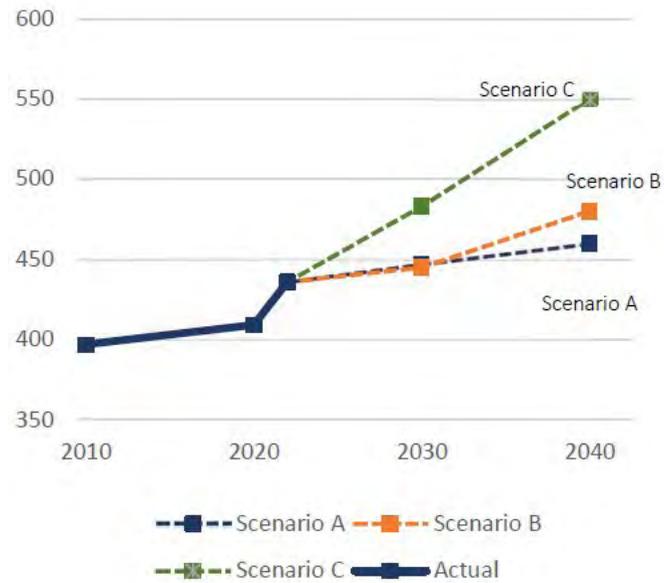


Figure 16. Jamaica households from 2010-2022 and household projections 2022-2040 (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates, with projections by the authors)

	Housing Units Needed in 2030	Housing Units Needed in 2040
Scenario A	32	45
Scenario B	40	65
Scenario C	68	135

Table 3: Jamaica projected household units needed in the next two decades

The loss of population is symptomatic of the community age structure turning from a young population to senior population. In 2010, 28% of the household heads were above 65 years old, by 2022, 38% were above 65. Those aged 35 to 54 are increasing in the rental segment of the housing, this increase signal potential working-age residents coming to the town in scenario B and Scenario C (Figure 17).

These projections suggest that the demand for new housing will increase due to increasing household numbers and an aging population, as well as a projected young population ranging from 35 to 54 years. This shift indicates a need for housing options that accommodate the variation in households needs based on their ages.

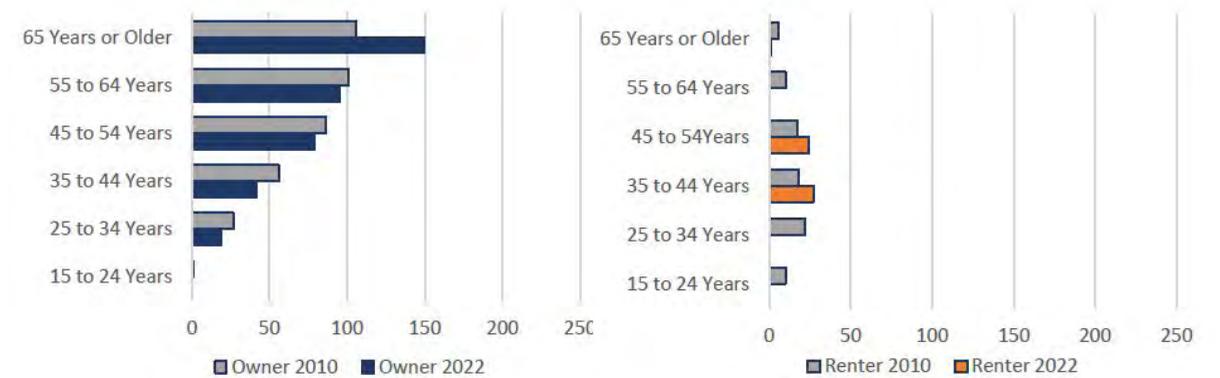


Figure 17. Jamaica estimated households by tenure and age of householder (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

### Housing Stock and Affordability

**Housing growth has essentially come to a standstill in recent years, and there has been no net new housing units constructed in the past five years.**<sup>26</sup> A 117 unit increase in single-family homes, including those used only seasonally, was offset by a 32 unit decline in multi-family and mobile homes from 2010 to 2022 (Figure 18). This is mainly related to natural disasters such as flooding, but also could indicate conversion of existing buildings, perhaps previously used as multi-family units, into single-family homes.

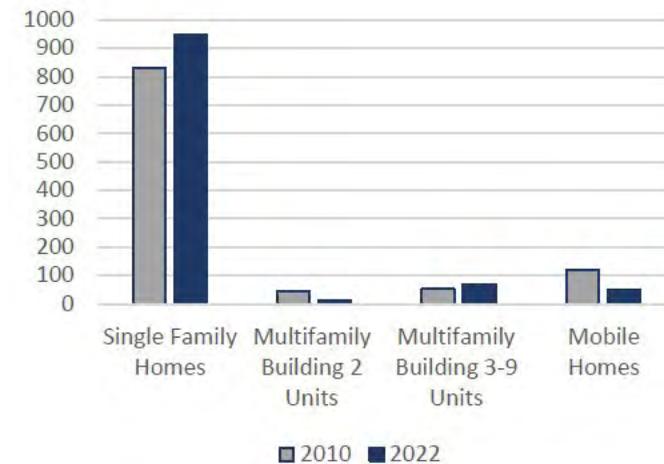


Figure 18. Jamaica housing unit structures (Source U.S. Census American Community Survey)

Seasonal or recreational use rentals have decreased housing accessibility for permanent residents. In 2022, there are a total of 1057 of housing units in Jamaica, with 62.6% of these units as seasonal or rental units—including short-term rentals, and 37.4% of them as owned units.<sup>27</sup> 91% of the rentals are for seasonal, recreational, or occasional uses and only 9% are considered available for year-round rentals. Parallel to the decrease in the year-round rental housing stock, the number of renters is declining (Figure 17). The result is a spike in rental prices – median rental prices in Jamaica are 14.9% higher than the median gross rental prices in Vermont.<sup>28</sup>

**The housing market has brought significant affordability pressures, especially for renters.** The latest estimated data from 2022 indicates

that most households in Jamaica have an annual income ranging between \$50,000 and \$75,000 (Figure 19). With most households making less than \$75,000 per year, new affordable and attainable housing options are needed.



Figure 19. Jamaica estimated households by household income for 2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

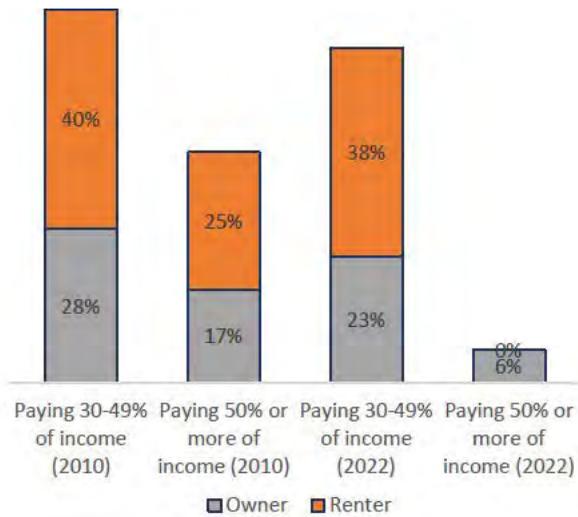


Figure 20. Jamaica households by housing costs as a percentage of household income (Source U.S. Census American Community Survey)

Currently, 38% of households pay more than 30% of their income for renting and 23% of households pay more than 30% of their income for house ownership (Figure 20). This seems better than in 2010, but in fact, it suggests a shift towards a more economically exclusive wealthy community, with average-income individuals moving away.

**Mobile home parks are critical for providing affordable housing issues but located in high-flood-risk areas.**

Single-family detached houses dominate the housing market at 95% in 2022. Mobile homes represent the rest of the market, accounting for a notable 5% of available housing types.<sup>29</sup> There are three Mobile home parks, which in 2023 provided almost 29 units of housing in the town.<sup>30</sup> Two of these parks are in dam inundation areas with significant flood risk.<sup>31</sup> This highlights the urgency of relocating these parks, as well as proposing more spaces to host attainable housing.

**Jamaica Housing Development Suitability Analysis**

As described in Table 3 above, our adopted scenario—scenario C projects a need for 135 new housing units in Jamaica by 2040. Housing in Jamaica is faced by two main issues: the first is the unaffordability due to the lack of available long-term rentals, and the second is the difficulty in finding appropriate parcels, given flooding risks and protected lands. Accordingly, any new housing development should consider the potential for floods in the area. Among the

issues noted during a recent meeting with Jamaica planners were questions on whether land currently designed as bear habitat/undevelopable should remain protected, the potential effects of a planned erosion dam removal, and questions on whether more local business is needed or likely. This map shows potentially suitable areas for development to meet the town’s projected housing needs for the town (Figure 21).

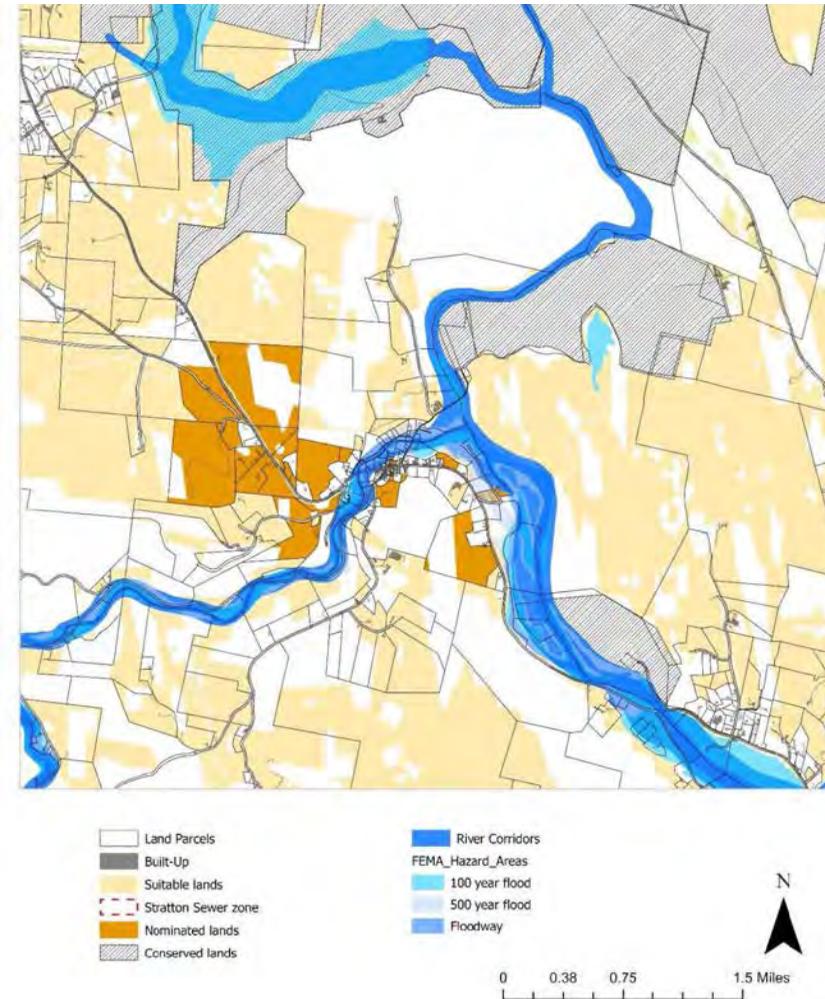


Figure 21. Jamaica suitable lands.

