



HARDWICK LOCAL BUSINESS ACCELERATOR FEASIBILITY STUDY

February 2018

Prepared for and in collaboration with:



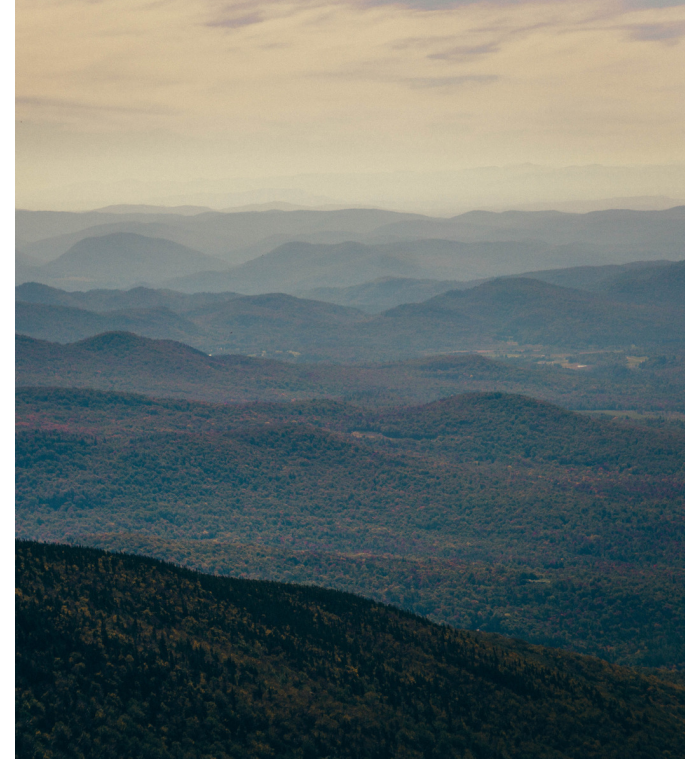


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A. EXECUTIVE SUMMARY

The Town of Hardwick, working with the Center for an Agricultural Economy (CAE), Northeastern Vermont Development Association (NVDA), and area business leaders in value-added agriculture and forestry sectors, have enlisted Kitchen Table Consultants (KTC) to conduct this Economic Planning and Feasibility Study for a multi-tenant commercial business facility in Hardwick, Vermont.

The initial research objective was to determine which vacant property (among three potential Hardwick locations) would provide the greatest opportunity for Hardwick's local economic development.

Following the selection of the Yellow Barn property as the focal point for this study, the researchers sought to understand the goals and needs of local and regional businesses to uncover the most viable potential business opportunities in Hardwick.

Although the study consisted of significant secondary research and data analysis, the majority of the work was completed using interviews and focus groups with the goal of identifying local business leaders who were willing and able to become tenants in the Yellow Barn property.

These interviews yielded a wide range of potential opportunities, which were refined using set criteria, weighting and team scoring with the Hardwick Business team.

The researchers sought to understand the goals and needs of local and regional businesses to uncover the most viable potential business opportunities in Hardwick.



A. EXECUTIVE SUMMARY

Once the top business concepts were selected, KTC facilitated a series of in-person roundtable discussions to further vet and explore each business concept with a select group of industry leaders and community leaders. This process yielded the following top five business opportunities deemed most viable:

1. Hard Cheese Aging and Distribution Center
2. Heirloom Wood Manufacturing and Workshops
3. Seasonal Local Snack Bar
4. Manufacturing Innovation and Prototyping
5. Artisan Incubator, Co-working and Makerspace

To move forward with these opportunities within a multi-tenant, integrated business center, a staged strategy was developed to prioritize next steps within the context of a longer-term vision for the facility.

The Yellow Barn property, with 4.7 acres, has the potential to become a hub of innovation and small-scale manufacturing that could generate jobs in multiple sectors, including manufacturing, education, distribution, logistics, and management.

This property has the ability to leverage local resources, talent, and the existing local business ecosystem to create high-quality unique products and services and export them to urban markets.

TOP 5 BUSINESS OPPORTUNITIES



Hard Cheese Aging
and Distribution Center

Heirloom Wood
Manufacturing and Workshops

Seasonal Local Snack Bar

Manufacturing Innovation
and Prototyping

Artisan Incubator, Co-working
and Makerspace

B. ABOUT THE PROJECT

The Town of Hardwick, working with the Center for an Agricultural Economy (CAE), Northeastern Vermont Development Association (NVDA), Kitchen Table Consultants (KTC), as well as area business leaders in value-added agriculture and forestry sectors, have conducted this Economic Planning and Feasibility Study for a multi-tenant commercial business facility.

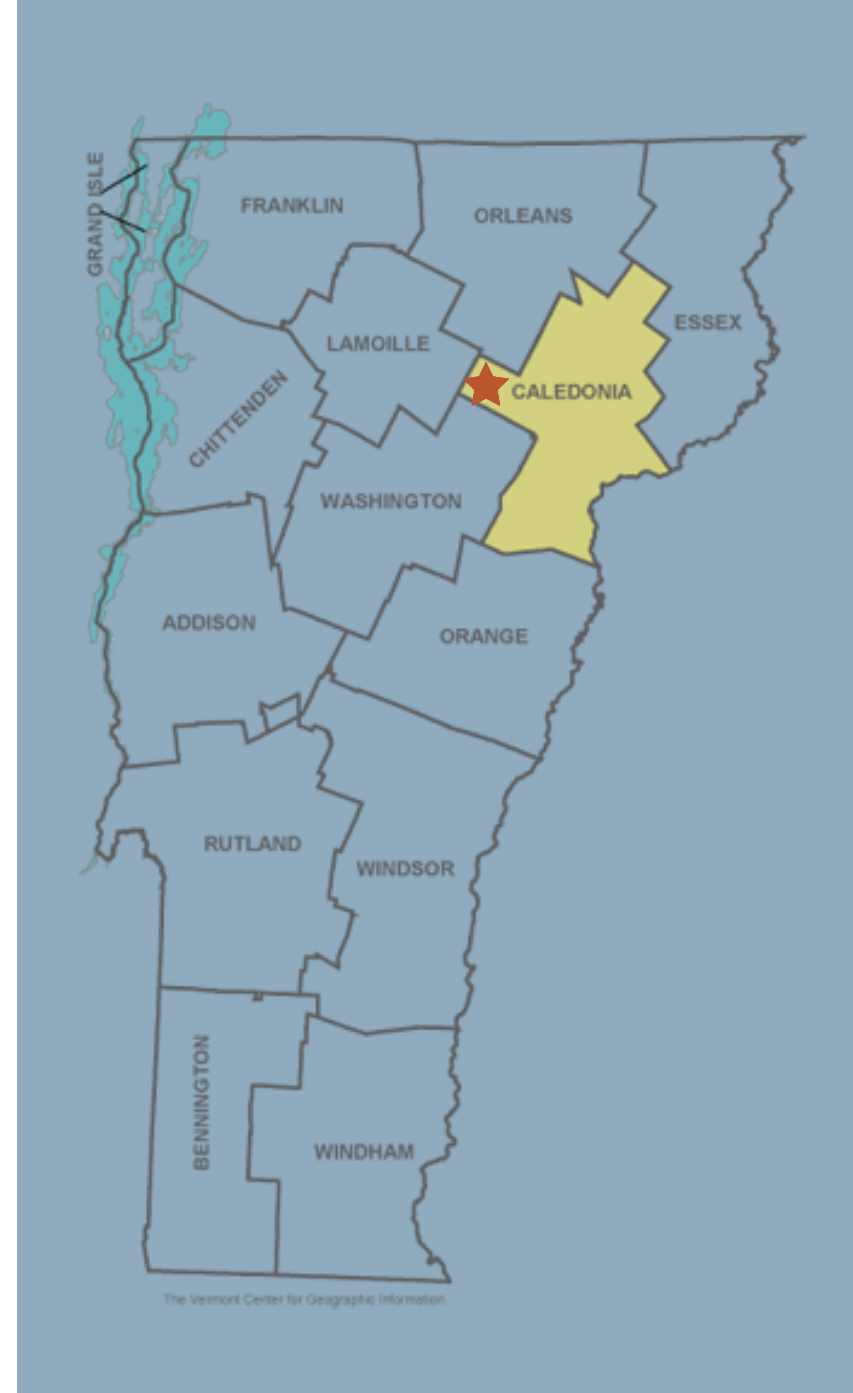
The Town of Hardwick, **located in Caledonia County, VT**, is within the 3-county region of Vermont known as the "Northeast Kingdom". The region is historically one of the poorest in VT and is part of a federally designated USDA Rural Economic Area Partnership (REAP) Zone. The Northeast Kingdom has a poverty rate of approximately 13.5%.

Over the past decade, the Town has undergone an economic resurgence through the growth of value-added agricultural and forest-based enterprises,

including the successful Vermont Food Venture Center - a business incubator for start-up food processing companies.

The diverse nature of the businesses we expect to use the facility will help to build economic resilience, and promote a quality of life for which Hardwick has become known in recent years.

This project is in alignment with the local and regional economic development priorities and plans, as well as the recently published Northeast Kingdom Food System Plan. This project is also in alignment with the Town of Hardwick's Municipal Plan goals and objectives (pg 53).



C. RESEARCH OBJECTIVES



1. The initial research objective was to determine which vacant property (among three potential Hardwick locations) would be the greatest opportunity for Hardwick's local economic development.

Following the selection of the Yellow Barn property as the focal point for this study, Kitchen Table Consultants (KTC) established the following research objectives as the guiding questions to be researched in this study. Each objective is followed by specific research questions.

2. Understand the capacity and growth goals of local and regional business leaders.

- Who are key local business leaders and entrepreneurs?
- What do these local business leaders need to grow their current ventures?
- Do any of these local business leaders need additional space?
- Are there appropriate regional/national businesses that might be interested in renting space in Hardwick?

C. RESEARCH OBJECTIVES

3. Identify factors that are limiting regional business development - in order to uncover potential opportunities for new business/infrastructure development that would support the continued growth of Hardwick's local economy.

- a. What are local businesses struggling with?
- b. Where are their pain points that a new business facility could potentially help alleviate?
- c. What is holding Hardwick's economic development back?
- d. If labor availability is limiting economic development, what types of educational programs could be developed in partnership with the local high school or nearby colleges and universities?

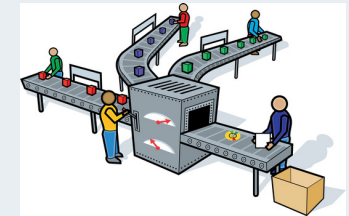
4. Identify which types of businesses would be most viable to seek to attract as partners or tenants in the Yellow Barn property. Understand concerns about these various opportunities.

- a. Which specific types of food and agricultural business models would be most viable in Hardwick? (e.g. Retail, Manufacturing, Distribution, eCommerce, etc.)
- b. Which specific types of specific businesses would be most viable for the Yellow Barn property? (e.g., Wood products, Alcoholic beverages, specialty food, etc.)
- c. Who are potential tenants or drivers for the property's development?
- d. What do potential tenants need exactly (square footage, water, electric, etc.)?
- e. What time frame are potential tenants using when considering a growth initiative?

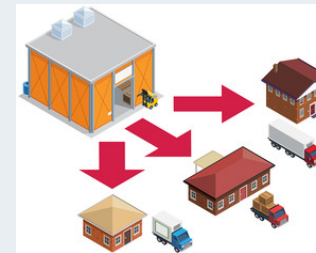
RETAIL



MANUFACTURING



DISTRIBUTION



ECOMMERCE



D. RESEARCH METHODS

The research methods for this feasibility study included a combination of secondary research, on-site assessments, 1-on-1 interviews with business and community leaders, data analysis with opportunity scoring and ranking, and in-person round-table focus groups.

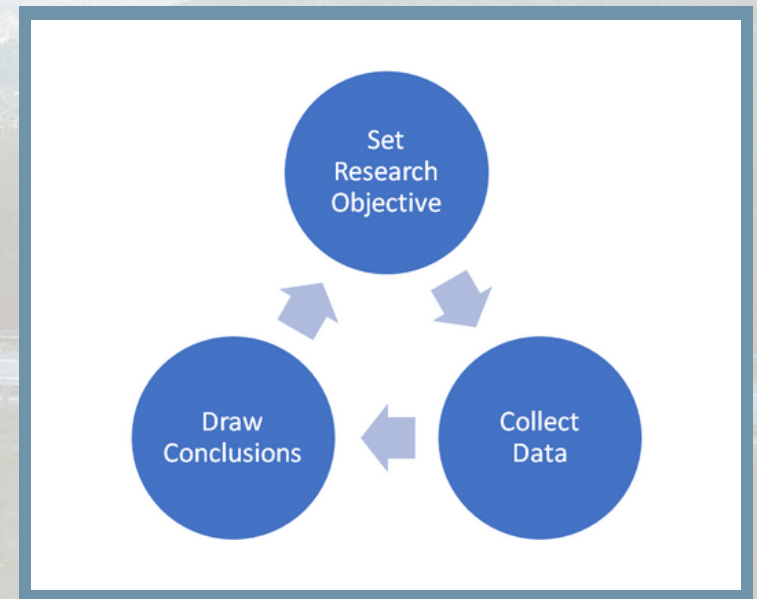
All of these research methods were implemented using an iterative approach to research. This means that an initial research objective was set (e.g. determine which location to focus on), data was collected to help accomplish the objective, conclusions were drawn, and then based on the conclusions additional research objectives were set. This process continued through several rounds in order to continually refine the project's focus and maximize the value of the final outcome.

