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Introduction

In 2020, the Vermont State Legislature allocated funding to complete the 93-mile long Lamoille Valley Rail Trail (LVRT). For years, portions of this and other rail trails have served the state as tourism and recreation economy catalysts, bringing visitors and redevelopment interest into rural communities. The completed Lamoille Valley Rail Trail will act as a significant driver to leverage and encourage these positive trends.

The Greensboro Bend Revitalization Initiative (BRI) and Town of Greensboro recognized this unique opportunity, to bring life back to the rail line that founded the Town so many years ago. They received a Municipal Planning Grant from the Vermont Agency of Commerce and Community Development to build this plan, which seeks to identify redevelopment opportunities and trail-adjacent improvements that will, first and foremost, serve the community of Greensboro Bend. In making these village improvements to better the quality of life in the Bend, such improvements are intended to support the ongoing revitalization of Greensboro Bend's economy and vibrancy.

This Revitalization Plan provides a detailed guide for Greensboro Bend to leverage opportunities brought by the completion of the Lamoille Valley Rail Trail.

History of Greensboro Bend

The Abenaki people have called the area of Greensboro Bend home "from time beyond memory," as affirmed by Don Stevens, Chief of the Nulhegan Band of the Coosuk Abenaki Nation. The legacy, feelings and heritage sites of the Abenaki people should be honored in undertaking project work in the Bend.

The relatively recent arrival of the railroad in Greensboro Bend in 1872 provides a useful reference point for the current planning efforts. Materials and products came in and went out by rail, including dairy, stock and milled lumber. Faster mail and freight service, and the telegraph, furthered regional connections and opportunities for Greensboro Bend's rapid growth as a trade center.

The railroad also brought people, whether to work in the thriving industries or to sell their wares, or to vacation along the pleasant shores of Caspian Lake.

By the early 1900s, four passenger trains and two freight trains were stopping daily in Greensboro Bend. It was the commercial and social center of the area.

After World War II, larger trucks on expanded road networks largely replaced the train, which made fewer and fewer stops in Greensboro Bend. Passenger service was dropped in the 1950s; the following decades also saw derailments and a devastating flood.

The State of Vermont bought the railroad in the mid 1970s, and while freight traffic continued to pass through (but not stop) for a time, all rail activity ceased in 1994.

The State created the Lamoille Valley Rail Trail Committee in 1997 to convert the rail line into a recreational trail.

In essence, the story of the Bend is the story of the rail line, and that narrative began with freight, lumber, coal and dairy, passengers and livestock shipment. In its upcoming phase, the story of the Bend will <u>still</u> be of passengers along the line, but self-powered passengers enjoying the recreational and open space bounty of Vermont.

Geography of Greensboro Bend

Greensboro Bend is located at the southeast corner of Greensboro, a community of 811 in the Northeast Kingdom of Vermont. The Bend, with its gas station and grocery store, daycare service and public park, as well as historic importance in the region, functions as a gathering point for community members in neighboring communities such as Craftsbury, Hardwick, East Hardwick, Stannard, and Glover.

Though this plan expressly focuses on the Bend's village geography, the Revitalization Plan is intended to support all neighboring communities as well.









The Village of Greensboro Bend

Greensboro Bend is a 314-acre village within Greensboro Town. The Project Area is focused on the immediate Village and surrounding landscape context, roughly the length of Main Street between Smith's Grocery Store to the north and the Greensboro Early Learning Center to the south.

The project area map on this page calls out a number of the relevant properties and destinations within and around Greensboro Bend.

Plan Background

This plan was developed between Summer 2021 and Spring 2022. Guided by the Greensboro Bend Revitalization Committee, the consultant team of planners, designers, engineers and economic specialists built this plan based on detailed site research and investigations, and the results of public engagement and stakeholder feedback.

This plan builds upon prior efforts within Greensboro Bend, including:

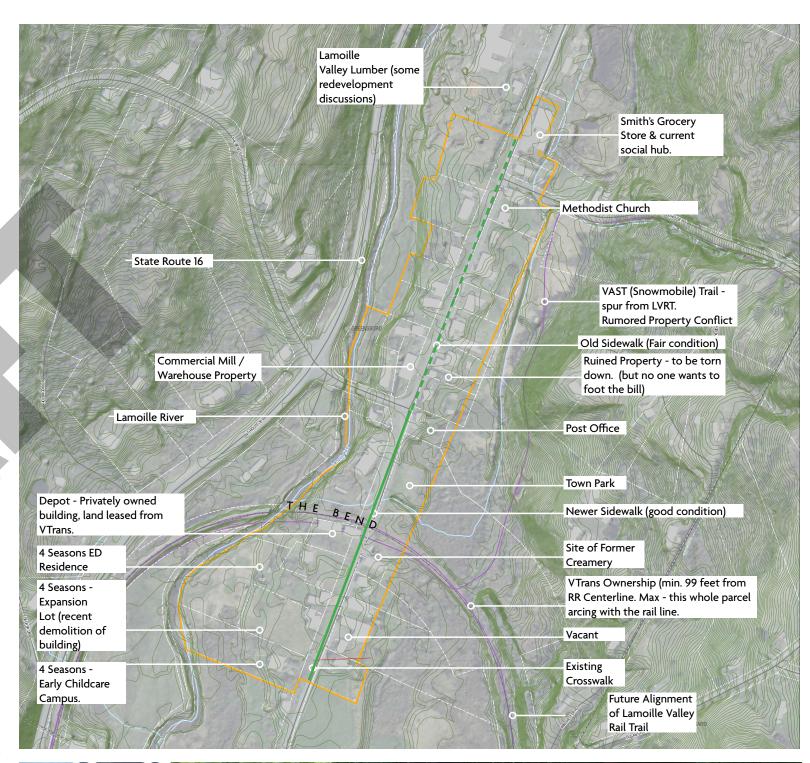
- 2018 Block Party A big Greensboro Bend party to build community, have fun, and build awareness about the Bend Revitalization Initiative.
- 2019 PLACE Program Report a detailed history of the land, nature and people who have contributed to Greensboro Bend.
- 2019 Main Street Landscaping Project -Volunteer led, effort to enhance Main street with native trees and plantings.

The initial observations of this plan were built from these prior efforts, multiple meetings with BRI members, and available GIS and community data, including a prior community survey regarding the potential for Greensboro Bend Improvements.

Plan Context

This plan is intended to support overall planning and development in the Town of Greensboro, Vermont. As a revitalization plan for Greensboro Bend, one of two designated village centers within the Town of Greensboro, this plan seeks to support existing goals from the adopted 2018 Greensboro Town Plan. These goals, which are supported by this plan, include:

- Land Use Maintain and enhance the Town's rural and agricultural character, by encouraging future residential and commercial growth in and adjacent to the Village Districts and by discouraging sprawl.
- Transportation Maintain Town roads in good condition while minimizing soil erosion impacts and increasing opportunities for safer walking and bicycling.
- Recreational and Cultural Continue to support our existing recreational and cultural facilities and events while encouraging the development of expanded recreational and cultural opportunities for the community of Greensboro, and expand tourism.
- Natural Resources Stewardship with integrity over all of Greensboro's natural resources, including open fields, forests, animal and plant habitats, streams, lakes, and scenic landscape in a manner that protects and enhances the Town's ecological health and biological diversity for the benefit of current and future residents.
- Housing The long-term sustainability of Greensboro depends upon the availability of adequate housing for all residents, including seniors and the workforce, that are energy efficient and compatible with the character of the community.
- Economy A sustainable Greensboro, where prosperity contributes to and drives quality of life must support existing local businesses and attract new small businesses that are compatible with and preserves Greensboro's rural character.







Plan At a Glance

This overview illustrates the key recommendations of this plan at a glance. Though these projects range in relative complexity, cost, and impact, they provide a suite of options for Town officials, volunteers, and state representatives to work towards implementation.

- A. Northern Gateway Project (Quick Build)
- B. Mini Roundabout Project (Quick Build)
- C. Southern Gateway Project (Quick Build & Long Term)
- D. Catching the Eye / Public Artwork
- E. Rail Trail Parking
- F. Depot Park
- G. The Depot
- H. Regional Trail Connections
- I. Street Trees
- J. History Walk
- K. Ecology Walk









This plan envisions Greensboro Bend as a thriving Vermont Village. To reach that goal, a key consideration is the ongoing and future reinvestment in building stock.

This chapter looks at The Bend as it stands today, and identifies the potential for future redevelopment. Some key elements that are considered as part of this redevelopment analysis include:

- Ecological Communities How can redevelopment least impact the unique ecological communities of Greensboro Bend?
- Land Use What is the current and potential future uses for public and private land throughout the Bend?
- Property Status What is current ownership and condition?
- Road Frontage How much exposure to the public right of way does any property have?
- Area How much potential expansion area does any one parcel have?
- Trail Adjacency Which parcels will have the greatest visibility from the Lamoille Valley Rail Trail's intersection with Main Street?



Natural Ecological Communities in the Bend

The natural environment along and adjacent to the Rail Trail in the Bend is quite diverse, and includes red maple-black ash seepage swamp, alluvial shrub swamp, northern conifer floodplain forest, and lowland spruce-fir forest.

Red Maple-Black Ash Seepage Swamp

Black ash is present in the Bend. Two other plants characteristic of this forest type, both named after their bird-like features, are the beaked hazelnut, a shrub, and the ostrich fern, also called "fiddlehead" fern.

Alluvial Shrub Swamp

The alluvial shrub swamp is associated with the Northern Conifer Floodplain Forest; it is distinguished by the dominance of the shrub speckled alder.

Northern Conifer Floodplain Forest

The Northern Conifer Floodplain Forest is associated with wetlands, and is ranked by the state as S2, or rare. This community is readily visible along the Rail Trail near the Bend.

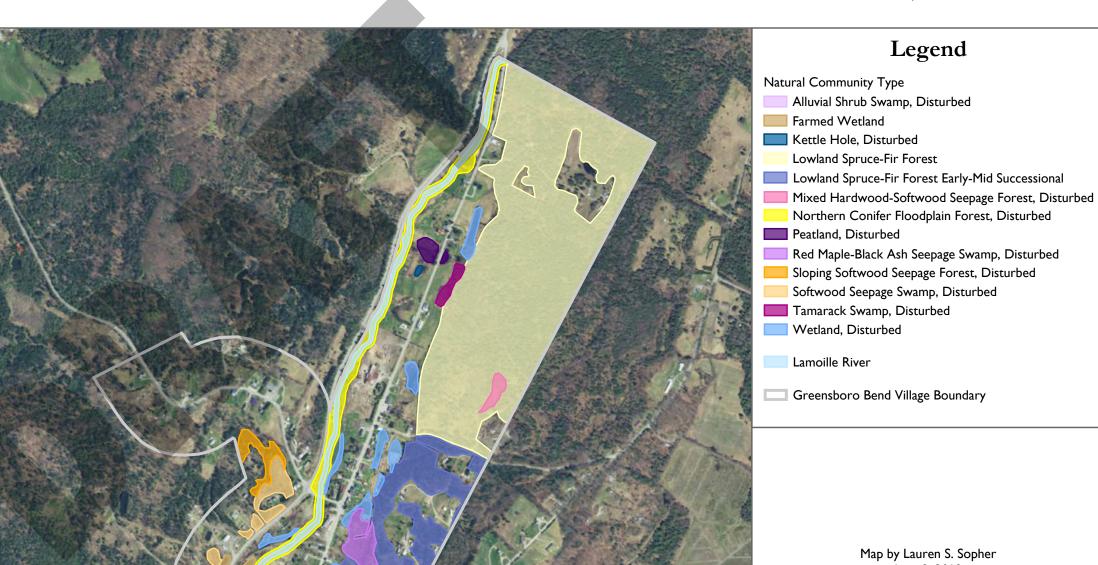
Lowland Spruce-Fir Forest

The Lowland Spruce-Fir Forest Early-Mid Successional is dominated by quaking aspen due to logging practices, and occurs in southeast Greensboro Bend.

Animals in the Bend

Animals typically found in the community types in the Bend include the snowshoe hare, black-throated green warbler, river otter, brook trout, Fisher, ruffed grouse, and spotted salamander.

Natural Communities of Greensboro Bend, VT



June 9, 2019

Data Sources: Charlie Hohn | Vermont Department of Environmental Conservation, Watershed Mgmt. Division, Lauren Sopher | UVM, and Vermont Center for Geographic Information

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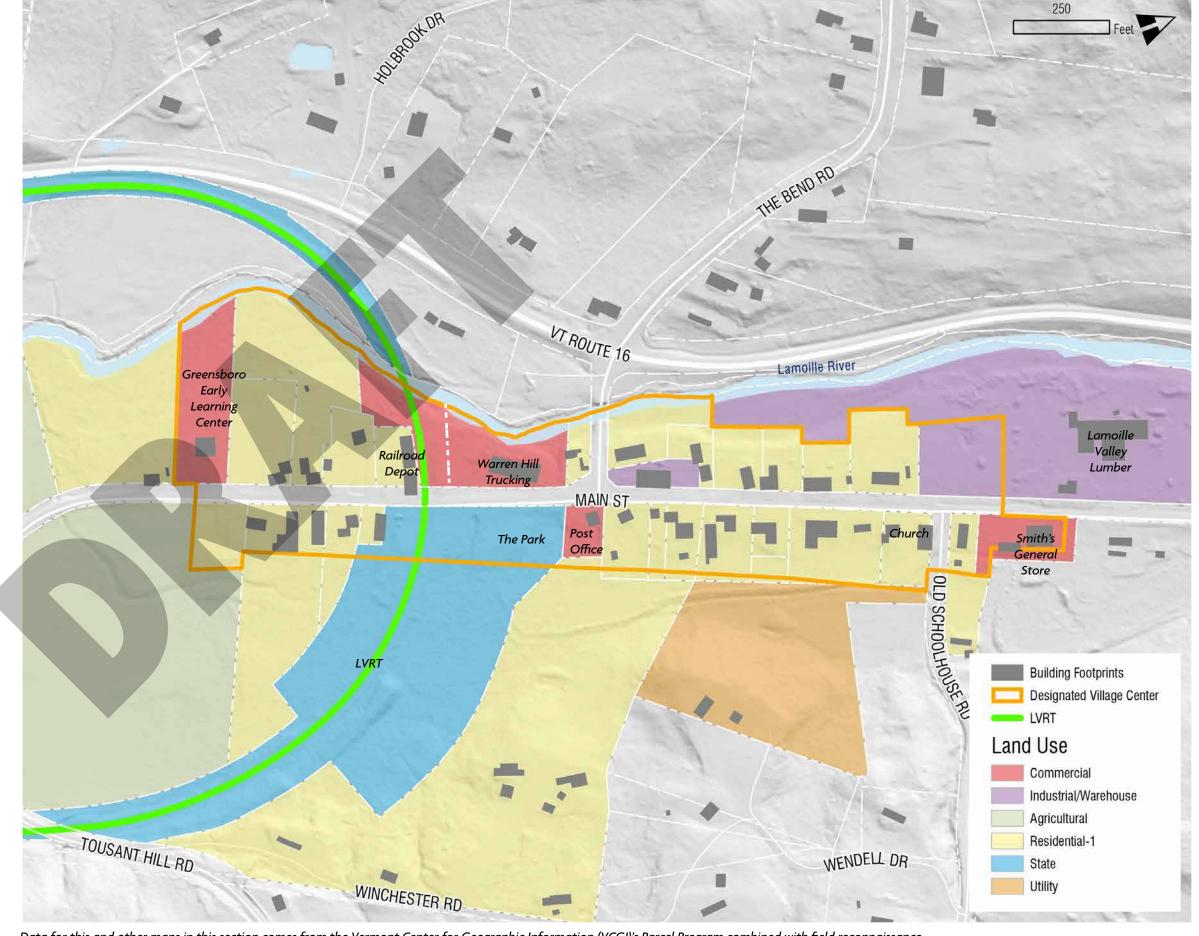
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Land Use

Land uses in The Bend are primarily residential, studded with commercial and industrial uses. The Village is capped by two significant commercial resources: Smith's Grocery on the north end, and the Greensboro Early Learning Center (Four Seasons) on the south. Lamoille Valley Lumber is located on the northern edge of The Bend, which includes a strip of land along the Lamoille River that used to have a rail spur. In the center of the Village sits the Post Office and the Town Park (on VTrans land), and a trucking garage/warehouse across the street. There is another parcel in the center of the Village at the corner of Main St and The Bend Road that is technically in the industrial land use category, though the building is currently vacant.