There are two potential areas to nominate suitable lands in Jamaica (Table 4). The first one is the village center – a particularly attractive option for funding new development. The second option is near Stratton sewer infrastructure, which is an attractive option for denser development (Figure 22) but would require some controls to prevent new units from becoming short-term rentals and second homes. Lands were considered potentially suitable if they were not too steep, did not flood, were not conserved or on prime agricultural soils, and were near village centers. Assuming a quarter-acre per unit on average for some combination of multi-family, mobile homes and small-lot or conservation subdivision designs for single family houses, the Town needs about 34 acres for development. Our analysis identified more than three times that acreage on our initial scan of developable parcels, so that as the details of nominated lands become clearer, some will be removed from the ‘suitable’ category while still leaving appropriate parcels for detailed consideration.

	Needed Housing Units	Total Needed Area at .25 units per (Ac)	Suitability analysis Nominated lands total area (Ac)	Total Nominated Land Area (Ac)
Jamaica Village Center	135	34	49.4	112.8
Near Stratton			63.4	

Table 4: Jamaica minimum needed and nominated suitable lands

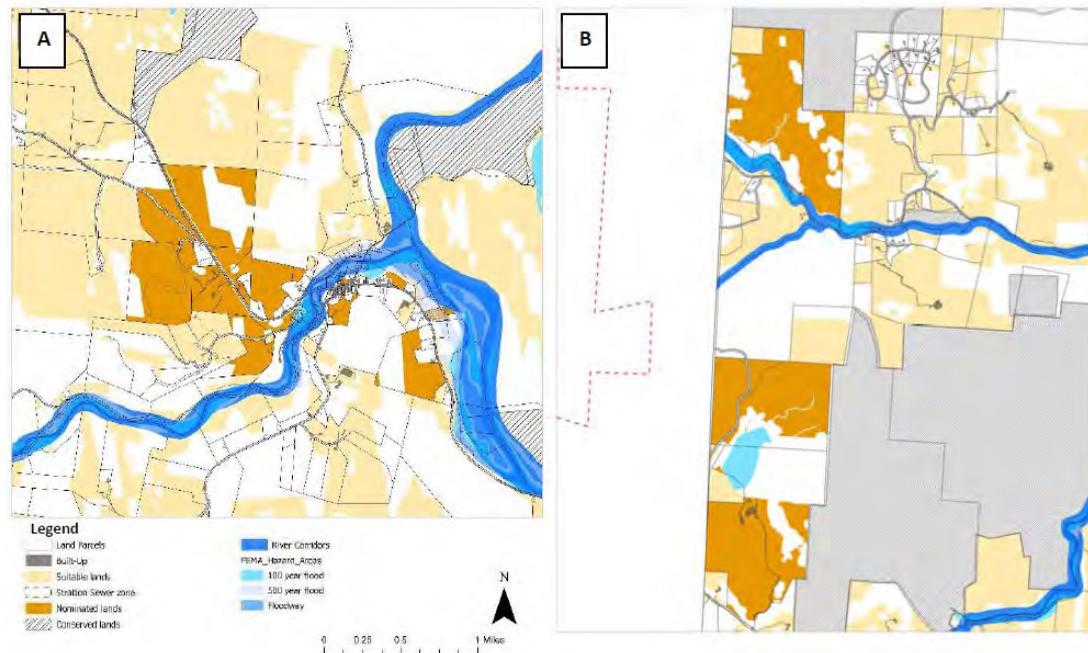


Figure 22. Jamaica nominated suitable lands. A (first alternative) around village center, and B (second alternative) near Stratton area

**Town Profile: Londonderry**

Londonderry is a charming town known for its scenic beauty, outdoor recreation, and small-town atmosphere. Colonial settlement began in the late 1700s and the town was officially incorporated in 1790. The town retains its historic New England character. Visitors enjoy activities such as skiing, hiking, and exploring the town’s quaint shops and local businesses. Its central location in Windham County provides easy access to nearby attractions and cities. Londonderry has two village centers, Londonderry North village center and Londonderry South village center.

A primary focus of the town’s housing strategy is to develop programs and secure loans to fund housing initiatives, particularly targeting the seasonal influx of winter workers who require accommodation for shorter durations. The concept of workforce housing has emerged as a central concern, with stakeholders recognizing its broad-reaching impact on the community.

Additionally, the town grapples with aging infrastructure, particularly roads and bridges, which require urgent attention to enhance connectivity and safety. These septic systems are causing public health issues, polluting the environment, and limiting economic growth. Accordingly, the state has provided a generous grant of \$7.9 million to help finance The Londonderry Village Wastewater project. The project aims to update the outdated wastewater systems in the town’s North and South Village Centers. It is expected to bring new life to the village centers, improving community services and boosting the local economy. By upgrading the wastewater systems, Londonderry aims to make better use of underutilized areas, support local businesses, and provide dependable services to its residents. Londonderry volunteer Planning commission and housing commission members are aware of the complex and pressing complex housing challenges and would like to accommodate residents seeking long-term residency while limiting the impact of short-term rentals on the local economy.

As of 2022, Londonderry had 1,937 residents and 1455 housing units. Most of the housing units are single-family units –1183 units, with about 146 as multi-family units and 56 as mobile home units.<sup>32</sup>

**Population and household Trends**

**New housing demand will escalate due to the growing number of households.** Population growth has been slow and steady in Londonderry over the last twenty years. If this trend continues, Scenario A and scenario B project that the town population growth will increase yearly by 0.8%, while Scenario C projects an increase of 1.8% in the population per year in the coming two decades (Figure 23).

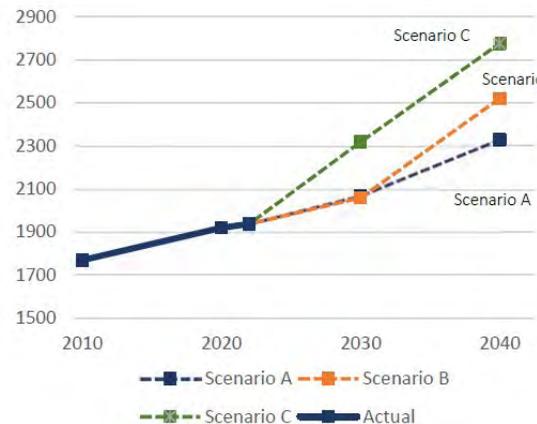


Figure 23. Londonderry population 2010-2022 and population projections 2022-2022 (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates and projections by authors.)

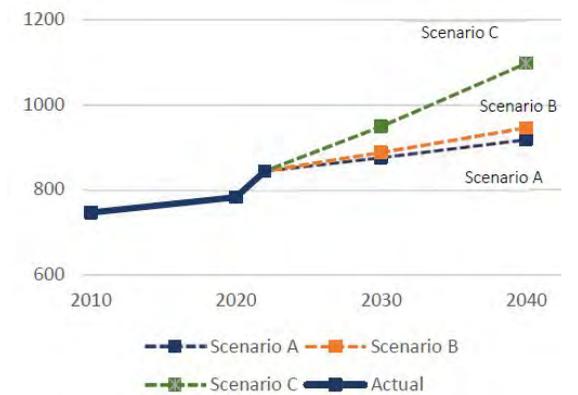


Figure 24. Londonderry households 2010-2022 and household projections 2022-2022. (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates and projections by authors.)

	Housing Units Needed in 2030	Housing Units Needed in 2040
Scenario A	41	84
Scenario B	53	111
Scenario C	114	263

Table 5: Londonderry projected housing units in the next two decades

With the steadily increasing population projections, the number of housing units people need is expected to increase in the three scenarios, paralleled by an increase in the number of households (Figure 24). This means that our adopted Scenario – Scenario C projects that 114 housing units will be needed by 2030, and 236 by 2040 (Table 5).

**If seniors had other places to live, a “senior sell-off” could provide most of the single-family homes needed by younger families.** The percentage of household heads above 65 years old was 32% in 2010 and 31% in 2022, with even higher percentages in the age range of 55 – 64 (Figure 25).<sup>33</sup> Households who rent dropped precipitously from 2010 to 2020.

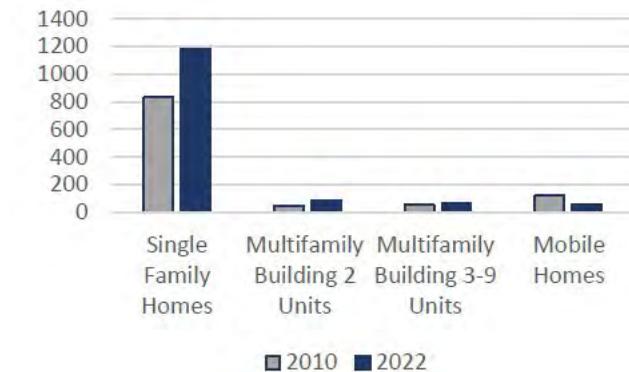


Figure 25. Londonderry housing structures (Source U.S. Census American Community Survey)

**Housing Stock and Affordability**

**There have been no net new housing units built in Londonderry from 2010 to 2022.**<sup>34</sup> There is a total of 1455 housing units in 2022, 51.1% of these units as rental units—including short-term rentals, and 38.9% of them as owned units.<sup>35</sup> Londonderry hosts no mobile home parks, and very few multi-family units (Figure 28), providing very limited housing options. This indicates a need for housing options that accommodate the variation in households needs based on their ages. Single-family homes increased by 351 units, and multi-family houses increased by 40 units from 2010 to 2022, while mobile homes declined (Figure 26).