Secondary Research

KTC started with a review of key planning documents that outlined objectives and growth strategies at the local, regional, and statewide level. The goal of this stage of the research was to understand the context for Hardwick's economic development.

KTC reviewed the following planning documents:

1. Northeast Kingdom Food System Plan
2. The Town of Hardwick's Town Plan
3. Vermont's Farm to Plate Plan
4. Northern Vermont Economic Development District's Comprehensive Economic Development Strategy
5. Hardwick Industrial Site Suitability
6. Storage and Distribution Report for Local Food in the Northeast Kingdom
7. NVDA's Regional Goals and Strategies
8. USDA's Regional Food System Plan for Vermont's Northeast Kingdom
9. NVDA's NVDA-Strategic Industries in the Northeast Kingdom
10. Hardwick Village VT 15 Transportation Assessment



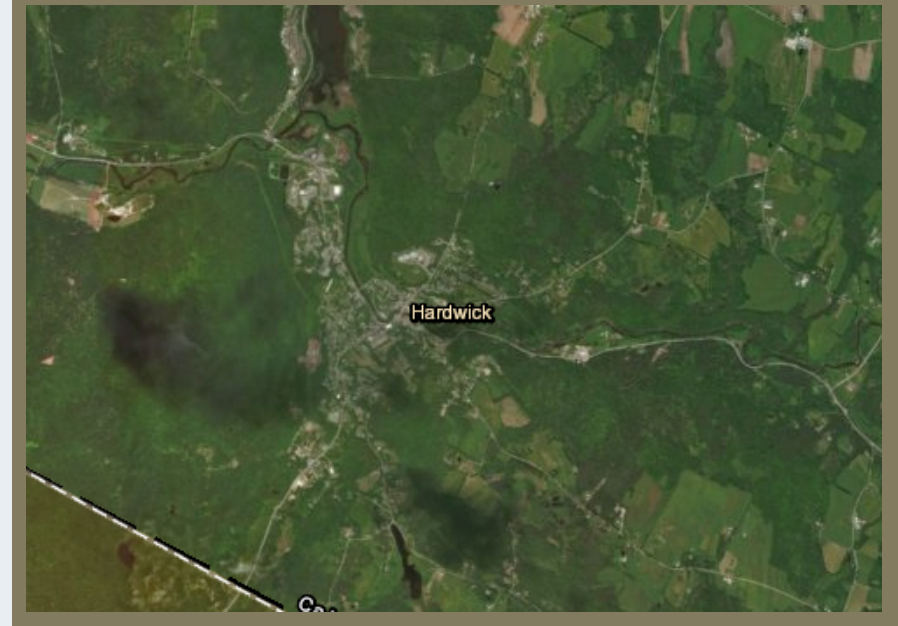
D. RESEARCH METHODS

Site Analysis

Once reviewed, the Northeastern Vermont Development Association (NVDA) conducted a site analysis of each potential location. For each location, the NVDA assessed the following aspects:

- natural resource constraints
- highway access
- traffic counts
- parking issues
- permitting and zoning considerations

The NVDA used site visits, interviews with government officials, and their own knowledge-base to assess the impact of the above factors on the viability of each location.



For more than 50 years, NVDA has been dedicated to helping businesses succeed.

D. RESEARCH METHODS

One-on-One Interviews

Once the location of the Yellow Barn property was selected as the focus for this project, KTC conducted a series of one-on-one interviews with 29 business, community, education, and government leaders. (See Appendix A) Most interviews were conducted in-person on site, but some were phone interviews.

This initial approach to primary research was selected (over surveys or group meetings) for five reasons:



- 1. Customize each interview to the specific circumstances and role of each interviewee.*
- 2. Create a focused dialogue that encouraged honest sharing of perspectives and ideas.*
- 3. Understand the breadth of perspectives and potential opportunities without the bias of "groupthink" impacting the subject's comments and feedback.*
- 4. Actively follow-up on specific comments to reveal unforeseen opportunities.*
- 5. Build a sense of community ownership for the project with the goal of increasing buy-in and support of the final project.*

These interviews yielded a wide range of potential opportunities and business concepts that may be viable in Hardwick and in the Yellow Barn facility. In addition, these interviews yielded a list of key attributes that business leaders felt were important for any venture to have in Hardwick, VT.

D. RESEARCH METHODS

Opportunity Scoring

To refine the list of potential business concepts and provide increased focus for the groups, KTC developed an opportunity scoring tool to help the Hardwick Business team assess each concept using a data based methodology. This process included the following steps:

1. *Create a list of important attributes for a business to possess for the Yellow Barn. (e.g. fit with Hardwicks "food/ag brand") (See Appendix B)*
2. *Facilitate a discussion with the Hardwick Business Team to assign weights of 1-3 to indicate each attribute's importance to the location. (e.g. "ability to create local jobs" was weighted with a "3" as more important than the "ability to have a dynamic, changing aspect" which was weighted with a "2") (See Appendix B)*
3. *Provide a framework for each member of the Hardwick Business Team to score how much each opportunity possesses each given attribute.*
4. *Average the team's weighted responses and summarize the data to help inform decisions about the most viable and appropriate business opportunities.*

D. RESEARCH METHODS

Focus Groups

Once the top business concepts were selected, KTC facilitated a series of in-person roundtable discussions to further vet and explore each business concept with a select group of industry leaders and community leaders.

Focus Group Topics and Attendees

Retail / Restaurants / Brewpub / Coffeeshop

- Emily Maclure of Craftsbury Country Store
- Eleanor Leger of Newport Tasting Center
- Annie Gaillard of Buffalo Mtn Coop
- Shari Cornish of Whistle Emporium
- David Snedeker, NVDA
- Jon Jewett, Town of Hardwick
- Sarah Waring, CAE

VT-Branded Wood Hub, Specialty Wood Manufacturing / Education

- George and Erin Sawyer of Heirloom Windsor Chairs
- Christine McGowan, Vt Sustainable Jobs Fund Forest Products Program Director
- Erin Lorentz, Wood Manufacturer's Assoc
- Paul Frederick, Hardwick resident and VT FPR Wood Utilization
- Alison Low, NVDA
- Sarah Waring, CAE
- Jon Jewett, Town of Hardwick

Alcoholic Beverage Manufacturing (beer, cider, gin, etc.)

- Ryan Christianson of Caledonia Spirits
- Eleanor Leger of Eden Ice Cider
- David Snedeker, NVDA
- Jon Jewett, Town of Hardwick
- Sarah Waring, CAE

Food Manufacturing / Meat Processing

- Mateo Kehler of Jasper Hill
- David Snedeker, NVDA
- Jon Jewett, Town of Hardwick
- Sarah Waring, CAE

Collaborative Workspace, Innovation Hub, Office Space

- Ceilidh Kane and Naomi Ranz-Schleifer of Wonderarts
- Sean Pelkey of Gardener's Supply
- Paul Wade, The Foundry
- Alison Low, NVDA
- Sarah Waring, CAE
- Jon Jewett, Town of Hardwick

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Location A:

Yellow Barn Property

General Description

281 Vermont Route 15 West: Parcel 09011-00000

Total Acres: 4.7

Total assessed value: \$160,100

Building type: Repair Garage (converted barn)

Year built: circa 1840 (according to State Historic Register)

Overall building condition: fair-average

Barn was originally part of the farmhouse located across the street and was converted to a commercial use in the 1980s.

Adjacent use immediately to the south is a parcel dedicated to the Lamoille Valley Rail Trail.



CIRCA 1840

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Zoning Considerations

The property is in an area that was rezoned in 2016. The entire parcel is in the Highway Mixed Use district, the purpose of which is “to allow automobile-oriented businesses and other compatible uses along major travel corridors contiguous to the historic village centers, while maintaining safe and efficient traffic flow.”

Agricultural and forest processing is allowed in this district, as is earth extraction, light industry, and sawmills. Other conditionally-approved uses include retail and hospitality. The district also allows for “mixed use,” meaning that more than one principal use may be allowed on the same lot. Each use would require about 5,000 square feet. The parcel backs up to Hardwick’s Industrial District, which can accommodate the Town’s most intensive commercial/industrial uses.

- Minimum lot size: 20,000 sq. ft.
- Setbacks: 20 feet on all sides.
- Minimum road frontage: 100 feet.
- Maximum height of a structure: 35 feet
(Although there are some extenuating circumstances where this height restriction might be waived by the DRB.)

Agricultural and forest processing was added to the Town of Hardwick’s development bylaws in 2016. The use is defined in fairly inclusive terms, with the exception of slaughter and saw mills. Examples include but are not limited to: the making of compost products, herbal products, food products, wreaths, woolen products, cheese, and candles. This use can also incorporate wholesale or retail activity, provided that it is clearly “incidental, secondary, and ancillary” to the processing activities.

Other siting considerations:

- All industrial activities, including the maintenance and repair of vehicles and equipment, must be enclosed.
- The DRB will review outdoor storage, and may require screening. Materials cannot be stored in flood hazard areas (see below), and storage must be set back at least 100 feet from road rights-of-way, surface waters, wetlands and adjacent properties.
- The Town of Hardwick has performance standards for all uses that are measured at the property line. These standards include smoke and emissions, noise, glare, vibrations, electromagnetic interference. Regularly occurring noise cannot be in excess of 65 decibels.
- New structures will have to be at least 75 feet away from a water body, and the site design will have to maintain a vegetation buffer of 25 feet from the top of the streambank.

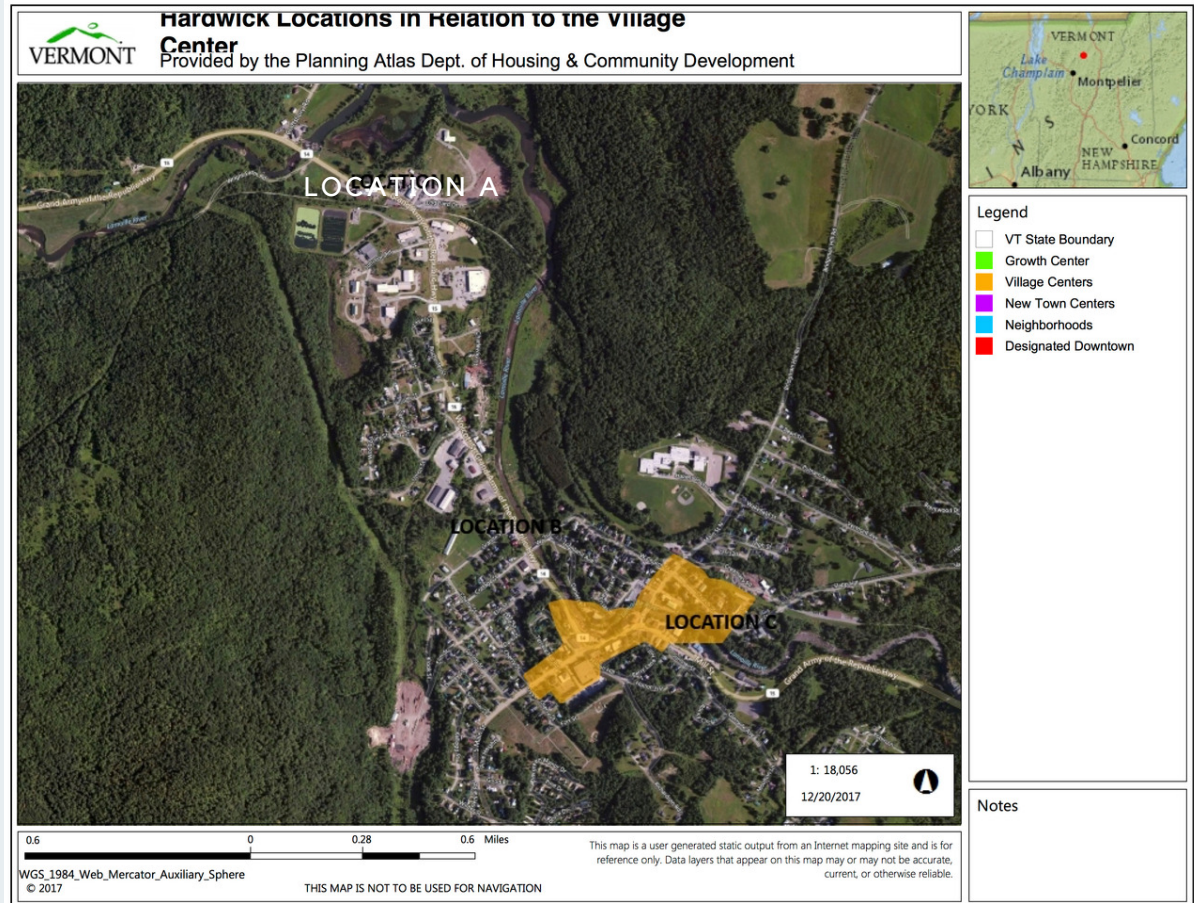
E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Additional Permitting Funding Considerations

The site is not located in the Designated Village Center, and is more than a half-mile from the boundary. (See Village Center map).

