Kingdom Roads - Safer Spaces for Walking and Biking in Craftsbury, Greensboro, Hardwick and Barton Village

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Acknowledgements

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Introduction

The towns of Hardwick, Craftsbury, Greensboro and Barton Village are in the heart of the northern Northeast Kingdom. The area is rural and remote, and the communities are vibrant. Built with walking-scale village centers, locals are regularly out and about at a treasured local general store, library, school or post office. Families and senior citizens, as well as those “from away,” are also discovering everyday biking for transportation and for fun. They are also surrounded by scenic beauty in a prime setting for outdoor recreation.

With village centers connected by paved roads along stretches of rural land, speeding is an issue and can be a barrier to safety for those walking and biking. Community leaders and members have pointed out priority areas where this is a concern. This project aims to identify near- and long-term ways that village centers in these NEK towns can become safer for all users by slowing vehicle traffic speeds, providing more visibility for pedestrians and suggesting simple changes to infrastructure to better connect the village centers by bike. Non-infrastructure efforts such as education, policy are also essential to success and support of these changes.

The region’s scenic quality and pleasantly-spaced villages make it attractive for bicycle touring, although these ceased for the most part when the Craftsbury Inn closed and there was nowhere to stay for the night. With the Inn re-opening in 2017
we may see more bike tours coming through the area spending money -- Given the same 200 mile stretch, a touring cyclist will make more of an economic impact on the small towns along the way than a person driving in a car1.

The Lamoille Valley Rail Trail (LVRT) also provides a huge opportunity to bring the health and economic benefits of biking closer to the area. The LVRT is located on the right-of-way of the former St. Johnsbury and Lake Champlain Railroad. The LVRT extends across Northern Vermont passing through 18 communities. When fully complete, the it will create more than 90-miles of four season recreational path between Swanton and St. Johnsbury. The LVRT passes through the heart of downtown Hardwick and Greensboro Bend. While this portion of the trail will be the last to be completed, municipalities should think strategically about how to leverage its location, whether through rail trail-area development, creating safer connections between the trail to nearby village centers, or marketing. The most recently completed sections of the LVRT connect Morrisville to Jeffersonville and St. Johnsbury to Danville and have spurred community development in those areas.

VTrans launched the Statewide On-Road Bike Plan process, a statewide effort sponsored by the VT Agency of Transportation to make state-maintained roads work better and be safer for all people who bike - families, commuters and recreational riders. Based on analysis of state roads in the area and the needs identified by area residents, roads have been ranked on the VTrans Bicycle Corridor Map as shown in the table to the left. Blue indicates that the road is a “High Priority” for bicycle-related improvements, Green indicates that the road is a “Medium Priority” and Yellow indicates that the road is a “Low Priority” for bicycling.

In addition, recent VTrans engineering guidance for state roadways is to limit motor vehicle travel lane width to 11

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feet, with 3 to 5-ft (ideally 4-ft) shoulders in rural areas, or 5 foot bike lanes where possible in downtowns and villages. According to the Vermont State Design Standards, some rural collector roads in villages can have motor vehicle travel lanes as narrow as 10 feet.

Benefits of Walking and Biking in Vermont Communities

Walking and biking have significant benefits to offer Vermont communities. They create safer communities because wider shoulders, sidewalks and bike lanes help to slow vehicle speeds on our winding country roads. The more varied forms of transportation sharing the road, the safer it is for everyone. As bike use grows, typically the number of all types of crashes declines. Creating a more human scale and pleasant place to stroll and shop in Vermont village centers and downtowns leads to a stronger local economy where people can meet their daily needs instead of driving to another town to do so. Transportation is Vermont’s largest source of energy consumption so one way to reduce our carbon footprint is to walk and bike more for short trips, which make up a large number of our overall travel. Finally, walking and biking improve community health by fighting climbing obesity rates and providing lifelong opportunities for physical fitness and mobility. Getting outside also supports mental health and can help counteract Seasonal Affective Disorder. Walking and biking have something to offer everyone in Vermont’s communities, rural and urban no matter how big or small.