**Seasonal and recreational use rentals have**

**complicated the issue of housing accessibility for permanent residents.** While 51.1% of Londonderry’s total housing units are rental as of 2022, 81% of these rentals are for seasonal, recreational, or occasional uses and only 19% are considered available for year-round rentals. When comparing the housing inventory from 2010, there is a decrease in the units available for sale between 2010 and 2022, and the available rental housing units dropped to zero, providing no vacant long term rental units (Figure 27).

**The housing market has brought significant affordability pressures, especially for renters.** Most of the community has an annual household income below \$75,000. Another significant portion of the community has an annual income exceeding \$150,000. (Figure 28). Higher income residents are mainly senior homeowners; this

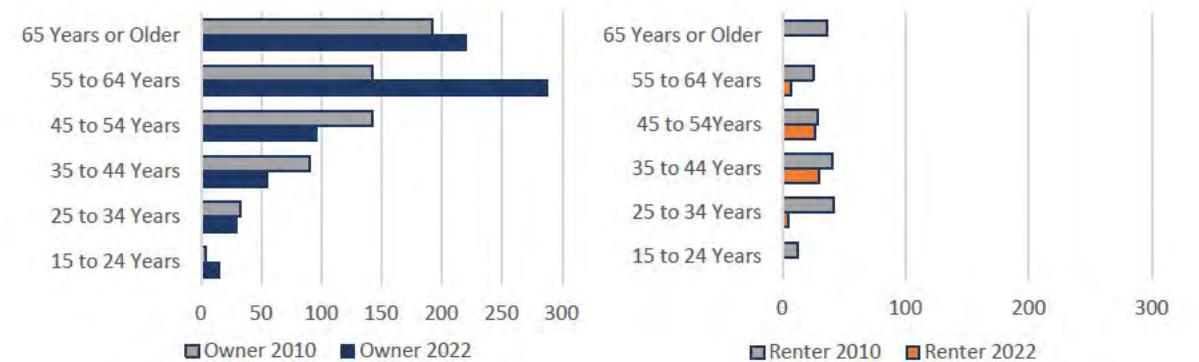


Figure 26. Londonderry estimated households by tenure and age of householder (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)



Figure 27. Londonderry housing inventory 2010-2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

income disparity indicates a need for thoughtful and inclusive housing policies and development strategies to ensure that all community members have access to appropriate and affordable housing options. With the shortage of available units came a massive increase compared to 2010 in the renting prices; 51% of the renters are paying 30-49% of their income in 2022 (Figure 31).

**Londonderry Housing Development Suitability Analysis**

There are two village centers in Londonderry, North and south villages – making two potential areas to nominate suitable lands (Table 6). Lands were considered potentially suitable if they were not too steep, did not flood, were not conserved or on prime agricultural soils, and were near village centers. Assuming a quarter-acre per unit on average for some combination of multi-family, mobile homes and small-lot or conservation subdivision designs for single family houses, the Town needs about 66 acres for development.



Figure 28. Londonderry estimated households by household income for 2022r (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

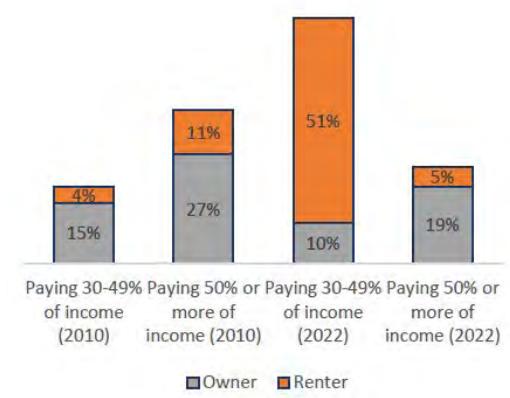


Figure 29. Londonderry households by housing costs as a percentage of income (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

	Needed Housing Units	Total Needed Area at .25 units per Ac	Suitability analysis Nominated lands total area (Ac)	Total Nominated Land Area (Ac)
Village Center of North Londonderry	263	66	57.7	117.7
Village Center of South Londonderry			60.0	

Table 6: Londonderry minimum needed and nominated suitable lands

Our analysis identified more than twice that acreage on our initial scan of developable parcels, so that as the details of nominated lands become clearer, some will be removed from the 'suitable' category while still leaving appropriate parcels for detailed consideration. For Londonderry, the Londonderry Suitable Lands map shows suitable areas for development to meet the projected housing needs for the town (Figure 30), with more detailed maps of the suitable nominated lands (Figure 31).

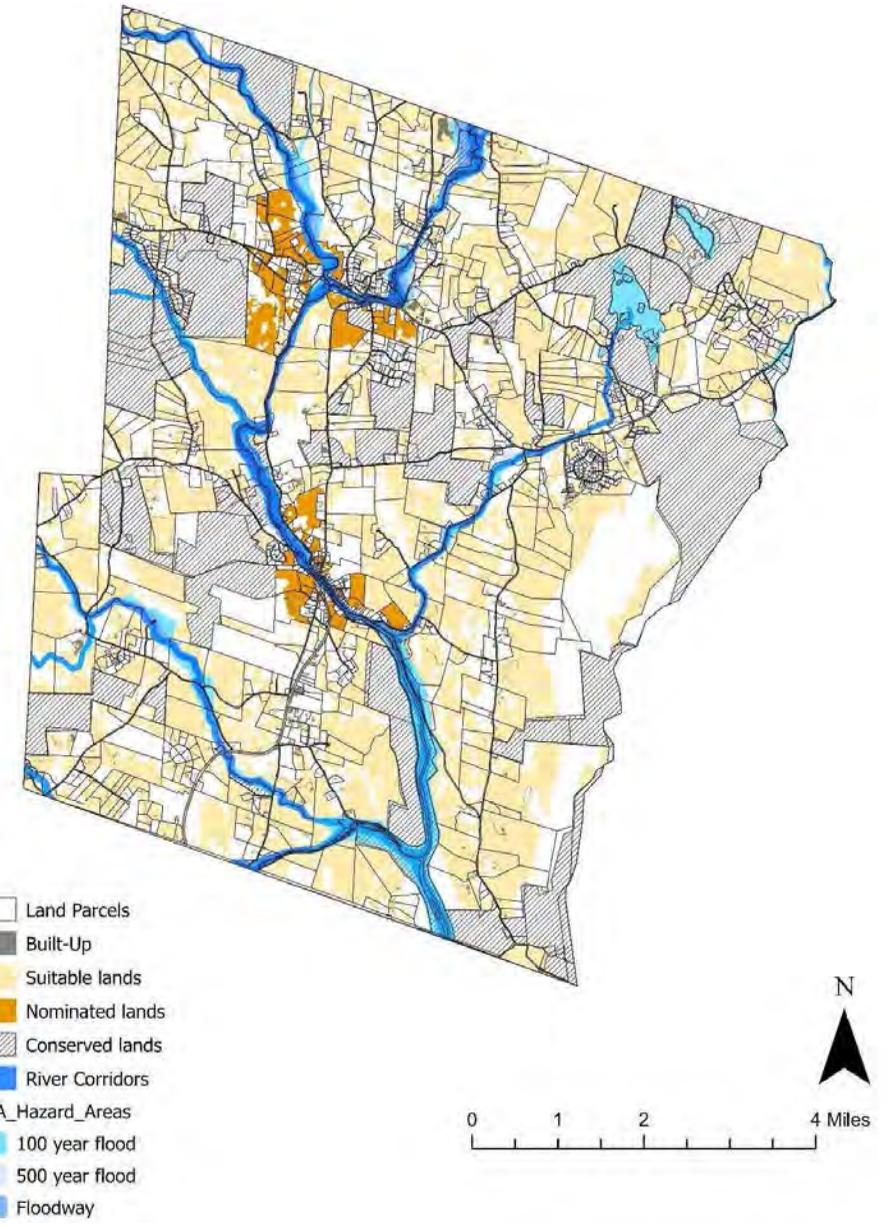


Figure 30. Londonderry suitable lands

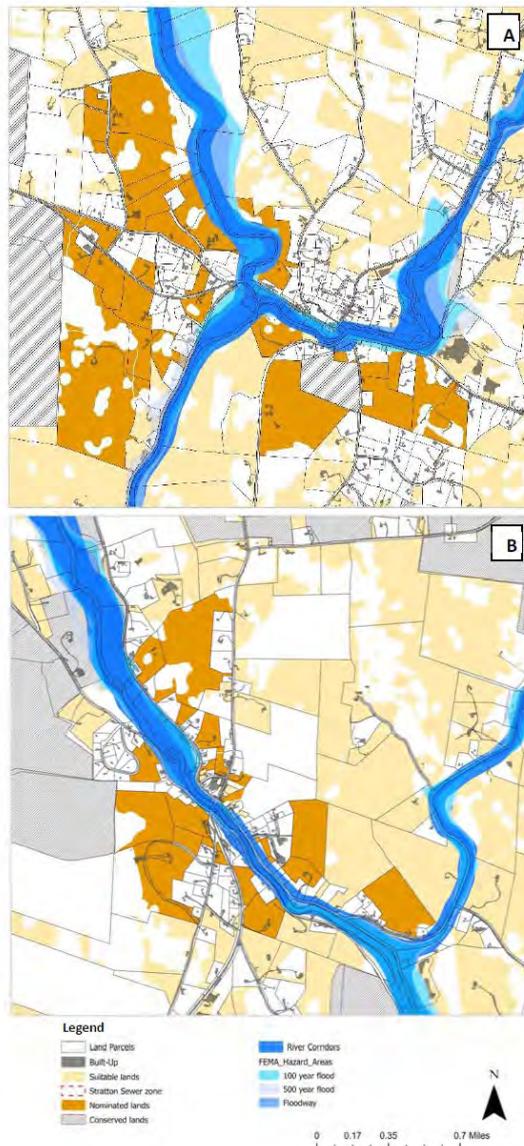


Figure 31. Londonderry nominated suitable lands, A (first alternative) around North Village Center and B (second alternative) around South Village Center.