The site was added to the State Historic Register in 1988. The use of grant funds for redevelopment will trigger historic preservation review, and this is also likely to happen even if no grant funds are involved. The Act 250 Coordinator found no underlying Act 250 permit associated with the site. Since Act 250 review in Hardwick is only triggered on commercial developments of 10 acres or more, redevelopment of the site would not trigger Act 250 review. This would obviously reduce redevelopment costs somewhat.

Brownfield Phases 1 and 2 Assessments have been done on the site. The assessments revealed no significant findings.



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Nearest Highway Access, Circulation, Parking

A State Highway access permit would be required BEFORE any local approval of a site plan can be granted. The adjacent lot west of the Yellow Barn site is considered a Highest Priority Wildlife crossing, a stretch that runs about 1,600 feet. These crossing areas, bordered by vegetation with little development, are buffered to connect larger blocks of forest and habitat. The “highest priority” crossings connect highest priority connectivity blocks, areas that are critical for allowing wildlife movement and genetic exchange. If the proposed use involves increases in traffic flow, the site design should incorporate context-sensitive measures to ensure safe passage, such as signage, and try to avoid barriers to crossings.

Nearest traffic counts are performed by VTrans, road segment on Vt. 15, starting from the intersection with VT 14 to Main Street. Counts are estimated (based on counts from adjoining areas) and have increased by more than 10% since 2010.

Relevant minimum parking requirements are as follows. The DRB has the ability to waive some requirements, if, for example, a use has access to shared parking, or offsite parking within a walkable distance.

Annual Average Daily Traffic (AADT)

In 2010 → 6,600

In 2012 → 6,900

In 2015 → 7,300

Relevant Minimum Parking Requirements

Office/Personal Service	1 per 300 sq. ft. of gross floor area
Retail	1 per 300 sq. ft. of gross floor area
Restaurant/Bar	1 per 3 seats, and one per employee on largest shift
Warehouse/Manufacturing/Industry	1 per 2 employees on the largest shift

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Hardwick's zoning bylaw requires off-street loading areas for commercial and industrial uses in this district (i.e. anything that requires more than a standard parking space.) Loading areas have to be clearly marked and located in a manner that doesn't obstruct access or visibility.

In absence of an identified use, it is difficult to identify specific loading and truck delivery needs. There are no state requirements for off-road truck turning radii. Nevertheless,

it is imperative to consider truck turning in the site design.

This aspect did not receive adequate consideration in the design of the Vermont Food Venture Center, and the site now has some circulation constraints. Figure 1 shows what would be needed for a 53-foot trailer truck (approximate turning radius of 45 feet. Without knowing precise parking needs,

the site appears to be able to accommodate this.

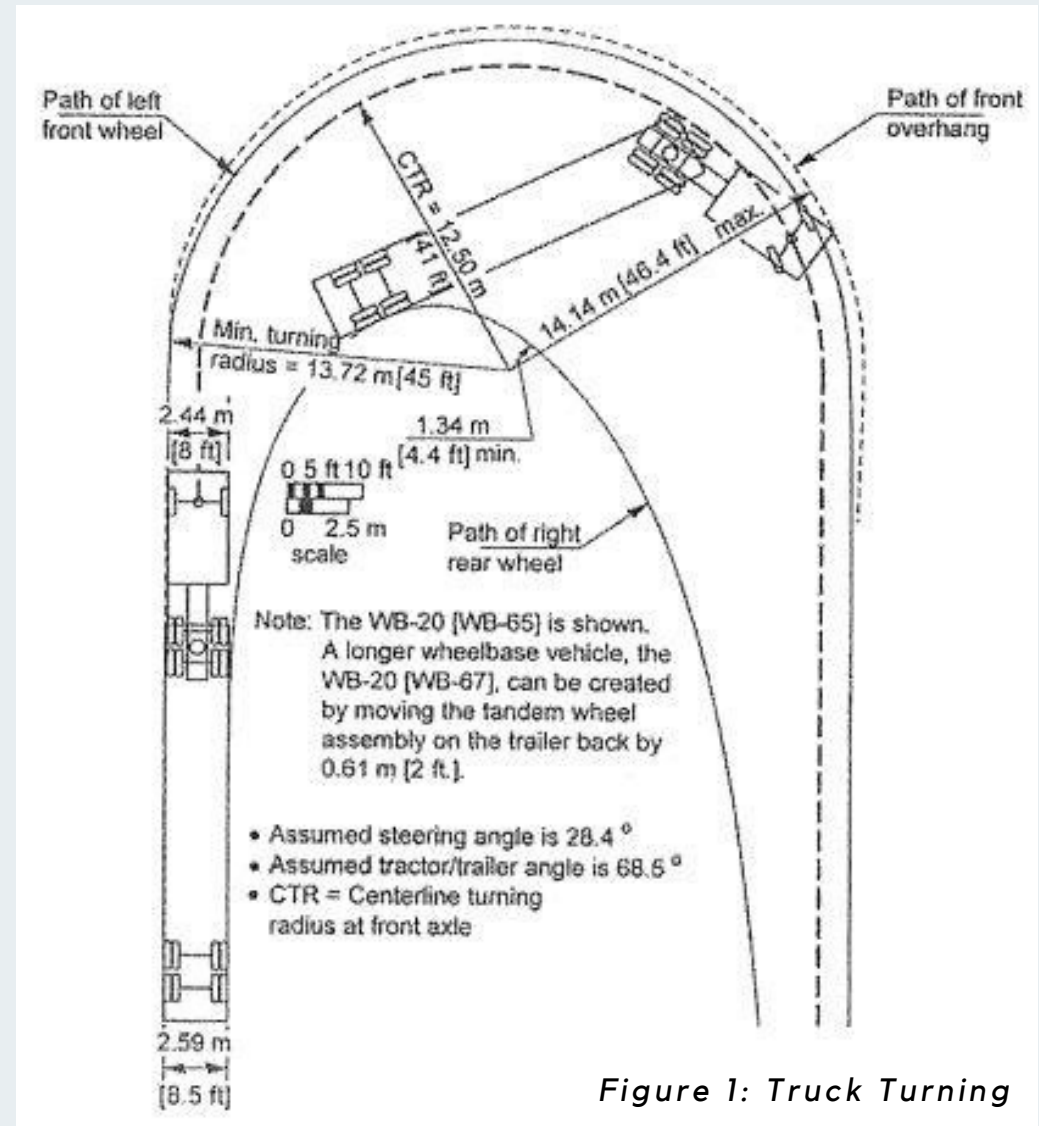


Figure 1: Truck Turning

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints

Hardwick has an extensive history of flooding, and numerous properties are affected by hazards related to inundation or fluvial erosion. The Town participates in the National Flood Insurance Program and recently updated its regulations to ensure minimal compliance with FEMA development standards. Different types of flood risks have different implications for development. Some of the flood risks identified below overlap. Only about 1.6 acres of the site have no flood risks at all. We can safely assume that redevelopment of the site might entail the services of a civil engineer to determine elevations on some areas of the site.

Floodways

- Floodways (0.08 acres): These are the areas in the stream channel where flood waters run the deepest and fastest, and they must remain free of obstruction so that floodwaters can be conveyed to adjacent floodplains. Structures, storage and fill are prohibited in these areas, and at-grade parking is subject to conditional use review. The placement of ground-mounted solar panels is not subject to local regulation, but it does fall under review of the State of Vermont Public Utility Commission (PUC). It is highly unlikely that the PUC would allow solar panels in this area.

River Corridors

- River Corridors (1.5 acres): This is the minimum area required to accommodate lateral movement of the stream channel over time. The town of Hardwick does not regulate this form of flood hazard, but it is possible that extra-jurisdictional regulations will require restrictions. For example, the PUC would probably not approve the placement of solar panels in this location unless a site investigation could demonstrate that the riverbank was stable and not subject to collapse.

Floodplains

- Floodplains in Zone AE (2.17 acres): Structures with a federally-backed mortgage must carry flood insurance in this area. Government funded grant programs will likely require development in this area to at least meet minimum standards, but in some cases, they might enforce flood resilience measures that exceed the minimum standard. Structures must be elevated or floodproofed at least to the base flood height. Some fill is allowed, but it cannot raise the base flood elevation by more than one foot. At grade parking is allowed, but vehicles should remain licensed and ready to move on short notice. Storage in this area is prohibited. It is possible that ground mounted solar can be installed here, provided that floodwater retention capacity is maintained and equipment is adequately anchored and watertight below the base flood.

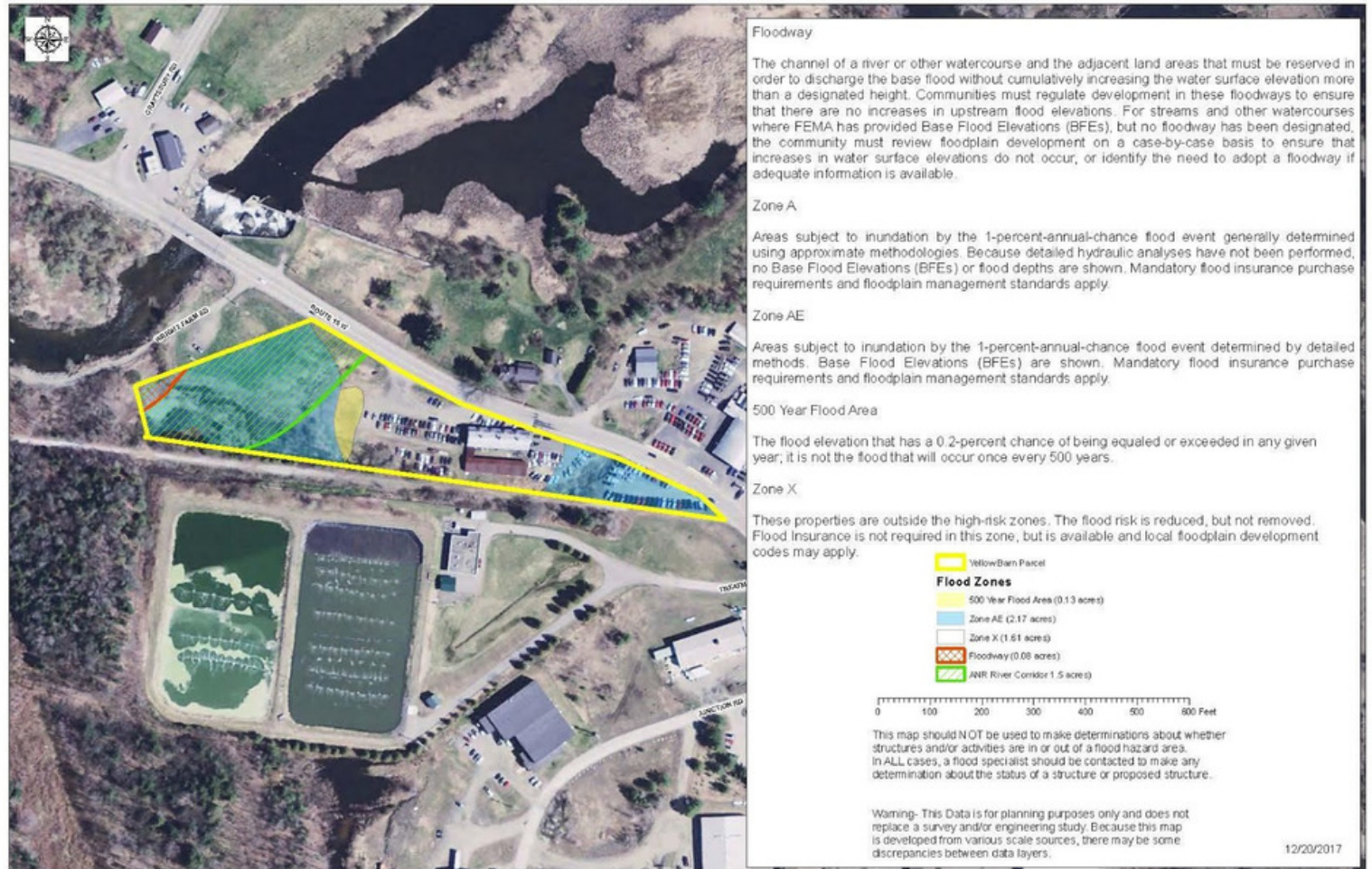
500 Year Floodplain

- 500 Year Floodplain (0.13 acres): This is the area that could be inundated in a highly significant flooding event. Flood insurance is not required for this area, but it is possible that some government funded grant programs would either place restrictions or require mitigation in this area.

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Site Conclusion

The site does face some redevelopment challenges for the proposed uses under consideration, but these challenges are fairly common, given Hardwick's history of flooding and numerous historic assets. The likely business uses are compatible with the objectives of Hardwick's zoning, and all could be sited on the most travelled road corridor in town. Even though the barn is not in the designated Village Center, the barn serves as an iconic gateway to the downtown area, and it is possible to demonstrate a strong relation to the strength and vitality of the downtown area.