Data for this and other maps in this section comes from the Vermont Center for Geographic Information (VCGI)'s Parcel Program combined with field reconnaissance.



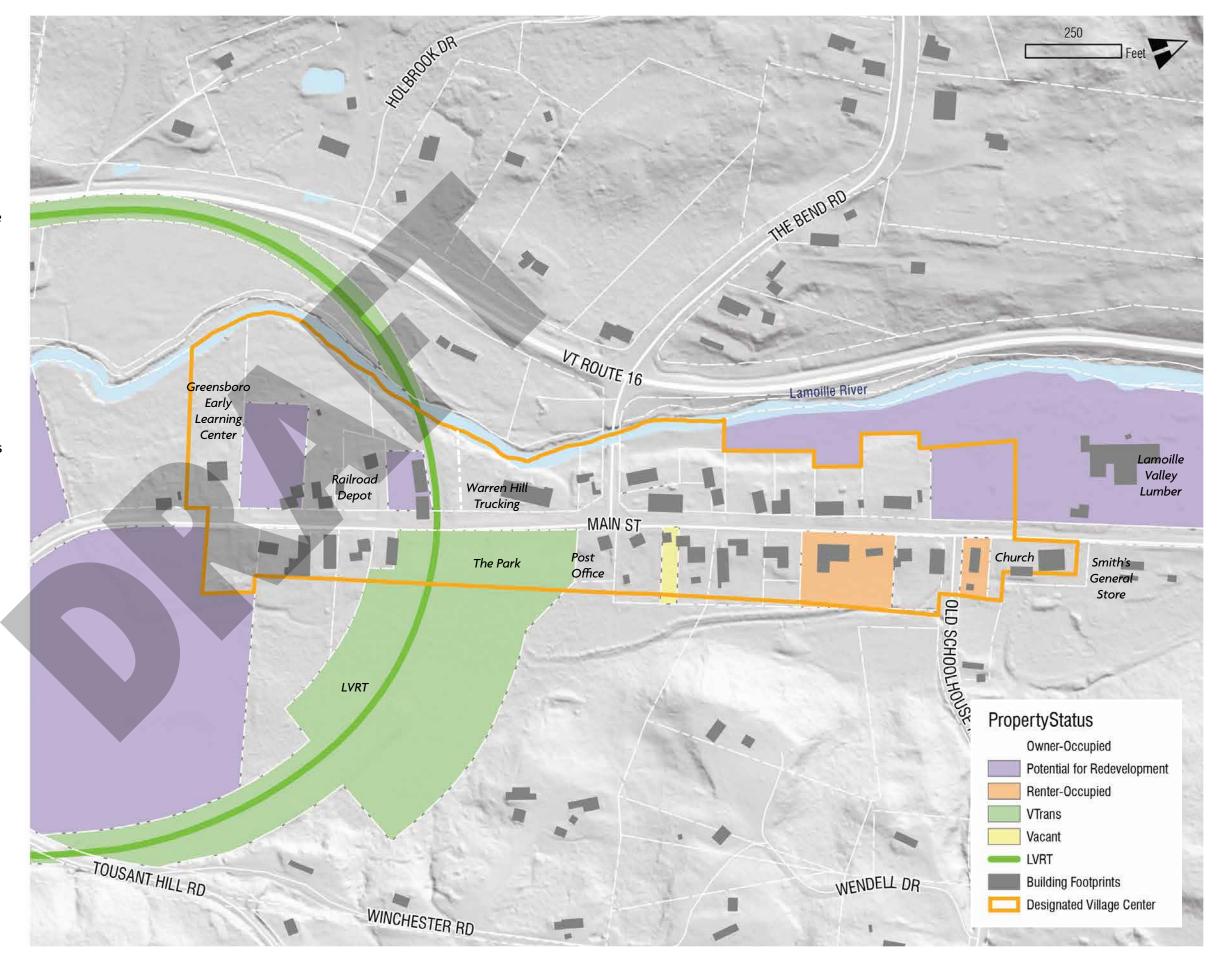
Property Status

The status of different properties in The Bend show where opportunities for redevelopment may exist.

Most properties in the Bend are owneroccupied, including residential and commercial properties. There are currently two renteroccupied buildings, both near Old Schoolhouse Road toward the north end of the Village. There is one vacant property in the center of the Village, likely needing significant renovation or demolition to meet local building codes.

The "other" category mapped at right includes properties that are either currently under redevelopment or are desired to be redeveloped. These include:

- The Early Learning Center owns the property next to its current location, and has removed the existing building with plans to utilize the land to expand the preschool.
- by a private resident who is interested in restoring the building so it can house commercial uses in the future. The land beneath the Depot is still owned by VTrans and is leased by the Depot's occupant.
- Lamoille Valley Lumber is currently owneroccupied and used as a lumber mill.
 However, the owner is interested in selling this property and desires to do so in a way that can benefit the Bend overall.



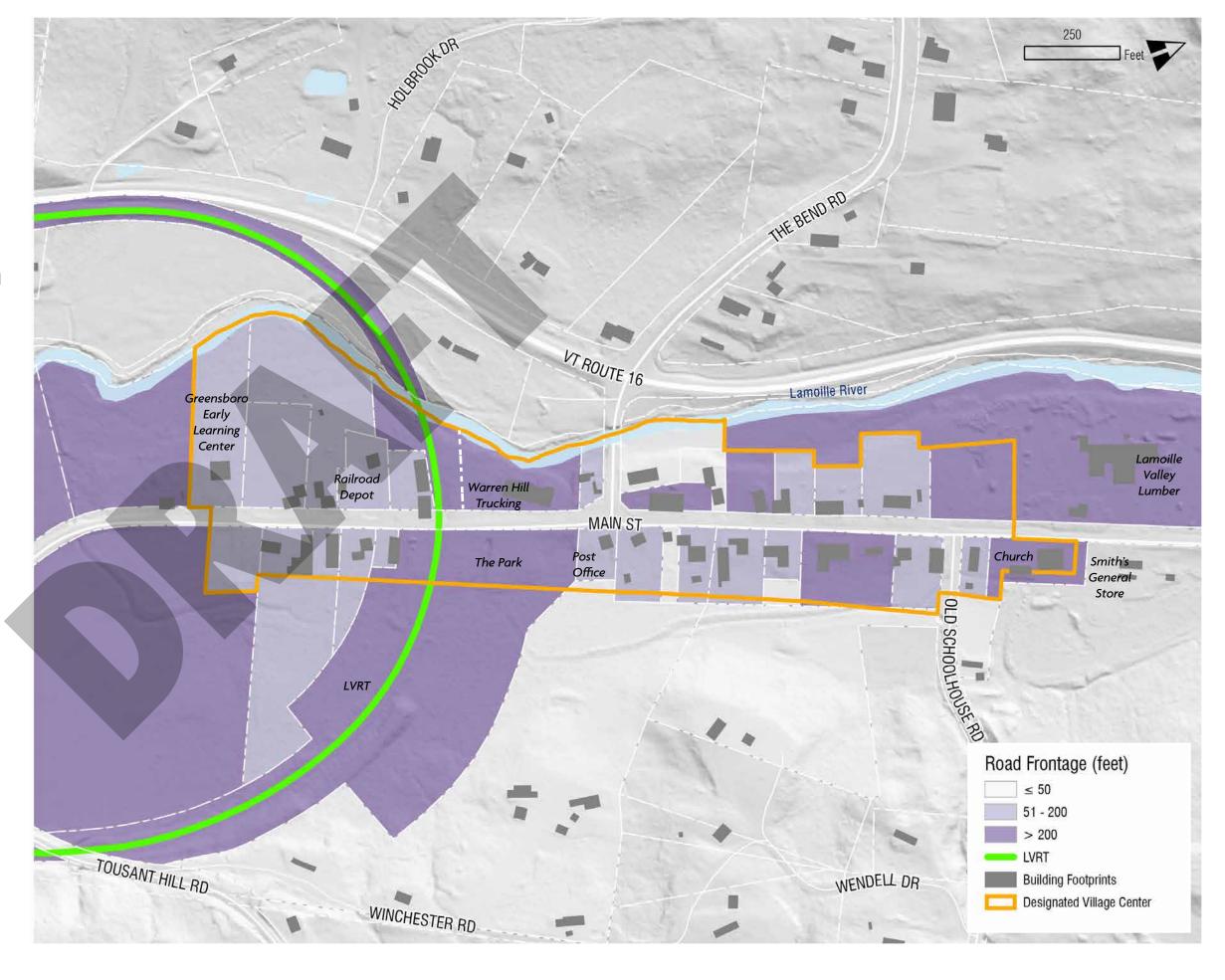


Road Frontage

The "Road Frontage" layer is the total distance (in feet) that each parcel has with direct access to Main Street.

A longer road frontage means more potential exposure to travelers through the Bend, and expanded future commercial opportunities.

This map shows properties within Greensboro Bend, illustrated based on the amount of available road frontage. Darker colors indicate greater amounts of available road frontage, and greater exposure for commercial visibility.





Developable Areas

The "Developable Areas" layer includes land in and adjacent to Greensboro Bend's Designated Village Center where new development would be less hindered by existing constraints. Considered constraints include:

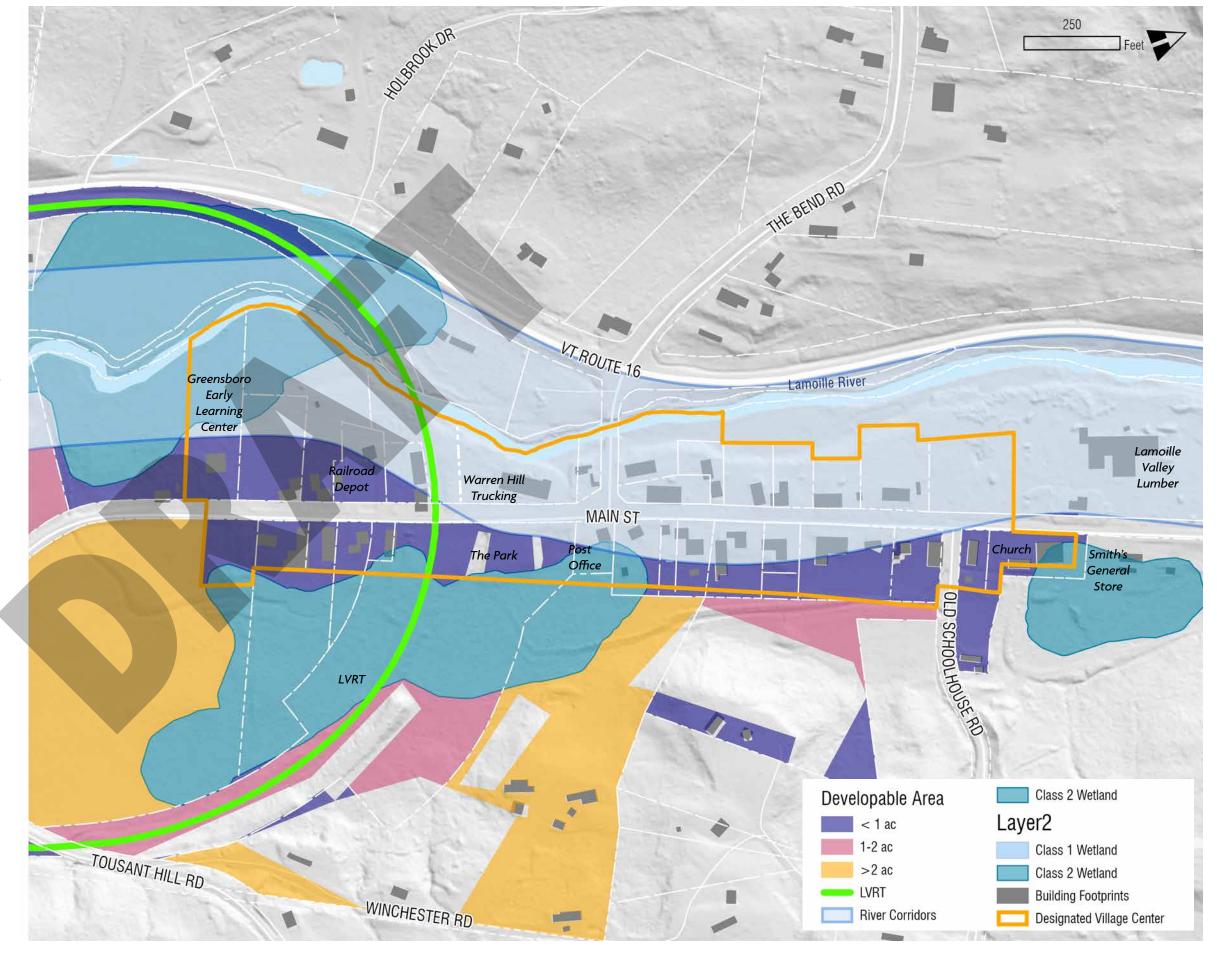
- Existing Buildings
- The Lamoille River's State-Designated River Corridor
- Vermont Significant Wetlands Inventory (VSWI) Wetlands
- Slopes exceeding approximately 10%

This map highlights areas where new buildings or renovation of existing buildings would be less hindered by regulatory requirements or outright prohibitions.

This analysis is intended for planning purposes only. New development will still require additional information, such as wetlands field delineation and consulting with the Vermont Department of Environmental Conservation (VT DEC) regarding allowable uses in the River Corridor.

It is worth noting that The State Rule, ANR Procedures, and the Model Flood Hazard Bylaws allow for infill and redevelopment within state or locally designated centers (such as Greensboro Bend), or in proximity to other existing improvements, as long as the new development is no closer to the river than existing development and does not require new channel management to protect the development that would not otherwise occur.

