

EXISTING CONDITIONS ANALYSIS

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EXISTING CONDITIONS ANALYSIS

Introduction

This existing conditions report consists of four sections:

- I. Overview of Demographic Trends
- II. A Review of Existing Reports
- III. Preliminary Observations
- IV. A Village Base Map

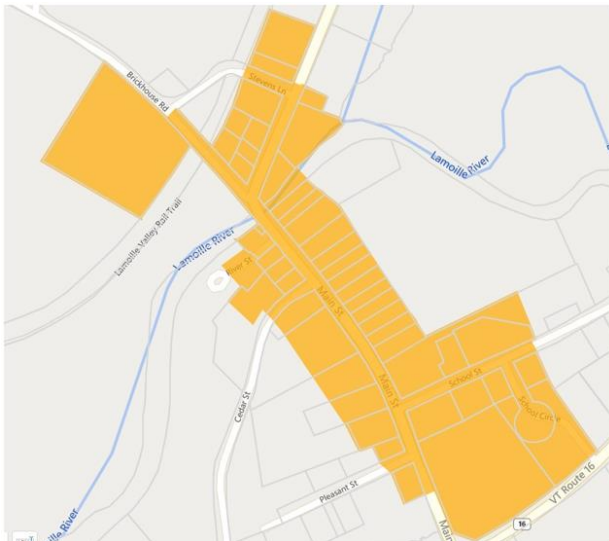
The analyses in this document are in support of the East Hardwick Better Connections Process. They are intended to provide a better understanding of the situation facing East Hardwick at the beginning of this effort and to contribute to the ability of the process to identify key issues and opportunities facing East Hardwick.

The Better Connections Process is centered on the Designated Village Center for East Hardwick. But the actual focus will extend beyond the borders of the Designated Village Center to include a broader “Planning Buffer.” The reason for this is best illustrated in Figure 1.

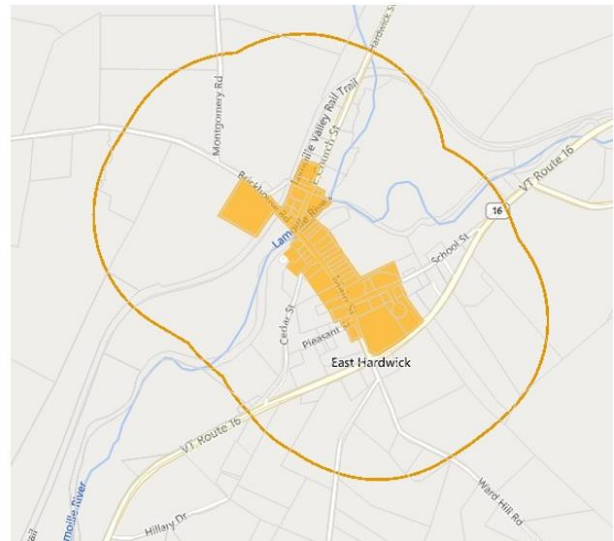
East Hardwick’s Designated Village Center is found on the left-hand side of Figure 1. The “Planning Buffer” is on the right-hand side. Note that the Village Center is almost entirely made up of commercial properties, with only a handful of residential areas included. Were this to be the focus of the Better Connections Process, there would be few opportunities to identify and take advantage of potential synergies between the Center and the nearby residential areas. Thus, the focus of this project will be the larger “Planning Buffer” which essentially includes residential areas within ½ mile of the Designated Village Center.

Figure 1.
East Hardwick’s Designated Village Center & the “Planning Buffer.”

The Designated Village Center



The “Planning Buffer”