### Town Profile: Weston

Weston is known for its classic New England charm and scenic beauty. Its location in the Green Mountains allows Weston a serene rural landscape, marked with historic buildings and lush greenery. The town is home to the renowned Weston Playhouse, Vermont’s oldest professional theatre, which attracts visitors with its high-quality productions. Additionally, the Vermont Country Store, a beloved landmark, draws tourists for its nostalgic and fun merchandise and old-fashioned hospitality. With its tranquil environment, cultural attractions, and rich history, Weston embodies the idyllic essence of Vermont’s small-town life. Weston has one village center.

As of 2022, Weston had 807 residents, and 305 housing units. Most of the housing units as single-family units -- 533 units, and about 40 as multi-family units and 10 as mobile home units.<sup>36</sup> During a recent meeting with the planning team in Weston, several critical issues were highlighted. Housing affordability remains a significant concern, exacerbated by high taxes. An outcome locals noted was the difficulty in finding workers and given that many homes are vacant much of the year, low demand for local businesses. As a result, business owners infrequently open their establishments, contributing to economic stagnation and a less lively town center. There are significant challenges to new housing development. About half the town’s land is preserved by one type or another, and land prices are high. Like the other towns, the absence of any wastewater treatment options other than septic has ensured large-lot zoning. Flooding is an issue and has resulted in FEMA-related housing unit loss. Existing buildings tend to be quite large, presenting redevelopment hurdles (and opportunity). All this highlights the need for strategies to retain residents, and particularly year-round and workforce residents.

### Population and household Trends

**New housing demand will escalate.** 2010 - 2020 population growth was slow and steady in Weston. COVID brought a population bump which was likely from seasonal residences being converted to year-round use, but it is unclear if this was a momentary blip or a long-term change.

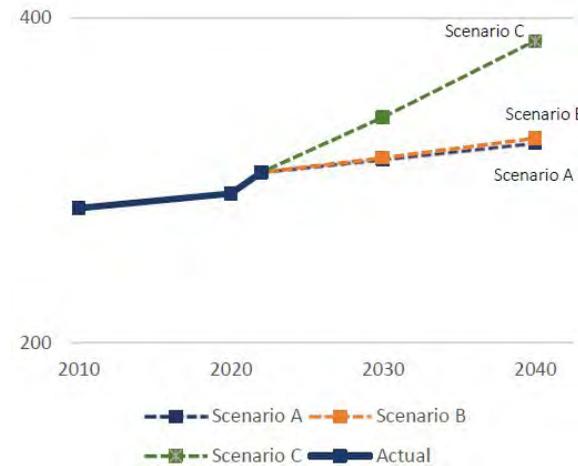


Figure 32. Weston households from 2010-2022 and household projections 2022-2040 (Source U.S. Census, 2018-2022 American Community Survey 5-Year Estimates, projection by the authors)



Figure 33. Weston population from 2010-2022 and population projections 2022-2040 (Source U.S. Census, 2018-2022 American Community Survey 5-Year Estimates, projection by the authors)

Scenario A, which uses only 2010 -2020 numbers, and scenario B, which includes the COVID era, project that the town population growth will increase by 1% and 3% respectively, per year for each of the next two decades. Scenario C, which uses Scenario A plus 1% to allow for some growth to meet pent-up demand, projects an annual increase of about 2% population growth per year in the coming two decades, less than Scenario B but more than Scenario A (Figure 32).

**New housing demand will escalate due to the growing number of households.** For Weston in particular, an important difference in the Scenarios is how we project household size. While population increased significantly during COVID, household size in Weston also increased, so fewer units are required with that larger household sizes assumption intact. In Scenario C we assume that household size will remain on-trend with the last decade, which is a smaller number of people living in each house. As a result, Scenario C brings a higher total household count than the other scenarios. (Figure 33). The town faces a critical housing shortage, with projected deficits of up to 54 housing units by 2030 and 101 by 2040 in Scenario C (Table 7).

	Number of Housing Units Needed in 2030	Number of Housing Units Needed in 2040
Scenario A	28	38
Scenario B	29	41
Scenario C	54	101

Table 7: Weston projected number of housing units for the next two decades

**Weston has a more balanced age demographic, but still has many homes owned by those over 65.** Currently, 49% of houses owners are aged 65 or older. Unusually, there has also been an increase of 50% in the middle-age population of 35 to 44 years old, marking 12% of the total ownership in 2020 (Figure 34). These trends suggest that the demand for new housing is more balanced than the other towns, with more families as compared to older households. Weston hosts no mobile home parks and very few multi-family units, providing very limited housing options. This indicates a need for housing options that accommodate the variation in households needs based on their ages.

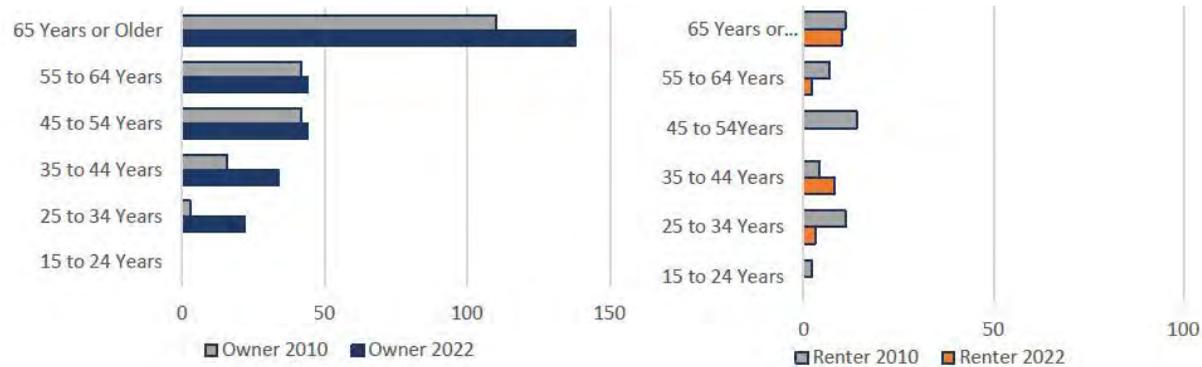


Figure 34. Weston estimated households by tenure and age of householder (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

**Housing Stock and Affordability**

**There have been no net new housing units built from 2010 to 2022.**<sup>37</sup> There is a total of 563 of housing units in Weston by 2022; 49% of these units as rental units—including short-term rentals, and 51% of them as owned units.<sup>38</sup> Despite no new net housing structures, there is an increase in the specific housing types: single-family homes has increased by 63 units, as well as multi-family houses which increased by 7 units from 2010 to 2022 (Figure 35). This may indicate conversion of existing buildings, perhaps previously used as commercial, into single-family and multi-family homes.

Insert Figure 35 around here. Caption “Weston housing units structures (Source U.S. Census American Community Survey)”

Seasonal and recreational use homes complicate housing accessibility for permanent residents. Despite that rental units are 51% of the total available units in 2022, 86% of them are for seasonal, recreational, or occasional uses and only 14% are considered available for year-round rentals. When comparing the housing inventory from 2010, there is a decrease in the units available for sale between 2010 and 2022, however, the total rental housing units massively decreased providing no vacant long term rental units (Figure 36).

Weston is a very wealthy, largely second home community. Estimated median household income by housing tenure doubled from 2010 to 2022 (Figure 37). Moreover, the majority of the residents are high income with annual income

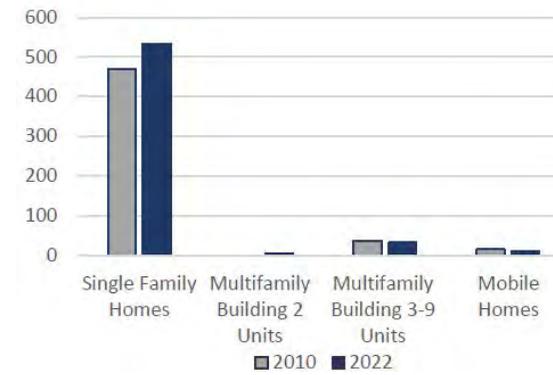


Figure 35. Weston housing units structures (Source U.S. Census American Community Survey)



Figure 36. Weston Housing Inventory 2010-2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

exceeding \$100,000 (Figure 38). Given the unavailability of vacant rental units, Weston lost half of its renters from 2010 (Figure 34), and similar percentages of average income residents are leaving the town.<sup>39</sup> This trend could be a symptom of unused housing units as families hold onto them for recreational reasons, removing them from the market for permanent housing.

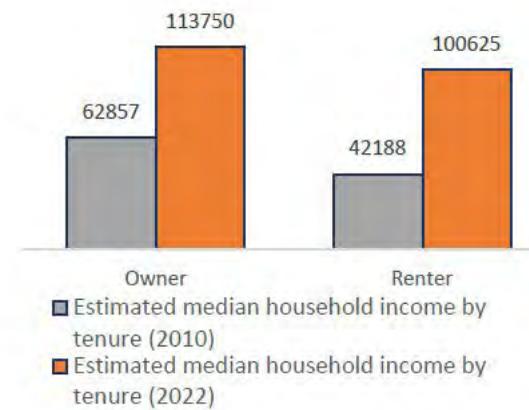


Figure 37. Weston estimated median household income by tenure (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

**Weston Housing Development Suitability Analysis**

There is one potential area to nominate suitable lands in Weston, which is the town’s village center (Table 8). Most of Weston’s lands are in conservation making it challenging to spot suitable areas. Lands were considered potentially suitable if they were not too steep, did not flood, were not conserved or on prime agricultural soils, and were near village centers. Assuming a quarter-acre per unit on average for some combination of multi-family, mobile homes and small-lot or conservation subdivision designs for single family houses, the Town needs about 25 acres for development. Our analysis identified about 35 acres on our initial scan of developable parcels, so that as the details of nominated lands become clearer, some will be removed from the ‘suitable’ category while still leaving appropriate parcels for detailed consideration.