Issues and Opportunities

Local Motion met with representatives from each town at least twice and conducted at least one field visit per town, in order to learn about priorities, issues related to walking and biking, current walking and biking conditions and habits of residents and visitors, as well as to better understand the opportunities for making improvements. Following an assessment of these issues and opportunities (see Appendix A), community members decided to focus on the following key action projects. Each project includes an option that is lower cost and feasible to implement in the short term with little alteration to existing pavement width, and no need for right-of-way acquisition, as well as a longer term vision for what could happen in the future with additional planning and funding. The table below
summarizes each town’s projects, and is followed by conceptual designs for each project. Specifics of the designs are noted on each of the Figures.

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<th>Community/Oppportunity</th>
<th>Pages</th>
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<tr>
<td><strong>Better Bicycle Connections Between Village Centers</strong></td>
<td>5-6</td>
<td>Using Google Earth imagery and field visits Local Motion examined roadway widths along roads between village center where speeding is an issue and where more space for walking and biking is desired. <strong>Figure 1</strong> shows various locations with potential for restriping vehicle travel lanes to narrower widths and wider shoulders. <strong>See pages 5-6.</strong></td>
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<tr>
<td><strong>Greensboro</strong></td>
<td>7-13</td>
<td><strong>Figures 2a through 2f</strong> illustrate a variety of gateway and intersection treatments in Greensboro. Local community members attest that speeding is an issue in the village. Gateways will signal the entry to the village, a place where higher volumes of pedestrians are to be expected, and where vehicle speeds should be slow. They are intended to make walking and biking safer in Greensboro by calming traffic and managing vehicle speed through the village. <strong>Figure 2b &amp; 2c</strong> shows near- and longer-term possibilities for improving pedestrian safety at Craftsbury Rd and Laurendon Ave. at the east end of town. Figures 2e &amp; 2f show concepts for making the intersection at Center Rd/Breezy Ave and Hardwick St/TH 5 safer, by adding crosswalks, creating tighter curb radii, and either intersection art or a small roundabout. <strong>See pages 7-13.</strong></td>
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<td><strong>Hardwick</strong></td>
<td>14-15</td>
<td><strong>Figure 3</strong> shows how downtown Hardwick can be safer and more accessible for all users along Main St/Rte 15 through downtown, where speeding is an issue. The addition of traditional and raised pedestrian crosswalks, as well as curb extensions along the linear downtown main street makes pedestrians more visible, moderates vehicle speeds and creates a more vibrant atmosphere on Main St. The addition of two speed feedback signs will help vehicles to self-enforce the speed limit. <strong>See pages 14-15.</strong></td>
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<td><strong>Barton Village</strong></td>
<td>16-19</td>
<td><strong>Figures 4a, 4b and 4c</strong> show opportunities for making Barton Village safer and more pedestrian friendly in the heart of the village by providing a more continuous sidewalk system along Church St and creating curb extensions and</td>
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<tr>
<td>Pedestrian safety improvements on Church St and at Church &amp; Elm St intersection</td>
<td>raised crosswalks at the intersection of Church St and Elm St near the school. Some of the sidewalks are existing but aren’t continuous due to vast curb cuts. In the short-term, pedestrian space in these areas should be defined through painting or stamping the asphalt. While designs are not included in this document, it should be noted that the Barton Village Trustees would also like wider shoulders along the roads connecting Barton Village and Orleans Village, as well as to the Village Park on Crystal Lake. See pages 16-19.</td>
<td></td>
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<tr>
<td>Craftsbury Village</td>
<td>20-27</td>
<td>Figures 5a through 5g illustrate several different approaches to speed management on East Craftsbury Rd in Craftsbury Village, ranging from a traditional two-way road with shoulders and a sidewalk (5b through 5e) to a road with a shared center lane with painted advisory shoulders (5f and 5g). All concepts also include safety improvements for all users at the intersection of E Craftsbury Rd and Creek Rd. The Town’s preferred alternative is the wide shoulders because they will slow vehicle traffic, create defined space for people walking and biking and are easy to maintain. It should be noted that there is likely a historic sidewalk which has been grown over which could be uncovered to complete at least a portion, if not all of the sidewalk on the south side of E Craftsbury Rd in the village. See pages 20-27.</td>
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<tr>
<td>Non-Infrastructure Strategies</td>
<td>28</td>
<td>Improve safety using policy, education and outreach. See Pages 14-15.</td>
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**Better Bicycle Connections Between Village Centers**

The goal of this priority is to identify ways that the roads connecting Barton Village, Craftsbury, Greensboro, and Hardwick safer and more bike-friendly through re-striping with narrower travel lanes and wider shoulders (Figure 1).