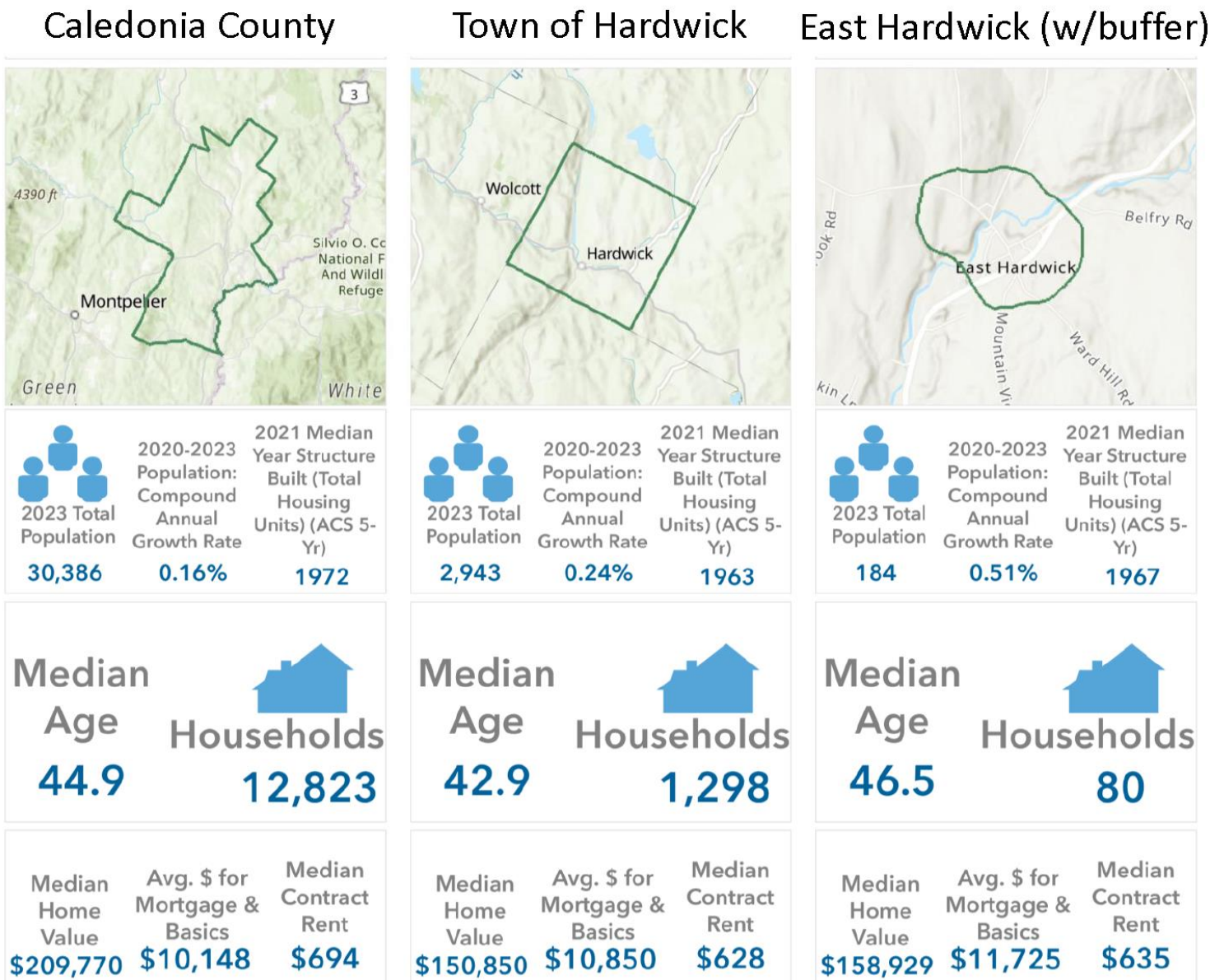
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I. Overview of Demographic Trends

This section reports on key demographic trends (e.g., population, housing, etc.) for the study area of the Better Connections Process for East Harwick. The data in this section comes from ESRI Business Analyst and includes or derives from data from the decennial censuses and the American Community Survey of the US Census Bureau. The infographic in Figure 1 provides a summary of these data. NOTE: ESRI has developed a process for geocoding Census data that provides reasonable estimates for areas with customized boundaries such as the Designated Village Center (DVC) and the “buffer” zone. Consequently, ESRI estimates based on Census data are used throughout this analysis. Given the small populations in these two areas, all estimates for them should be used with some caution.

Figure 2.

OVERVIEW OF SOCIO-ECONOMIC DATA



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Summary of the Analysis

This analysis compares five geographic areas. These include the State of Vermont as a whole, Caledonia County, the Town of Hardwick and two delineations to capture the characteristics of East Hardwick. Data found in the table columns labelled “East Hardwick” are from East Hardwick’s Designated Village Center. Data from the columns labelled “Buffer” include the Designated Village Center and a buffer area of the adjacent residential areas within ½ mile. (See Figure 1 for a map of this “buffer” zone.)

