

## North Hyde Park and Waterville Main Street Initiative

September 30, 2021

*Prepared by: The Lamoille County Planning Commission*



*Above, North Hyde Park with trees and sidewalks. Photo courtesy of the Hyde Park Historical Society*

*Below, Waterville village with the Town Hall to the right. Photo courtesy of the Waterville Preservation Board*



*This project is funded by the Municipal Planning Grant Program through the Vermont Agency of Commerce and Community Development.*

## Introduction

The Lamoille County Villages of North Hyde Park and Waterville approached LCPC due to concerns about pedestrian safety related to accessing important civic buildings and public spaces. Waterville wants safer conditions for pedestrians in the Village Core which includes the Town Hall and Town Green. In North Hyde Park's Village Core the pressing need is pedestrian access to the Gihon Valley Hall and the post office. People want to walk to these destinations, but they are harder to reach and access than they should be. These communities also seek to revitalize their historic Main Streets, use their Village Center Designation status to advantage, and effect other positive changes in their village settings. Making Main Street more walkable is the starting point. Each community has created a vision for transformative change to implement over time to improve pedestrian safety and access and enhance Village streetscapes.

Waterville and North Hyde Park are linear villages located along State Highways. The village core in each contains important community resources, including civic venues and public spaces that provide opportunities for community events and gathering. This historic rural urban form is a common in Lamoille County,

*“Many of Lamoille County’s villages have developed around state highways. These highways play the dual role of providing access and mobility. The complicating factor in many of these villages is that the state highway often also serves as Main Street.” (Regional Plan, Lamoille County Planning Commission)*

The spatial structure and organization of Waterville and North Hyde Park formed in the 19<sup>th</sup> century. Each village formed as a settlement around the waterpower used for processing the industrial goods of the day. As each village grew a Village Main Street formed to facilitate on-foot activity, civic life and wealth building, delivering a surplus of amenities to the community's inhabitants while maintaining direct connections to the surrounding working and natural landscapes. Each village has retained the community scale and much architecture of this era on its Village Main Street. Restoring this legacy – built environments with an ordered hierarchy of buildings and spaces of different sizes in relationship to each other that facilitates social activities – is the goal of North Hyde Park and Waterville. Visioning in this report identifies the preexisting and inherently logical framework that formed in each village's founding era and based on this determines opportunities to retrofit for easy and comfortable pedestrian access and the development of strong sense of place.

Attributes that allowed the civic and commercial functioning of Main Street historically continue to provide capacity for this today. However, restoring these attributes conflicts with today's priority for rural highways designed and maintained to provide efficient vehicular mobility. This condition affects historic and Designated Villages across Vermont.

The emphasis on vehicular mobility has transformed Vermont Rt. 100 in the village of North Hyde Park and Vermont Rt. 109 in the village of Waterville into conduits for cars. Within each Village Core it is dangerous and hard to walk even a few hundred feet. In both Waterville and North Hyde Park the problems begin in the approaches to these villages due to roadway design that provides few signals that a driver is approaching a pedestrian area and should slow down. Within the Village Core loss of sidewalks and street trees has eliminated safe pedestrian connections to public services and community gathering spaces. Lack of access has contributed to disinvestment in the historic buildings on these villages' Main Streets.

Today, the compact walkable settlement pattern intrinsic to these villages is largely inaccessible and driving is the safest and most convenient mode of transportation. Demand for a pedestrian friendly Village Main Streets in North Hyde Park and Waterville began before the COVID-19 pandemic and has increased as residents seek opportunities to socially mingle in safe outdoor settings they can reach on foot and by bike.

Making Village Cores more walkable sets them up to be platforms for rebuilding civic and commercial vitality. This can attract investment for new development in walkable patterns – for the new housing necessary for entrepreneurial newcomers and younger workers Vermont needs to revitalize local and regional economies and repopulate the state. Targeted investments in walkable Main Streets, especially in Designated Village Centers, connects people to destinations of value in these preexisting settings. This can attract private investment to build walkable, equitable places and restore brownfields to productive use. New housing in compact walkable preexisting centers helps protect the working and forested lands that sustain rural economies, help to mitigate for a changing climate, and provide opportunities for healthful recreation.

The villages of Waterville and North Hyde Park provide relatively affordable cost of living in commuting distance to jobs in Burlington and Montpelier and located in easy reach of world class outdoor recreation. Transportation investments that restore walkability to their historic Main Streets will magnify other public investments - for broadband that supports partial or full remote work, for water and wastewater infrastructure that provides capacity for new housing, and for daycare centers that support workforce employment.

