



East Hardwick Walk/Bike Safety Improvement Concepts

Compiled by Jonathon Weber
Complete Streets Program Manager





Introduction

Local Motion was contacted by representatives from the East Hardwick Neighborhood Organization (EHNO) in August of 2021 with a request for assistance with improving walkability and bikeability in East Hardwick.

This document provides high-level concepts generated by Local Motion staff. The concepts are intended to be utilized for community discussion and sparking local action. The concepts have not gone through a public engagement process beyond receiving feedback from EHNO, but were created with input from a community survey in mind.

The roadway concepts shown here are not engineering documents, and will generally require additional study, community engagement, and engineering before being implemented.

Destinations

The map to the right shows key community destinations that should be considered when planning future enhancements.

These locations indicate where bike and pedestrian activity may be or become more common, and therefore may be key points for infrastructure improvements, including bike parking and wayfinding.

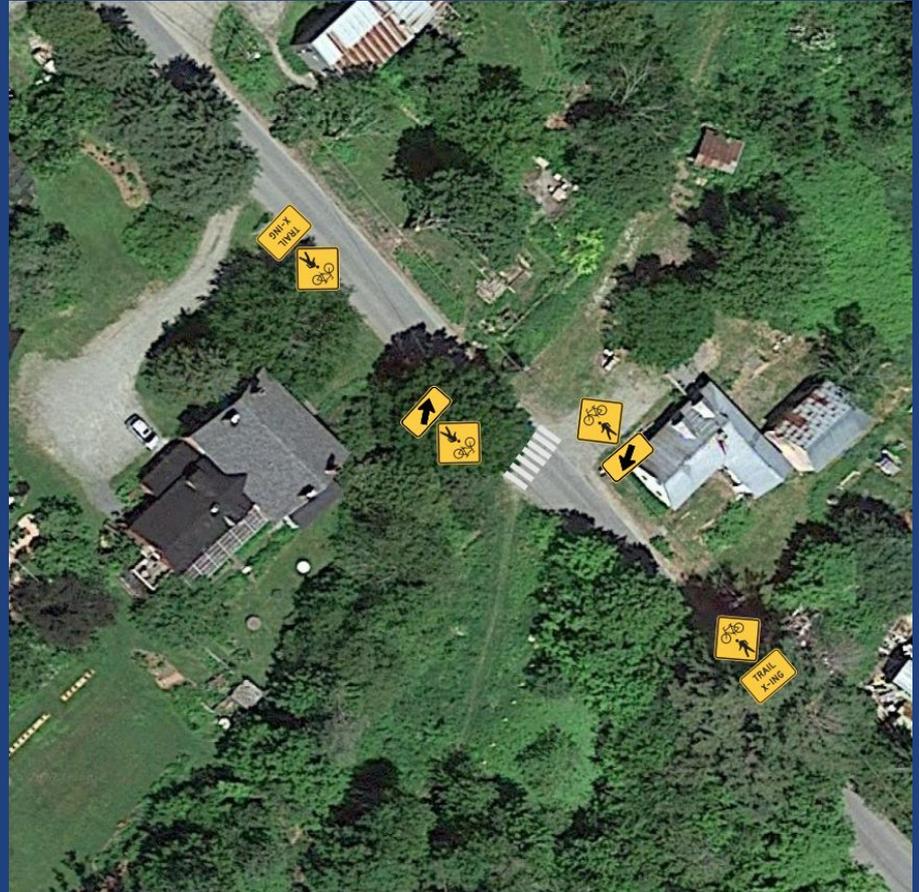




Infrastructure Enhancements

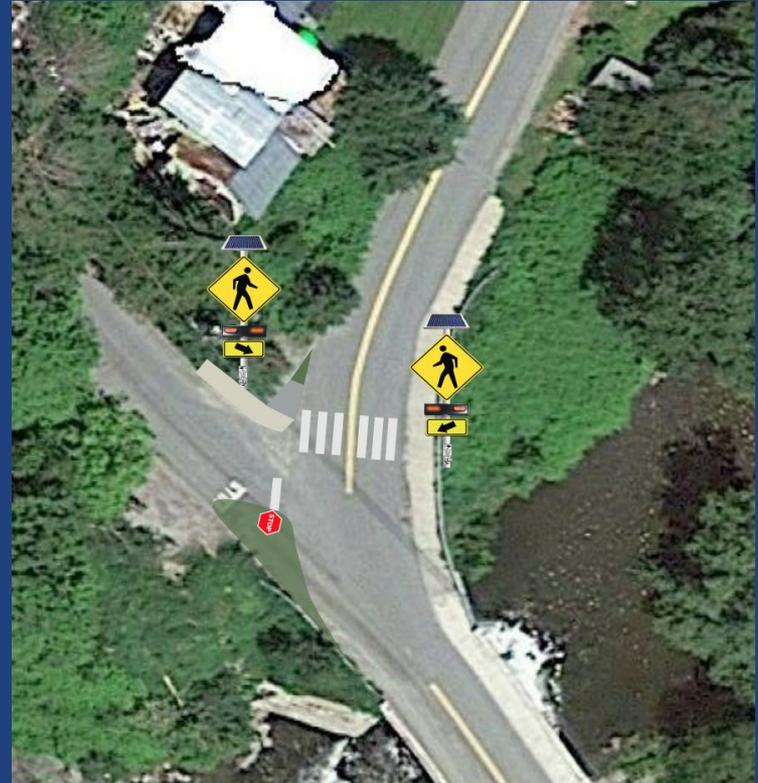
LVRT Crossings

- Advance trail crossing and crosswalk signage should be installed at both the east and west trail crossings
- In the short term, crosswalks should be marked at these locations
- Longer-term, raised crossings could be installed to improve visibility and calm traffic