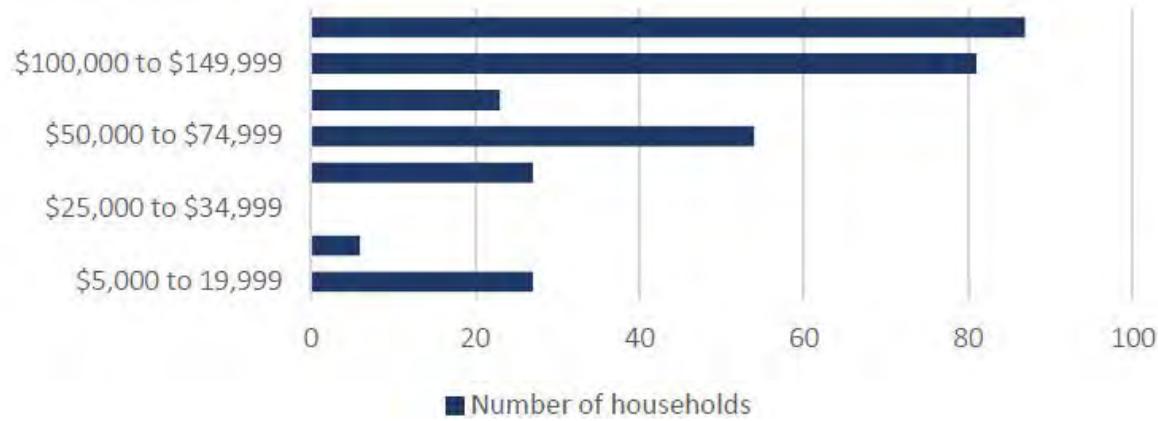


Figure 38. Weston estimated households by household income for 2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

	Needed Housing Units	Total Needed Area at .25 units per (Ac)	Suitability analysis Nominated lands total area (Ac)	Total Nominated Land Area (Ac)
Weston Village Center	101	25	34.8	34.8

Table 8: Weston minimum needed areas and nominated suitable lands

The Weston suitable lands map (Figure 39) show suitable areas for development to meet the projected housing needs. The Weston nominated suitable lands map (Figure 40) shows a more detailed view around the village center

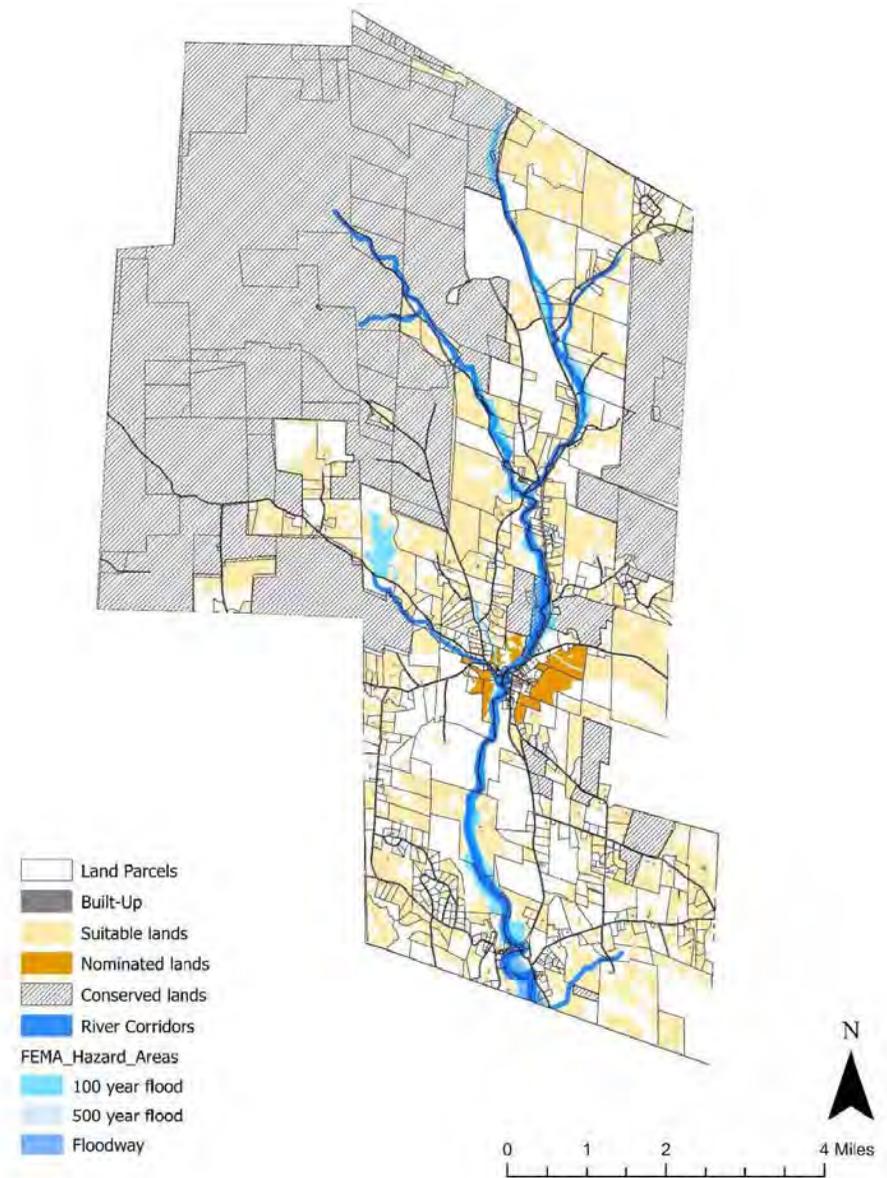


Figure 39. Weston suitable lands

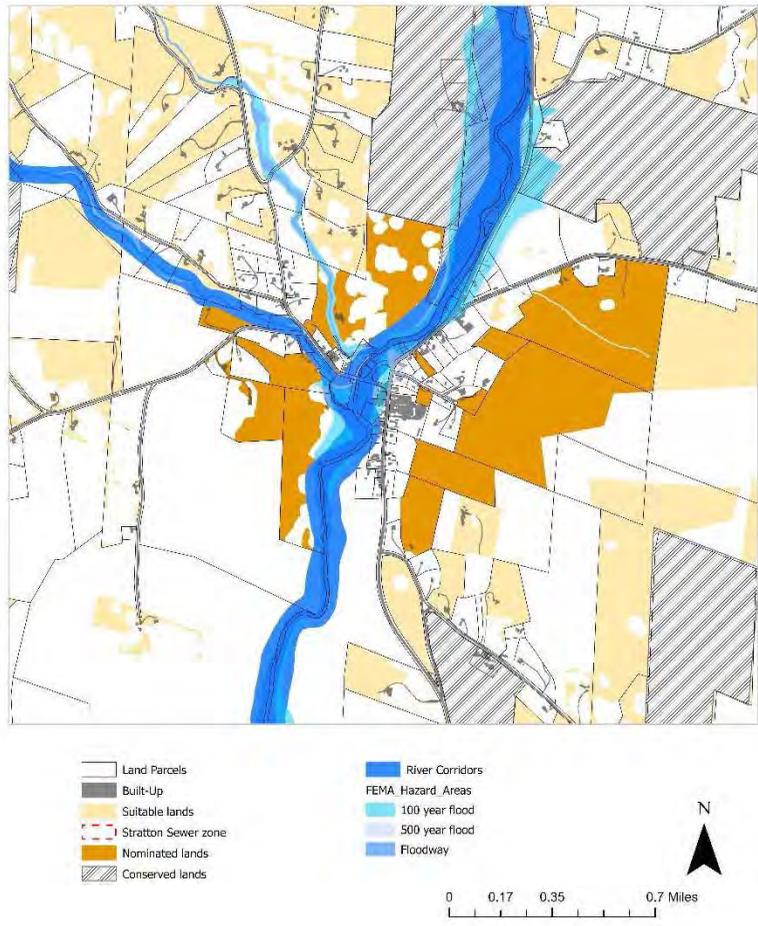


Figure 40. Weston nominated suitable lands around village center

### Town Profile: Winhall

Winhall, Vermont, is a small and charming town in the Green Mountains, known for its beautiful scenery and outdoor activities. Located in Bennington County, it has a friendly community and a colonial history that goes back to 1761. Winhall is close to Stratton Mountain Resort, making it a great spot for skiing, snowboarding, and hiking. The town's forests, rivers, and countryside attract people who love nature and want a quiet escape from the city. With its natural beauty and small-town feel, Winhall offers a classic Vermont experience. Winhall has one village center, often called Bondville and borders Stratton mountain from the south.

As of 2022, Winhall had 752 residents, and 1653 housing units. Most of the housing units are single-family units – 1464 units, with about 142 as multi-family units and 57 as mobile home units.<sup>40</sup>

### Population and household Trends

New housing demand will escalate due to the growing number of households and household size. Prior to the pandemic, population was on a steady rise in Winhall. If this trend continues, Scenario A projects that the town population growth will increase by 4% per year in each of the next two decades. Unusual for the rest of the region, population during COVID actually dropped. As a result, Scenario B, which incorporates

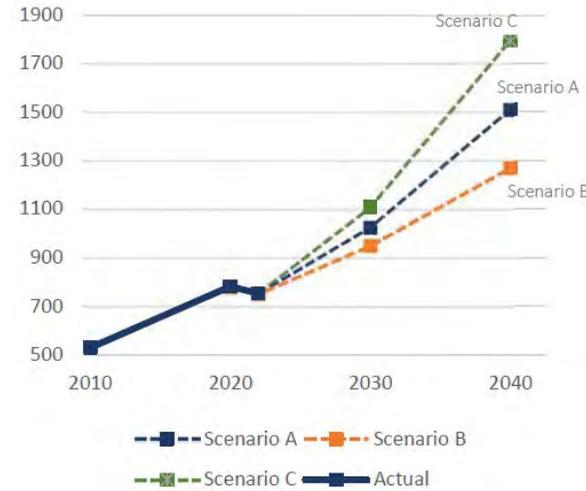


Figure 41. Winhall population 2010-2022 and population projections 2022-2040 (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates and projections by authors)



Figure 42. Winhall Households from 2010-2022 and Households projection 2022-2040 (Source U.S. Census 2018-2022 American Community Survey 5-Year Estimates and projections by authors)

COVID era changes projects a lower growth, with an increase of 3% per year in the population. Scenario C projects an increase of 5% per year in the population growth in the coming two decades (Figure 41).