More information on River Corridors can be found at floodready.vermont.gov

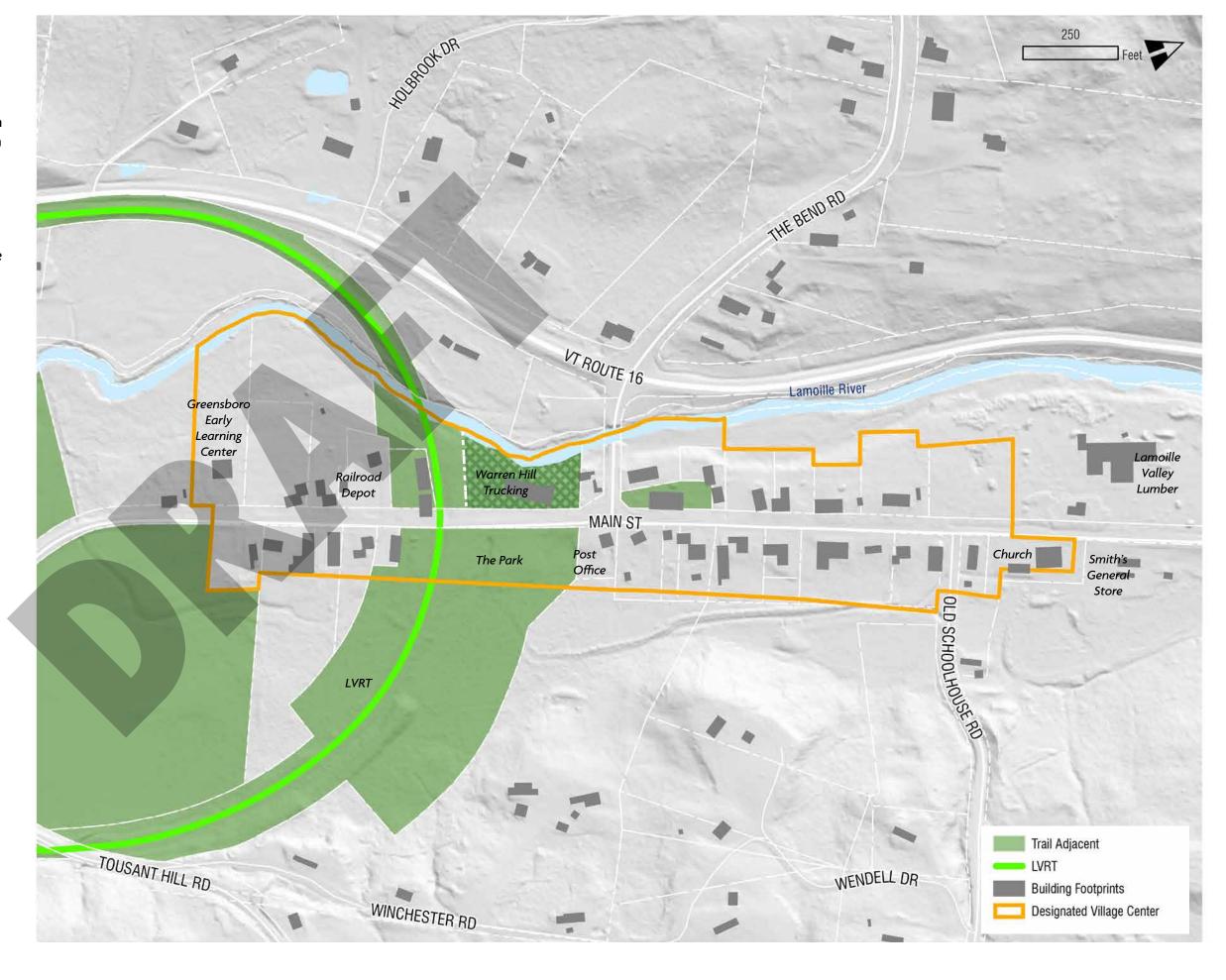




Trail Adjacency

This map highlights that parcels that are either next to the LVRT or easily visible from the LVRT where it crosses Main Street. These properties will be seen by all who pass through Greensboro Bend on the rail trail, making them prime opportunities for revitalization and redevelopment catered toward trail users.

Parcels on this map highlighted in green have either direct adjacency to the Lamoille Valley Rail Trail, or clear and direct sightlines from the Rail Trail crossing of Main Street.





Redevelopment Opportunities

Numerous properties identified in this study offer unique redevelopment opportunities.

1. Goldberg Property

This parcel has had buildings removed, and provides a unique development opportunity across the street from the thriving Four Seasons early childcare site, at the southern entry of Greensboro Bend's designated village center.

2. Four Seasons Opportunities

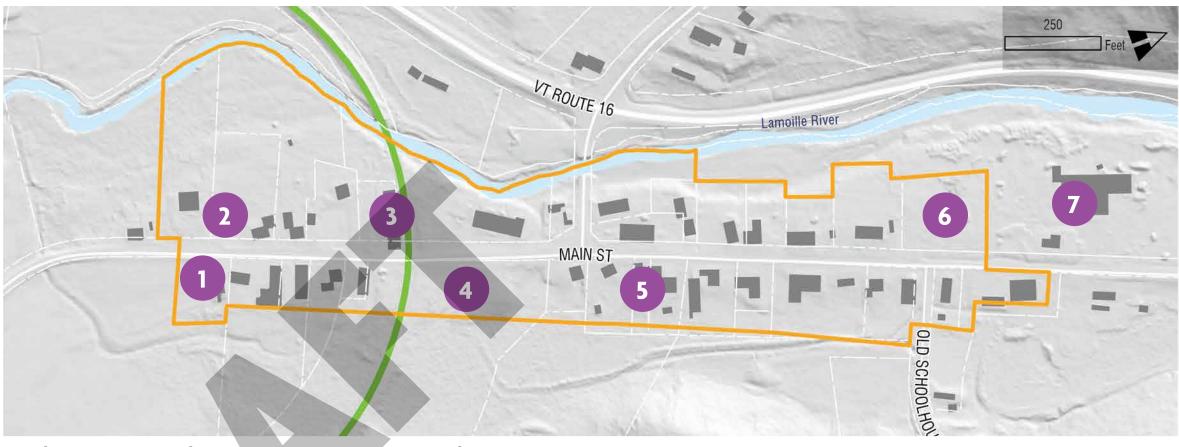
The recent acquisition, by Four Seasons, of the parcel immediately to the north will provide an opportunity to expand this thriving business. This expansion could also provide incentive for business development on adjacent parcels, to leverage the regular traffic generated by the Four Seasons site.

This site also has opportunity to redevelop into a more welcoming gateway to the Bend, and support the automotive access needed for regular dropoff and pickup at a childcare facility that serves this region of Vermont.

3. Historic Depot

This building is one of the best preserved historic architectural sites in the Bend. In addition, its location and landscape adjacent to the future LVRT makes for an ideal conversion to a commercial site serving trail travelers. However, the state lease of the land, separate from the building ownership, currently complicates any such transition that could support revitalization of the Bend.

This site is further enhanced by opportunities for river access, increasing its potential to become a destination along the regionally significant recreation amenity of the LVRT.



4. Park Expansions & Parking

VTrans currently leases a portion of their land to the Town of Greensboro as a public park. This park atmosphere could be expanded to encompass both sides of the LVRT on the eastern side of the trail, creating a public access point to the trail, and offering a public, non-commercial side of the trail. It would connect the trail directly to existing community assets, beyond just an intersection with Main Street.

5. Tax Sale Property

This abandoned residential home will need to be demolished in the near future, before new uses can be considered. If publicly owned, this parcel would offer an opportunity to develop low cost greenspace solutions, such as community gardens or simple park space.

In the future, this parcel could be utilized to help incentivise housing development in the Bend, as acreage could be considered an add-on to potential redevelopments on adjacent properties.

6. Hotel Site

Once the site of the Greensboro Bend Hotel, this site, on the Woodmill parcel at the edge of the Village, could be considered for future redevelopment to complement the commercial gateway envisioned for this end of the village. Its redevelopment may work well in conjunction with the woodmill discussed as #7 on this page.

7. Woodmill

This site should be considered for inclusion within the Designated Village Center. Such designation would exclude it from numerous restrictions regarding redevelopment in the River Corridor.

Once part of the Village Center, this site could be targeted for redevelopment to complement the existing commercial uses across Main Street at Smith's Market.





1. Goldberg Parcel

This blank slate provides a unique development opportunity across the street from Four Seasons at the southern entry to Greensboro Bend.



2. Four Seasons Gateway

Adjacent expansion of a successful childcare business may provide opportunities for adjacent business development to leverage the increased exposure.



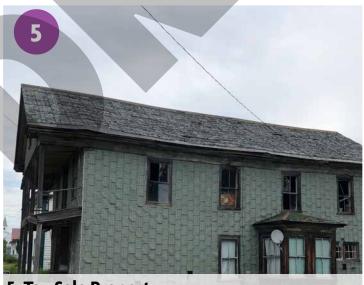
3. Historic Depot

Proximity to the rail trail gives this property high potential for redevelopment.



4. Park Expansions

VTrans currently leases a portion of their land to the Town of Greensboro as a public park. This park atmosphere could be expanded to encompass both sides of the LVRT.



5. Tax Sale Property

This abandoned residential home will need to be demolished in the near future. If publicly owned, this parcel offers an opportunity to develop low cost greenspace solutions, or support adjacent redevelopment opportunities.



6. Hotel Site

Once the site of the Greensboro Bend Hotel, this portion of the Woodmill parcel at the edge of the Village could be considered for future redevelopment to complement a commercial gateway envisioned for this end of the village.



7. Woodmill

This site should be considered for inclusion within the Designated Village Center. Such designation would exclude it from numerous restrictions regarding redevelopment in the River Corridor.



Demographics & Economics

Population:

Northern Vermont's regional population is declining regardless of how one views the data. It is notable that the percentage of population decline increases as one looks at larger and larger rural geographies in Northern New England. Though this is not a positive sign for economic development purposes, there are bright lights.

Median Household Income:

Median Household Incomes are on the rise as one zooms in on Greensboro Bend. Larger geographies in this area have a lower household income, but the Greensboro Bend area seems to buck that trend.

The Census Designated Place (CDP) and five minute drive time are nearly identical in size. When reviewing geographic areas that include Hardwick's data, average income levels drop below that of Vermont and the US.

This increase of disposable income in the local area may point towards opportunities that are suited to the highly localized population and unique character of the area. These types of businesses would be more successful than regionally appealing retail opportunities.

Retail Opportunities:

Across data summaries, the market gains in total sales. This backs out all online sales. However, much of this gain is in building supplies and hardware, which is logical considering the nature of the region. The data reveal opportunities for specialized retail, clothing, some outdoor/sporting goods, and definitely restaurants and alcoholic beverages for "on site consumption."

Redevelopment Opportunities

Destination Dining / Brewery

Some key initial conclusions are that dining/taproom/brewery are obvious options. For such uses, the depot itself is a key opportunity site based its location within Greensboro Bend and the broader LVRT network. The "Hill Parcel" and current sawmill just beyond the Village's boundaries also offer unique opportunities for such development.

Housing

Although the population is declining there are few options for housing locally. It would seem that some additional housing types in non-commercial areas would be logical but would likely need to be developed for 80 percent of the adjusted median income or what some refer to as "attainable" housing. This can provide funding incentives for the Town and non-profit partners such as Rural Edge or Habitat for Humanity.

Current Zoning

Currently, Greensboro Bend and the immediately surrounding areas are zoned as a single Greensboro Bend Village District. This District allows for residential and residential care as permitted uses, with all other commercial, retail, or service uses being Conditional.

In order to facilitate redevelopment that suits the desires of the Greensboro Bend community, this plan recommends reviewing current zoning to understand the value of a new type of zoning that would encourage and not discourage appropriate commercial / retail businesses in the appropriate areas of Greensboro Bend.

With a two-tier zoning pattern, Greensboro Bend could seek a corresponding development pattern that creates predictable gateway commercial and residential districts within the village. A predictable pattern of residential / commercial activity will also help commercial investments support one another in Greensboro Bend, and support the protection of residential property values and investment.

§ 2.4 Greensboro Bend Village District

(C) Permitted Uses:

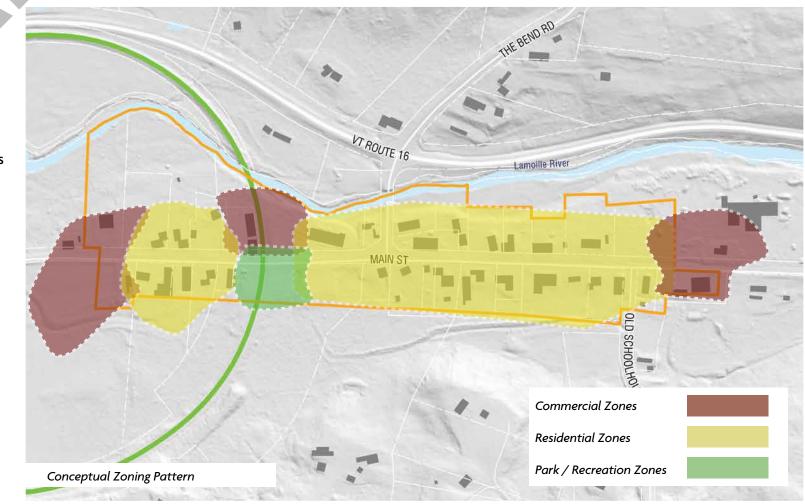
- 1. Accessory Dwelling Unit [see §4.2]
- 2. Accessory Use or Structure
- 3. Agriculture [see §3.6]
- 4. Dwelling, Single Family
- 5. Dwelling, Two Family
- 6. Forestry [see §3.6]
- 7. Home Child Care¹
- 8. Home Occupation [see §4.7]
- 9. Residential Care or Group Home²
- 10. Signs up to 6 sq. ft.

Excerpt of Greensboro Bylaws -

Greensboro Bend Village District Zoning

(D) Conditional Uses:

- 1. Auto Repair/Service Facility
- 2. Cemetery
- 3. Club, Private or Camp
- 4. Commercial Use [see §4.4]
- 5. Dwelling, Multiple Family
- 6. Essential Service
- 7. Health Care Facility
- 8. Home Business [see §4.5]
- 9. Motel, Hotel
- 10. Municipal Recycling Facility
- 11. Professional Services
- 12. Public Building
- 13. Recreational Facility
- 14. Retail Business
- 15. Signs larger than 6 sq. ft.
- 16. Telecommunications Facility [see Article 7]









The Bend Revitalization **Initiative**

This plan has been led by the Greensboro Bend Revitalization Initiative (BRI) and supported by consultants from DuBois & King. The BRI is led by Greensboro residents Dan Predpall (President) and Nancy Hill (Vice President), as well as Bend resident Jane Johns (Treasurer).

The BRI was formed in the Spring of 2018 in response to concerns voiced by Bend residents at the March Annual Meeting. The BRI became a 501(c)(3) non-profit organization in 2021. A visioning process was conducted with about 25 Bend and other Greensboro residents. This led to the following BRI goals:

- Support home improvement in the Bend and attract new housing stock (rentals or homes for sale)
- Enhance the physical appearance of the Bend
- Increase opportunities for community interaction
- Attract economic development to the Bend and provide jobs
- Seek funding for the above initiatives

The BRI is composed of Greensboro community members interesting in revitalizing the Bend. The group includes longtime residents of the Bend, new residents, business owners, retirees, and young parents.

Visioning Meeting

On August 5th, 2021, an outdoor gathering was held as a Greensboro Bend Visioning meeting. Approximately 50 residents arrived on a beautiful warm summer evening to discuss visions for the future of Greensboro Bend.