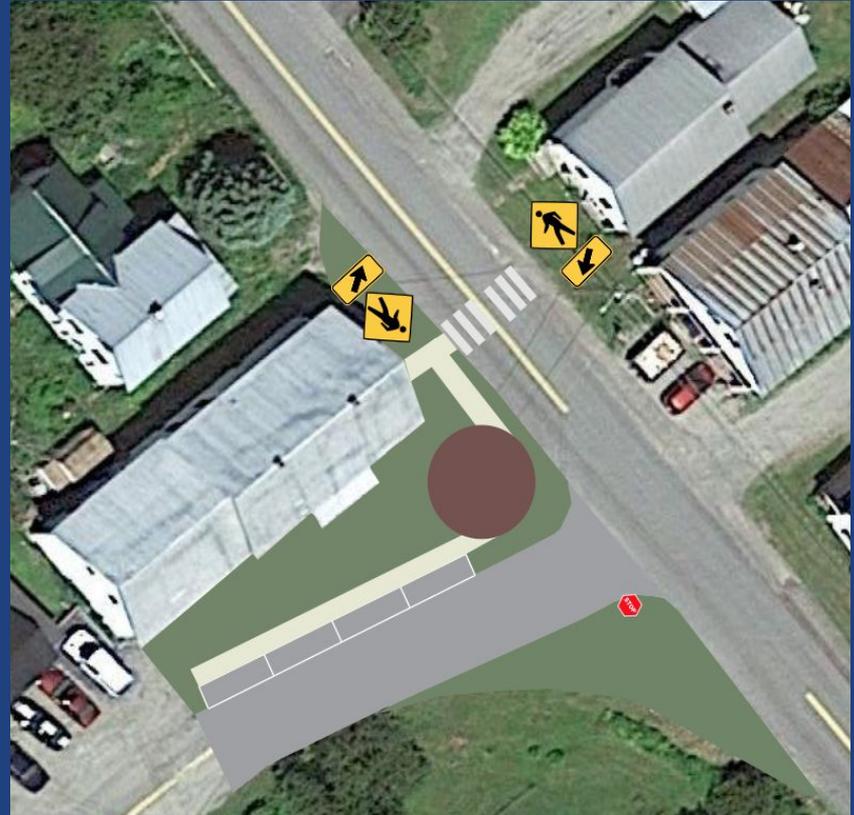
Main St./Brickhouse Rd. Intersection

- Proximity to the river and the driveway orientation of the house at the corner of this intersection are potential constraints
- Further study could determine how to square the intersection with an extended sidewalk along Brickhouse Rd. leading to a crosswalk across Main St.
- Rapid rectangular flashing beacons would enhance visibility at this crossing
- The curb extension on the west side of the intersection could be mountable for large vehicles



Cedar St./Main St. Intersection Alternative 1

- This reconfiguration would extend the green space on both sides of Cedar St., slowing drivers
- The additional space could be repurposed with on-street parking, a parklet/seating area, and sidewalks to provide access
- A crosswalk should be considered across Main St., potentially with rapid rectangular flashing beacons and/or a raised crossing



Cedar St./Main St. Intersection Alternative 2

- This reconfiguration would activate both sides of Cedar St., slowing drivers, and may provide improved commercial delivery access over Alternative 1
- The additional space could be repurposed with on-street parking, a parklet/seating area on the south side, and sidewalks to provide access
- A crosswalk should be considered across Main St., potentially with rapid rectangular flashing beacons and/or a raised crossing



Daycare Crossing

A marked crossing should be considered to link the daycare on the west side of Main St. to the sidewalk on the east side.



School St./Main St. Intersection

- Consolidating this intersection into a T shape would reduce turning speeds in all directions
- This reconfiguration would increase green space, and the sidewalk along Main St. could be extended, including to the south of the intersection to connect to Pleasant St.
- Interpretive signage could make the Tub a point of interest, and seating could be added to enhance the space



School St. Sidewalk

- Further study could identify alignment for a sidewalk along School St.
- Constraints along this street include steep grades on the north side and powerlines on the south side, making this a potentially challenging project



School St. Yield Roadway