Narrowing the width of vehicle travel lanes to 10 or 11 feet by striping fog lines, shoulders or various types of bike lanes creates a traffic calming effect, meaning that the cars go slower. A maximum 11 foot lane/minimum 4 foot shoulder width is now VTrans engineering practice for all road resurfacing projects. The less available space that drivers perceive causes them to drive more slowly. Slower speeds
result in fewer and less severe crashes for all users and generally contributes to safer roads.\textsuperscript{2} In addition to the traffic calming effect, minimum 4 foot shoulders provide dedicated space for bicyclists and people walking.

Explore an interactive version of this map here: https://tinyurl.com/Kingdomroads

\textsuperscript{2} Narrower Lanes, Safer Streets, Dewan Masud Karim, P.Eng., PTOE
1. 30 MPH speed: Add speed feedback sign southbound
2. Make pedestrian crossing safer by shortening crosswalk on Laurenden
3. Craftsbury Rd gateway: Manage speed with slight extension to green
4. Where speed changes to 25 MPH at Church Ln, paint markings on roadway
5. Extend Breezy Ave sidewalk to Tolman Corners
6. New sidewalk to Highland Center for the Arts
7. Tolman Corner gateway: Short and longer term speed management with paint and traffic calming
8. Speed feedback sign coming down the hill into Tolman Corners
Figure 2a. Existing Conditions at Craftsbury Rd and Laurendon Ave
Figure 2b. Short-Term Gateway & Pedestrian Safety Improvements at Craftsbury Rd & Laurendon Ave

1) A short-term pedestrian lane would connect the existing sidewalk to an improved crossing. The pedestrian lane is meant as a temporary solution until the new sidewalk is constructed. It should include a double white line and flex posts.

2) Redesigning the existing crosswalk on Laurendon Avenue would shorten the crossing from approximately 90 feet to approximately 20 feet. New warning signage alerts cars to the presence of pedestrians. The signs encourage motorists to watch for pedestrians before reaching the crossing. The location may benefit from an RRFB. Pylons form a traffic island to reduce speed before entering the reduced speed area.

3) A temporary extension creates additional pedestrian space between the crosswalks. The temporary painted path to the existing sidewalk would eventually be upgraded to a permanent sidewalk. The painted path between the crosswalks is designed to encourage pedestrians to face the street at a 90 degree angle before crossing. Consider using Color-Safe Crosswalks by Transpo Industries, Inc. to paint the crosswalk. The product is easily applied with a roller.

Colorful pavement markings add color to alert motorists to pedestrian space. Flexible delineators should be placed along the pedestrian lane and around the temporary bulbout.

Note: The pavement markings shown here are meant for inspiration only. The concept recommends creating a unique art piece. It does not recommend copying the example shown here.
Figure 2c. Long-Term Gateway & Pedestrian Safety Improvements at Craftsbury Rd & Laurendon Ave in Greensboro

1) A new segment of sidewalk would connect the existing sidewalk to an improved crossing.
2) Expanded greenspace provides additional space for pedestrians and widens the space between the two legs of the crosswalk.
3) Redesigning the existing crosswalk on Laurendon Avenue would shorten the crossing from approximately 90 feet to approximately 20 feet. New warning signage alerts cars to the presence of pedestrians. The signs encourage motorists to watch for pedestrians before reaching the crossing. The location may benefit from an RRFB. Pylons form a traffic island to reduce speed before entering the reduced speed area.
4) A new sidewalk connection between the crosswalks is designed to encourage pedestrians to face the street at a 90 degree angle before crossing. A new sidewalk connects the crossing to the Town Clerk building.

5a, b) The intersection offers an opportunity to install public art or welcome signage. Both options offer potential partnerships with Greensboro residents.

Sculpture by David Hayes (Image: flasworths.ukaedu)

Note: The public art shown here is meant for inspiration only. The concept recommends creating a unique art piece. It does not recommend copying the example shown here.

Craftsbury Rd/Town Hwy 1 and Laurendon Ave | Greensboro, VT
Improved Crossing: Long-term
Figure 2d. Existing Conditions - Intersection at Hardwick St/TH 5 & Center/Breezy Ave.

Center Rd and Town Hwy 5 | Greensboro, VT
Existing Conditions
1) "Intersection Repair Art" acts as part of the proposed gateway treatment and alerts drivers while offering an aesthetically-pleasing design. The design could be created by local artists, potentially in partnership with the Highland Art Center.