Figure 2 provides an overview of the data for East Hardwick, Hardwick and Caledonia County. (NOTE: the figure provides data on the “Planning Buffer,” rather than the Designated Village Center. This is because the DVC focuses largely on commercial properties and—as will be seen in the tables below—has very few residents. In that sense, the Planning Buffer provides a better measure of the activity on the commercial center and the surrounding residential areas.

As shown in Figure 2, there are some ways in which East Hardwick differs—at least slightly—from the Town and County.

East Hardwick’s population grew slightly faster. The population growth is slightly higher in the Planning Buffer, with an annual average growth rate of 0.51 percent from 2020 to 2023, double that for the Town and three times that for the County.

The housing stock in Hardwick and East Hardwick is older than in the County, for which the median year housing was constructed is 1972, compared to mid-sixties for the Town and Village. See Table 4 for more detailed data.

The median home value is slightly higher in the Village than the Town, but lower than the County, with respective 2020 values of \$158,929, \$150,850 and \$209,770.

As shown in the more detailed data in the four tables below, there are some ways in which East Hardwick is very similar to the Town and County.

Age distribution is roughly comparable across all jurisdictions. The “Baby Boomers” are the largest cohort (ranging from 25 to 28 percent of the population), followed by Generation X and the Millennials, each with about 20 percent of total population

Incomes are higher in the Village than in the Town or County, whether measured by Median Household Income, Per Capita Income or Average Household Income. (See Table 2.)

Owner-occupied housing is the most common form of housing, accounting for over 2/3 of all housing units in the Village and Town, and between 50 and 55 percent of housing in the County and State (see Table 3). and County.

Second homes or seasonal housing affect the housing markets in all jurisdictions. The vast majority of vacant units—two-thirds or better—are categorized for “Seasonal/Recreational/Occasional Use.”

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General Population Characteristics

This analysis compares five geographic areas. These include the State of Vermont as a whole, Caledonia County, the Town of Hardwick and two delineations to capture the characteristics of East Hardwick. Data found in the table columns labelled “East Hardwick DVC” are from East Hardwick’s Designated Village Center. Data from the columns labelled “Planning Buffer” include the Designated Village Center and a buffer area of the adjacent residential areas within ½ mile. (See Figure 1 for a map of this “buffer” zone.)

Table 1 provides general population characteristics for the five geographies included in this analysis. The data in the table estimate that the Village Designated Center had a population of 22 in 2023. The Planning Buffer had population of 184, the Town had 2,943 residents, the County 30,386 and the State 649,316. As to be expected, of the five jurisdictions, the Village Designated Center and the Planning Buffer had much higher population densities than the Town, County or State.

Note that the East Hardwick area has education levels comparable to the Town and County, with a little over fifty percent of the population over 25 years of age holding at least a bachelor’s degree.

Table 1. General Population Data.					
Variable	East Hardwick DVC	Planning Buffer	Town of Hardwick	Caledonia County	Vermont
2020 Total Population	19	181	2,920	30,233	643,077
2023 Total Population	22	184	2,943	30,386	649,316
2020-2023 Population: Percent Change	15.8%	1.7%	0.8%	0.5%	1.0%
2020-2023 Compound Annual Growth Rate	4.74%	0.51%	0.24%	0.16%	0.30%
2020 Household Population	18	175	2,869	29,173	618,176
2023 Household Population	21	178	2,892	29,326	624,415
2020-2023 HH Population: Percent Change	16.7%	1.7%	0.8%	0.5%	1.0%
2023 Population Density (Pop per Square Mile)	487.3	347.1	76.9	46.8	70.5
2023 Population Age 25+: High School Diploma	5	44	750	6,648	112,979
2023 Population Age 25+: Bachelor's Degree	5	41	583	4,944	127,495
2023 Population Age 25+: Graduate/Professional Degree	1	8	175	2,996	88,751
% of 2023 Population Age 25+ w/ at least BA	54.5%	52.7%	50.3%	54.4%	65.7%

Source: Compiled by Fairweather Consulting from ESRI Business Analyst.