- As a shorter-term, lower-cost alternative, a yield roadway could be installed
- This would use chicanes to slow motor vehicles
- See [Rural Design Guide](#) for more information



Speed Table Zones

- These areas may be suitable for installation of speed tables or bumps
- These locations are set away from nearby residences while still calming traffic at key points,
- Noise impacts from vehicles rolling over the bumps and changing speed should be considered





Resources



Centerline Removal

In Vermont, Class 2 roadways are painted with centerlines. Research indicates that removing the centerline reduces vehicle speeds, making this an essentially free way to slow traffic. Fog lines may be installed to assist in low-visibility conditions.

To be eligible to not have a centerline, a roadway must have an AADT of less than 3,000. Most roads in East Hardwick are likely under this limit.

Town officials would need to request that VTrans not repaint centerlines on desired roadways.



Edge Lane Roads/Advisory Bike Lanes

Roadways with at least 22 feet of paved width may be suitable for a treatment known as an “edge lane road” or “advisory bike lanes.”

In this configuration, bicyclists have a dedicated lane on each side of the road. Motorists share a center lane and can merge into the edge lanes after yielding to any bicyclists or pedestrians.

This treatment will hopefully be granted approval by the FHWA soon, at which point it will be more feasible to implement. It could be a good option for some of East Hardwick’s rural paved roads.

See the [Rural Design Guide](#) for more information.

Local Motion hosted a webinar on Edge Lane Roads, which is available for viewing [here](#).

LVRT Crossing Improvements

The LVRT is anticipated to be completed by fall 2022. VTrans is not planning to construct any amenities along the trail. Communities can make enhancements to LVRT crossings and trailheads through a lease agreement with VTrans, which manages the LVRT.

Common usage requests along rail trails are for parking, trail kiosks, or seasonal and moveable stands to sell things like ice cream. Things like landscaping, benches, bike racks, or water filling stations are not cumbersome agreements.