2) Tightening the intersection's radii intends to slow motor vehicles' turning movements and set a more urban tone in advance of entering the town center.

3) Expanding the greenspace into a pause point would give residents expanded parkland, while retaining parking.

4) Narrowing the travel lanes on Breezy Avenue could result in space to add a shoulder. Further study is needed and some sections of Breezy Avenue may require widening and grading to accommodate a shoulder. The minimum 4' wide shoulder could serve as pedestrian space. Longer-term options should investigate a sidewalk or shared-use path connection to the town center to provide a more comfortable and safe pedestrian travel experience.

5) An all way stop would enhance pedestrian safety, especially as the area experiences more traffic due to the Highland Arts Center. Add a sidewalk to the Highland Arts Center as a long-term pedestrian improvement.

**Figure 2e. Traditional Gateway, Speed Management & Pedestrian Safety Improvements at Hardwick St/TH 5 & Center/Breezy Ave**

**Option 1: Intersection Repair, Radii Adjustment, and Pause Point**
1) A mini traffic circle intends to slow traffic, while maintaining traffic flow. According to NACTO guidelines, 15’ minimum clearance should be provided from the corner to the widest point on the circle.

2) Tightening the intersection's radii intends to slow motor vehicles' turning movements and set a more urban tone in advance of entering the town center.

3) Expanding the greenspace into a pause point would give residents expanded parkland, while retaining parking.

4) Narrowing the travel lanes on Breezy Avenue could result in space to add a shoulder. Further study is needed and some sections of Breezy Avenue may require widening and grading to accommodate a shoulder. The minimum 4’ wide shoulder could serve as pedestrian space. Longer-term options should investigate a sidewalk or shared-use path connection to the town center to provide a more comfortable and safe pedestrian travel experience.

5) An all way stop would enhance pedestrian safety, especially as the area experiences more traffic due to the Highland Arts Center. Add a sidewalk to the Highland Arts Center as a long-term pedestrian improvement.

Center Rd and Town Hwy 5 | Greensboro, VT
Option 2: Mini Traffic Circle and Pause Point
Hardwick

Village Center | Hardwick, VT
Existing Conditions
1) Curb extensions tighten the curb radii to encourage slower speeds when motor vehicles turn onto Route 15. Narrow the west side of Rte 15 to install sidewalk.
2) Including curb extensions near existing parking will improve motorists’ visibility of pedestrians crossing the roadway. This would require removing approximately one parking space on either side of the curb extension. Raised crossings emphasize pedestrian space and help calm traffic.
3a, b) Access management would reduce the number of driveways and potential motor vehicle/pedestrian conflicts.
4) Consider changing parking on west side of intersection to parallel parking.
5) The curb extensions act as gateway treatments that signal to motorists that they are entering an area where slow speeds are appropriate and where pedestrians will be crossing the roadway. The median further reduces pedestrian crossing distance. The photographs show locations for artistic gateway arches.
6) Eliminate parking at the intersection. The Village could choose to add landscaping.
7) The Post Office crossing is frequently used. A pedestrian beacon would further alert motorists to the presence of pedestrians. A raised crosswalk would add visibility to crossing pedestrians if a new sidewalk is added to the north side of the street. The Village could keep the in-pavement pedestrian sign even if this crosswalk enhancement is installed.
8) Repair existing sidewalk, add raised crossing, and add curb ramps/warning pads to existing crossings.

Not Shown: Wayfinding signs to parking and to and from the future LVRT would highlight area amenities and would enhance visitors’ experience of the village center.

Village Center | Hardwick, VT
Curb Extensions and Improved Crossings
Barton Village

Downtown Sidewalk Study | Barton, VT
Existing Conditions
Figure 4a. Proposed Pedestrian Safety Improvements in Barton Village’s Center

Generally, the downtown area lacks ADA-compliant detectable warning pads. The area would benefit from a more robust inventory of ADA compliance or non-compliance. ADA compliant curb ramps and detectable warning pads should be added during sidewalk or walkway reconstruction.

Aerial imagery shows a mixture of concrete and asphalt sidewalks behind nose-in parking. The Town should verify whether this area is currently in good repair.