AN
 ICONIC
 GATEWAY

The boundaries exhibited on this map are a general range.



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Location B:

Atkins Field ("The Granite Sheds")

General Description

Granite Street, Parcel 23003-00000

Total assessed value: \$83,900

Owned by the Center for Agricultural Economy (CAE) since 2008

Total Acres: 15.27

Acquired by CAE with the intent of preserving the land for agriculture or community use. In addition to the historic granite sheds, the parcel contains a community garden, a bicycle pump track, a skating rink (in the winter) and recreational trails. The parcel is actually two tracts because it is bisected by the Cooper Brook and a utility easement. The primary uses occur on the 10-acre tract, and there is a private trail and a tiny "bog bridge" that crosses the Cooper Brook to the remaining approximate 5 acres, all of which contain slopes of at least 15% or more. Only the 10-acre tract is located inside the Town's sewer service area.

E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Zoning Considerations

The 10-acre portion of the parcel is contained in the Village Neighborhood District, and the balance of land is located in the Forest Reserve District. The purpose of the Village Neighborhood District is “to provide for high density residential development and appropriate non-residential uses in existing neighborhoods located close to Hardwick’s traditional downtown in a manner that maintains historic settlement patterns and streetscapes.”

Non-residential uses allowed pending conditional use are Agricultural and Forest Processing and Mixed Use.

Restaurants/bars, retail, light industry, and sawmills are not allowed per se. Nevertheless, “adaptive reuse” of historic structures is allowed in this district to establish a restaurant, retail operation, storage facility, cultural facility, or indoor recreation center.

- Minimum Lot Size: 7,500 square feet
- Minimum Lot Area per Unit –Class 2: 1 per 7,500 square feet Minimum Lot Area per Unit; Class 3 1 per 7,500 square feet
- Minimum Frontage: 70 feet
- Minimum Setback/Front and Side: 10 feet
- Minimum Setback/Rear: 15 feet
- Minimum Setback/Side and Rear for Accessory Structure: 5 feet
- Maximum Height: 35 feet



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Additional Permitting Funding Considerations

The property is not located in the Designated Village Center District, but is part of the Granite Street Historic District, which was added to the State Register back in 1988. The District contains 102 properties, bounded by Wolcott Street (VT15), Holcomb Hill Road, Winter Street, Kellogg Street, River Drive, and Granite Street. The majority of houses are late 19th century-early 20th century vernacular workers homes. The use of state and/or federal funding, licenses, or permits for a project that may affect a historic property will trigger the need for regulatory review. The CAE is currently working with the Department of Historic Preservation to delineate a preservation and development plan for the site.

Redevelopment of the site would trigger Act 250 review. In fact, there is already a draft Act 250 Permit for the site to conduct the following activities: demolish an existing barn (the “workshop building”) and to construct a timber frame pavilion (30' x 60'), trails with new “bog bridge”, kiosk, parking improvements, wastewater disposal via portable toilets, exterior signage, and seasonal ice rink. The Project will be accessed via two existing driveways from Granite Street, and includes abandonment of other existing access drives. The Permit only addresses “Phase 1” of a master plan project, and it does not permit construction of the future phase(s). Final issuance of the permit is pending approval of exterior signage, and trail and bridge design.

The site was conveyed to the CAE with a number of deed restrictions, all of which are intended to preserve the historic character of the area and securing the property for agriculture or community use.

Nearest Highway Access, Circulation, Parking

The property is connected to Route 15 by way of Granite Street, a local road going through a largely residential neighborhood. Although a tractor trailer is used on this street, it would not be possible to accommodate a turning radius as shown in Figure 1, given the current configuration of the site. NVDA performed traffic counts on Route 15, just 250 feet west of Granite Street, back in 2007. AADT was 9,898, with peak volumes of 742 at 11:00 a.m. and 883 at 4:00 p.m. (This traffic data does not provide any insights into traffic flow that turns into Granite Street.)



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints

Nearly half of the 10 acre parcel (the west of the Granite Sheds) contains class 2 wetlands. (See attached map).

A similar portion is considered “Highest Priority” conservation design by the Agency of Natural Resources. This designation takes into account priority forest and connectivity blocks, as well as riparian corridors. (See attached map.)

Finally, the entire 10-acre flat portion of the property contains some form of flood hazard, which means that virtually no outdoor storage could occur unless materials were stored in the 5-acre portion of the parcel. Since this portion is connected only by a footbridge, this is not feasible. (See the analysis of Location A for an explanation of each flood hazard risk.)

- Floodways (2.83 acres)
- Floodplains in Zone AE (10.63 acres)
- 500 Year Floodplain (.88 acres).
- River Corridors (6.82 acres)

Site Conclusion

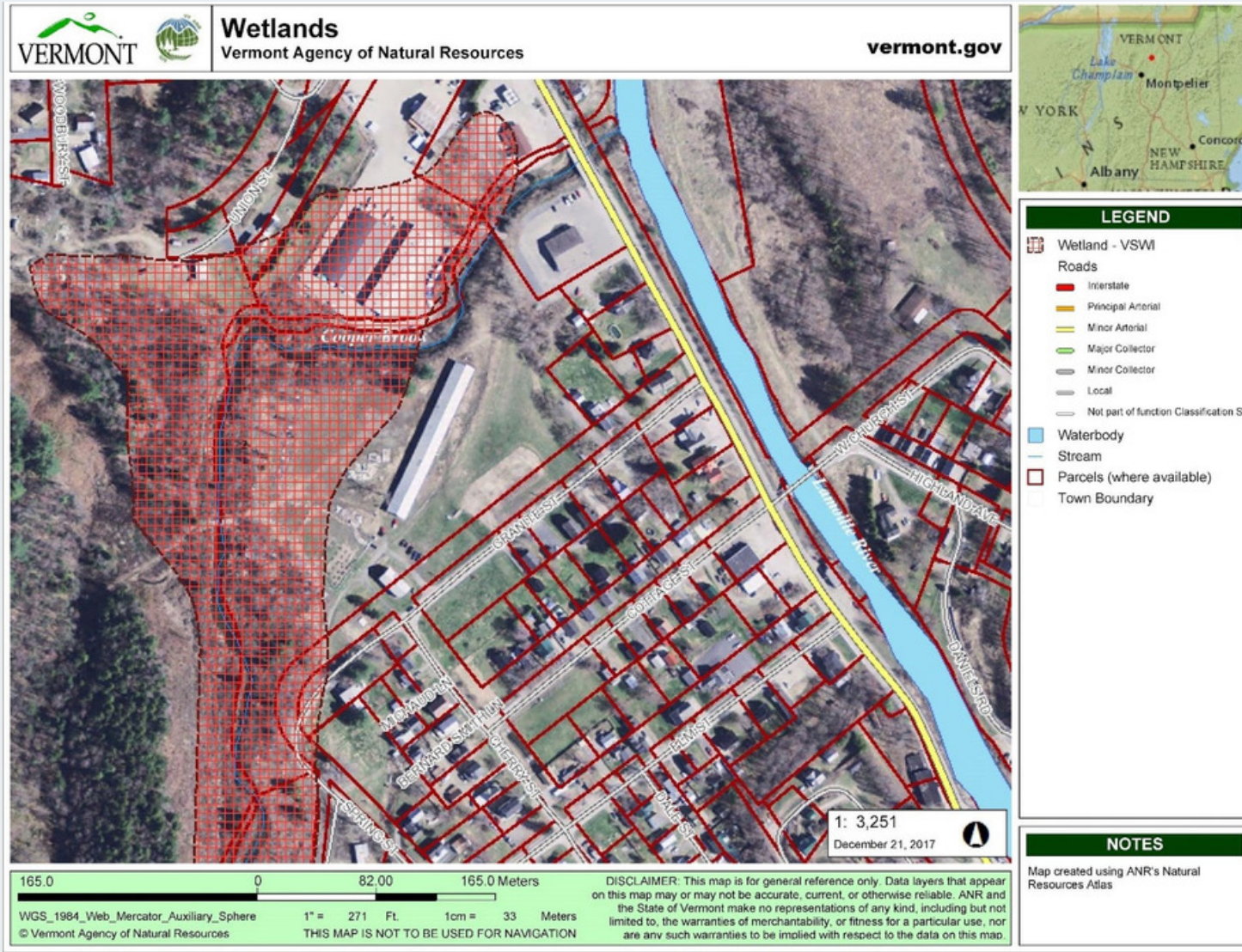
Only the 5-acre portion of the parcel is outside of flood hazard areas. Yet, for all intents and purposes, that portion is not developable due to zoning considerations, steep slopes, inadequate road access, and critical forest blocks.

Any substantial improvement of the 10-acre parcel would have to be either elevated to the base flood or waterproofed, adding to development costs and significantly limiting commercial or industrial activity on the site.

Even if deed covenants could be accommodated, the Atkins Field site faces numerous natural resource constraints and should therefore be considered inappropriate for likely food/agricultural/wood product uses.

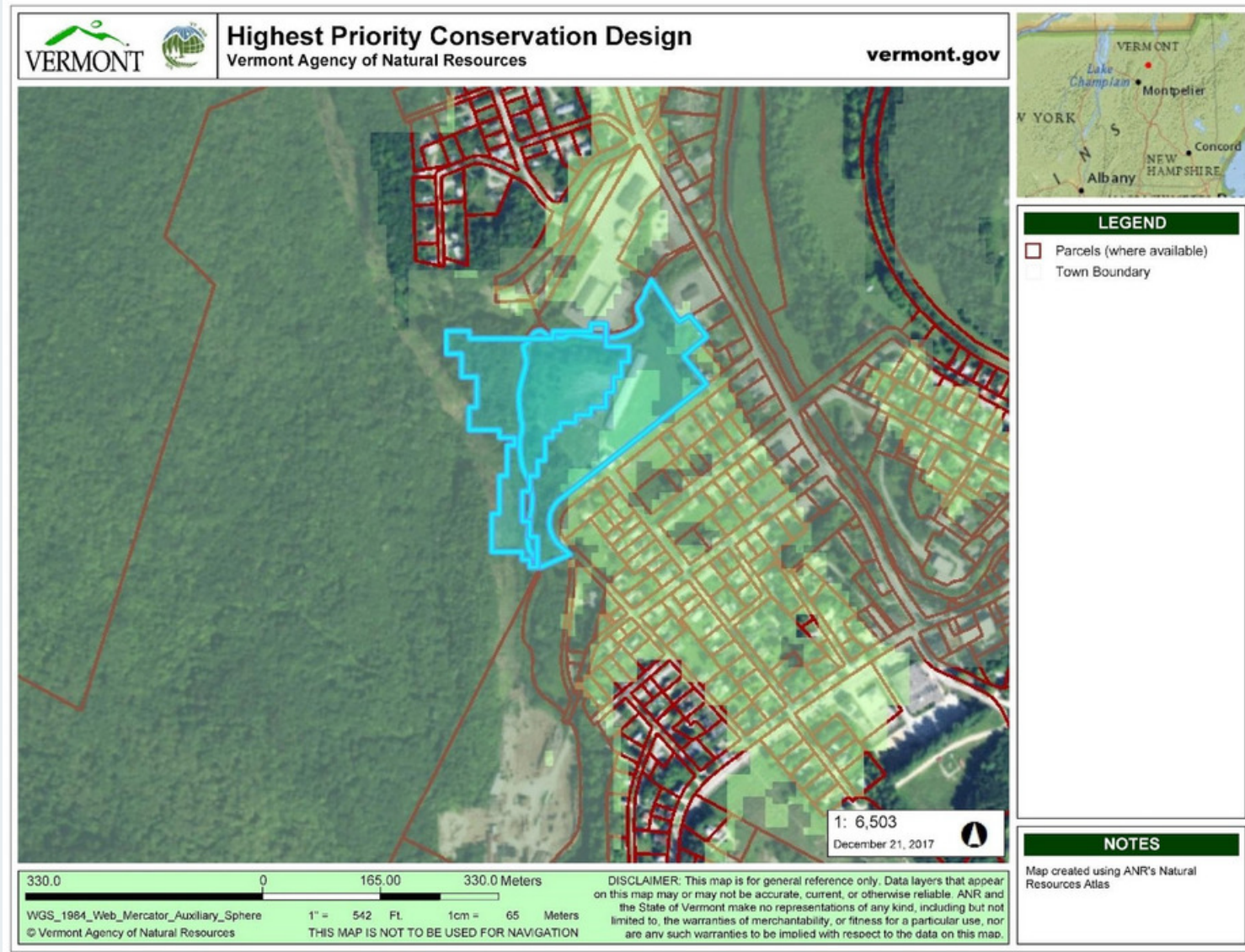
E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints



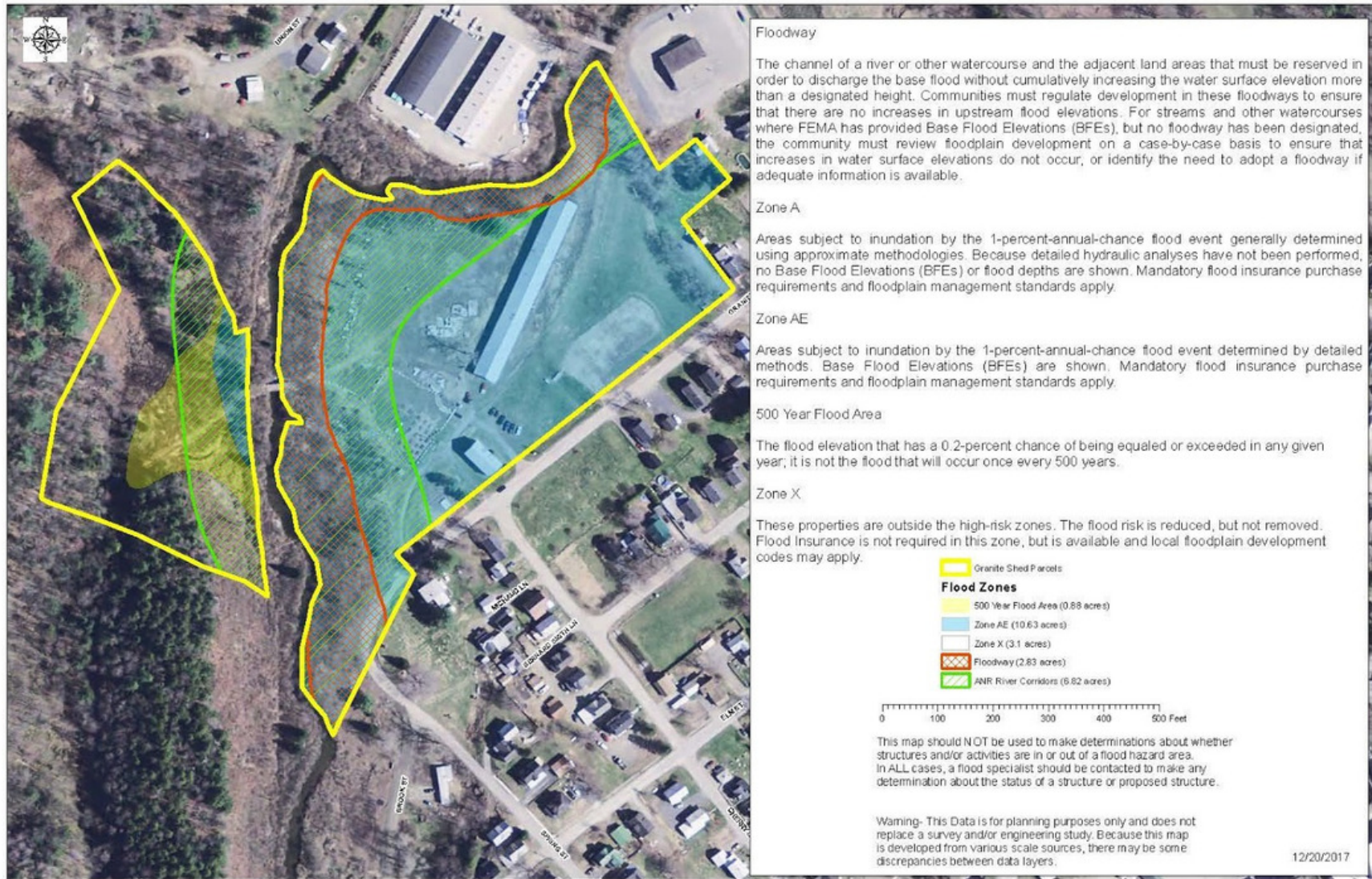
E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Location C: **Bank Building**

General Description

21 Mill Street, parcel 24051-00020

Year built: 1910

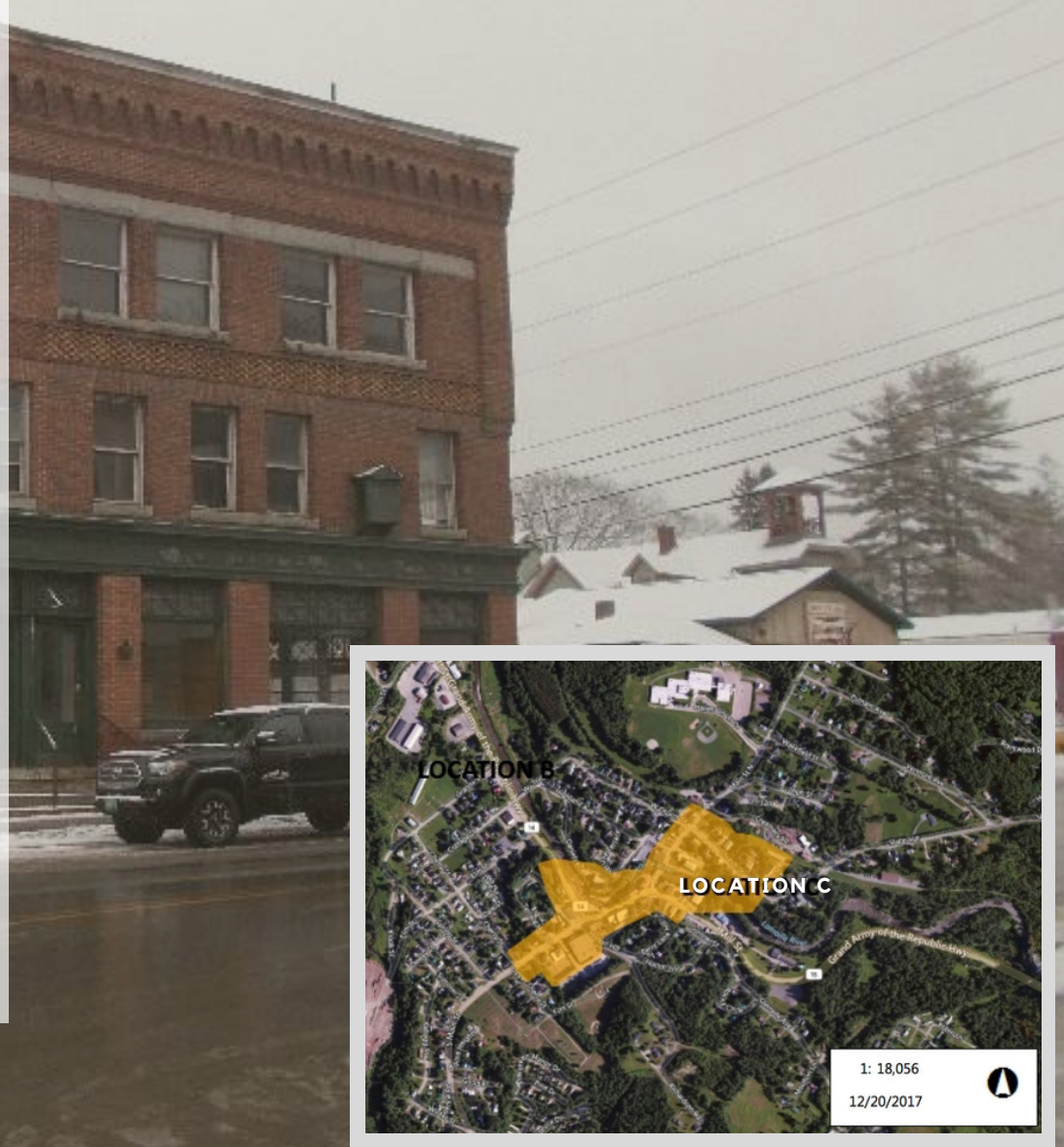
Total Assessed Value: \$199,500

Total acres: 0.18

Gross floor area of the building: 9,054 sq ft

Finished area: 4,280 sq ft

The property is currently on the market for \$185,000. The first floor (site of the former bank) has two vaults and a drive-up window and contains a number of historic architectural elements such as marble floors and mullioned windows. The second floor has 7 rooms, and 1 1/2 baths, as well as second floor back porch. The third floor is vacant. The property has no parking spaces.



E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Zoning Considerations

The property is located in the Central Business District, the purpose of which is to “support a compact mix of commercial, professional, civic and residential uses in Hardwick’s traditional downtown in a manner that maintains and enhances the area’s historic character and economic vitality.” Relevant uses that may be establishing pending conditional use review are light industry, restaurant, retail sales, and warehousing and storage. Agricultural and forestry processing is not allowed in this district. Adaptive reuse is allowed in this district, and this property would be eligible for consideration for restaurant, retail, cultural facility, indoor recreation, and storage.

Performance standards and provisions pertaining to light industry would apply, (such as required screening of objectionable views from neighboring properties). In the Central Business District, parking requirements extend only to employees of a use – one space per every 2 employees.

Additional Permitting Funding Considerations

The property is located in the Central Business District, the purpose of which is to “support a compact mix of commercial, professional, civic and residential uses in Hardwick’s traditional downtown in a manner that maintains and enhances the area’s historic character and economic vitality.” Relevant uses that may be establishing pending conditional use review are light industry, restaurant, retail sales, and warehousing and storage. Agricultural and forestry processing is not allowed in this district. Adaptive reuse is allowed in this district, and this property would be eligible for consideration for restaurant, retail, cultural facility, indoor recreation, and storage.

Nearest Highway Access, Circulation, Parking

NVDA performed the nearest traffic counts on Main Street in 2007 (approximately 125 miles east of the intersection of Rte. 15 and 14). AADT is 9,459, and peak volumes are 681 at 11:00 a.m. and 868 at 3:00 p.m.

This site has no parking. However, the adjacent property (consisting of 1/3 acre) is for sale. It is possible that the adjacent property could be purchased to create off-street parking. (The adjacent property is for sale.) Nevertheless,

accommodating off-street turning for trailers (as in Figure 1, p17) and parking would probably not be feasible.

02.24.2016

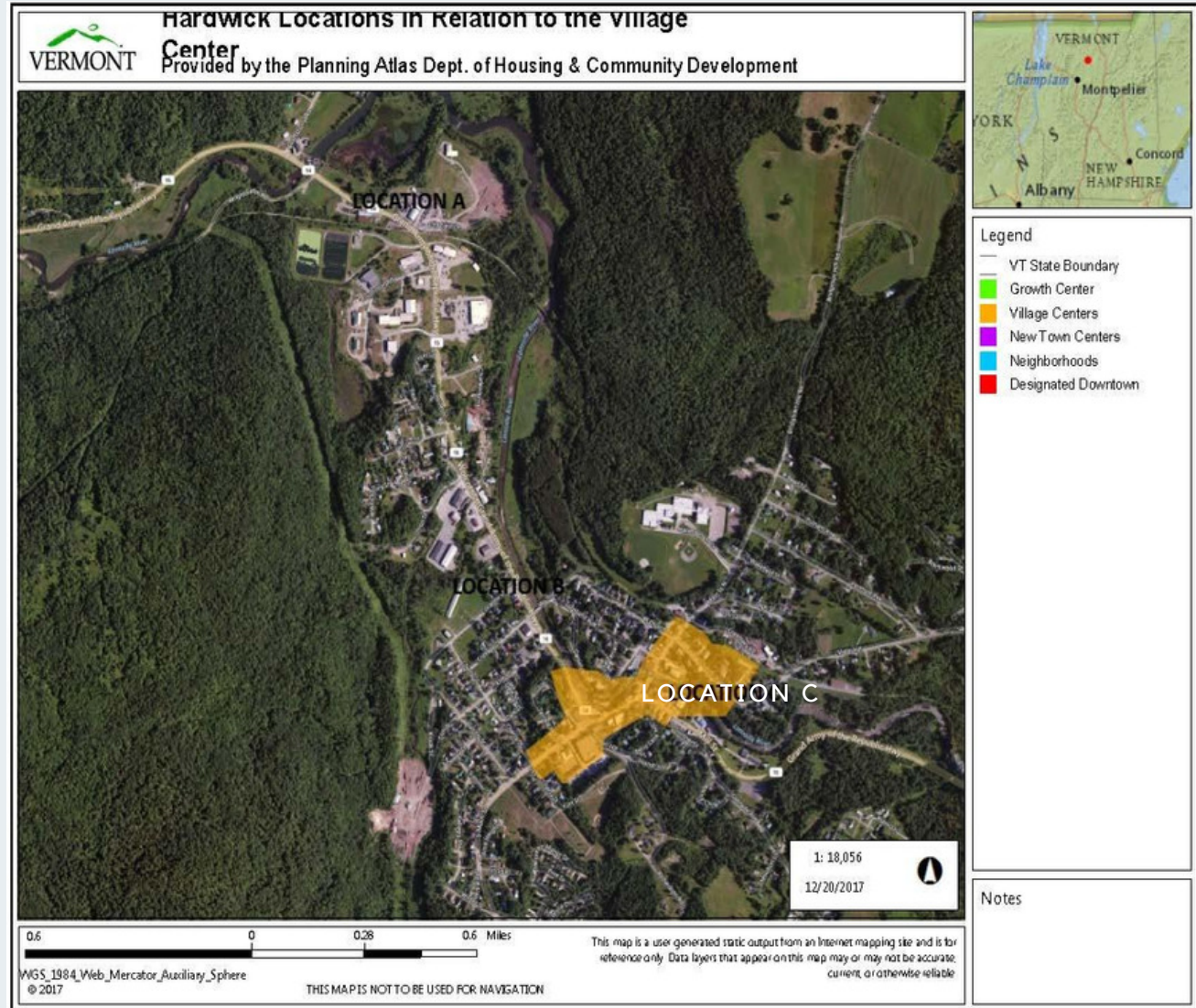
E. SITE ANALYSIS OF POTENTIAL LOCATIONS

Natural Resource Constraints

The property is located along the Lamoille River. Part of the parcel is located in the 0.2 percent flood zone. This would not trigger the flood insurance requirement, and the property would not be subject to the Town of Hardwick's flood hazard regulations.