Many residents of Stannard were in attendance, as it became clear that for that small community, Greensboro Bend is also their Village.

There was broad support for the many improvements proposed, from streetscape improvements and park improvements along the Rail Trail, as well as a need expressed to connect Greensboro Bend to other recreation destinations in Vermont's Northeast Kingdom.

In discussing major town issues, dealing with septic issues was seen as perhaps the key barrier to future reinvestment in the Village center.





Across all conversations that evening, it became clear that the rich and storied history of Greensboro Bend as the core of railroad economy in the region was important. As one resident said.

"There wouldn't be a Greensboro without the Bend"

Other unique ideas were brought up at this meeting, where attendees proposed the provision of restrooms along the trail to encourage visitors to stop, as there are no other restroom facilities nearby on the Rail Trail. There was general broad support for improvements that could bring new life to this small rural village.



Physical notice of the draft plan was circulated to every residence in Greensboro Bend in winter of 2022, and community comments and feedback were incorporated into the final draft of this plan

This draft plan is being reviewed by community members of Greensboro Bend and Stannard, as well as members of the project steering committee and Bend Revitalization Initiative.

100 copies of a flyer promoting the development of this plan in draft form were mailed directly to residents of the Bend during late winter 2022. The plan is available for review online. For a one month period, public comments were solicited both online and through direct communication with members of the Bend Revitalization Initiative. Those comments and critiques will act as the final round of public feedback for this plan and resulted in the final document you are reading today. This text is flagged in orange to remind plan authors to update the tense of these paragraphs when the plan is made final.









This plan for the revitalization of Greensboro Bend is divided into three major components.

Streetscape Improvements

Recognizing Greensboro's scale and the community's desire for implementable solutions, this element provides both low cost, short term improvement recommendations, as well as longer term recommendations that can reduce traffic speeds while beautifying the village to make Greensboro Bend a more inviting place to live, work, play and invest.

The Trail, The Bend

The State's significant investment in completing the Lamoille Valley Rail Trail offers a unique opportunity to the Bend and other rural Vermont Communities. By planning for park, commercial, and trail access improvements, the Village can build its sense of place and economic vitality.

Regional Trail Connections The completed Lamoille Valley Rail Trail will

The completed Lamoille Valley Rail Trail will place Greensboro Bend at the heart of a recreationally significant trail network. Yet the LVRT is only one trail, and one type of trail. Through the development of a robust trail network connecting the Bend to Caspian Lake and neighboring communities, the beneficial effects of trail development can be multiplied.





Streetscape Improvements

Three major streetscape improvement types are envisioned in this plan: Street Tree Expansion, History & Ecology Walks, and Traffic Calming Improvements.

Street Tree Expansion

The addition of street trees in Greensboro Bend can be a volunteer-led project that would bring benefits to the appearance and ecological functioning of Main Street, offering shade, visual appeal and wildlife habitat.

This plan illustrates potential street tree planting locations on land within the right of way and adjacent open areas on private property that could be planted with landowner agreement.

- Tree options are informed by the Greensboro Bend PLACE Program and the Vermont Tree Selection Guide. For more information regarding native species and Greensboro Bend's Ecology, see the Greensboro Bend PLACE report online.
- Trees should be hardy to USDA Zone 4a.
- Select trees and locations based on utilities (above and below ground) and other site conditions such as motorists' visibility.
- Small trees (15 to 30 feet in height) should be placed not closer than 25 feet on center.
- Medium and Large trees (30 to 70 feet in height) should be placed not closer than 40 feet on center, based on typical canopy widths at tree maturity.



Sugar Maple (Acer saccharum) 60-70 foot height, 50-60 foot canopy width Best for spacious areas away from salt spray



Crabapple varieties (Malus spp.) 15-25 foot height, 20-25 foot canopy width Several native species are available



American Elm (Ulmus americana)
50-70 foot height, 40-50 foot canopy width
Also consider disease-resistant hybrids



Red Maple (Acer rubrum) 50-60 foot height, 30-40 foot canopy widths Also consider narrow-canopy cultivars



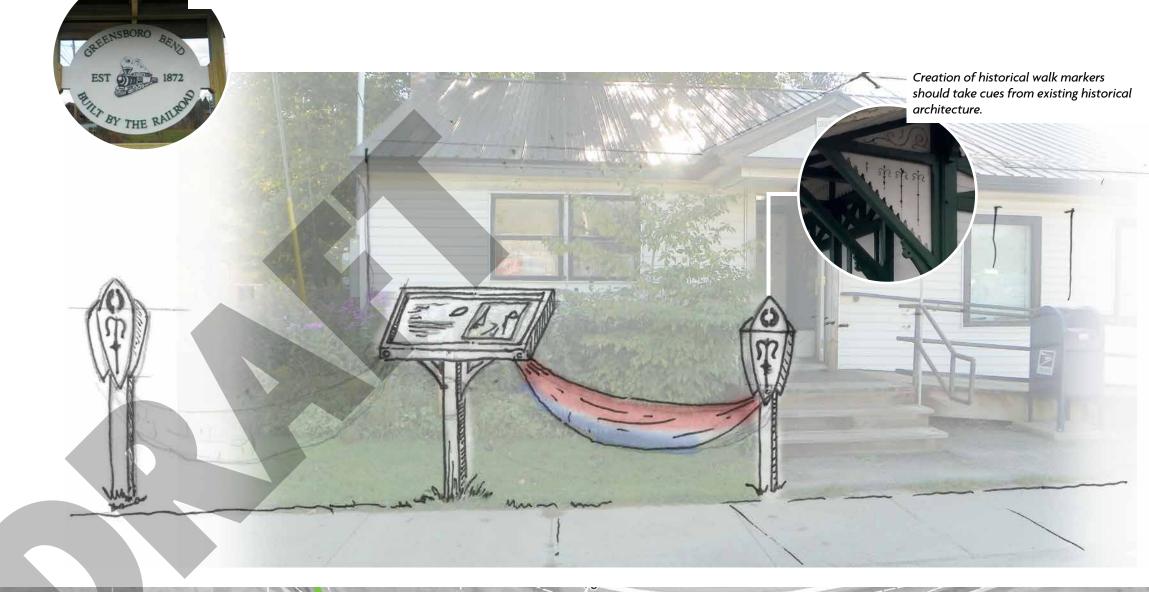


Expanded History Walk

Installation of decorative railing, street lights, or traditional street banners hung on light posts are improvements that make a village street appear more cohesive and inviting. They do this through the creation of rhythm on the street.

Greensboro Bend has already begun to establish this rhythm through the installation of historic information signs along Main Street.

Inspired by Laura Pope's millinery shop documented in "The History of Greensboro - The First 200 Years," a simple installation of banners and bunting framing and expanding each Historic sign could be a tactful and clear way to bring interest and rhythm to the street, giving visitors a reason to wander Historic Main Street and get to know the history of Greensboro Bend.



Signage and railroad themes are some of the newest Bend improvements



Laura Pope's millinery shop in rear of her husband's hardware store, c. 1910. She made all the hats, covering wire frames with fabrics, fancy braids, and flowers from New York City.





Ecology Walk

With guidance from the Greensboro Bend PLACE Program, locales in the Bend could highlight the heritage of its physical, cultural and ecological landscape.

- Lamoille River Ecology & Geology
- Forest Types
- Animal Life: Mammals, Fish, Birds, Insects
- Farmland Stewardship
- Wetlands and Swamps
- New Planting for Buffers and Habitat

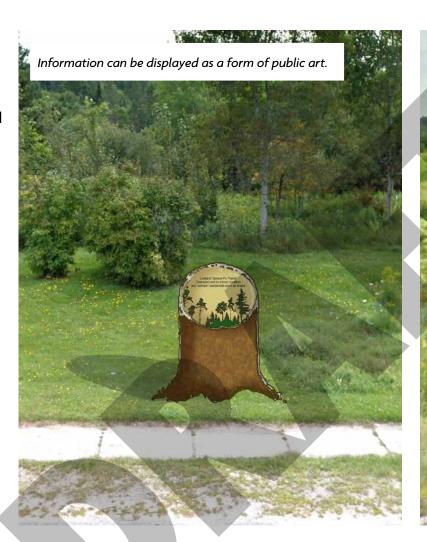
Depending on the location, information could be displayed in various context-sensitive ways, such as on a "stump" sign or on a bench.

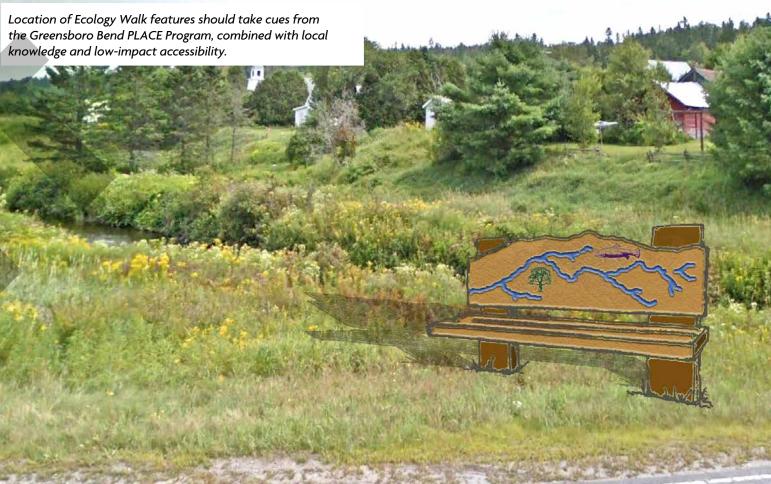
A "stump" sign could describe forest communities, while a bench sign could be used at along the LVRT and at river access points.

Along Main Street, ecological could be combined with elements of the History Walk to emphasize the importance of the environment as part of Greensboro Bend's cultural legacy, including that of the Abenaki people.



Planting projects could focus on attracting pollinators. Photo Source: Fairbanks Museum & Planetarium.









Traffic Calming Quick Builds

Rather than focus on complex and costly permanent streetscape improvements for the Bend, this project focuses on tactical urbanism installations which are designed to be temporary in nature.

Detailed designs for "quick build" projects are presented in this chapter. These projects can be installed for one weekend or one whole season. Quick build projects serve many purposes: they will raise awareness of this Plan and invite conversation and feedback about the concepts presented within, especially from local residents who use this road every day. They also allow the community to test out different ideas to see what works in Greensboro Bend, and ultimately aim to build support for future, permanent investments in changes to the roads in Greensboro Bend.

Where possible, specific materials that can be used for a quick build installation are called out in these designs. However, these are simply suggestions and many other material options exist. Additional options to consider can be found in the <u>Burlington Public Works Quick Build Design + Materials Standards</u>.

Through addition of traffic-calming elements at each end of the Bend's historic village center, as well as a minor treatment at the intersection of The Bend Road with Main Street, these installations have the potential to make the village street a safer place for everyone walking, biking, or driving through the Bend, as well as improve civic pride and sense of place.

The southern gateway recommendations

located by the future Four Seasons expansion have additional potential to evolve into a coordinated streetscape improvement that could improve pedestrian safety crossing the street to the Four Seasons campus, as well as improve the predictability of parking access and circulation at this busy childcare center. These improvements are provided as a conceptual recommendation to facilitate ongoing conversation between Greensboro and Four Seasons as the development plans progress.





Northern Gateway

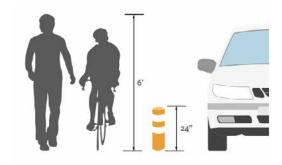
The materials described on this page are suggestions and recommendations. Other materials can be used depending on the community's preference and budget.

- Create quick build curb extensions with bollards and paint that will narrow the road to calm traffic
- Add artwork and/or welcome signage



K-71 Bollard

Use K-71 bollards to delineate temporary curb extensions that narrow the road to 20 feet, creating a gateway and traffic calming feature. Bollards should be spaced 4 to 5 feet apart.



Graphics from the Burlington Public Works Quick Build Design + Materials Standards



Reference Image: Quick Build curb extension with K-71 bollards, paint, and planters in Burlington, Vermont





Mini Roundabout

The materials described on this page are suggestions and recommendations. Other materials can be used depending on the community's preference and budget.



Armadillo (Zicla Zebra System)

Use Zicla Zebra Family "Armadillos" with a 2 inch height to delineate the center of the mini roundabout. These are mountable for larger trucks that also need to get through the intersection, but will discourage cars from driving through the center of the mini roundabout. Armadillos should be placed 5 to 8 feet apart.

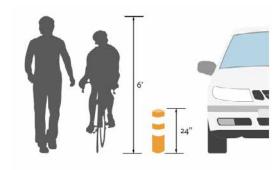




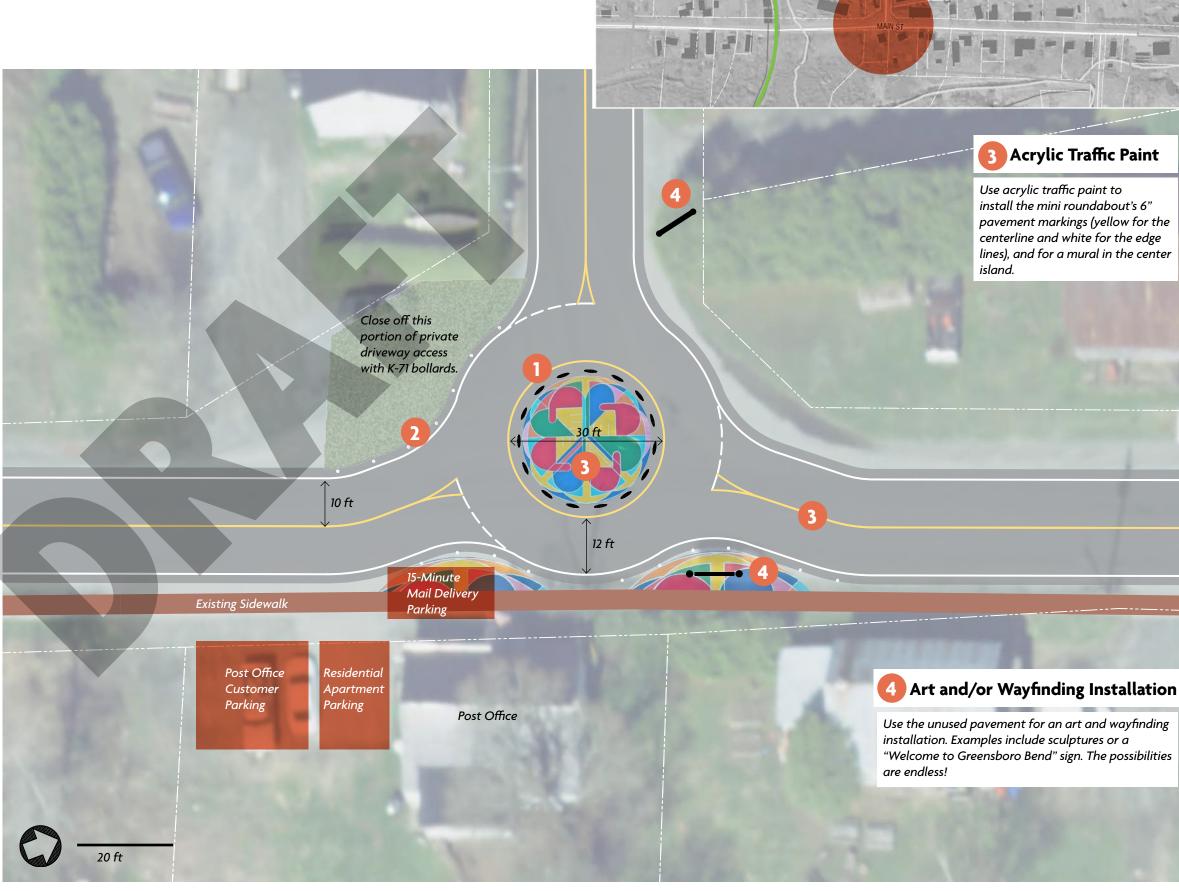


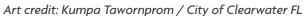
K-71 Bollard

Use K-71 bollards to define the geometry of the mini roundabout without having to change the pavement. It's important to include curvature in the approaches to the mini roundabout to reduce the traffic speed of vehicles driving through the intersection. Bollards should be spaced 5 to 8 feet apart.