The Town should discuss the option of changing this parking area to a sidewalk. Based on aerial imagery, it appears this shop uses the parking area as space for their goods. Formalizing this use would require maintaining a 4-foot Pedestrian Access Route (PAR) of clear sidewalk.

The drawing shows two white stripes: one at the edge of the travel lane and the other along the walkway (the edge of the shoulder). These stripes delineate the pedestrian space from the vehicle realm.

These dedicated accessible parking places were originally proposed to the Village, along with sidewalk reconstruction plans.

Reorienting this driveway to create a level surface for pedestrians would increase people’s ability to navigate driveways.

Downtown Sidewalk Study | Barton, VT

Proposed Improvements

Drawing intended for planning purposes only. Not to scale. Measurements from aerial imagery and subject to field review. Aerial Image source: Nearmap/Google Earth
Figure 4b. Existing Conditions at Church and Elm Street in Barton Village

Elm Street and Church Street | Barton, VT
Existing Conditions
Figure 4c. Proposed Pedestrian Safety and Traffic Calming Improvements at Church & Elm Street in Barton Village

- **Proposed Pedestrian Safety and Traffic Calming Improvements**
  - **Church Street**
  - **Elm Street**
  - **Weller Street**

**Details:**
- **Existing 6' shoulder**
- **Existing 22 travel lanes**
- **Existing 4' shoulder**
- **Striping the existing parking visually narrows the roadway. Nose-in parking is retained on the southwest corner of the intersection.**
- **Planters act as vertical elements to enhance the intersection and midblock crossing. Plants should be kept at a low height to maintain sight lines.**
- **The southwest corner does not currently feature curb and gutter. A dowel on raised island would transition to the proposed sidewalk/shoulder pedestrian way. Caution must be taken so that slopes and ramps meet ADA requirements.**
- **Adding a four-way stop would slow traffic at the intersection.**
- **Curb extensions realign the intersection, which is currently slightly offset. The proposed extensions would create a gateway and shorten pedestrians’ crossing distance.**
- **This corner keeps the original geometry because of bus traffic to the school.**
- **The existing parking lane on Glover appears to be 11’. This could be reduced to 7’. Easement would need to be purchased to provide a grass buffer next to a minimum 4’ sidewalk.**

**Gateway Treatment:** Four-way Stop and Curb Extensions
Craftsbury Village

Craftsbury Road | Craftsbury, VT
Existing Conditions
Figure 5a. Existing Conditions on East Craftsbury Rd in Craftsbury Village

Craftsbury Road | Craftsbury, VT

Existing Conditions

Measurements originated from aerial imagery and are subject to field review.
Figure 5b. Pedestrian Safety and Striped Parking for Craftsbury Rd & Creek Rd

Reinstalled sidewalk is pictured as a long-term project. Design uses existing pavement width, about 38 ft in widest section, according to available imagery.

1. Objective: Lower vehicle speeds prior to entering Craftsbury Road.
2. Pavement markers clarify in/out direction
3. Visually reduce corner radius with pavement markings
4. The original centerline remains. Parking striping formalizes parking options and visually narrows the roadway. The objective is to lower the street’s design speed. National guidance recommends seven to nine feet wide parking lanes (NACTO).
5. Raised crossings are no higher than three inches above the current grade. They should have a gentle slope so motor vehicles can roll over if traveling the speed limit
6. Bikes May Use Full Lane Sign (R4-11) alerts motorists that bikes may travel outside of the shoulder. Pedestrian warning signs (W1-2) alert motorists to the presence of pedestrians.
7. A curb extension creates additional pedestrian space and shorten the crossing distance.
Figure 5c. Pedestrian Crossings and Striped Parking on Craftsbury Rd

Travel lanes at this location can be 10 to 11 ft wide depending on parking width.

8) Pavement markings indicate presence of on-street parking in front of the Town Clerk's office.
Figure 5d. Pedestrian Safety and Wide Shoulders for Speed Management on Craftsbury Rd & Creek Rd

1) Objective: Lower vehicle speeds prior to entering Craftsbury Road.
2) Pavement markers clarify in/out direction for Creek Rd.
3) Visually reduce corner radius with pavement markings
4) Shoulder is identified using a fog line with the objective of lowering motor vehicle speed. The design encourages trucks and cars to drive slowly through the area. Pedestrians are not prohibited from the shoulder. The shoulder can also function as bicycle space. The shoulder should be a minimum of six feet wide.
5) Raised crossings are no higher than three inches above the current grade. They should have a gentle slope so motor vehicles can roll over if traveling the speed limit.
6) Pedestrian warning signs (W11-2) alert motorists to the presence of pedestrians.
7) A painted curb extension creates additional pedestrian space and shortens the crossing distance. Five feet of space should be left available for bicyclists to pass the pedestrian space. Bollards or planters reinforce pedestrians separation from motor vehicles.