Scenario A and C project significant increases in the number of households. Scenario B, which uses the COVID years population change and the increased household size during that period, projects a continuing decline in overall households. Scenario A and C, in contrast, do not use the COVID years in their calculations and instead assume the household size patterns pre-COVID will continue -- households get slightly smaller, and new units are needed. (Figure 42).

	Number of Housing Units Needed in 2030	Number of Housing Units Needed in 2040
Scenario A	101	249
Scenario B	0	0
Scenario C	133	353

Table 9: Winhall projected housing units in the next two decades

Based on scenario A and C, the town faces a critical housing shortage. Scenario C projects the need for 133 units in 2030 and 353 units in 2040. (Table 9).

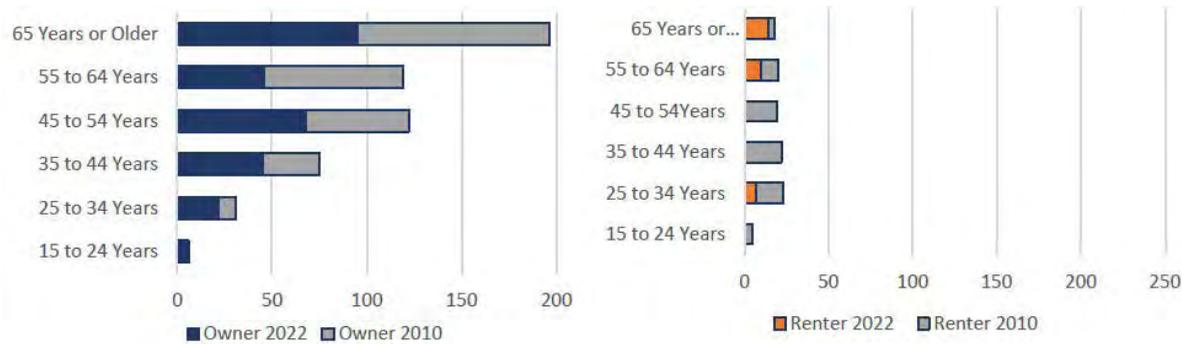


Figure 43. Winhall estimated households by tenure and age of householder (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

Winhall, alone of the four towns, has fewer senior-aged households now compared to 2010, with increases in the younger age brackets. The percentage of household heads above 65 years old was 38% in 2010 and 34% in 2022, and the change was even more for ages 55 to 64, and overall population of seniors decreased by 11% from 2010 to 2022 (Figure 43). This may be connected to the relative steadiness of the percent of homes that are in seasonal use only (Figure 44); if seasonal homes have become year-round homes, this may be bringing the younger demographic to town.



Figure 44. Winhall housing inventory 2010-2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

**Housing Stock and Affordability**

**Winhall lacks diversity in its housing stock and there have been no new housing units since 2020.**<sup>41</sup> Very few multi-family or mobile homes are available in the town (Figure 45). Winhall hosts no mobile home parks, and very few multi-family units providing very limited housing options. In addition, there was a decrease in some housing types, for instance single-family homes has decreased by 54 units, as well as multi-family houses which decreased by 105 units from 2010 to 2022. This indicates the demolishing of some buildings due to climate change or shifting some of them for commercial use.

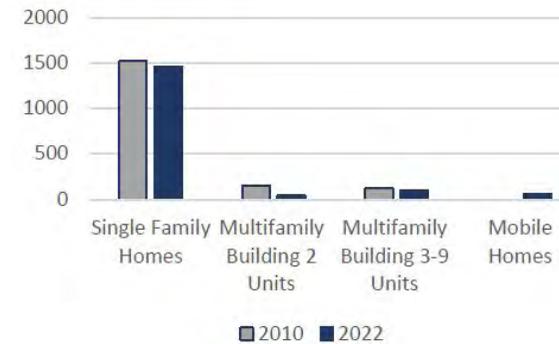


Figure 45. Winhall housing units structures. (Source U.S. Census American Community Survey)

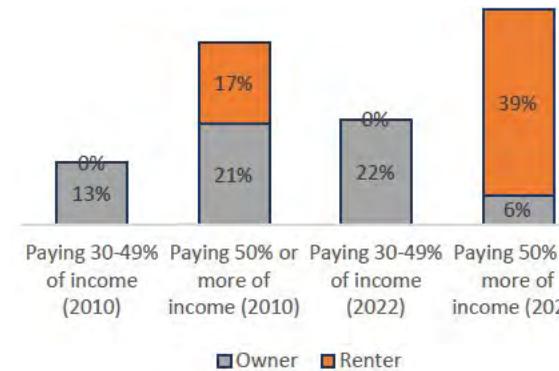


Figure 46. Winhall households by housing costs as a percentage of household income (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

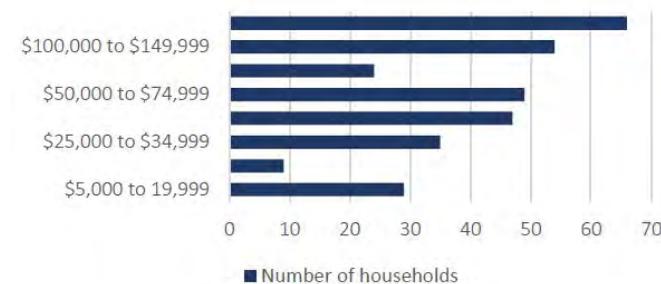


Figure 47. Winhall estimated households by household income for 2022 (Source U.S. Census American Community Survey and Decennial Census from Housingdata.org)

**There are lots of rental units, but only 2% of those are for year-round residents.** There is a total of 1653 housing units in Winhall by 2022, with 82% of these units as rental units—including short-term rentals, and 18% of them as owned units.<sup>42</sup> Despite that the rental units are 82% of the total available units in 2022, 98% of them are for seasonal, recreational, or occasional uses and only 2% are considered available for year-round rentals.

The result has been a massive increase in rents compared to 2010, and 39% of the renters are paying 50% or more of their income for housing (Figure 46). Moreover, Winhall income levels are diverse distributions within the community, with a significant high-income group and a substantial middle-income group, along with smaller lower-income groups. This diversity necessitates a broad approach to housing policy and development to address the needs of all community members.

**Winhall Housing Development Suitability Analysis**

We analyzed Winhall land in three areas of focus: near to the Village Center, in the Stratton area and adjacent to Stratton; the latter two areas have the benefit of being near to the Stratton wastewater treatment lines, but also will experience significant pressure to become seasonal/rental units. Lands were considered potentially suitable if they were not too steep, did not flood, were not conserved or on prime agricultural soils, and were near village centers. Assuming a quarter-acre per unit on average for some combination of multi-family, mobile homes and small-lot or conservation subdivision designs for single family houses, the Town needs about 88 acres for development. Our analysis identified about 104 acres on our initial scan of developable parcels, so that as the details of nominated lands become clearer, some will be removed from the

‘suitable’ category while still leaving appropriate parcels for detailed consideration.

	Needed Housing Units	Total Needed Area at .25 units per (Ac)	Suitability analysis Nominated lands total area (Ac)	Total Nominated Land Area (Ac)
Winhall Village Center	353	88	68.8	142.2
Near Stratton			73.5	

Table 10: Winhall minimum needed and nominated suitable lands

The Winhall suitable lands areas maps show areas suitable for housing development townwide (Figure 48) and in more detail in Winhall village center and near Stratton (Figure 49). Adjacent land is also shown in Jamaica to provide connectivity.