Contact [Mark Fitzgerald](#) at VTrans for more information.

See slides 19 - 21 for more detailed information about trail enhancements and leases.



Key Funding Opportunities

Resource	Use
<u>VTrans Bicycle and Pedestrian Program</u>	State matching grants for the scoping, design, and construction of bike and pedestrian facilities, sidewalks, bicycle lanes, crosswalks, shared-use paths, and lighting.
<u>Transportation Alternatives Program</u>	State matching grants for the construction, planning, and design of bike and pedestrian facilities (on or off road), sidewalks, bicycle infrastructure, lighting, stormwater management, and others
<u>Municipal Planning Grant</u>	Supports a wide range of projects relating to planning and land use, and promotes cooperation, collaboration and the exchange of ideas.
<u>Better Connections Program</u>	Funds planning efforts to increase multi-modal transportation options and to improve land use, water quality, public health, and economic vitality in Vermont communities.

These are some of the most common funding sources for bike/pedestrian projects in VT, but is not an exhaustive list. The Chittenden County Regional Planning Commission maintains a [database with additional funding sources](#).

VTrans Lamoille Valley Rail Trail Community Grant

The Vermont Agency of Transportation (VTrans) recently announced an upcoming grant funding opportunity for municipalities along the Lamoille Valley Rail Trail (LVRT) to improve trail amenities and visitor experience on the LVRT. Specific program information and application requirements are expected to be announced in August 2022, with applications anticipated to be due in October.

As a community that is directly adjacent to the LVRT, Hardwick is eligible for this grant, which can fund feasibility and scoping studies, as well as construction of a variety of project types including trailhead amenities and infrastructure improvements to better connect community assets to the LVRT. A 20% match is required for all projects.

Contact [Jackie Cassino](#), VTrans Rail Trail Program Manager, for more information.



Resources & References

Resource	Use
Local Motion	Resource for further facility design guidance and Safe Routes to School initiatives
NVDA	Regional planning commission serving Hardwick with assistance with grants, planning, etc.
FHWA Small Town and Rural Design Guide	Reference for facility design
VTrans Guidelines for Pedestrian Crossing Treatments	Reference for facility design
Worksafe Industries	VT-based vendor for MUTCD signs

LVRT Crossing Improvements (from VTrans)

- Lease agreements with the AOT are created on a case-by-case basis depending on the intended use of the AOT railroad right-of-way property. Common usage requests along rail trails are for parking, trail kiosks, or seasonal and moveable stands to sell things like ice cream. Things like landscaping, benches, bike racks, or water filling stations are not cumbersome agreements.
- Although not impossible, it is not encouraged to pursue a lease agreement that involves building permanent structures on AOT railroad right-of-way. The more permanent the structure, the more difficult to move if needed. Any relocation costs are the responsibility of the tenant.

LVRT Crossing Improvements (from VTrans) (cont.)

- Commercial activities that are more temporary in nature are easier to allow, although there are leases throughout the state at train stations and airports for commercial activity, but these require stricter scrutiny and more complex maintenance agreements. All leases have a termination clause in case the rail line was to become operational again.
- Leases outline insurance requirements and maintenance responsibilities
- Municipal leases typically have minimal costs because they benefit the public instead of an individual. Municipalities can typically access grants to assist with maintenance costs.
- A typical lease would maintain that nothing should be built a minimum distance of 15 feet from centerline of the trail.

LVRT Crossing Improvements (from VTrans) (cont.)

- Cambridge Junction, which includes a place to repair bike tires and picnic tables, but no real commercial activity is a good example of trail development on AOT railroad right-of-way property
- An important element of any recommendations should be a maintenance plan and cost estimates for a Municipality so they know what they would be responsible for, should they pursue a lease agreement with the AOT
- Contact Mark Fitzgerald at VTrans for more information: mark.fitzgerald@vermont.gov