Site Conclusion

Some, but not all, proposed uses are compatible with Hardwick's zoning bylaw. Limited parking and loading create some constraints for some of the proposed uses. Nevertheless, the available tax credits should be promoted and pursued to establish a use that is complementary of the proposed uses, such as hospitality, retail, or dining.



F. FINDINGS AND CONCLUSIONS

After carefully considering all three properties, NVDA concluded that the Yellow Barn would be the most appropriate property to focus the remainder of this feasibility study.

Conclusions of Location Assessments

Given Hardwick's needs, it's difficult to build anything appropriate in the Atkins Field site, and most uses under consideration are incompatible with the zoning district that the bank building is located in.

The likely business uses are compatible with the objectives of Hardwick's zoning bylaws, and the Yellow Barn would mean that all uses could be sited on the most travelled road corridor in town. Even though the barn is not in the designated Village Center, the barn serves as an iconic gateway to the downtown area.



F. FINDINGS AND CONCLUSIONS

Important Attributes for Hardwick Businesses in the Yellow Barn

Upon reviewing all of the notes from the one-on-one interviews, the following are the

attributes that business and community leaders believe any new business venture should aim to possess:

- supports entrepreneurial ecosystem
- ability to incorporate an educational component
- meets a consumer need for locals
- cultural fit with Northern VT
- fit with Hardwick's "food/ag brand"
- fits with vision for Hardwick as "Gateway to NEK"
- ability to co-exist with other enterprises
- likelihood to attract tourists
- presence of a potential driver (i.e. tenant)
- level of support to existing local industry
- ability to create local jobs
- likely ability to be an "anchor tenant" financially
- likelihood of not requiring financial subsidy
- likelihood of long-term commitment to Hardwick (place-based values)
- ability to incorporate a charitable mission
- ability to have a dynamic, changing aspect

INPUT FROM THE COMMUNITY

F. FINDINGS AND CONCLUSIONS

Potential Business Concepts

After reviewing the results of the one-on-one interviews, KTC developed the following list of potential business concepts that may work in the Yellow Barn facility. The average score is a weighted average score based on the Hardwick Business Team's assessments of each opportunity's ability to deliver on the above attributes.

Based on the level of enthusiasm for each concept witnessed in the one-on-one interviews, and the evidence of the presence of potential drivers/tenants, KTC decided to pursue the following final business concepts further with focus group sessions to further vet and refine each of the following concepts:

1. Retail / Restaurants / Brewpub / Coffeeshop
2. Alcoholic Beverage Manufacturing (beer, cider, gin, etc.)
3. Food Manufacturing / Meat Processing
4. Collaborative Workspace, Innovation Hub, Office Space
5. VT-Branded Wood Hub, Specialty Wood Manufacturing / Education

<u>Opportunity</u>	<u>Average Score</u>
Alcoholic beverage manufacturing (beer, cider, gin, etc.)	81%
Restaurant, Coffeeshop, Fast Casual, Brewpub	78%
Food Manufacturing	78%
VT-Branded Wood Hub, Specialty Wood Manufacturing / Education	75%
Meat Processing	71%
Maple Retail / Education	70%
Retail	69%
Specialty Food Online Retailer and Marketing	68%
Garden Center and Feed Store	67%
Artist / Maker-Space / Co-op Art Gallery	64%
Storage facility	58%
Collaborative Workspace, Innovation Hub	57%
Shipping Facility	56%
Professional Office Space	46%
A Recycling Collection Center	43%

F. FINDINGS AND CONCLUSIONS

Focusing on the Most Viable Business Concepts

After conducting the focus groups, it became clear that a business model that relied on walk-in tourist customer traffic (e.g., retail) would be highly risky in a rural community with limited tourist traffic. Additionally, the focus group members expressed an interest in supporting complimentary, not competing, business opportunities with the growing downtown business district that serves both the community and visitors.

In addition, KTC concluded that a restaurant/brewpub or coffeeshop would be better located directly in the downtown area. An exception could be made if an established brewery brand such as Hill Farmstead were interested in developing a brewpub on the Yellow Barn property. In addition, there is potential for a pop-up food truck business that could be potentially be located in the parking lot of the Yellow Barn.

Furthermore, it was concluded that while alcoholic beverage manufacturing could be a viable opportunity, it would require a strong driver and may not be the most appropriate for the yellow barn facility due to the high volume of water required and the need for adequate water treatment.



Hill Farmstead Brewery has been named Best Brewery in the World for the year 2016, as well as Best Brewery in the United States and Vermont, by RateBeer, the world's largest, most popular beer review and rating website.

A business model that relied on walk-in tourist customer traffic (e.g., retail) would be highly risky in a rural community with limited tourist traffic.

TOP 5 YELLOW BARN BUSINESS OPPORTUNITIES

After reviewing all notes and observations from the series of focus groups, and following up with potential tenants/drivers, KTC and the Hardwick Business Team discovered several potential tenants/opportunities that appear to be willing to occupy the Yellow Barn property over the next few years:

OPPORTUNITY #1: HARD CHEESE AGING AND DISTRIBUTION CENTER

A stand-alone facility dedicated exclusively to hard cheese aging and distribution

Tenant

Jasper Hill Farm

Contact Name

Mateo Kehler

Space Required

20,000 sq feet

Building

New construction on site

Timeframe

3-5 years

Discussion

Jasper Hill Farm is already the anchor tenant at the VT Food Venture Center and has indicated that they would be “happy to be the anchor tenant” to help other businesses occupy other parts of the building and the surrounding land. Jasper Hill would like to see this happening “sooner rather than later”.

ANCHOR
TENANT



Jasper Hill Farm is a working dairy farm and a 22,000 sq ft onsite creamery known as The Cellars at Jasper Hill.



TOP 5 YELLOW BARN BUSINESS OPPORTUNITIES

OPPORTUNITY #2: HEIRLOOM WOOD MANUFACTURING AND WORKSHOPS

A small wood workshop with convertible educational/classroom space and possibly some retail space. Likely would house 2-3 employees who would build lower value, higher volume wood products (e.g. benches, stools, etc.).

Likely Tenant

Heirloom Windsor Chairs

Contact Name

George and Erin Sawyer

Space Required

1,000+ sq ft

Building

In the Yellow Barn

Timeframe

2019 at the earliest

Discussion

Heirloom Windsor Chairs hopes to double their revenue within next five years and wants to expand the educational aspect of their business.

This will require more space to run workshops for more people and the yellow barn could be the perfect fit.

The property's immediate proximity to the Town forest may also provide opportunities for outdoor workshops and demonstrations.



TOP 5 YELLOW BARN BUSINESS OPPORTUNITIES

OPPORTUNITY #3: SEASONAL LOCAL SNACK BAR

A seasonal snack bar in a renovated airstream serving local/seasonal products that are affordable. The snack bar would offer a great burger and local sausage, Pete's Greens potatoes as fries, kale salad, etc.

Likely Tenant

Craftsbury General Store

Contact Name

Emily Maclure and Kitt Basom

Space Required

1,000 sq ft in parking lot

Building

Outside of the Yellow Barn

Timeframe

Potentially summer of 2018

Discussion

Could be a temporary location to begin to bring more attention and awareness to the Yellow Barn location.



TOP 5 YELLOW BARN BUSINESS OPPORTUNITIES

OPPORTUNITY #4: MANUFACTURING INNOVATION AND PROTOTYPING

A collaborative workspace with a manufacturing capacity that allows ideas to come to life quickly, i.e. execute an idea and produce a prototype in just a few days. Such a site would combine high-tech tools such as 3D printers and CNC manufacturing tools with a cross-disciplinary team of expertise to provide a full-service array of resources for innovators.

Potential Tenant

Gardeners' Supply

Discussion

Concept will likely require partnership with VT Technical College (VTC).

Contact Name

Sean Pelkey

Space Required

TBD

Building

Inside the Yellow Barn

Timeframe

TBD



TOP 5 YELLOW BARN BUSINESS OPPORTUNITIES

OPPORTUNITY #5: ARTISAN INCUBATOR, CO-WORKING SPACE AND MAKERSPACE

An incubator space for artisans for testing ideas and sharing skills. Initial equipment would be marketing and technical assistance for artists, as well as printers, essentially a "clean" makerspace. Clientele would likely be contemplating taking a hobby to the next level as a business.

Potential Tenant

WonderArts

Contact Name

Ceilidh Kane and
Naomi Ranz-Schleifer

Space Required

TBD

Building

Inside the Yellow Barn

Timeframe

TBD

Discussion

Potential tenant envisions an open space that creates a sense of a micro-factory. Unlike food production, which has very clear restrictions against co-locating various productions, non-food manufacturing and innovation does not face the same restrictions. The idea of taking something from the idea stage to production in the same space seemed like a compelling advantage.



♥ Community Wish ♥

Integrated · **VIBRANT**
supportive & encouraging of
ART & CULTURE
EDUCATION
strong sense of *PLACE*
Collaborative
Affordable with economic
opportunity
imaginative · Families & Kids
MULTI-GENERATIONAL
LIVING & Aging with dignity
DIVERSE
ACTIVE · Welcoming & **JUST**
Civically ENGAGED
S U S T A I N A B L E

F. FINDINGS AND CONCLUSIONS

Yellow Barn Property Development - A Staged Approach

It became clear from the focus groups that due to the significant costs of renovating the physical barn, that it could be more strategic to initially construct new buildings on the property. While the barn provides an important iconic “gateway” to the Northeast Kingdom and central point of the property, the barn’s function could be secondary to its use.

It could be more strategic to initially construct new buildings on the property.

STAGE ONE

- Attract Craftsbury General Store to open its snack bar in parking lot. This will begin to build awareness of property’s potential.
- Begin to define physical space needs of Jasper Hill Farm.
- Pitch site with offer to build to suit new buildings for food manufacturers, bakers, maple houses, etc. including longer-term vision for Center for a Wood Forest Economy.

STAGE TWO

- Construct new buildings for Jasper Hill Farm for cheese aging facility.
- Pitch site with offer to build to suit new buildings for additional food manufacturers, bakers, maple houses, etc.

STAGE THREE

Develop business plan for Center for a Wood Forest Economy that integrates the following concepts into one cohesive, multi-functional wood focused facility to support the local wood-based economy:

- Heirloom Wood Manufacturing and Workshops
- Manufacturing Innovation and Prototyping
- Artisan Incubator and Makerspace

F. FINDINGS AND CONCLUSIONS

Yellow Barn Property Development - A Staged Approach

Small Scale Manufacturing in the Northeast Kingdom

Although the wide range of businesses or nonprofits to be located on the Yellow Barn property may appear to be diverse or disconnected, when you view the property as a platform for small scale manufacturing and innovation, the vision for the property becomes clear.

When you view the property as a platform for small scale manufacturing and innovation, the vision for the property becomes clear.

In order for small-scale manufacturers in rural Vermont to be able to survive, they must be able to export their products to more densely populated markets. Whether it's a designer with a large format printer who can ship their work nationwide, an artisan wood maker with a new assembly line and retail distribution, or Jasper Hill Farm with their new cheese aging facility and their network of customers, connectivity to the larger economy will help rural Hardwick continue to prosper.

In order for small-scale manufacturers in rural Vermont to be able to survive, they must be able to export their products to more densely populated markets.

G. POTENTIAL ECONOMIC AND COMMUNITY IMPACTS

The Yellow Barn property has the potential to become a hub of innovation and small-scale manufacturing that could generate jobs in multiple sectors, including manufacturing, education, distribution, logistics, and management.

This property has the ability to leverage local resources, talent, and the existing local business ecosystem to create high-quality unique products and services and export them to urban markets.

While the specific number of jobs and economic value will be determined based on the number and composition of the tenants who occupy the space, if you assume an average salary of \$30,000 per year¹ and 20 jobs², the property has the potential ability to add over half a million dollars of income to the local economy every year.

In addition, the educational value of workshops or programs will also provide workforce development and further strengthen Hardwick's entrepreneurial ecosystem, which will likely create additional innovation and economic development. The property will also likely have some degree of public access, creating an additional tourist attraction in Hardwick, which should also benefit the local economy overall.

Lastly, when the Lamoille Valley Rail Trail (<https://www.lvrt.org/>) is fully completed, it may provide new recreation-based opportunities near or support other uses occurring at the Yellow Barn.

1: The approximate average salary of \$30,000 is sourced from the NVDA-Strategic Industries in the Northeast Kingdom report, June, 2011.

2: The researchers are projecting that there will be at least 10 business tenants, each with an average of two full-time equivalent jobs.

The property has the potential ability to add over half a million dollars of income to the local economy every year.