Graphics from the Burlington Public Works Quick Build Design + Materials Standards







Southern Gateway

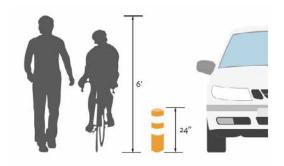
The materials described on this page are suggestions and recommendations. Other materials can be used depending on the community's preference and budget.

- Create quick build curb extensions with bollards and paint that will narrow the road to calm traffic
- Add artwork and/or welcome signage



K-71 Bollard

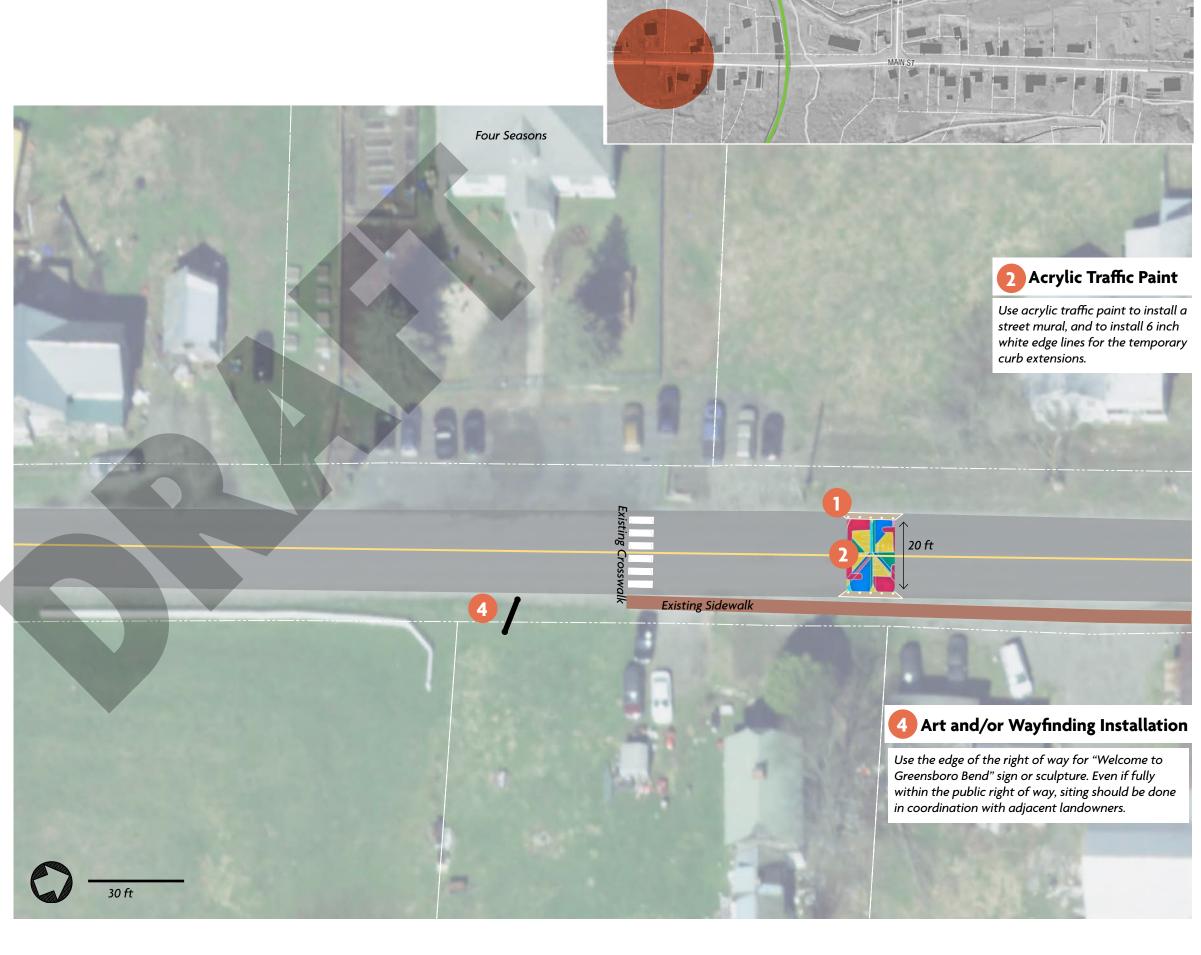
Use K-71 bollards to delineate temporary curb extensions that narrow the road to 20 feet, creating a gateway and traffic calming feature. Bollards should be spaced 4 to 5 feet apart.



Graphics from the Burlington Public Works Quick Build Design + Materials Standards



Reference Image: Quick Build curb extension with K-71 bollards, paint, and planters in Burlington, Vermont





Southern Gateway: Long Term Concept

- Formalized angled parking enforces oneway traffic circulation for pick up and drop off at the preschool.
- The crosswalk is moved to align with the preschool's walkway to the front door.
- A 4 foot median (grassed or curbed) separates the parking area from the road.
- The road centerline shifts 4' to accommodate the median and the road is narrowed from 24 feet to 20 feet. These changes create a gateway and traffic calming measure.

Consultation with Four Seasons is imperative to making this design work for both the public road and private business, especially if/when Four Seasons expands to the adjacent parcel. This concept should be used as a starting point for conversations with the landowner.





The Trail, The Bend

The Rail Line has always been the life of the Bend. From its inception to the rebirth of the rail as a regionally significant recreational resources. This element of the Bend Revitalization Plan provides a conceptual vision to make the Bend more than just a curve in the trail and a crossing through a quaint village, but a destination unto itself that can spur the redevelopment and revitalization of Greensboro Bend. This plan includes the following elements:

Public Artwork - Catching the Eye 🕕

Artwork along the western edge of the LVRT Bend can create a reason to visit the Bend, and create an enticing gateway visible to all travelers along Route 16.

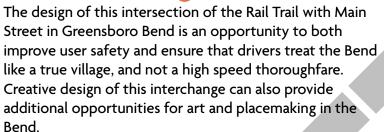
Public Rail Trail Parking 🗿

Public parking facilities on VTrans owned land adjacent to the Rail Trail can provide simple tools to leverage the trail's potential for economic development.

Depot Park

Named for a historic stopping point along The Bend road, development of improved parking resources, bike repair areas, and food truck courts can provide short term improvement possibilities without significant impacts to the State owned land underneath them.

Rail Trail Intersection 4



The Depot 🕟

Historic Depot stations across the state of Vermont have been repurposed successfully many times. Greensboro Bend's unique Depot is a treasure of historic preservation and offers unique opportunity for the right enterprise.







Public Art - Catching the Eye

The western edge of the LVRT's bend is bounded by an open field to the east and VT Route 16 to the west. The highway is slightly elevated relative to the trail, and provides clear views of the trail corridor as drivers pass by in either direction.

This visibility from a roadway which averages over 1600 vehicles daily* presents an ideal opportunity develop iconic, eye catching artwork that entices visitors to stop, stay, and explore Greensboro Bend and the LVRT.

This artwork could be installed in VTrans right of way, as envisioned on this page, or built adjacent to the trail corridor on private land if permission were granted.

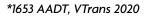
The rich history and ecology of the Bend offer ample opportunity and inspiration for Artwork - as the 'Coal Shed' Frame elements envisioned here illustrate.



draws visitors and economic activity to the Town.









Trailside Parking

The VTrans owned property to the north of the LVRT and west of Main Street would make an ideal location for a low-impact parking area and trail access point.

Such improvements as a graveled parking lot with an accessible connection to the rail trail could support visitation to the Bend and provide incentive for future redevelopment as the area becomes known as a trail and recreation access hub.

By limiting improvements to ground level and above-ground improvements, this improvement area of the proposal can comply with the VTrans directive that this land must be ready to revert to active rail line if there is sufficient future demand for full rail access in the future.





Rail Trail Intersection & Depot Park

Trail Intersection

A trail intersection design can calm local traffic and create public artwork opportunities for Greensboro Bend.

The proposed design widens the trail cross section to 20 feet from the typical 12 foot width to accommodate traffic entering and exiting the trail. This widened section is envisioned as asphalt surfacing to provide temporary artwork opportunities. Dividing the bicycle and pedestrian flow are two ground level 'median' planters that can be planted with grass and perennials and will not block vehicular access.

The actual road intersection with main street could be raised approximately 3 inches to create a speed table intersection that would slow local traffic through the Bend.

Depot Park

An old watertub was once a refueling site for horses and their passengers between Greensboro and Greensboro Bend. That same rest and respite could be captured in an expansion of the existing park space in Greensboro Bend. South of the existing public park, the new Depot Park links to the rail trail to provide a place to stop and refuel for human powered recreation along the LVRT.

Simple park improvements to the northeast of the rail trail could extend Greensboro Bend's park space and provide opportunities for economic development. This plan envisions a series of simple, ground level improvements, including parking for seasonal food truck operations, seasonal picnic tables, a covered bike parking/repair area, and semi-permanent stone wall seating areas.

All improvements would be designed to be relatively easy to deconstruct to facilitate permitting with VTrans and comply with railbanking requirements.





The Depot

This plan envisions the future of the Depot as the mixed-use commercial or cultural hub of Greensboro Bend. With supporting lease conditions from the State, this immaculately restored example of Greensboro Bend's historic character could support a future retail, restaurant, or cultural destination.

The addition of a parking area to the south could be developed in conjunction with commercial re-purposing of the building, or there is potential to have future uses of this site leverage public parking resources if developed to the north of this site.

The existing greenspace west of the Depot Building is park-like in its current state, and with the simple addition of seating and a patio space could support lite commercial activity as soon as the rail trail opens. With the addition of a small mowed trail in the summer months, this site could also function as a river access location for locals and visitors alike.







Depot Ownership

State Ownership in Greensboro Bend

The State of Vermont owns 12.6 acres of property within and adjacent to Greensboro Bend. Operated by the Rail Division of the Vermont Agency of Transportation, initial conversations regarding future uses for this land reveal that the agency's current policy is to maintain ownership of former rail properties in order to be able to should rail service return.

This railbanking offers a pragmatic approach to hold onto transportation systems land to avoid the high future cost of land acquisition. Yet other uses in the interim could perhaps better serve local communities such as Greensboro Bend. Given that the former Lamoille Valley Railroad is being systematically converted to a public, shared use path under guidance of the Agency of Transportation, there appears to be little purpose in preserving the state's ownership interest in the Greensboro Bend Train station.

In this area in particular, due to the broad swaths of ownership on either side of the LVRT, easement realignment or right of first refusal clauses could allow for revitalization efforts to move forward in the Bend, and still retain the ability of the state to return to rail use in some far-future scenario.

With these lands at the heart of the Bend, and a \$2 million investment in the development of the Lamoille Valley Rail Trail, the state has potential to further leverage their investment in recreation infrastructure by supporting revitalization efforts in Greensboro Bend.

With so much public land surrounding the rail line, the State's role supporting trail and recreation adjacent redevelopment, businesses, and amenities is crucial.

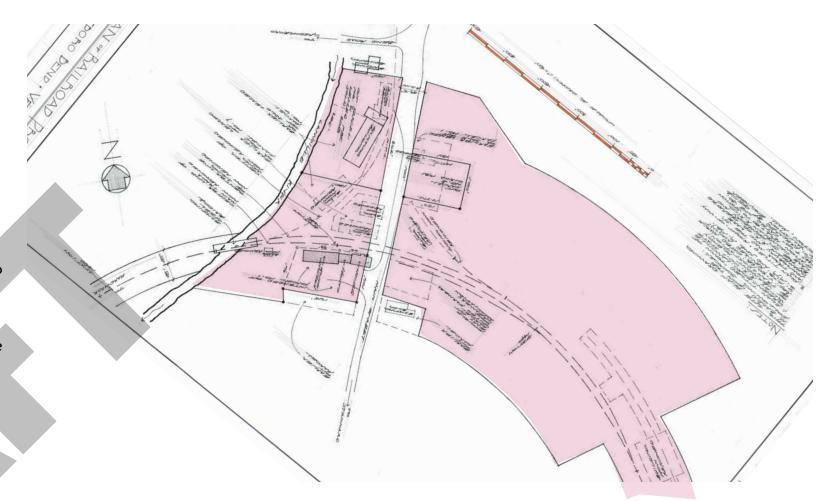
Statute Conflicts

One challenge related to the Greensboro Bend Depot arises from Vermont State Statue. Even if VTrans sought to explore alternatives to railbanking, §5 V.S.A. 3406 requires land sold along an abandoned railroad bed be more than 33 feet from the centerline of the former railroad bed. The Greensboro Bend depot does not lie that far from the centerline. Research regarding how or if these centerlines have been adjusted in other locations across the state could benefit discussions between property owners, state agencies, and the Town of Greensboro.

To sell the property for redevelopment, a sale would require either:

- an exception to the statute, enacted by state government
- a realignment of the established railbed centerline (feasible in Greensboro Bend due to the large swaths of land owned on either side of the current centerline)

Alternately, a sale could be circumvented by a lease arrangement that would encourage future private investment related to rail trail development, that still provides the State a right to resume operations and ownership in the case of a re-establishment of the LVRT as a functional rail line.





This land could be held in reserve until rail returns. Or it could be a destination site leveraging the new trail and historic depot site to support economic activity in Greensboro Bend.



Vermont Depot Lease Agreements

There is a wide variety of agreements, historic arrangements, and ownership patterns among Historic Vermont Rail Depots. This table identifies a few of the varied arrangements that are functioning currently across the State's former (and current) rail line.

It stands to reason that there should be a clear and identifiable process by which a Municipality can take ownership and care of a depot on State-Owned land within their jurisdiction, as this upkeep can relieve VTrans of maintenance obligations, while still agreeing to relinquish ownership in the event of a return to active rail usage.