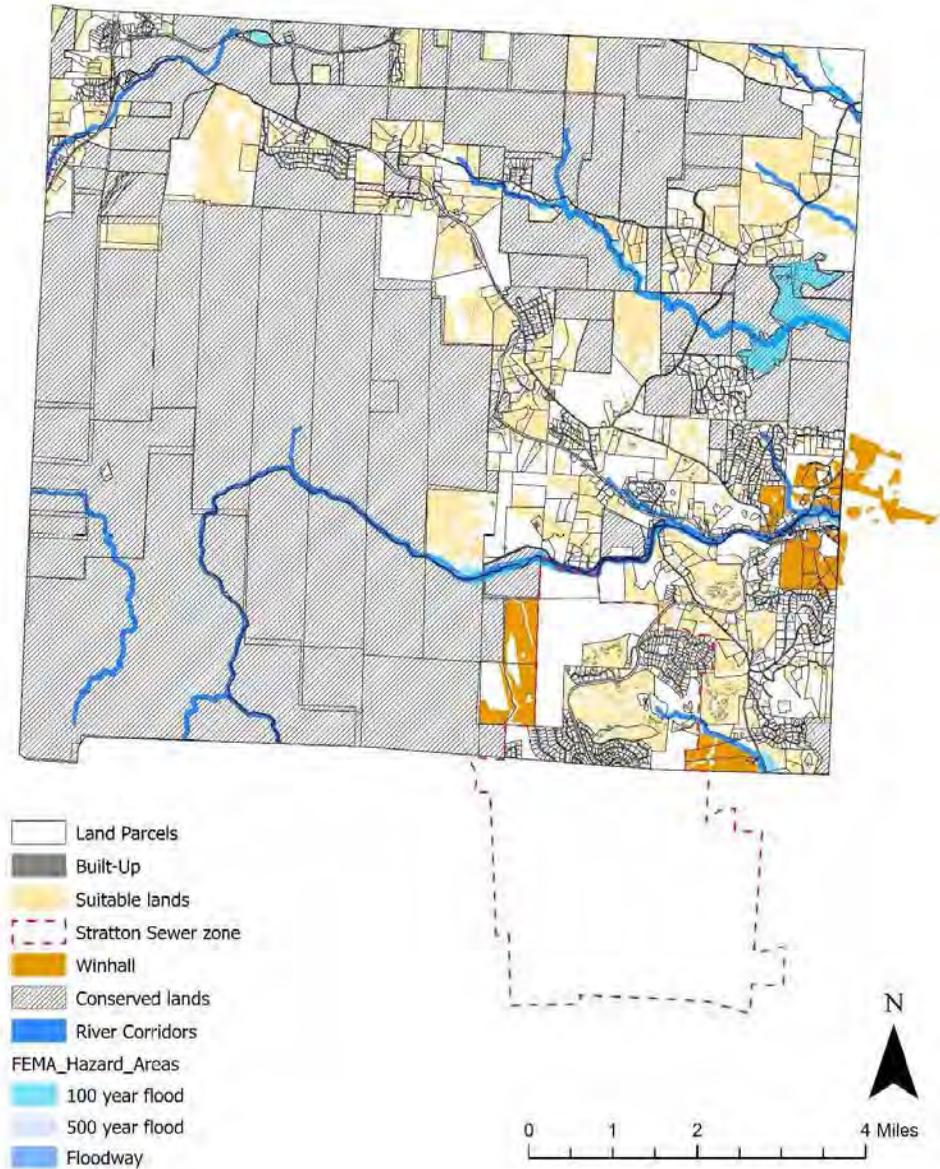


Figure 48. Winhall suitable lands

## Methodology and MetaData

- Population growth rate:** Average annual growth rate, using the Compound Annual Growth Rate equation:

$$r = \left( \frac{P \text{ Final}}{P \text{ Initial}} \right)^{\frac{1}{n}} - 1$$

*P Final* = population at the end of the period.

*P Initial* = population at the beginning of the period.

*n* = number of years in the period.

Based on this equation:

$$r_{2010 \text{ to } 2020} = \left( \frac{P \text{ 2020}}{P \text{ 2010}} \right)^{\frac{1}{10}} - 1$$

$$r_{2010 \text{ to } 2022} = \left( \frac{P \text{ 2022}}{P \text{ 2010}} \right)^{\frac{1}{12}} - 1$$

- Population projections:** Population projections using the exponential growth formula:

$$P_t = P_0 \times (1 + r)^t$$

*P<sub>t</sub>* = is the population at time *t*

*P<sub>0</sub>* = is the initial population,

*r* = is the growth rate

*t* = is the number of time periods (years).

Based on this equation Population projections for the three scenarios for 2030 are:

**Scenario A** 2030 Projection based on 2010-2020 rates:

$$P_{2030(A)} = P_{2022} \times (1 + r_{2010 \text{ to } 2020})^8$$

**Scenario A** 2040 Projection based on 2010-2020 rates:

$$P_{2040(A)} = P_{2030(A)} \times (1 + r_{2010 \text{ to } 2020})^{10}$$

**Scenario B** 2030 Projection based on 2010-2022 rate:

$$P_{2030(B)} = P_{2022} \times (1 + r_{2010 \text{ to } 2022})^8$$

**Scenario B** 2040 Projection based on 2010-2022 rate:

$$P_{2040(B)} = P_{2030(B)} \times (1 + r_{2010 \text{ to } 2022})^{10}$$

**Scenario C** 2030 Projection based on 2010-2022 rate+ 1% growth:

$$P_{2030(C)} = P_{2022} \times (1 + r_{2010 \text{ to } 2020} + 0.01)^8$$

**Scenario C** 2040 Projection based on 2010-2022 rate+ 1% growth:

$$P_{2040(C)} = P_{2030(C)} \times (1 + r_{2010 \text{ to } 2020} + 0.01)^{10}$$



Figure 49. Winhall suitable land A (first alternative) nominated land around Winhall village center and B (second alternative) nominated land near Stratton area

3. **Household projections:** Households projections using the exponential growth formula:  $H_t = H_0 \times (1 + r)^t$

$H_t$  = is the Number of households at time t  
 $H_0$  = is the initial Number of households,  
 $r$  = is the growth rate  
 $t$  = is the number of time periods (years)

Based on this equation Household projections for the three scenarios for 2030 are:

**Scenario A** 2030 Projection based on 2010-2020 rates:

$$H_{2030(A)} = H_{2022} \times (1 + r_{2010 \text{ to } 2020})^8$$

**Scenario A** 2040 Projection based on 2010-2020 rates:

$$H_{2040(A)} = H_{2030(A)} \times (1 + r_{2010 \text{ to } 2020})^{10}$$

**Scenario B** 2030 Projection based on 2010-2022 rate:

$$H_{2030(B)} = H_{2022} \times (1 + r_{2010 \text{ to } 2022})^8$$

**Scenario B** 2030 Projection based on 2010-2022 rate:

$$H_{2040(B)} = H_{2030(B)} \times (1 + r_{2010 \text{ to } 2022})^{10}$$

**scenario C** 2030 Projection based on 2010-2020 rate+ 1% growth:

$$H_{2030(C)} = H_{2022} \times (1 + r_{2010 \text{ to } 2020} + 0.01)^8$$

**Scenario C** 2030 Projection based on 2010-2020 rate+ 1% growth:

$$H_{2040(C)} = H_{2030(C)} \times (1 + r_{2010 \text{ to } 2020} + 0.01)^{10}$$

4. **Needed Housing Units:** Housing units needed using this formula:

$$\begin{aligned} \text{Needed Housing Units}_{2030} &= HH_{2022} - (\text{Long term rental units}_{2022} + \text{Owned Units}_{2022}) - (HH_{2030} - HH_{2022}) \\ \text{Needed Housing Units}_{2040} &= HH_{2022} - (\text{Long term rental units}_{2022} + \text{Owned Units}_{2022}) - (HH_{2040} - HH_{2022}) \end{aligned}$$

5. **Allocation of needed housing units:**

- $\frac{1}{3}$  in multi-family, assumed to be built at a density of 15 units per acre
- $\frac{1}{3}$  in modular/mobile home park, assumed to be built 5 un/acre, or lot size of 60 ft by 145 ft. with lot sizes of 60 ft by 120 ft
- $\frac{1}{3}$  in single family housing, assumed to be built in conservation subdivision designs with 0.5 acres per house.

These are calculated as:

A. Num of MF houses = needed housing units (for town)  $\times \frac{1}{3}$

● Needed Area of MF houses (sq Acre) =  $\frac{\text{Num of MF}}{15}$

B. Num of Mobile Park houses = needed housing units (for town)  $\times \frac{1}{3}$

● Needed Area of MF houses (sq Acre) =  $\frac{\text{Num of Mobile Park houses}}{5}$

C. Num of SFR houses = needed housing units (for town)  $\times \frac{1}{3}$

● Needed Area of SFR houses (sq Acre) =  $\frac{\text{Num of SFR houses}}{2}$

6. **Suitability analysis:**

A. **Data**

Layer	Resources	Layer Name
<b>Occupied parcels</b>	Created by us	occupied parcels
<b>Parcels and Conservation easements</b>	Supported by CRM GIS team Layer it contains: 1. Conservation easements, 2. Conservation organizations, 3. Public, federal lands, 4. Public, state lands, 5. Public, town lands	conserved_lands_2021_carto
<b>Wetlands</b>	VCGI land use/land cover data	Wetlands_2016
<b>Wetlands 50 ft buffer</b>	Created by us	Wetlands_50ft_buffer
<b>Open agricultural land</b>	land use/land cover data or National Land Cover Database	Agriculture_2016
<b>Flood zones (100-year and 500-year flood maps), streams, rivers, and ponds</b>	VCGI land use/land cover data	FEMA_Hazard_Areas
<b>River Corridors</b>	VCGI	WaterHydro_RiverCorridors
<b>Slope</b>	VCGI	VCGI_lidarslope
<b>Parcels</b>	VCGI Parcels: 1. Parcels available by town, 2. Inactive parcel polygons, 3. Road infrastructure	1. Land_Parcels 2. Parcels_Status
<b>Village centers boundary</b>	VCGI	VT_Designated_Village_Centers_Boundary

**B. Land which is excluded from analysis include those:**

1. Parcels that are inactive.
2. All parcels that are under conservation easements, and/or belong to conservation organizations, Federal, state and town lands.
3. All wetland parcels plus a 50 ft buffer.
4. All Agricultural land parcels.
5. All FEMA hazardous areas
6. All river corridors
7. All land parcels that have a slope equal to or more than 25%
8. Parcels Less than 5 Acres with an existing house

**C. Land prioritized for suitability include:**

1. Those relatively near to road infrastructure.
2. Land inside or as close as possible to the village center boundary.
3. Land which could potentially connect with the Stratton Mtn sewer lines.