Reinstalled sidewalk is pictured as a long-term project. Design uses existing pavement width, about 38 ft in widest section, according to available imagery.

Note: If an “Advisory shoulder” design is preferred, it requires a request to experiment, per MUTCD Section 1A.10

Craftsbury Road | Craftsbury, VT
Pedestrian Crossings and with Wide Shoulder

*Final design is dependent on additional observations, measurements, and data collection.
Figure 5e. Pedestrian Safety and Wide Shoulders for Speed Management on E Craftsbury Rd

Preferred shoulder width is 6 ft. Minimum width is 4 ft. when no curb and gutter are present.

8] Pavement markings to indicate presence of on-street parking in front of the Town office.
9] Vehicle travel lane widths should remain no wider than 10.5-11 feet in each direction and should remain consistent throughout the village. Shoulder lines should be striped so that they vary from 6 to 8 feet wide.

Craftsbury Road | Craftsbury, VT
Pedestrian Crossings and Wide Shoulder

Note: If an “Advisory shoulder” design is preferred, it requires a request to experiment, per MUTCD Section I.A.10
Figure 5f. Two-Way “Slow Street” Design with Advisory Shoulders for Pedestrians and Bikes at E. Craftsbury Rd & Creek Rd

The town purchased a solar speed monitor, which will first be placed north of the common and later moved to an approach to the elementary school. Image: https://wiki.waze.com/wiki/Camera.

Preferred shoulder width is 6 ft. Minimum width is 4 ft. when no curb and gutter are present.

Reinstalled sidewalk is pictured as a long-term project. Design uses existing pavement width, about 36 ft in widest section, according to available imagery.

1) Objective: Lower vehicle speeds prior to entering Craftsbury Road.
2) Pavement markers clarify in/out direction
3) Visually reduce corner radius with pavement markings
4) Shoulder is identified using colored pavement with the objective of lowering motor vehicle speed. The design encourages trucks and cars to slowly roll through the area. Pedestrians are not prohibited from the shoulder. The shoulder can also function as bicycle space. The shoulder should be a minimum of six feet wide.
5) Raised crossings are no higher than three inches above the current grade. They should have a gentle slope so motor vehicles can roll over if traveling the speed limit.
6) Signage clarifies the two-way travel pattern (W6-3). Pedestrian warning signs (W11-2) alert motorists to the presence of pedestrians.
7) A painted curb extension creates additional pedestrian space and shortens the crossing distance. Five feet of space should be left available for bicyclists to pass the pedestrian space. Bollards or planters reinforce pedestrians’ separation from motor vehicles.

Craftsbury Road | Craftsbury, VT
Pedestrian Crossings and Advisory Shoulder

Note: Advisory shoulders require a request to experiment, per MUTCD Section 1A.10

Drawing is intended for planning purposes only. Not to scale. Measurements originated from aerial imagery and are subject to field review.
Figure 5g. Two-Way “Slow Street” Design with Advisory Shoulders for Pedestrians and Bikes at E. Craftsbury Rd

8) Pavement markings to indicate presence of on-street parking in front of the Town Clerk's office.
9) Guidance from the FHWA Small Town and Rural Multimodal Networks design guide states the preferred two-way center travel lane width is 13.5 - 16 ft. The design may function with a width of 10 - 18 ft.

Craftsbury Road | Craftsbury, VT
Pedestrian Crossings and Advisory Shoulder

Note: Advisory shoulders require a request to experiment, per MUTCD Section 1A.10
Non Infrastructure Recommendations

In addition to the location-specific infrastructure improvements noted in this Walk-Bike Safety Action Plan, Local Motion identified several potentially viable non-infrastructure strategies for improving walk-bike safety. In addition to the strategies outlined below, these and others are presented in much greater detail in the “Toolkits” section of the Safe Streets Vermont website, which is available online at [http://safestreets.vermont.gov/toolkits](http://safestreets.vermont.gov/toolkits).