H. OWNERSHIP AND OPERATING STRUCTURE

Currently, the Yellow Barn property is in private ownership. The Town of Hardwick secured federal funding from the Northern Border Regional Commission (NBRC) to assist with the purchase of the property. Based on past experience, when the NBRC funds are utilized for the purchase there will likely be language in the mortgage indicating that the property needs to be held by a public or non-profit entity for a defined period of time (estimated 20 years) before the property can be sold.

The property can, however, be transferred to other public or nonprofit entities during that defined period. This means that it is likely that the ownership at some point will be public or non-profit. Businesses would lease space from the public/non-profit entity.

One public owner would be the Town of Hardwick while non-profit entities could include the Center for Agricultural Economy, the NVDA, or a new non-profit development corporation that is currently being formed. It has yet to be determined who the owner will be at this point however, and this is a topic that will require additional local dialogue.



It is likely that the ownership at some point will be public or non-profit. One public owner would be the Town of Hardwick...

APPENDICES

A. APPENDIX A: Interview subjects

- David Marvin, Butternut Mtn Farm
- Don Maynard, Farm Connex Distributor
- Shaun Hill, Hill Farmstead
- Brian Cook, Kingdom Brewery
- Christine McGowan, VT Sustainable Jobs Fund, Forest Products Coordinator
- Mateo Kehler, Jasper Hill Farm
- Pete Johnson, Pete's Greens and Farmstand
- Emily Maclure, Craftsbury General Store
- George Sawyer, Heirloom Windsor Chairs
- Sabrina Morrison, Hardwick Cider
- Ceilidh Kane and Naomi, Wonderarts
- John Craig, Hazen Union School
- Minty Conant and Ryan Christianson, Caledonia Spirits
- Chuck Ross, UVM Extension
- Anson Teffets, VT Secretary of Agriculture
- Charlie Emmers, Patchwork Farm and Bakery
- Annie Gaillard, Buffalo Mountain Coop
- Judy Geer, Craftsbury Outdoor Center and Concept 2
- Shari Cornish, Whistle Emporium and Downtown Business Group
- Sean Pelkey, Gardeners Supply
- Joel Currier, Currier Farms Forest Products
- Kathleen Wanner, Wood Manufacturers Association
- Brian Ball, Lyndon Furniture
- Andrew Meyer, Vermont Natural Coatings
- Ryan Christianson, Caledonia Spirits
- Eleanor Leger, Eden Ice Center and Newport Tasting Center
- Roberta MacDonald and Laurie Callahan, Cabot Creamery
- Cindy Locke and Don Balcom, Recreation Lamoille Valley Rail Trail
- Wendy Knight, Commissioner, Vermont Department of Tourism and Marketing

**29 COMMUNITY LEADERS
AND BUSINESS OWNERS
INTERVIEWED**

APPENDICES

B. APPENDIX B: Opportunity Assessment Weighted Attributes and Scoring Key

- Weighting Key
 3 = Very Important
 2 = Important
 1 = Not Very Important

Weight	Attributes	Scoring Key		
		1	2	3
3	supports entrepreneurial ecosystem	Not at all	Somewhat	Strongly
2	ability to incorporate an educational component	Unlikely	Likely	Definitely
1	ability to incorporate a charitable mission	Unlikely	Likely	Definitely
1	ability to have a dynamic, changing aspect	Unlikely	Likely	Definitely
2	meets a consumer need for locals	Unlikely	Likely	Definitely
3	cultural fit with Northern VT	Doesn't fit	Possible fit	Fits well
3	fit with Hardwicks "food/ag brand"	Doesn't fit	Possible fit	Fits well
2	fits with vision for Hardwick as "Gateway to NEK"	Doesn't fit	Possible fit	Fits well
3	ability to co-exist with other enterprises	Unlikely	Likely	Definitely
3	likelihood to attract tourists	Unlikely	Possibly	Likely
3	presence of a potential driver	None	Possible	Definite
3	level of support to existing local industry	Low	Medium	High
3	ability to create local jobs	Low	Medium	High
3	likely ability to be an "anchor tenant" financially	Not Likely	Likely	Very Likely
2	likelihood of requiring financial subsidy	Very Likely	Likely	Not Likely
3	likelihood of long-term commitment to Hardwick (place-based values)	Not Likely	Likely	Very Likely

APPENDICES

C. APPENDIX C: Factors limiting business growth

KTC asked ten local businesses to grade various factors that could be limiting their growth with one of the following color-coded indicators:

Red = Major Issue

Yellow = Possible or Minor Issue

Green = Non Issue

Red was then assigned two points, yellow was assigned one point, and green was not assigned any points.

The totals were tallied and the top 4 factors limiting business growth in Hardwick were:

- a. Labor Quality/Skill
(Lack of high quality labor/middle management)
- b. Labor Quantity
(.e.g “Getting drivers that will get out there and move product, always struggling, greatest issue.”)
- c. Capital
- d. Storage

Labor Quality/Skill	2	2	2	2	1	1	2			1	13
Labor Quantity	1	1	2	2	1		2		2	1	12
Capital		2	1	1	1	2				1	8
Storage		2	1	1	1	1		1			7
Real Estate				2	2	1	2				7
Wastewater Infrastructure		2					2		2		6
Knowledge/Technical Info	1	1	1	1		1					5
Land						1	2	2			5
Transportation Infrastructure	1	1		1		2					5
Specialty Equipment		2	1			2					5
Distribution Systems	1	1		1						1	4
Availability of Inputs/Raw Resources						1			1	1	3
Water Quality							1		2		3
Internet access		2									2
Cell service		2									2
Legal Resources						1					1
Rental prices											0

Note: each column represents answers from a single interviewee.

APPENDICES

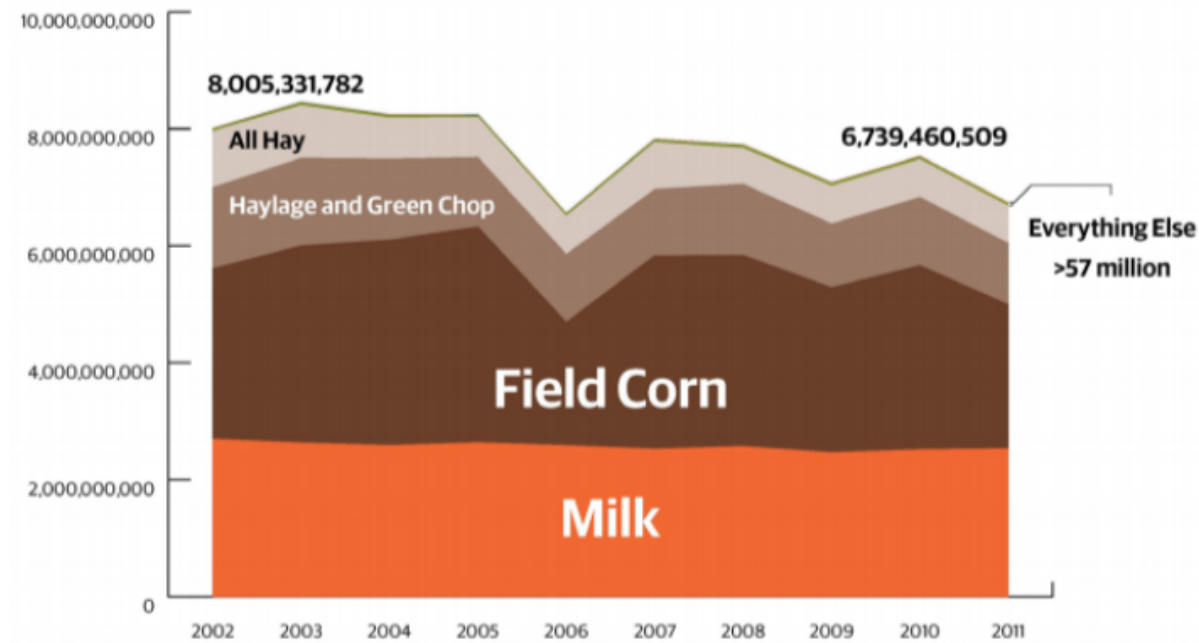
D. APPENDIX D: Secondary research notes

Vermont: Farm to Plate - VT Strategic Plan

Chapter 1 (Overview)

- From 2007 to 2012 food system economic output expanded 24%, from \$6.9 billion to \$8.6 billion.
- Over 60,000 Vermonters are directly employed in Vermont's food system
- Milk is #1 product, 70% of all ag products produced in VT = \$2.2B/yr
- Volatile dairy pricing has been a big issue, has hurt profitability/equity of dairy farmers
- Supply shortages: Vermont food production is likely short, by hundreds of millions of lbs, for most fresh and lightly processed food products
- It's all about milk, corn, and hay:

Figure 1.4: Estimate of Vermont Food Production, 2002-2011



APPENDICES

D. APPENDIX D: Secondary research notes

Vermont: Farm to Plate - VT Strategic Plan Chapter 1 (Overview)

- Local food challenges:
 - Large supermarkets can't pay small producers enough
 - Large institutions aren't setup to handle logistics of so many local suppliers
- Key goal: identify infrastructure investments and public policy recommendations to support ag enterprises
- Focus on all 3 markets for locally produced food:
 - Local markets (i.e., Vermont plus 30 miles)
 - » Regional markets (i.e., New England, New York, and southern Quebec)
 - » National and international markets
- Food system map →
- The Farm to Plate Organization has:
 - » Established an inventory of 2,185 individuals, from over 1,275 nonprofit and educational organizations, involved in strengthening the food system.

Figure 1.10: Food System Diagram



APPENDICES

D. APPENDIX D: Secondary research notes

Vermont: Farm to Plate - VT Strategic Plan Chapter 1 (Overview)

Core VT Values

Community— a shared feeling of belonging, acceptance and trust; a sense that the success of each neighborhood, town, county, and the state depends on the contributions and engagement of every individual.

Environment— a reverence for the land and committed stewardship of the working landscape, including farms and forests; the natural landscape; and the built landscape, including the state’s historic architecture and community centers.

Hard Work— a tradition rooted in the state’s agrarian and industrial heritage and legendary work ethic that invites and encourages entrepreneurship, resourcefulness and creativity.

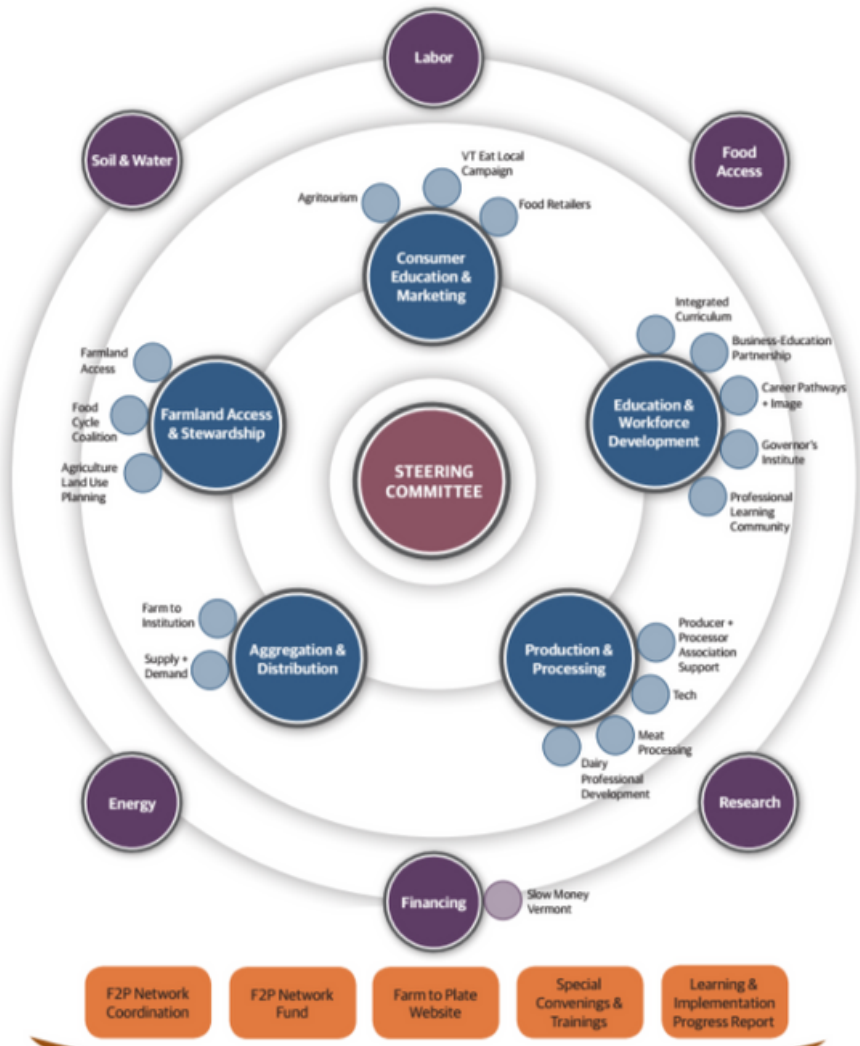
Independence— both politically and as a way of life, reflecting a desire to live independently and championing individual freedoms and self-reliance.

Privacy— as a personal right and as an expression of respect toward others that encourages tolerance and open mindedness about the lifestyles and beliefs of others.