Endnotes

- 1 <https://abenakination.com/>, <https://www.atowi.org/>
- 2 U.S. Census Bureau, 2020 Census Redistricting Data
- 3 Vermont Climate Assessment, <https://www.uvm.edu>
- 4 Vermont Climate and Health Profile Report (2016), Vermont Department of Health. Division of Environmental Health
- 5 INITIAL VERMONT CLIMATE ACTION PLAN (2021), Vermont Climate Council
- 6 National Weather Service, <https://www.weather.gov/btv/climoFreeze>
- 7 Vermont Public, By April McCullum, Sophie Stephens, Corey Dockser, Published July 24, 2023. <https://www.vermontpublic.org>
- 8 Windham Regional Commission, GIS Planning department.
- 9 INITIAL VERMONT CLIMATE ACTION PLAN (2021), Vermont Climate Council
- 10 INITIAL VERMONT CLIMATE ACTION PLAN (2021), Vermont Climate Council
- 11 American Community Survey and Puerto Rico Community Survey 2022 Subject Definitions. Source : [Census.gov](https://www.census.gov)
- 12 U.S. Census Bureau, American Community Survey 5-Year Estimates
- 13 2020 Vermont Housing Needs Assessment, Chapter 23: Windham County
- 14 U.S. Census Bureau American Community Survey and Decennial Census from [housingdata.org](https://www.housingdata.org)
- 15 U.S. Census Bureau American Community Survey and Decennial Census from [housingdata.org](https://www.housingdata.org)
- 16 U.S. Census Bureau American Community Survey and Decennial Census from [housingdata.org](https://www.housingdata.org)
- 17 Vermont Department of Housing & Community Development Mobile Home Park Registration Summary, [outside.vermont.gov](https://www.outside.vermont.gov)
- 18 Vermont Department of Housing & Community Development Mobile Home Park Registration Summary, [outside.vermont.gov](https://www.outside.vermont.gov)
- 19 Mobile Home Park Risk Assessment Tool created by Dan Baker, Scott Hamshaw, Kelly Hamshaw, report last edited 2023, [accd.vermont.gov](https://www.accd.vermont.gov)
- 20 Mobile Home Park Risk Assessment Tool created by Dan Baker, Scott Hamshaw, Kelly Hamshaw, report last edited 2023, [accd.vermont.gov](https://www.accd.vermont.gov)
- 21 2020 Vermont Housing Needs Assessment, Chapter 23: Windham County
- 22 Vermont Department of Health website
- 23 Town of Stratton, [townofstrattonvt.com](https://www.townofstrattonvt.com)
- 24 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 25 TOWN OF JAMAICA: Town Profile 2018
- 26 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 27 U.S. Census Bureau American Community Survey and Decennial Census, housing types from [housingdata.org](https://www.housingdata.org), vacancy rates from [housingdata.org](https://www.housingdata.org)
- 28 U.S. Census Bureau, American Community Survey 5-Year Estimate
- 29 U.S. Census Bureau, American Community Survey 5-Year Estimate [data.census.gov](https://www.data.census.gov)
- 30 Mobile Home Park Risk Assessment Tool created by Dan Baker, Scott Hamshaw, Kelly Hamshaw, report last edited 2023, [accd.vermont.gov](https://www.accd.vermont.gov)
- 31 Mobile Home Park Risk Assessment Tool created by Dan Baker, Scott Hamshaw, Kelly Hamshaw, report last edited 2023, [accd.vermont.gov](https://www.accd.vermont.gov)
- 32 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 33 U.S. Census Bureau, American Community Survey 5-Year Estimates
- 34 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 35 U.S. Census Bureau American Community Survey and Decennial Census, housing types from [housingdata.org](https://www.housingdata.org), vacancy rates from [housingdata.org](https://www.housingdata.org)
- 36 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 37 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://www.data.census.gov)
- 38 U.S. Census Bureau American Community Survey and Decennial Census, housing types from [housingdata.org](https://www.housingdata.org), vacancy rates from [housingdata.org](https://www.housingdata.org)

- 39 U.S. Census Bureau American Community Survey and Decennial Census, Households by annual income from [housingdata.org](https://www.housingdata.org).
- 40 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://data.census.gov)
- 41 U.S. Census Bureau, American Community Survey 5-Year Estimates [data.census.gov](https://data.census.gov)
- 42 U.S. Census Bureau American Community Survey and Decennial Census, housing types from [housingdata.org](https://www.housingdata.org), vacancy rates from [housingdata.org](https://www.housingdata.org)

# **Exhibit C: Vermont Toolkit & Zoning Guide**

## Exhibit C. Vermont Toolkit and Zoning Guide

### Vermont Homes for All Toolkit

The [Vermont Homes for All Toolkit](#) re-introduces missing middle housing to Vermont by focusing statewide attention on small-scale gentle infill and incremental development as a strategy to address Vermont’s housing and affordability crisis.

- The goals of the toolkit include:
- Build Affordably
- Grow Small Developers
- Cultivate Local Support
- Empower Missing Middle Housing Champions
- Included below are samples from the toolkit’s design guide that are applicable to the local contexts of Jamaica, Londonderry, Weston, and Winhall.

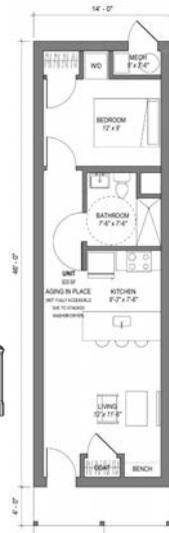
### Age-in-Place

During the community engagement process for Homes for Us, a challenge that many residents brought up was the lack of appropriate options for aging individuals that wish to downsize to a lower-maintenance home. The following three variations of an age-friendly model would be assets to local housing stock.

#### Single

##### Development Metrics

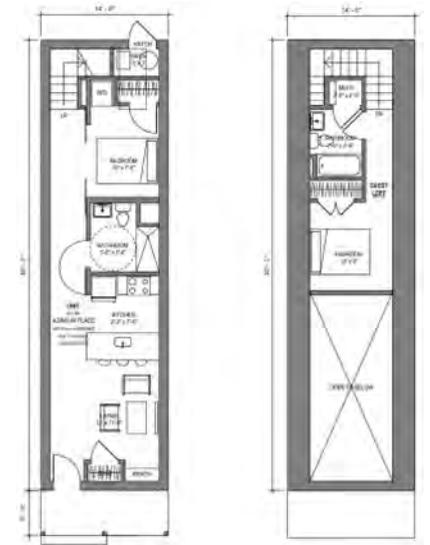
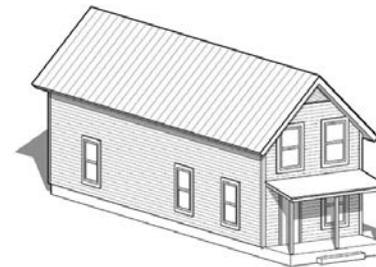
# of Units	1 Unit
# of Bedrooms per Unit	1 Bd
Unit Types (Accessible/Age-Friendly)	Age-Friendly
Gross Square Footage per Unit	644 sf
Building Footprint	14' × 46'



#### Single Plus

##### Development Metrics

# of Units	1 Unit
# of Bedrooms per Unit	1 Bd
Unit Types (Accessible/Age-Friendly)	Age-Friendly
Gross Square Footage per Unit	1,022 sf
Building Footprint	14' × 50'



#### Garage Single

##### Development Metrics

# of Units	1 Unit
# of Bedrooms per Unit	1 Bd
Unit Types (Accessible/Age-Friendly)	Conventional
Gross Square Footage per Unit	1,134 sf
Building Footprint	14' × 50'



**Narrow Lot**

For sites with limited frontage, this narrow design is suitable for underutilized side yards or driveways. Because the street-facing side of the residence is so narrow, a building like this will easily blend into existing single-family neighborhoods.

**Development Metrics**

# of Units	4 Units
# of Bedrooms per Unit	(4) 1 Bd
Unit Types (Accessible/Age-Friendly)	(2) Accessible, (2) Conventional
Gross Square Footage per Unit	697 sf/ 697 sf/ 903 sf/ 903 sf
Building Footprint	20' x 80'

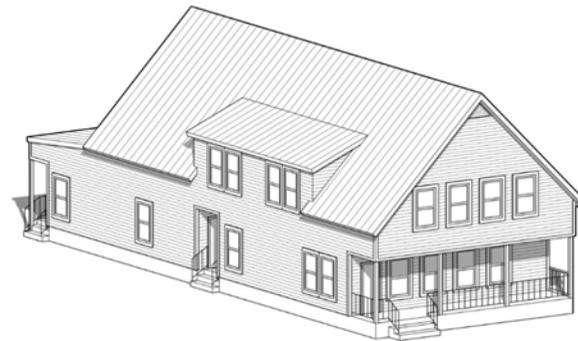


**Village Home**

The village-style home is an opportunity to provide attainable housing for larger families while maintaining the architectural identity of local communities.

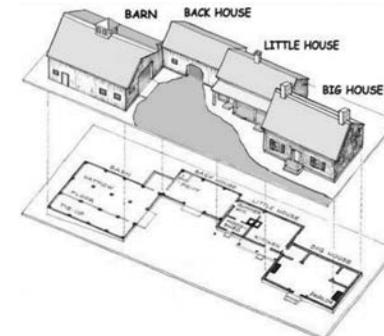
**Development Metrics**

# of Units	3 Units
# of Bedrooms per Unit	(1) 1 Bd, (2) 3 Bds
Unit Types (Accessible/Age-Friendly)	(1) Accessible, (2) Conventional
Gross Square Footage per Unit	676 sf/ 1,426 sf/ 1,496 sf
Building Footprint	30' x 70'



**“Telescoping Home” Aggregation Pattern**

A common New England architectural building type, the “telescoping home” is an attractive option for conversions to multi-unit residences, desired home additions, or new construction that blends into surrounding dwelling styles.



For the full toolkit, please visit <https://accd.vermont.gov/homesforall>.

**Enabling Better Places: A Zoning Guide for Vermont Neighborhoods**

Vermont produced a zoning guide for local leaders to enable better places and create great neighborhoods with a variety of housing types. The guide identified the following six key topics for code reform with the most significant impact on housing affordability in Vermont:

- **Dimensional Requirements.** Carefully craft to reflect the existing built patterns and local goals and avoid needlessly restricting desirable housing options.
- **Parking Standards.** Don't let high parking requirements block new housing options and inflate the cost of housing.
- **Allowable Uses.** Allowing small buildings with two, three, or four dwelling units by-right lowers the overall development cost and encourages more small-scale housing development.
- **Street Standards.** The capital and maintenance costs of overly wide streets can increase the cost of delivering housing as well creating a long-term drain on municipal budgets.
- **Accessory Dwelling Units (ADU).** Encourage the creation of more ADUs through minor changes to parking standards and to size and ownership restrictions.
- **Development Review Process.** Retain the important functions of the development review process while eliminating unnecessary barriers to locally desired housing.

The guide provided reform suggestions, sample regulations, neighborhood character survey instructions, and stormwater strategies. See the full guide at <https://accd.vermont.gov/content/zoning-for-great-neighborhoods>. For example, zoning can authorize:



Live-Work Unit



Duplex



Townhouse



Cottage Court

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