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<th>Strategy</th>
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<th>Partners and Examples</th>
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<tr>
<td>A. Update local ordinances</td>
<td>Update local ordinances regarding the rights and responsibilities of non-motorized users of local roads. The town of Middlebury recently undertook a comprehensive rewrite of those portions of its ordinances that pertain to vulnerable users, with an eye towards clarifying where and how people can walk and bike on streets, sidewalks, and paths in town.</td>
<td>Middlebury’s rewrite was led by local volunteers in close collaboration with the police chief. The language was recently approved by the selectboard. It might serve as a useful starting point for the NEK municipalities to do the same.</td>
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<td>B. Organize a sidewalk stenciling campaign</td>
<td>Organize a downtown sidewalk stenciling campaign to promote safe walking and biking.</td>
<td>Local Motion offers materials and assistance with local volunteer-led stenciling of safety messages and graphics on sidewalks using temporary spray chalk.</td>
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<td>C. Apply for Walk-Friendly Community/Bicycle-Friendly Community recognition.</td>
<td>These free programs, from Walk Friendly America and the League of American Bicyclists, help communities evaluate how effectively it supports and promotes walking and biking respectively. Qualifying communities are awarded recognition starting at bronze and going up to diamond levels, and all communities that apply are given detailed feedback on steps to take to achieve the next level of recognition.</td>
<td>Local Motion can assist with the application process. A municipality must be the formal applicant.</td>
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<td>D. Presentation on the benefits of walking and biking</td>
<td>Offer one or several workshops or presentations for local elected officials and/or staff regarding the benefits of and strategies for making the community more walk- and bike-friendly.</td>
<td>Local Motion can develop customized presentations on topics that are particularly relevant to Morristown and then present them to any group of community leaders.</td>
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<tr>
<td>E. Walking and/or biking tour</td>
<td>Organize a walking and/or biking tour of key sites of concern with local officials and community leaders.</td>
<td>Local Motion could lead the tour, highlighting issues and solutions as outlined in this proposal.</td>
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<tr>
<td>F. Bike Smart program</td>
<td>Make it easier for kids to walk and bike to school by instituting regular bike skills training for kids in grades 3 through 6.</td>
<td>Local Motion can provide a cargo trailer filled with kids’ bikes and all needed equipment for building bike skills training into PE and/or afterschool at a nominal cost, and can train school staff in how to implement our bike skills curriculum. Partner with school and teachers.</td>
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<td>G. Add walk-bike policy language to municipal plans</td>
<td>Amend tow/village plans to include policies about narrowing lane widths and creating a connected walk-bike networks. Review zoning standards to ensure that new development supports walking and biking.</td>
<td>Work independently or with regional partners.</td>
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<td>H. Work with business community on using biking to enhance tourism and economic development</td>
<td>Capitalizing on the municipalities’ locations adjacent to the LVRT to bring more economic activity, with the goal of drawing riders off the trail and into local businesses, and to surrounding towns.</td>
<td>Work with VT Agency of Commerce and Community Development</td>
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<tr>
<td>I. Identify pop-up demonstration projects</td>
<td>Choose one project from each community to run as a pop-up to demonstrate low cost, low risk temporary ways to try out new ideas.</td>
<td>Contact Local Motion to use our Pop-Up Demonstration trailer.</td>
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Next Steps

There is great potential to capitalize on the energy in this area, the Bike and Pedestrian Committee work to date and the opportunities ahead. We recommend the following next steps.

1. **Apply for a Vermont Bike-Ped Program Grant or other grant funding sources in 2017**: Select specific projects from the recommendations in this plan to implement.

2. **Continue to meet as a Steering Committee**: Meet quarterly or monthly as a steering committee. We recommend that the steering committee organize into a local advocacy group that can spearhead future walk-bike projects.

3. **Amend Local Plans to include Walk-Bike goals and policies**. Strong policy language lays the groundwork for long term support of safety improvements and will make the town more competitive when applying for grants and other funding for projects. The town could adopt this plan into the Plans by reference.

4. **Identify additional pilot projects**. The steering committee should identify pilot projects that they advocate for demonstrating around the area. Any of the restriping projects in this plan could start as pilot projects. Recruit volunteers, borrow Local Motion's pilot trailer and make them happen!

5. **Celebrate!** Plan a spring Walk-Bike event to highlight the positive changes in the community so far and what you’ve accomplished together.