Vermont Depot Building Ownership Agreements

Town	Depot Building	Land	Rail Status	Arrangement	Source
	Ownership	Ownership			
Greensboro Bend	Private (Utilized as Private Residence)	VTrans	Inactive - Soon to be Recreational Trail	Current: Town Lease Expired on property, State is currently pursuing a new lease with the following terms: • 5 year lease/4 terms • Costs \$3360/year • Termination without cause: "Landlord reserves right to terminate this lease at anytime with 30 days notice in writing to the tenant of its intent to terminate" State's right to terminate occupancy of the land with 30 days notice • No insurance on land	Depot Building Owner/ Resident
Hardwick	Town (utilized as History Museum, recreation trail, and Town Garage)	Town of Hardwick	Recreational Trail	 Land purchased by Town for \$1. VTrans Rail has first right of refusal should town look to sell. Far side of rails utilized for Town Garage / PW purposes. 	Hardwick Town Manager Interview September 2021
Randolph	Private (utilized as Cafe & Market)	Private	Active Rail Line	Parcel bought in early 1970's prior to State ownership of rail line	Public Purchase Records
Lyndonville	Private (Utilized as Cafe & Market)	VTrans	Active Rail Line	 30 year lease Costs \$3,800/year Lesee responsible for all maintenance and upkeep, with freedom to upgrade remodel, improve as owners see fit. 	Email Correspondence with Owner - September 2021
Danville	Town	Town w/ Caveats	Recreational Trail	 Station built by Town in 1870 - deeded back to the town by the State without land. In 19XX Judge Springer wrote a quit claim deed and the land was deeded back to the town. Improvements and funding must first get approval from VTrans 	Danville Historical Society



Regional Trail Connections

The Lamoille Valley Rail Trail is just one trail anticipated to shape the future of Greensboro Bend. The Town of Greensboro and the State of Vermont have been working to develop a comprehensive trail network that links the Town and provides healthy outdoor activities year round.

This conceptual trail map illustrates how the planned trails (dashed red) would integrate into a broader network. The Greensboro Trail Committee is working on an engineering study to understand the feasibility of these trail alignments. Landowner discussions and VOREC funded construction grants are anticipated within the next 2-5 years. Key Trails illustrated are:

1. Village-Bend Connector

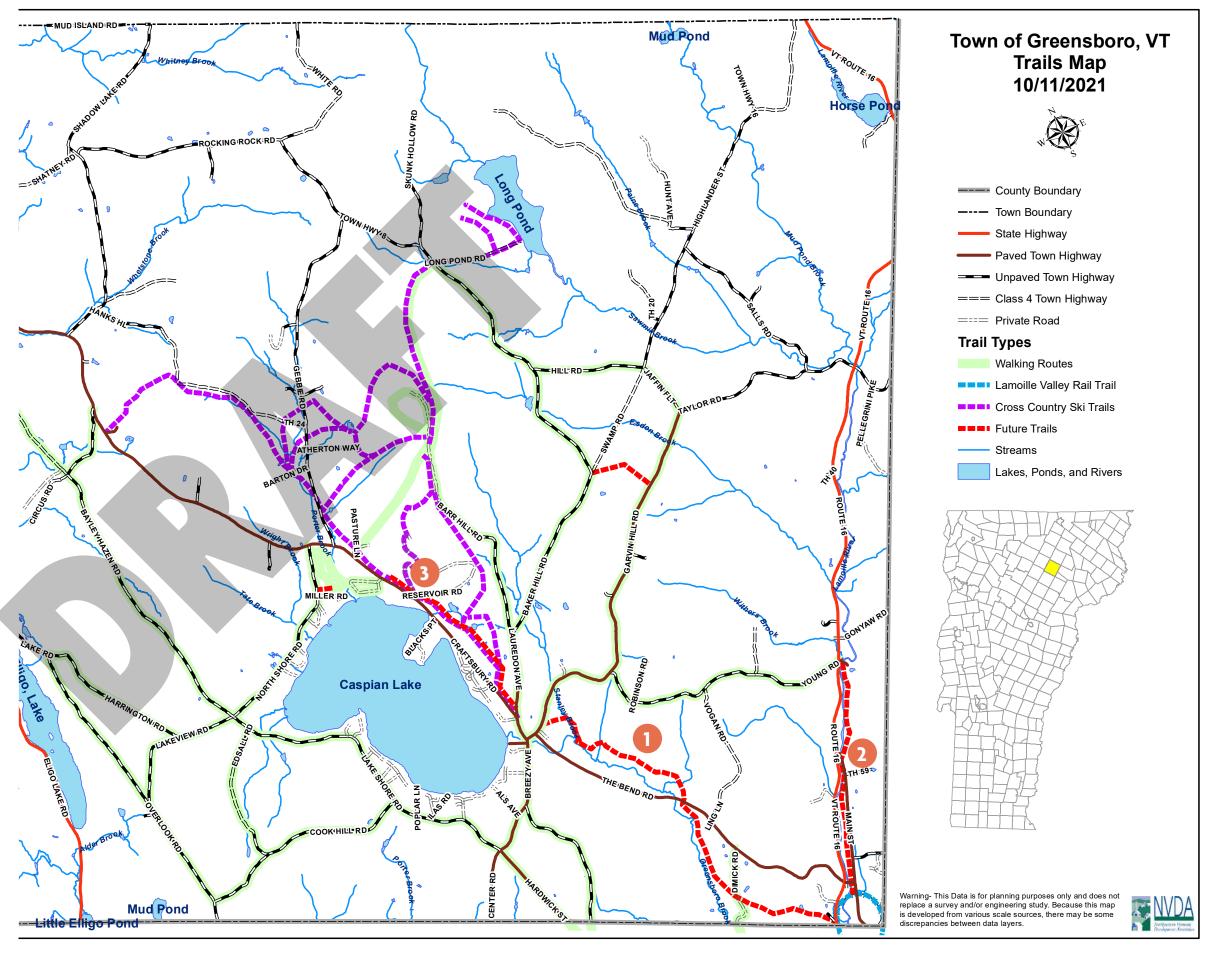
This trail connects the Lamoille Valley Rail Trail with the rich recreational and cultural hub of Greensboro Village and Caspian lake.

2. Lamoille River Trail

This trail would provide a spur trail from Greensboro Bend northwards, connecting to the Young Road /Route 16 intersection. This spur would create a unique riverwalk trail experience, connecting locals and visitors alike to the unique ecology and natural environment of the Lamoille River.

3. Village to Highland Lodge

This trail would connect the Village to the Highland Lodge, enabling visitors to access the trail network.





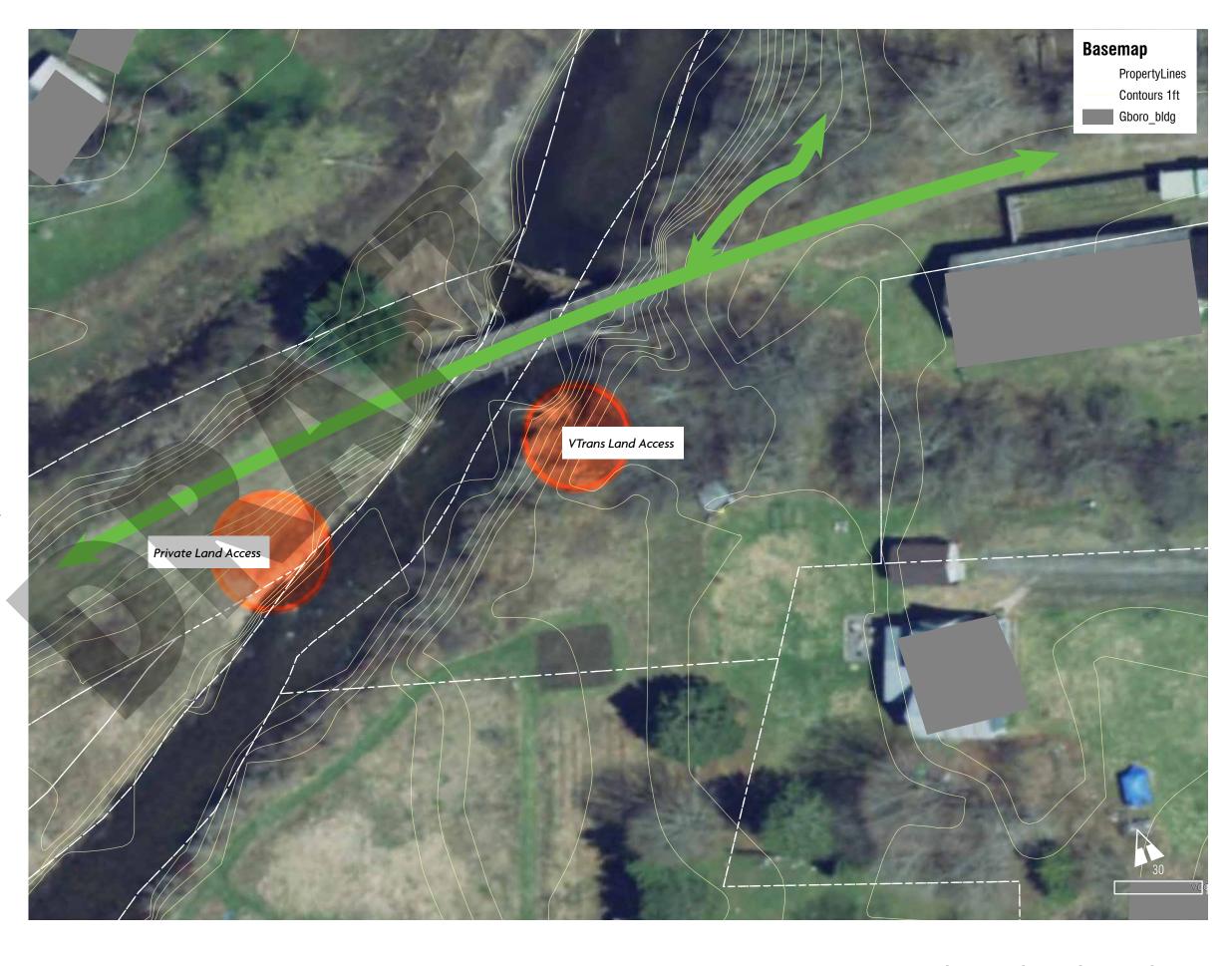
Trail Intersections and River Access

As envisioned in the Greensboro Trails Plan, a spur from the Lamoille Valley Rail Trail could provide both a river trail experience for travelers moving northward through the Bend and beyond.

This trail connection would be ideally situated at the Depot site, and nearby two potential river access areas could be possible.

Interpretive Signage and Nature Trail

Interpretive signs along a riverside nature trail utilizing the old rail bed could highlight the types of natural communities that exist in the Bend (see page 22 of this document). The signs also could direct trail users to a short nature trail through a wetland and upland, where local plant communities could be highlighted.







This final chapter provides guidance for the Greensboro Bend Revitalization Initiative, Town officials and Staff, and advocates and partners from non profits and state government to implement many of the visions set forth in this plan.

For each project, a summary page is provided which details key next steps, relevant grant funding resources, and a conceptual timeline towards implementation.

Implementation

Next Steps for Revitalizing Greensboro Bend

This plan should set the stage for the next round of conversations, designs, plans, and construction that will lead towards a vibrant Greensboro Bend, leveraging the construction of the LVRT.

For this plan to have value, advocates and leadership must be in place who have the persistence and vision to see this plan through towards implementation of the projects envisioned here. Some key first steps include:

Step 1: Prioritize & Confirm Goals

Included here is an preliminary list of Priority Projects, which has been developed in initial discussions with the BRI, Town of Greensboro, and Greensboro Bend Stakeholders. After this plan is finalized, there should be clear consensus among project leaders about relative priorities and opportunities relative to the revitalization of the Bend. The goals established in the Priority Projects list on this page may change, and should be seen as a starting point, rather than any fixed requirements.

Step 2: Identify and Assign Leadership

The Greensboro Bend Revitalization Initiative is an obvious player to continue this plans vision forward. The BRI should seek additional support from Greensboro Town Staff, volunteer committees, and advocates for the Bend. Individual advocates should take ownership of single projects, rather than a series of projects to dedicate the time, energy, and patience to see them forward.

Step 3: Learn and Build from Precedent

Other village building and trail-adjacent work in Vermont can offer clear guidance on how the Revitalization of Greensboro Bend could move forward. Such precedents are referenced further in this implementation chapter, but they include:

- Rupert Village Trust, a community trust that has revitalized the village store as a community gathering place.
- Danville's ongoing Efforts to revitalize and improve their Depot Station adjacent to the LVRT
- Cross Vermont Trail's development of trails adjacent to portions of the Cross Vermont Trail and Montpelier's Siboinebi Pathway

Step 4: Seek Funding

The following pages detail several resources for obtaining project funding. These include grant resources from state, federal and non-profit sources. For many of these grant applications, Town support and finances will be crucial to secure the seed funding needed for many of these grants.

Note that more complex projects will need additional levels of study to work out design details, further demonstrate community support and ensure that final works are well thought out and representative of the community vision represented here.

Priority Project Implementation

This list of priority projects was selected as 'low hanging fruit' to be pursued by the Bend Revitalization Initiative, Town of Greensboro Bend, and partners.

- Trailside Parking
- Park and Trail Amenities
- Public Artwork
- History & Ecology Walks
- Gateway Signage
- Main Street Trail Crossing

These projects are not listed in any specific order, but identified as a suite of projects that should be pursued as opportunity and funding become available.



Quick Builds Northern/ Southern Gateways & Roundabout

The development of gateway and traffic calming features throughout Main Street in Greensboro Bend area has great potential to improve safety by slowing traffic. In addition to safety benefits, these projects offer a real opportunity for placemaking by creating public artwork that marks one's arrival in the Bend.

It should be noted that the roundabout, with adjacent parking impacts and need for precision dimensions and painting is a more complex project than the gateways, and could be approached as Phase 2 of the quick build efforts.

Potential Project Partners and Additional Resources:

Local Motion, the Statewide Bicycle and Pedestrian advocacy organization can provide technical assistance and implementation guidance for projects supporting walking and bicycling in Vermont.

Jonathon Weber - Manager, Complete Streets Program jonathon@localmotion.org 802-861-2700 www.localmotion.org

VTrans has published "Demonstration Projects in Highway Right of Way" a document that describes how these projects are (and are not) allowed in the State right of way (which does not directly apply to these projects, but may be valuable to understand if applying for VTrans funding resources).

Grant Title	What does it fund?	Maximum Grant Amount	Match Requirement	Who can apply?	Federal Funding	Recent Application Deadline	Grant Contact
VNRC - Small Grants for Smart Growth	Quick build projects, natural resource inventories, public outreach campaigns, design and planning.	\$1,500.00	None Required	Municipalities, 501(c) Orgs, and those aligned with these groups.	No	Ongoing	Kate McCarthy kmccarthy@vnrc.org 802-223-2328 x114
AARP Community Placemaking Mini-Grants	Quick build projects and placemaking efforts - often associated with events.	\$3,000.00	None Required	Municipalities and 501(c) Orgs	No		Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
Vermont Arts Council - Animating Infrastructure Grants	Projects that integrate art with infrastructure improvements. Funds can be used to pay artist fees or fees related to fabrication and installation of artwork.	\$15,000.00	None Required.	Municipalities and 501(c) Orgs	No	TBD	Michele Bailey mbailey@vermontartscouncil.org 802-828-3294
VTrans - Bicycle and Pedestrian Program Grants - Small Scale	Distinguished from Bike/Ped program by smaller maximum funding amount and lack of federal requirements	\$100,000.00	50 percent	Municipalities and 501(c) Orgs	No	Fall 2019	Jon Kaplan jon.kaplan@vermont.gov 802-498-4742

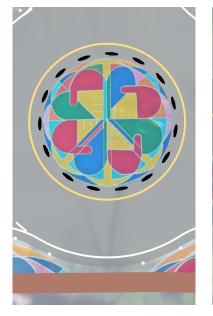
Key Steps towards Quick Build Installations:

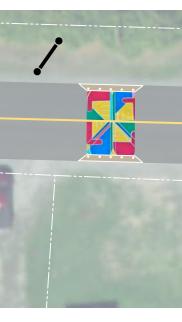
- Utilize this plan to build community support for a
 Quick Build Projects with adjacent businesses and
 landowners. Key supporters include Smith's Grocery
 Store, Lamoille Lumber, The Post Office, Four Seasons,
 and all other adjacent landowners.
- 2. Once local support is secure, contact Local Motion for additional guidance towards implementation. This statewide bicycle and pedestrian non-profit can offer additional support and resources towards implementing these installations as temporary installations to 'test' their utility to the Town.
- 3. **Track relevant grants** as listed in the table above. Funding from these grants can be utilized for materials and labor costs required to install quick build projects.