Population by Age & Socioeconomic Status

The data in Table 2 pertain to the age and socio-economic status of the residents of each of the five jurisdictions. Note that East Hardwick (in both the Designated Village Center and the Planning Buffer) has higher income levels than the Town or County, whether measured by Median Household Income, Per Capita Income or Average Household Income. At the same time, the estimates for the Designated Village Center and the Planning Buffer both show higher median ages for 2023 than the Town, County and State.

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That being said, the age distribution is roughly comparable across all five jurisdictions. The “Baby Boomers” are the largest cohort (ranging from 25 to 28 percent of the population), followed by Generation X and the Millennials, each with about 20 percent of total population.

The reported incidence of poverty appears to be lower in Hardwick and East Hardwick when compared to the County and State. The percentage of households below the poverty line is below 3 percent in Hardwick and East Hardwick, compared to double-digit rates for both the County and State. The data for businesses and employees reinforces the idea that the local economy is dominated by small businesses, with the average number of employees per business holding at 6 employees in the Town, 9 for the County and 11 for Vermont as a whole. Note that these numbers only include businesses and employees covered by Workers Compensation Insurance. Those in agriculture and self-employment are not included in these numbers.

Table 2. Population by Age and Socioeconomic Status

Variable	East Hardwick DVC	Planning Buffer	Town of Hardwick	Caledonia County	Vermont
2023 Median Household Income	\$66,862	\$62,626	\$58,115	\$59,765	\$75,269
2023 Per Capita Income	\$38,693	\$38,692	\$37,272	\$34,819	\$44,740
2023 Average Household Income	\$87,923	\$87,925	\$84,437	\$82,300	\$104,624
2010 Median Age	42.5	42.5	40.6	42.0	41.5
2023 Median Age	51.2	46.5	42.9	44.9	44.1
2023 Generation Alpha Population (Born 2017 or Later) (%)	4.6%	6.0%	7.7%	6.9%	6.2%
2023 Generation Z Population (Born 1999 to 2016) (%)	18.2%	19.0%	20.7%	20.1%	21.4%
2023 Millennial Population (Born 1981 to 1998) (%)	22.7%	20.7%	22.0%	20.8%	21.1%
2023 Generation X Population (Born 1965 to 1980) (%)	22.7%	20.7%	19.9%	20.1%	20.7%
2023 Baby Boomer Population (Born 1946 to 1964) (%)	27.3%	28.8%	25.6%	26.2%	24.9%
2023 Silent & Greatest Generations Population (Born 1945/Earlier) (%)	4.6%	4.4%	4.2%	5.9%	5.7%
2021 Households with 1+ Persons with a Disability	3	20	419	3,806	69,572
2021 Households Receiving Food Stamps/SNAP	2	12	223	1,829	27,047
2021 Households Below the Poverty Level	0	2	36	1,614	27,813
% 2021 Households Below Poverty Level	0.0%	2.2%	2.9%	12.9%	10.6%
2023 Total Businesses	3	8	167	1,455	32,370
2023 Total Employees	17	46	951	12,892	363,267
2023 Average Size of Business (Employees)	6	6	6	9	11

Source: Compiled by Fairweather Consulting from ESRI Business Analyst.

Housing Units by Tenure and Occupancy

Table 3 contains data on number of housing units, tenure (i.e., owned versus rented) and occupancy. The table shows that the Designated Village Center had 12 housing units in 2022, compared to 85 for the

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Planning Buffer, 1,441 for the Town, and 16,005 for the County. Owner occupied housing is the norm in all of the jurisdictions, ranging from 60 to 70 percent of all housing.

Housing vacancy rates range from 9 percent in the Designated Village Center to 20 percent County-wide. A closer look at the data in Table 3 explains why there are such high vacancy rates at a time noted for widespread housing shortages. In each case, the vast majority—two-thirds or better—of the units reported as vacant are categorized for “Seasonal/Recreational/Occasional Use.”

As is the case throughout Vermont, the housing shortage is exacerbated in Hardwick by a comparative lack of rental units, combined with the fact that much of the existing housing inventory is dedicated to only part-time use.