Small Scale— the strength that comes when government, business and communities are accessible and personal.

- Great resources in network →
- Tons of resources for raw data (page 21)

Figure 1.12: Farm to Plate Network Diagram



VSJF as Network Coordinator: Backbone Support Structure for the F2P Network

APPENDICES

D. APPENDIX D: Secondary research notes

Vermont: Farm to Plate - VT Strategic Plan

Chapter 2 (Goals for 2020 for VT)

Most relevant broad goals:

- Goal 12: A sufficient supply of all scales and types of on-farm and commercial storage, aggregation, telecommunications, and distribution services will be available
- Goal 11: Vermont's food processing and manufacturing capacity will expand
 - Strategies / Actions
 - Inventory capacities of existing multi-purpose food processing, manufacturing, and co-packing facilities, commercial kitchens, and food hubs able to serve producers interested in value-added processing.
 - Support regional food hubs in the development of food aggregation facilities for small to medium-size producers
 - Provide technical assistance and access to the right match of capital to farmers who want to ramp up their production to serve institutional markets with lightly processed fruits and vegetables.
- Goal 13: Local food will be available at all Vermont market outlets and increasingly available at regional, national, and international markets
 - Strategies / Actions
 - Advance strategic partnerships among farmers, public agencies, private businesses, and nonprofit organizations through joint marketing initiatives, ad sponsorships, matchmaking events, and market-building and networking opportunities.
 - Foster partnerships between food system businesses, industry associations, colleges, and private businesses that are developing innovative applications of technology (e.g., social media mobile platforms) for marketing food products.
- Goal 19: Business planning and technical assistance services will be highly coordinated, strategic, and accessible
 - Provide professional development and encourage co-learning and networking opportunities for technical assistance providers so they have the skills and understanding to adequately meet the needs of food system businesses.

Goal 20: greater access to all types of capital

Goal 25: Food system market development needs will be strategically coordinated.

Convene annual Farm to Plate Network gathering.

Convene supply chain coordination gatherings.

Promote and coordinate multi-stakeholder projects through Farm to Plate Network Working Group, Task Force, and Cross-cutting Team structure.

APPENDICES

D. APPENDIX D: Secondary research notes

NORTHERN VERMONT REGION: NVEDD Comprehensive Economic Development Strategy

Demographics

- Northern region represents 23% of VT population and 35% of VT's land area
- VT population growing much more slowly compared to rest of US
- Hardwick is in Caledonia County - some stats on the county
 - From 2012 to 2013, county's population fell by .3%
 - One of the oldest populations, with 33% over the age of 55
 - Ranked 9 of 14 for health ranking of VT counties
 - 22K people over age 25 in 2015
 - 16% with bachelors, 11% with grad degrees, relatively good compared to other northern counties
 - Avg weekly wage: \$753; compared to VT at \$882 and US at \$1035
 - Annual household income: \$44K compared to \$56K
 - Unemployment 5% compared to VT's 4.1%
 - 1 in 4 children are food insecure; 17% households with SNAP status
 - Food services and drinking in Northern region: 324 businesses employ 3,686 people
 - 560 Farms (5% up from 2007 to 2012), 81K acres

Agricultural Products

- DAIRY AND MAPLE SYRUP: Northern Vermont has a strong agricultural economy.
In terms of revenue generated, its top five agricultural products are: dairy products, beef cattle and calves, greenhouse and nursery products, hay and maple products. While only 34% of Vermont's farms are in the District these farms account for over 52% of the state's milk production and almost 63% of Vermont's maple syrup production.
 - In Caledonia County
 - 5% of state's milk sold, \$900K
 - 2.8% of maple
- The forest-based industry (forest products, maple syrup products, and Christmas trees) contributes \$861 million in sales to the state economy annually and provides direct employment for about 6,600 people.
- Forests also provide a backdrop for the Vermont tourism industry. Forest-and-farm-related recreation and tourism, provide an additional \$1,936,000 per year to the state's economy. The state's forest industry decreased total production between 2011 and 2010 - with both hardwood and softwood harvests reporting declines during this time period.

APPENDICES

D. APPENDIX D: Secondary research notes

NORTHERN VERMONT REGION: NVEDD Comprehensive Economic Development Strategy

Industry Opportunities

Bio-technology development

Vermont-Quebec business partnerships

Small business expansion

Foreign Trade Zone designation

Value-added agricultural product development

Goals for Region

- Support efforts to improve awareness of, and access to, regional Small Business Development Centers
- Number of business formations and expansions in the region

NORTHEAST KINGDOM REGION: Regional Plan for the Northeast Kingdom

Chapter 1 - Intro

- Some relevant goals of report:
 - integrate agriculturally focused approaches with existing land use and community development priorities;
 - identify economic growth opportunities for the major constituent groups in the agricultural sector in the region;
 - provide an informed basis for coordination with ongoing regional planning efforts.
- Vermont Farm to Plate plan defines 'local' as any products made in Vermont, plus 30 miles beyond Vermont's border.

Chapter 2 - Profile of Region

Lower income and older population compared to VT

2012: 1291 farms in region, up from 1260 in 2007; largest gain in Caledonia

151 farms in Caledonia operated by people over 65; only 5 of them have a succession plan: ISSUE: who will take over these farms?

Most farms between 10 and 500 acres, biggest growth is in small 50 acre or smaller farms, now representing 35% of farms

Farm size decreasing mostly because of decrease of dairy productions

Higher # of farms per capita compared to state

Caledonia is 8th highest county in vt for # of farms

More than 1/2 of farms have less than 10K of annual sales

Avg rev in county about 60K; compared to VT: 100K

- # of profitable farms has increased in VT, but 1/3 is due to Caledonia
- Livestock sales have decreased
- 60% of all farms in NEK are operated by people over age 55

APPENDICES

D. APPENDIX D: Secondary research notes

NORTHEAST KINGDOM REGION: Regional Plan for the Northeast Kingdom

Chapter 3 - Food System Assets

Annual sales of dairy products in county: over 25M

73 farms, 6700 dairy cows

Types of dairy products: value-added, raw milk, dairy beef

Recent increase in chicken, eggs, goat milk, goat meat, and sheep products

In NEK: 327 acres of vegetables harvested = 102% increase from 2007

of farms producing vegetables increased from 79 to 127; mostly sold fresh but some lightly processed

81 farms producing berries on 99 acres, up from 42 farms on 61 acres in 2007.

The most commonly produced crops in the region are potatoes, pumpkins, sweet corn, snap beans, and tomatoes

Processing Infrastructure:

The Vermont Food Venture Center (VFVC), which represented a \$3.2 million federal investment, was completed in 2011. Operation and ownership was assumed by the Center for an Agricultural Economy (CAE). Between 30 and 50 small food producers have used the facility each year. To date, 27% of the kitchen and storage clients using the shared-use facility have been located in the NEK.

The VFVC also operates the Farm to Institution program, which produces fresh-cut, minimally processed local fruits and vegetables from area farms for distribution to schools, college, and hospitals. In 2014, the VFVC received a Working Lands Enterprise Capital and Infrastructure Investment with the Mad River Food Hub to establish the Equipment Access Program, which leases new equipment to businesses using local products.

In 2014 NCIC commissioned an exhaustive study of opportunities to further food system development in the Northern Tier (Vermont, New Hampshire, and Maine). The study identified an overarching need for technical assistance to grow or make products of optimum quality and consistency and to meet USDA regulations, while being profitable. Technical assistance needs included livestock and dairy production, cured meats, value-added products, grain production, and business planning.

Participants in the study also emphasized a need for expanded aggregation facilities, transportation, and distribution networks.

The authors of the study voiced serious reservations of establishing a processing facility, especially a regional one, as it was felt that such an enterprise would not in and of itself be commercially feasible. Rather a food hub with various services including storage and freezing may be a potential opportunity for private-public partnership to support the growth of agricultural industry in the region.

In short, building smart — and strategically — will be critical to sustaining the region's value-added processing infrastructure. Focusing on alignment and coordination of technical services, rather than bricks and mortar, will avoid expensive redundancies in the future.

APPENDICES

D. APPENDIX D: Secondary research notes

NORTHEAST KINGDOM REGION: Regional Plan for the Northeast Kingdom

Chapter 3 - Food System Assets (continued)

- Meat Processing: Northeast Kingdom processing
- Wholesale Distribution and Transport
 - Farm Connect - Regional distributor that pickups up at local producers and drops off at customers
- Producer Needs
 - 73% of producers responding deliver product and 80% store product now.
 - 60% would like additional logistics support.
 - 20% of respondents were interested in storage only, 33% were interested in delivery only, and
 - 44% would like both storage and delivery support.
 - Strong interest in collaboration around distribution

Case Studies

- VT Chevron

Goat meat business born out of recognition that the US imports a huge amount of goat meat, mostly from Australia, rising trend for it (caused by increasing immigrant populations and foodies trends), and need to put male goat somewhere as they didn't have much value in goat milk industry.

Challenges: transportation to large markets (BOS and NYC); and marketing; envision more collaboration/shared drives/deliveries directly to customers

www.vermontchevon.com - Shirley Richardson, could be perfect contact to interview

LOCAL: Hardwick Town Plan

The Hardwick area has strength in numbers when it comes to value added agricultural businesses. A soy processing and a whey processing facility (both located in the industrial park, a seed production business in neighboring Wolcott, and three cheese producers are among a few of the bigger businesses.

APPENDICES

D. APPENDIX D: Secondary research notes

STUDY: Storage and Distribution Report for Local Food in the Northeast Kingdom

Results

73% of producers responding deliver product, and 80% store product now.

60% would like additional logistics support.

20% of respondents were interested in storage only; 33% were interested in delivery only, and 44% would like both storage and delivery support.

Of all respondents seeking delivery, 31% of producers are seeking delivery access to markets outside of VT, 38% for service in the NEK, 38% percent for service along the Montpelier to Burlington corridor, and 23% percent for service into NH.

Almost three quarters of the producers responding: 73% are interested in collaboration. Of the producers interested in collaborating, 62% percent were seeking delivery, while 48% had delivery capacity to offer. 52% were seeking storage, and 52% had storage capacity to offer. 80% of distributors surveyed indicated an interest in collaboration. All of these indicated an interest in collaborating on delivery. Only 50% were interested in storage.

Opportunities uncovered - Delivery:

Create a marketing/outreach campaign to increase awareness of Farm Connex, our NEK based freight service company serving the farm and food sector.

Explore a Zipcar/Shared Use Community Based Delivery Vehicle Model

Implement a community capital raise to retrofit one of Myers Produce vehicles with a freezer box for freight service and frozen distribution capacity to NYC.

Opportunities - Storage:

VFVC storage, dry, refrigerated, frozen available for lease

Farm Connex storage, building to suit, available for lease

Capitol Candy new multi-million dollar, state-of-the art storage facility in Barre, may be available for lease

The Old Batten Potato Shed, for sale or lease, needs renovations (utilities, plumbing, insulation)

Kingdom Creamery of VT, would consider storage build out if there was demand

Sugarmill Farm including storage and storefront infrastructure and ease of access to I-91, for sale

Warehouse with loading dock near Sugarmill Farm, will be for sale soon

APPENDICES

D. APPENDIX D: Secondary research notes

STUDY: Storage and Distribution Report for Local Food in the Northeast Kingdom

Unmet Infrastructure Needs

The greatest unmet needs cited were delivery out of region, and frozen and refrigerated storage. This may not be surprising given these three needs represent the most cost prohibitive and logistical barriers.

Examples of Need

Kingdom Creamery of VT needs frozen delivery service to New York City. While delivery service to New York City exists for refrigerated goods, the company has been hard pressed to find service for frozen goods.

Vermont Chevon is looking for delivery of five whole goats per week to Boston area restaurants. While distribution models for cut and packaged product exist and are financially feasible, the current freight service model is available but is not financially feasible for the per carcass shipment.

Vermont Chevon suggested a “zip car” model, shared use delivery vehicle system, whereby the cost of infrastructure can be diffused over multiple users, and the issues of unique delivery situations, intermittent delivery schedules, and high cost of delivery per unit can be mitigated by the owner assuming some of the responsibility or burden for travel. In this model, the cost of travel could potentially further be subdivided if additional producers needed delivery to the same region, and could co-op travel together. Additional research is needed to make this approach viable. For example, would leasing or owning the vehicle(s) be more cost-effective? How many vehicles are needed to ensure availability? What is the best way to manage maintenance expense – and where are the best resources for maintenance?

When discussing storage needs many producers were unaware of regional storage facilities such as the Vermont Food Venture Center. Simply sharing awareness of the availability of VFVC infrastructure during our conversation potentially resolved several producers’ needs. While this may address some needs, certain unique circumstances do remain, for example, in accordance with the International Dairy Foods Association, ice cream in commercial storage should be stored at or below -20°F.¹² Most other frozen foods do not require temperatures below 0°F, thus often shared freezer space is programmed to meet 0°F.³ This has limited Kingdom Creamery of VT’s ability to utilize shared infrastructure in the past.

The Cellars at Jasper Hill have need for additional storage but have reservations about shared infrastructure due to the potential risk for product impairment from shared use operating models.

From Page 20 onwards, there is a full list of businesses with contact info, their needs, etc.