Conceptual Costs

Northern and Southern Gateways: \$2000 - \$6000 for materials and paint (intersection and gateway artwork)

Roundabout: \$8,000 to \$20,000 for materials and paint and any additional design / engineering required.







Southern Gateway Concept (Long Term)

The Southern Gateway Concept has potential to evolve into longer-term, coordinated streetscape improvements at Four Seasons, that can improve pedestrian safety and vehicular circulation during drop off and pickup

It is worth noting that many grants that can fund larger, permanent infrastructure improvements such as this project can also come with numerous strings attached which will drive up costs (such as required additional planning studies, expanded permitting and engineering fees, and similar). Small portions of this project (such as the extended sidewalk) could be completed at a lower overall cost if approached without federal grants.

Next Steps:

This project could classify as a public/private partnership project, improving both the public right of way in Greensboro Bend, as well as the private parking area for Four Seasons. The BRI should work closely with the Four Seasons ownership to coordinate an approach to further refinement of this concept.

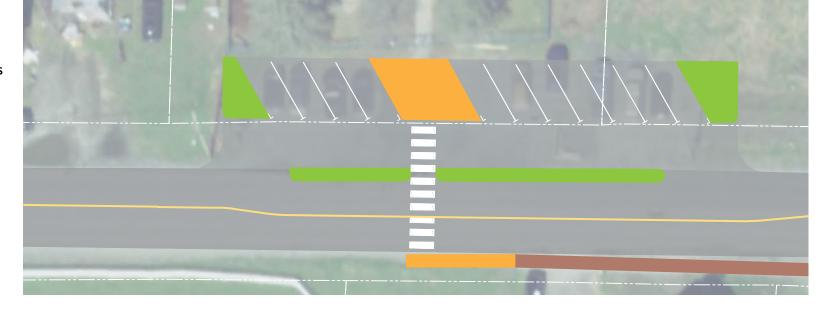
- 1. **Utilize this plan** to work with Four Seasons to incorporate this or a similar design in the Four Season's expansion plans.
- 2. If public funding is sought, apply for funding to complete a scoping study which could explore multiple design options that support both Four Seasons and Greensboro Bend's needs. These studies outline construction costs, explore various design solutions, and continue the public process to ensure that construction grant applications are 'shovel ready'.

Grant Title	What does it fund?	Maximum Grant Amount	Match Requirement	Who can apply?	Federal Funding	Recent Application Deadline	Grant Contact
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
VTrans - Bicycle and Pedestrian Program Grants	Construction, planning & design of on and off roadway facilities for active transportation facilities. Specific scoping study funding source.	\$1,000,000.00	20 percent	Municipalities	Yes	September 30 2020	Jon Kaplan jon.kaplan@vermont.gov 802-498-4742
VTrans - Bicycle and Pedestrian Program Grants - Small Scale	Distinguished from Bike/Ped program by smaller maximum funding amount and lack of federal requirements	\$100,000.00	50 percent	Municipalities and 501(c) Orgs	No	Fall 2019	Jon Kaplan jon.kaplan@vermont.gov 802-498-4742
CDBG - Implementation Grants	Assist businesses to create or retain jobs, create or rehabilitate housing units, build infrastructure, create or assist childcare and senior centers etc.	\$1,000,000.00	10 percent	Funds must demonstrably benefit persons of low & moderate income as defined by census.	Yes	Ongoing - grants awarded 3x a year	Julia Connell julia.connell@vermont.gov

- 3. If local funding and private funding can fund implementation, (no state/federal funding required) the site plans for Four Season's future expansion could serve in lieu of a full scoping study. This presents an option for lower design costs for this project, but limits the ability of the project to acquire state and federal grants.
- 4. Apply for grants listed in the table above that can support scoping studies and/or future design plans for this public/private partnership.

Conceptual Costs:

Scoping Study: \$40,000 - \$50,000 Construction: \$250,000 - \$500,000





Public Artwork - Catching the Eye

Route 16 is slightly elevated relative to portions of the trail, and provides clear views of the trail corridor as drivers pass by in either direction.

Additional Resources

The Vermont Arts Council can offer guidance towards finding artists capable of realizing these visions, securing relevant grant funding resources, or issuing a call for artists to develop plans or build final artwork.

Vermont Arts Council 136 State Street Montpelier VT 05633 802-828-3291

https://www.vermontartscouncil.org/

It is worth reaching out to VTrans, who has an entire permit process dedicated to artwork on State Transportation Facilities to understand how a LVRT adjacent installation might be permitted. Click here for the current (2022) permitting website. It is worth noting that some of these permitting requirements may be more state highway oriented than state-controlled recreational trail.

Next Steps

 Utilize this plan as a starting point for conversations with VTrans, and private land owners whose property would be required to host a temporary or permanent installation. The goal of these conversations should be to understand requirements and prohibitions relevant to siting artwork on these properties.

Grant Title	What does it fund?	Maximum Grant Amount	Match Requirement	Who can apply?	Federal Funding	Recent Application Deadline	Grant Contact
VNRC - Small Grants for Smart Growth	Pop up projects, natural resource inventories, public outreach campaigns, design and planning.	\$1,500.00	None Required	Municipalities, 501(c) Orgs, and those aligned with these groups.	No	Ongoing	Kate McCarthy kmccarthy@vnrc.org 802-223-2328 x114
AARP Community Placemaking Mini-Grants	Pop up projects and placemaking efforts - often associated with events.	\$3,000.00	None Required	Municipalities and 501(c) Orgs	No		Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
Vermont Arts Council - Animating Infrastructure Grants	Projects that integrate art with infrastructure improvements. Funds can be used to pay artist fees or fees related to fabrication and installation of artwork.	\$15,000.00	None Required.	Municipalities and 501(c) Orgs	No	TBD	Michele Bailey mbailey@vermontartscouncil.org 802-828-3294

- 2. Investigate Greensboro Town progress on hiring a recreation/cultural director or partner as discussed in the 2019 Town Plan. This position could coordinate, develop and expand artistic endeavors in Greensboro and act as a lead activist for this effort (per the 2019 Town Plan).
- 3. **Reach out to the Vermont Arts Council** to understand how best to coordinate concepts with artists to develop an approach to implementable, community supported artwork along the LVRT in Greensboro Bend.
- 4. Utilize the grant resources listed on this page to apply for funding that can support artist fees, materials, and temporary or permanent installations.

Conceptual Costs

\$10,000 - \$50,000 for artist fees and materials. (But it's artwork, so the sky's the limit.)







Trailside Parking & Depot Park

Install public parking facilities on VTrans owned land adjacent to the Rail Trail, and expand the current use of community park southward to the LVRT right of way. In addition, inclusion of a public restroom was suggested during public outreach as part of this area's improvement, and such a detail could open additional revenue streams not represented here.

Additional Resources

As this project directly benefits a nonmotorized rail to trail conversion, coordination between multiple departments within the Vermont Department of Transportation will be key. Contacts to facilitate discussion include:

Jon Kaplan, VTrans Bike Ped Coordinator jon.kaplan@vermont.gov; 802-498-4742

Jacqueline Dement, VTrans Planning Coordinator

jacqueline.dement@vermont.gov

Mark Fitzgerald, Property Management **Section Chief**

Mark.fitzgerald@vermont.gov

Both the Rail Trail Parking expansion and Depot Park could be approached as the same design project, as all facilities lie on VTrans controlled land, and would directly benefit Greensboro Bend and the overall LVRT.

If design concepts are simple enough, and public input clear, preliminary engineering could serve in lieu of a scoping study, reducing project soft costs. As land owner and permitting agency, this \$30,000-\$40,000 - Scoping Studies & Pre Permitting decision would be up to VTrans to make.

Grant Title	What does it fund?	Maximum Grant		Who can	Federal	Recent	Grant Contact
		Amount	Requirement	apply?	Funding	Application Deadline	
Northern Forest Recreation Grants	Outdoor recreation facilities and programs	\$50,000.00	50 percent	Municipalities and 501(c) Orgs	No	Spring 2021	Mike Wilson mwilson@northernforest.org 207-767-9952
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
VOREC Grants	Construction of trails, trailheads, outdoor recreation facilities that support local economies	\$50,000 minimum. No Maximum		Municipalities and 501(c) Orgs	Yes	Winter 2021	Jackie Dagger jackie.dagger@vermont.gov 802-636-7410
Vermont Agency of Natural Resources Land and Water Conservation Fund	Assists in acquiring land for parks and public outdoor recreation, as well as the development of new facilities and/or renovations of existing facilities or outdoor recreation.	No Maximum	50 Percent	Municipalities and State Agencies	Yes	Winter 2020	Jessica Savage jessica.savage@vermont.gov 802-249-1230
The Department of Forests, Parks and Recreation Enhancement of Recreation Stewardship and Access (ESRA) Trail Grants	Projects focused on the stewardship and accessibility of trails	\$25,000.00	None Required	Municipalities, 501(c) Orgs	No	8.27.2021	Sherry Smecker Winnie sherry.winnie@vermont.gov 802-760-8450
VTrans - Transportation Alternatives Program (TAP)	Construction, planning and design of on and off roadway facilities for active transportation	\$300,000.00	20 percent	Municipalities	Yes		Scott Robertson scott.robertson@vermont.gov 802-793-2395

Next Steps:

- Utilize this plan as a starting point for conversations with VTrans and adjacent landowners to better outline the series of next steps that would be required to build this infrastructure.
- 2. Consider applying for a scoping study that could further develop design details, understand permitting requirements and review designs with the Greensboro Bend Community before committing significant public resources towards construction.
- Use the grants listed here to fund additional scoping and design studies, to eventual construction and implementation.

Conceptual Costs:

\$20,000 - \$50,000 - design fees \$150,000 - \$750,000 - construction (depending on final scope and facilities)







Trailside Parking and Depot Park Amenities Conceptual Cost Estimates

This page illustrates some conceptual cost estimates for the Rail Trail Parking and Depot Park amenities envisioned in this plan.

The costs illustrated here are based on loose conceptual drawings and do not represent a precise cost estimate. They do illustrate a relative order of magnitude cost estimate for some key individual items that would be needed to construct the improvements envisioned in this plan.

These cost estimates imagine the Rail Trail
Parking north of the depot station being
constructed as a phase 1 project, with a public
restroom constructed as a phase 2. Similarly,
the trailside amenities envisioned in this
construction cost estimate would include an
improved lawn area, benches, and a bicycle
repair station, but food truck parking would be
reserved for a phase 2 effort.

These estimates should allow the Town of Greensboro and Bend Revitalization Initiative to plan for capital allocations that could support further design work, refined cost estimation, and grant applications.

	Amount	Unit	Un	it Cost	Cost		
Trailside Parking							
Graded Gravel Parking Area, Restroom and Signage							
Clearing and Grubbing	C).13 Ac	\$	33,793	\$	4,393	
Common Excavation		139 CY	\$	22	\$	3,027	
Subbase of Dense Graded Crushed Stone		72 CY	\$	37	\$	2,689	
Aggregate Surface Course		68 CY	\$	47	\$	3,183	
Concrete		4 CY	\$	632	\$	2,472	
Detectable Warning Surface		8 SF	\$	42	\$	333	
Traffic Signs Type A	•	4 ea	\$	24	\$	94	
Permitting (Archeological, Vtrans Access, SWPPP)		1 ea	\$	25,000	\$	25,000	
Design (15%)					\$	2,429	
25% Contingency					\$	9,807	
					\$	49,034	Concept Trailside Parking Cost
Trailside Amenities							
Lawn, Bike Repair Station & Racks, Picnic Tables							
Clearing and Grubbing	C).25 Ac	\$	33,793	\$	8,534	
Common Excavation		207 CY	\$	22	\$	4,518	
Subbase of Dense Graded Crushed Stone		2 CY	\$	37	\$	68	
Concrete		2 CY	\$	632	\$	1,159	
Fertilizer		40 lb	\$	8	\$	343	
Grass Seed		40 lb	\$	9	\$	353	
Mulch	C).51 T	\$	857	\$	433	
Agricultural Limestone	•	408 If	\$	11	\$	4,488	
Bike Repair Station		1 ea	\$	1,200	\$	1,200	
Bike Racks		4 ea	\$	200	\$	800	
Picnic Tables		3 ea	\$	500	\$	1,500	
Permitting (Archeological, Vtrans Access, SWPPP)		1 ea	\$	25,000	\$	25,000	
Design (15%)					\$	3,509	
25% Contingency					\$	5,849	
					\$	42,779	Concept Trailside Amenities Cost

Cost estimate figures sourced from 2020 VTrans Path and Sidewalk Construction Report and online retailers.