Table 3. Housing Units, Tenure and Occupancy					
Variable	East Hardwick DVC	Planning Buffer	Town of Hardwick	Caledonia County	Vermont
2020 Total Housing Units	11	82	1,441	16,005	334,781
2022 Total Housing Units	12	85	1,468	16,195	338,867
2022 Owner Occupied Housing Units	8	60	971	9,557	198,837
2022 Renter Occupied Housing Units	3	20	327	3,266	78,060
2022 % Owner Occupied Housing Units	66.7%	70.6%	66.1%	59.0%	58.7%
2020 Vacant Housing Units	1	9	166	3,343	62,428
2020 % Vacant Housing Units	9.1%	11.0%	11.5%	20.9%	18.6%
2020 Vacant Housing Units: For Rent	0	0	25	267	5,234
2020 Vacant Housing Units: Rented - Not Occupied	0	0	1	53	1,088
2020 Vacant Housing Units: For Sale Only	0	1	12	177	2,582
2020 Vacant Housing Units: Sold - Not Occupied	0	0	9	69	1,009
2020 Vacant Housing Units: Seasonal/Recreational/Occasional Use	1	5	53	2,199	44,057
2020 Vacant Housing Units: For Migrant Workers	0	0	0	0	68
2020 Vacant Housing Units: Other Vacant	0	3	66	578	8,390
Source: Compiled by Fairweather Consulting from ESRI Business Analyst.					

Age of the Housing Stock

Table 4 contains data on the age of the housing stock in the five jurisdictions. The data reveals that the housing stock is generally much older in Hardwick than in the County and State. The median year housing units were built in the Designated Village Center is 1965, 1967 in the Planning Buffer and 1963 in the Town. This is compared to 1972 county-wide and 1975 for the State as a whole. The difference appears to come down to a drop off in housing construction over the last 20 or so years. All five jurisdictions show relatively active housing construction in the 70s and 80s. This trails off for both the County and the State in the 00s and teens. The drop off is even more pronounced in the Town and Village for those decades. At the same time, the bulk of housing construction in the Town and Village took place prior to 1939, accounting for 43

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percent of the Town’s housing stock, compared to only 33 percent for the County and 26 percent for the State.

Table 4. Housing Stock by Year Built					
Variable	East Hardwick DVC	Planning Buffer	Town of Hardwick	Caledonia County	Vermont
2021 Median Year Structure Built (Total Housing Units)	1965	1967	1963	1972	1975
2021 Housing Units Built in 2020 or Later	0	2	15	19	219
2021 Housing Units Built in 2010-2019	0	2	30	746	16,977
2021 Housing Units Built in 2000-2009	1	8	112	2,046	35,193
2021 Housing Units Built in 1990-1999	1	9	111	1,267	35,602
2021 Housing Units Built in 1980-1989	1	8	136	1,839	50,812
2021 Housing Units Built in 1970-1979	2	15	223	2,610	51,652
2021 Housing Units Built in 1960-1969	2	11	129	1,004	27,364
2021 Housing Units Built in 1950-1959	0	3	26	604	19,255
2021 Housing Units Built in 1940-1949	0	3	32	655	10,384
2021 Housing Units Built in 1939 or Earlier	5	34	628	5,231	86,061
% of Units Built in 1939 or Earlier	45.5%	41.5%	43.6%	32.7%	25.7%

Source: Compiled by Fairweather Consulting from ESRI Business Analyst.

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II. Review of Existing Reports

The documents reviewed for this report include:

- AARP-style Walkability Audit of East Hardwick (May 2022)
- Local Motion Bike Safety Improvement Concepts for East Hardwick (September 2022)
- East Hardwick LVRT Trailhead Scoping Study carried out by Wall Consulting Group (October 2022)
- Stormwater Infrastructure Mapping Project - Jim Pease, David Ainley, VT DEC (January 2017)
- Stormwater Master Plan, Town of Hardwick, VT, Stone Environmental (November 2017)

These documents contain many analyses and findings that could be incorporated into a Better Connections Process for the Village of East Hardwick. In general, they are in broad concurrence on the need for sidewalk improvements and streetscape enhancements that include improved wayfinding signage, reconfiguring key intersections and improving stormwater draining in the Village area. The findings of these studies are summarized below.

[AARP-style Walkability Audit of East Hardwick \(May 2022\)](#)

This audit was derived from an on-site tour of the Village along Main Street from School Street to Brickhouse Road and East Church Street. It concluded that the overall walkability of the Main Street area was poor and that the overall appeal of the area as a place to walk was fair. The overall assessment made by the study team was:

The location could be improved by installation of additional crosswalks, drainage repairs, sidewalk repairs, sidewalk installation, and access management at the intersection of Cedar Street and Main Street and at the intersection of School Street and Main Street. The bridge over the Lamoille Valley River should also be examined for life expectancy.