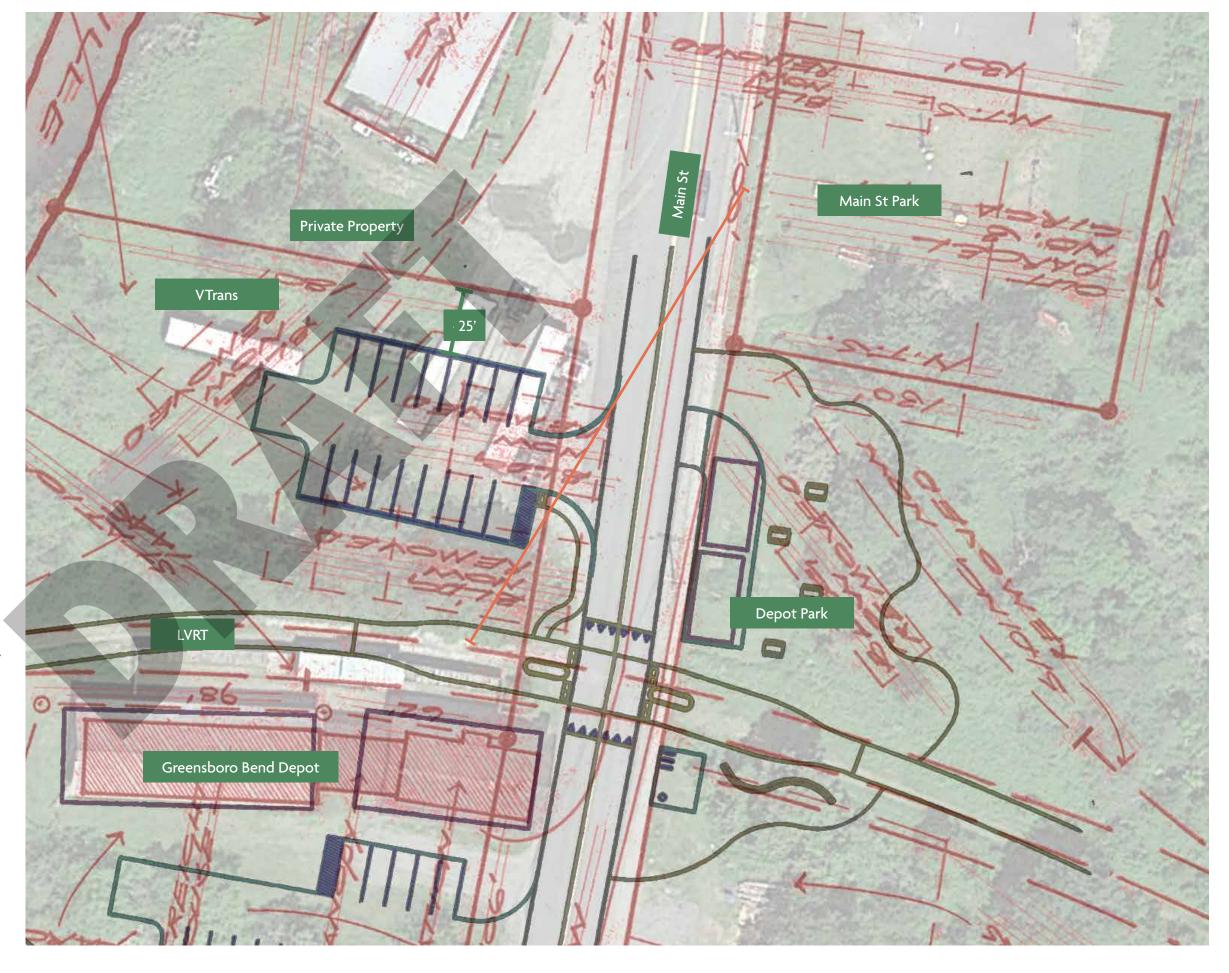
Rail Trail Parking and Amenities Land Area

As a planning study, this project relies heavily on existing GIS property boundary data as provided by the Vermont Center for Geographic Information. However, during the course of the project, Barrett Architecture provided the study team with surveyed drawings of the depot station in the heart of Greensboro Bend.

The design CAD files for this project were georeferenced alongside this of the Depot station survey and an orthographic aerial to create the composite image at right.

Based on these coarse assumptions, the design concepts of the Rail Trail Parking Area and Trailside Amenities should fit all within land currently owned by VTrans. There appears to be an approximate 20 foot buffer between the northern edge of the parking area and VTrans property boundary to the north.

These assumptions are based on the best available data at the time of this planning study but should be further confirmed by additional survey, design and engineering.





The Depot

The impeccably preserved Depot could become a mixed-use commercial and cultural hub of Greensboro Bend, and a destination along the LVRT. This building, if developed, could be the crown gem of the Bend, and its structure and precedent across the state illustrate how historic depots can continue to add as focal points for community gathering and commerce, even without active rail lines.

Additional Resources

This project involves both VTrans and a property owner who have been in dialog with one another for some time regarding a preferred lease agreement for state owned land.

This study should be another tool to further dialog between these entities, as a privately controlled depot station, or favorable lease terms could offer real benefits to the Village of Greensboro Bend by facilitating future commercial uses at this location in conjunction with the anticipated expanded use of the LVRT.

State Contacts

Jacqueline Dement, VTrans Planning Coordinator

jacqueline.dement@vermont.gov

Mark Fitzgerald, Property Management Section Chief

Mark.fitzgerald@vermont.gov

Next Steps:

- 1. Investigate Options for future use of the Depot.

 This could involve future Town ownership of the site, improved lease terms with VTrans and the building owner, subtle relocation of Rail ROW, or purchase of the building and lease by a Town Collective.
- 2. Continue to research Depot station agreements and operations across Vermont. Additional study may reveal creative solutions to the state-owned land, privately-owned building conundrum that could point to a productive future for this site.







Regional Trail Connections

Multiply the benefits of the LVRT in Greensboro Bend by connecting to Caspian Lake via a "Village-Bend" connector and to Highland Lodge.

This effort will make the Bend more than a single trail destination, but a hub of myriad outdoors adventures.

Additional Resources

Established trail advocacy clubs may provide additional resources and expertise to support to this effort beyond the BRI alone. Here are a few potential organizations and contacts that could feasibly support these efforts:

Caledonia Trail Collaborative info@caledoniatrailcollaborative.org

Friends of the Lamoille Rail Trail Ken Brown LVRT Project Manager

LVRT Project Manag 802-793-0479

Vermont Association of Snow Travelers

Cindy Locke, Executive Director 802-229-0005 x11 Cindy@vtvast.org

NVDA

Irene Nagel, Senior Planner inagel@nvda.net 802-424-1423

In addition to building new trail, the BRI and partners should continue to coordinate with NVDA and Friends of the Lamoille Valley Rail Trail to continue to advocate for improved wayfinding signage across the length of the LVRT that identifies the location of Greensboro Bend and the services available there.

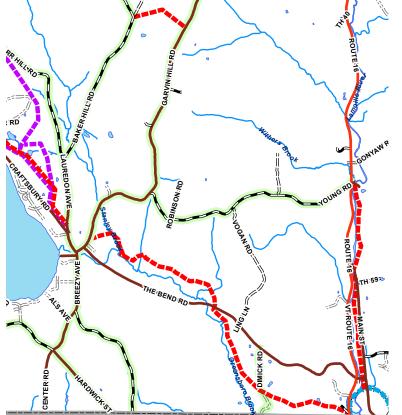
Grant Title	What does it fund?	Maximum Grant Amount	Match Requirement	Who can apply?	Federal Funding	Recent Application Deadline	Grant Contact
Vermont Department of Forests, Parks & Recreation - Recreational Trails Program	Construction & Maintenance of trails Easements for Trail Access Trailheads & wayfinding elements	\$50,000.00	20 percent	Municipalities and 501(c) Orgs	Yes	Spring 2022	Sherry Smecker Winnie - sherry.winnie@vermont.gov 802-760-8450
VOREC Grant	Construction of trails, trailheads, outdoor recreation facilities that support local economies	\$50,000.00	None Required	Municipalities and 501(c) Orgs	No	Winter 2021	Jackie Dagger jackie.dagger@vermont.gov 802-636-7410
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
VTrans - Bicycle and Pedestrian Program Grants - Small Scale	Construction, planning and design of on and off roadway facilities for active transportation facilities.	\$75,000.00	50 percent	Municipalities	No	02.19.2021	Jon Kaplan jon.kaplan@vermont.gov 802-498-4742

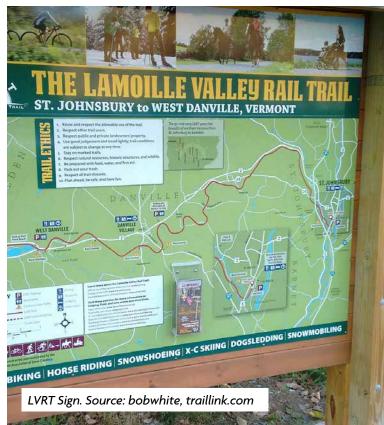
Next Steps

- 1. **Utilize this plan** and other Town resources to expand conversations with all potential landowners along proposed routes, regional trail organizations, Town officials, Town staff, and local businesses. This document can form the foundation of a regional trail vision connecting the Bend to Greensboro Village.
- Conduct Field Investigations to find subsections of trail that can be built as 'proof of concept' or whose terrain could accommodate a trail with little more than brush clearing and signage (old road beds / VAST trails / Power line corridors)
- Continue to Coordinate with LVRT, NVDA and VTrans to advocate for official LVRT signage to identify Greensboro Bend.
- 4. **Track relevant grants** and seek matching funding through private and public resources.

Conceptual Costs

Trail Building - \$10-\$15 per linear foot of trail built.







Street Tree Expansion

Install street trees along the project area to have great benefits to the street's appearance, provide summertime shade and potentially increase property values.

Envisioned as a volunteer driven effort, and leveraging the BRI's recent success in adding street plantings to the Bend, this represents an excellent "low hanging fruit" project to implement quickly and build forward momentum for this plan.

Local Contacts

An online search of tree nurseries reveals numerous local businesses within an hour's drive of Greensboro Bend. These nearby tree nurseries should be a first stop shop to discuss the Town's vision for improved street tree plantings. Their familiarity with the species and tolerance in Vermont roadside settings will be crucial to selecting trees that can enjoy a long life shading Greensboro Bend's Main street.

Next Steps:

- 1. **Utilize this plan** for conversations with Town officials, Town staff, private Property Owners along community streets. Confirm support (in writing) for future street tree sighting and planting.
- 2. **Identify area plant nurseries** that can provide expertise on appropriate street trees
- 3. **Track relevant grants** and seek matching funding through private and public resources.
- 4. Organize a volunteer-led tree planting!

Grant Title	What does it fund?	Maximum	Match	Who can apply?		Recent	Grant Contact
		Grant Amount	Requirement		Funding	Application Deadline	
						Deadine	
AARP	Pop up projects and placemaking	\$3,000.00	None Required	Municipalities and 501(c)	No		Kelly Stoddard Poor
Community	efforts - often associated with			Orgs			kstoddardpoor@aarp.org
Placemaking	events.			_			802-951-1313
Mini-Grants							
VNRC - Small	Pop up projects, natural resource	\$1,500.00	None Required	Municipalities, 501(c)	No	Ongoing	Kate McCarthy
Grants for Smart	inventories, public outreach			Orgs, and those aligned			kmccarthy@vnrc.org
<u>Growth</u>	campaigns, design and planning.			with these groups.			802-223-2328 x114
Vermont Agency	To help communities care for	\$5,000.00	50 percent	Municipalities and 501(c)	No	January 2021	Elise Schadler
of Natural	tree canopy including tree			Orgs			elise.schadler@vermont.gov
Resources	plantings and maintenance						802-522-6015
Caring for							
Canopy Grant							

Conceptual Costs:

\$30-\$100 per tree, depending on species and size.







History & Ecology Walks

A system of durable, artfully designed informational signage can create a unique destination for residents and visitors to learn more about the Bend's native ecology and unique history.

Next Steps:

- Utilize this plan for conversations with Town officials, Town staff, the Greensboro Historical Society and private Property Owners along community streets. Assess interest and support to pursue either the history walk updates, a new ecology walk, or both.
- 2. Work with local artists and the community to develop designs, colors and material palettes that compliment the ideas expressed in the current history walk and/vibrant descriptions of local ecology in the PLACE Program report.
- 3. Investigate hiring a recreation/cultural director or partner to coordinate, develop and expand history endeavors in Greensboro Bend (per the 2019 Town Plan). This position could also support ecology walk design and planning work.
- 4. Coordinate with the Greensboro Historical Society for guidance on locations of interest in Greensboro Bend.
- Track relevant grants and seek matching funding through private and public resources.

Grant Title	What does it fund?	Maximum Grant Amount	Match Requirement	Who can apply?	Federal Funding	Recent Application Deadline	Grant Contact
VNRC - Small Grants for Smart Growth	Pop up projects, natural resource inventories, public outreach campaigns, design and planning.	\$1,500.00	None Required	Municipalities, 501(c) Orgs, and those aligned with these groups.	No	Ongoing	Kate McCarthy kmccarthy@vnrc.org 802-223-2328 x114
AARP Community Placemaking Mini-Grants	Pop up projects and placemaking efforts - often associated with events.	\$3,000.00	None Required	Municipalities and 501(c) Orgs	No		Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
AARP Community Challenge Grants	Infrastructure, programs, events, and organizations supporting livable communities and smart growth objectives	\$20,000.00+ (variable)	None Required	Municipalities and 501(c) Orgs	No	04.14.2021	Kelly Stoddard Poor kstoddardpoor@aarp.org 802-951-1313
Vermont Community Foundation	Projects to improve environmental sustainability, cultural heritage, social justice, historic preservation, and vitality of Vermont communities	\$25,000,00	None Required	Municipalities and 501(c) Orgs	No	Ongoing	Sarah Waring swaring@vermontcf.org 802-388-3355 x283

Conceptual Costs:

\$300-\$600 per sign, depending on materials and installation. Design fees could range from \$2,000 to \$10,000 depending on artist and/or contractor.







Case Study: Rupert Village Trust

The Rupert Village Trust is a nonprofit organization founded in 2018, whose mission is historic preservation and community development in Rupert, Vermont.

Their major project has been to develop a community center and café in the historic Sheldon General Store, which had closed in the 1980s. With no other focal gathering place in town, the effort to purchase and restore the property started an ongoing trend towards social and economic vitality, and a greater sense of community.

Saving the Sheldon Store allowed the building to once again become a community hub. The upstairs, once the Grange Hall, is now regularly used for yoga classes, workshops, presentations and performances.

The store is directly adjacent to the Rupert Town Green, making it a natural extension of this community space.

Rupert Village Trust Inc. has been formed as a 501(c)(3) organization. While the non-profit application was pending with the IRS, Preservation Trust of Vermont (PTV) acted as its fiscal sponsor.

To promote the café and events at the Sheldon Store, the Rupert Village Trust established a web site, sends out regular e-mails and occasional mailings, and creates frequent Facebook and Instagram posts. Events include Board Game Night, S'mores on the Green, Holiday Craft Sales and yoga, writing and sewing classes.

The leadership team of the Rupert Village Trust consists of a diverse group: an artist and small business owner, the Town's zoning administrator, non-profit specialists and construction professionals.

In 2021, the Vermont Planners Association recognized the efforts undertaken by the residents and citizen leaders of Rupert, awarding it its "Project of the Year." The project was held up as a successful example of implementing a vision for a vital, walkable, mixed-use area centered on preservation in an historic village.

Learning from Rupert and Peacham, residents of Greensboro Bend could similarly work with the Preservation Trust of Vermont as it leverages the opportunities presented by the Lamoille Valley Rail Trail.

Contacts:

Preservation Trust of Vermont:

https://ptvermont.org/ ptv@ptvermont.org 802658-6647

Rupert Village Trust:

https://rupertvillagetrust.aplos.org/ rupertvillagetrust@gmail.com 2824 Route 153 Rupert, VT 05768

Guess What's Coming To Rupert!

A New Community Center & Café at The Historic Sheldon Store





Rupert Village Trust

The Trust is a newly formed nonprofit organization whose mission is historic preservation and community development in the Designated Village Center of Rupert, Vermont.

Our Project: The Sheldon Stor

We plan to acquire & renovate the Sheldon Store, and transform it into a community center and café for Rupert residents and visitors.

Slide Presentation and Information Session

Learn about the project and offer your ideas

Thursday, September 6, 6:00 - 7:00 pm, Rupert Kittay Library

Monday, September 17, 6:00 - 7:00 pm Rupert Town Office

Saturday, September 22, 10:00 - 11:00 am Rupert Kittay Library

Sunday, September 30, 1:00 - 2:00 pm Rupert Congregational Church Please note the times and locations vary.



Sheldon General Store has been the hub of the Village since the early 20th century. Here it is pictured around the time of its closing in the 1980s.



A "float" display during Rupert's Old Home Days.