The twelve issues identified by the report can be placed in three categories.

1. Sidewalk and cycling infrastructure

The report notes that, while the sidewalk is continuous along Main Street, much of the sidewalk is cracked, broken and uneven, making pedestrian access difficult and handicapped access extremely problematic. It found that Main Street lacks adequate curbing to separate it from the road and that portions of the sidewalk have sunk as much as 10 inches below street level. It also pointed out that Main Street does not have a dedicated bicycle lane which is currently an issue when there is truck traffic in the corridor, but is likely to become more severe with the opening of the Lamoille Valley Rail Trail and the increased bike traffic that will bring. An addendum to the report notes that School Street (the site of the only store operating in the Village) currently sidewalks or lanes for pedestrians and cyclists, and points out that the sections of the street with steep embankments have inadequate guardrails.

2. Intersection configuration and signage

The report notes that only the intersection of School and Main streets has any crosswalks, and even these are currently faded and lack landings or caution signs, nor does it have stop signs or yield signs to calm vehicular traffic. The intersection of Main and Cedar streets is cited for having too much space for vehicular traffic at the expense of cyclists and pedestrians. In general, the report notes that East Hardwick has no signage at all to alert drivers to the likelihood of increased pedestrian and bicycle traffic in the

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Village, including the School Street/Minimart Drive corridor which links the one store to the rest of the Village.

3. Drainage issues

Potential poor stormwater drainage is highlighted as an issue, noting that the study area “does not appear to have adequate drainage for increased capacity rain events.”

[Local Motion Bike Safety Improvement Concepts for East Hardwick \(September 2022\)](#)

The Local Motion study ties its recommendations to various destinations or nodes of activity in the Village that are likely to attract bicycle traffic in the future. The report presents a series of conceptual infrastructure enhancements for broader community discussion prior to being finalized through engineering documents. At the end of this report, potential funding resources are identified. The enhancements identified include:

- Enhanced crosswalks and signage at all Lamoille Valley Rail Trail crossings
- Upgrading of the Main Street/Brickhouse Road intersection (e.g., extending sidewalk along Brickhouse Road , flashing beacons) to minimize potential conflicts with traffic through the corridor and pedestrian and cyclist traffic as well as traffic originating from the driveway of the house at that intersection.
- Realignment of the Cedar Street/Main Street intersection to minimize conflicts among vehicular, bicycle and pedestrian traffic via that would reduce the number of vehicular lanes at the intersection. Two potential realignments are offered in the report.
- A Crosswalk on Main Street linking the daycare on the west side of the street to the sidewalk on the east side.
- Creating a sidewalk on School Street linking the Village to the Minimart, noting the difficulty presented by steep grades and utility lines along the corridor.
- Changing the School Street/Main Street intersection into a simple “T” intersection, relocating the Tub and adding nearby seating to make it more of a local point of interest. A shorter-term solution would be to turn the intersection into a yield roadway by installing a variety of traffic calming measures to slow vehicular traffic.
- Installing Speed Tables (portable “speed bumps”) at various locations throughout the Village to slow traffic flow.
- Removal of Centerlines on Main and School Streets as a means of slowing traffic. While the State places centerlines on Class 2 highways, their removal in certain areas appears to slow traffic.
- Creating “Edge Lane” Roads. For roads with at least 22 feet of paved right of way, “advisory bike lanes” can be created on either shoulder, leaving a single lane dedicated to only vehicular traffic. Vehicles can use the advisory lanes when no bikes are present or can easily be avoided.

[East Hardwick LVRT Trailhead Scoping Study carried out by Wall Consulting Group \(October 2022\)](#)

This study provided the research and support documentation for the recent siting of the LVRT Trailhead by East Hardwick at Stevens Lane, west of the Rail Trail. The study provides an inventory of the resources and

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constraints found in the project study area: the land bounded by Church Street to Stevens Lane, Stevens Lane and Brickhouse Road from Stevens Lane to Church Street.

Stormwater Mapping Infrastructure Project (January 2017)

The Stormwater Mapping Infrastructure Project completed in 2017 by the Vermont Agency of Natural Resources Ecosystems Restoration program focused on updating stormwater mapping for use by municipalities and identifying potential locations for the installation of Best Management Practices (BMP) to reduce nutrient and contaminant loading in surface waters.

The project identified two potential areas for improvements in East Hardwick, one near the intersection of VT Route 16 and School Street and another around the Main Street bridge. The recommended improvements include a bioretention area along VT Route 16 and outfall stabilization when culverts discharge around the bridge.

Stormwater Master Plan (November 2017)

Stone Environmental completed a Stormwater Master Plan for the Town of Hardwick in 2017 and identified one area of focus in East Hardwick. Area of moderate erosion around the Main Street Bridge and on the east side of Church Street were identified in the plan. Recommendations for addressing erosion at the northwest corner of the bridge include step-pool conveyance, a stone-lined swale or a swirl separator. These items are all intended to address erosion caused by discharge of the storm drain in this area. At the southeast corner, to address erosion at the storm drain outlet, stone splash pads are recommended along with overall bank stabilization using large stone.

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III. Preliminary Observations

The history of East Hardwick as a settled place in the State of Vermont extends back over 200 years. As pointed out on the website of the East Hardwick Neighborhood Organization (EHNO), in the fifty years following the construction of the bridge spanning the Lamoille River at Stephens Mills, “Federal and Greek Revival residences and commercial structures were built on Main, Church and School Streets,” with many of the structures from that time still standing, helping to define the historic character of the Village.¹

On the EHNO site, a Beers map from 1875 shows the Village anchored to the railroad that served local farms, the Stephens Mill and, as evidenced by the depot on Railroad Street, visitors to the Village.

The historic character of East Hardwick remains intact. The photos in Figure 4 show Main Street looking North to the bridge and a view looking East on Church Street (School Street on the map in Figure 3), showing the Congregational Church and the Grange Hall.

While history is important to East Hardwick, it is also hosts economic activities that can serve as anchors for revitalizing the Village. Some of these are depicted in Figure 5. The Minimart already serves as a community crossroads and meeting place. The manufactured housing development has brought new residents to the Village. In addition, Figure 5 shows emerging activities that will play a key role in East Hardwick’s future. These include

Figure 3.



Source: <https://ehno5.wordpress.com/historic-pictures/>

Figure 4.
The Village’s Historic Character

Main Street facing the Bridge over the Lamoille River.



Church Street with the Congregational Church (right)
& the Grange Hall (left).



¹ <https://ehno5.wordpress.com/historic-pictures/>

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the arts (as represented the Whitewater Gallery and River House) and tourism related to outdoor recreation (as represented by the Lamoille Valley Rail Trail) and agri-tourism (as represented by Summersweet Gardens). Capitalizing on these opportunities will require a Village that attractive and walkable, as well as easily navigated by walkers, bikers and vehicles. Consequently, addressing the infrastructure issues highlighted in the Review of Existing Reports is one of the key priorities facing the Better Connections Process.

**Figure 5.
Economic Drivers**

Summersweet Gardens



Lamoille Valley Rail Trail



Minimart & Manufactured Housing Park



Whitewater Gallery & River House



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IV. Base Map of the Village

The base map of the Village is on the following page. is best viewed online as a PDF. You can link to it at

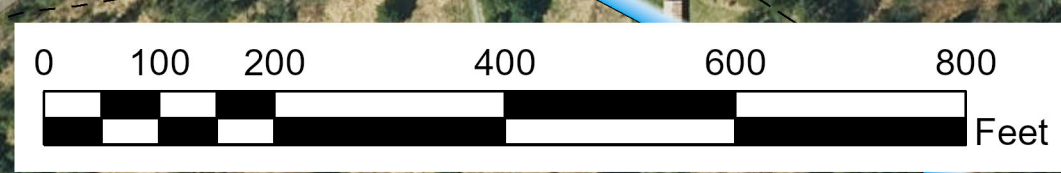
<https://easthardwick.com/wp-content/uploads/2024/06/Village-map.pdf>

DRAFT



Legend

- Catchbasins
- Hydrants
- Culverts
- Water Mains
- Hardwick_TaxMap
- WaterLimits
- VillageLimits
- Compact Residential
- Highway Mixed Use
- Central Business District
- Sidewalk



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