## **Executive Summary**

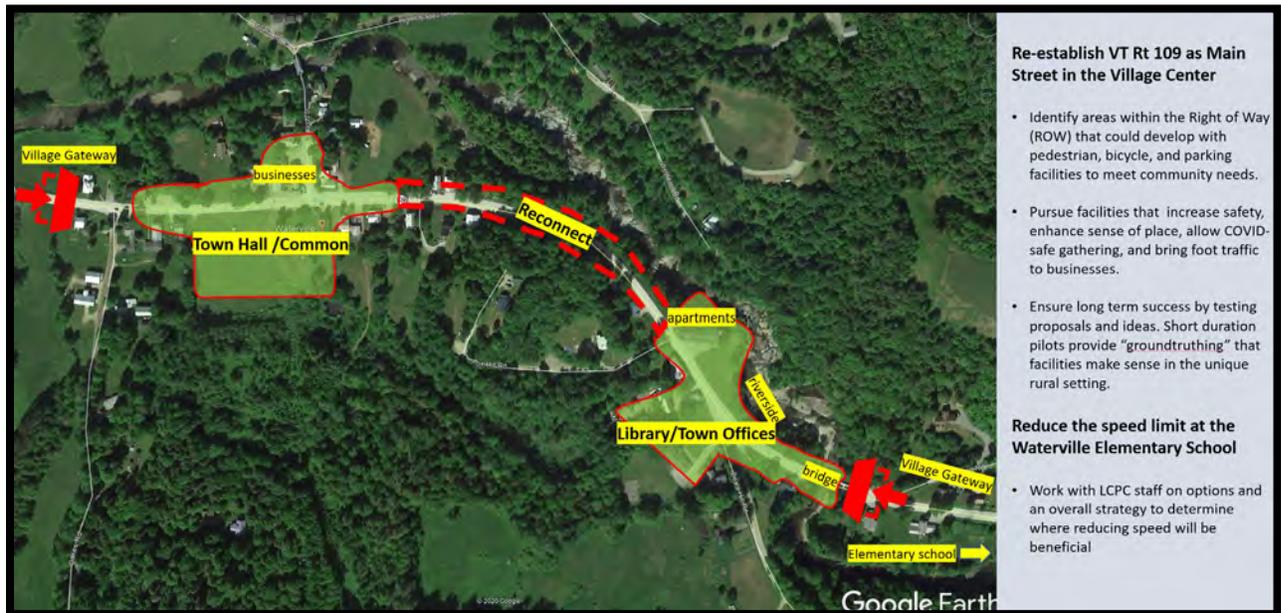
The historic villages of North Hyde Park and Waterville feature homes, businesses and institutions organized along traditional Main Streets. While neither community currently refers to the State Highway as “Main Street”, this report and the visioning proposals for these communities will refer to State Highways within these villages as “Village Main Streets”. By using this term, we identify the state highway within each designated village where the public realm could transform into a platform for building economic prosperity in the community. The term “Village Main Street” frames and formalizes each community’s intention to increase accessibility of residents and visitors to capitalize on unique and intrinsic assets.

The Village Main Streets of Waterville and North Hyde Park were once tree-lined and walkable settings that welcomed both drivers and pedestrians. In recent decades both villages experienced widening of Main Street and this resulted in the removal of both street trees and sidewalks. Loss of pedestrian access has deterred economic, social, and environmental well-being in these communities. Visioning for the villages of North Hyde Park and Waterville provides guidance to help these communities restore the function and sense of place lost over time.

***Achieving transformative change requires recognizing state highways in designated villages as qualitatively and materially*** distinct from state highway’s usual role as a conduit for facilitating movement of vehicles. Proposals address how Main Street could be retrofitted for pedestrian friendliness, and redefined and public spaces along it remade as places for the community’s use, and how this restored and strengthened sense of place could replicate and extend beyond Main Street to other areas of the village. Visioning for each community follows common themes: use of the existing

right of way (ROW) to make Main Street safe and functional so pedestrians can access important civic buildings and spaces, placemaking streetscape design appropriate for each unique setting, how state government and land use work together, and recommendations that could enhance and coordinate this.

Reallocating road space within the right of way to serve pedestrians and bicycling along with vehicles reduces material costs of providing active transportation, introduces design modifications to help slow traffic naturally, and cost-effectively manage stormwater. Slowing traffic through each village frames each as unique setting and experienced by motorists and pedestrians alike as a sequence of spaces – an arrival and entry zone, an edge that becomes more densely built as it reaches the center or core of the village. *(This sequence in Waterville Village is represented in the slide below).*



How the state highway through the village manifests prevents or fosters ‘sense of place’. When areas within a village are defined by place-based elements and attributes being in a village becomes as an immersive experience. *(The sequence of spaces in North Hyde Park below).*



Whether this can be reestablished in Village Main Streets along State Highways depends on the successful coordination of state and community planning. Having mutual goals and priorities facilitates reaching formal agreements between towns seeking to implement local planning and VTRANS, which holds jurisdiction over the public right of way.

To develop a rubric and timeframe for achieving desired improvements in its Village Core each community's visioning included the pilot demonstration of an active transportation project. Visioning to increase pedestrian friendliness was pursued a new under a new Agency of Transportation (AOT), or VTRANS, Demonstration Program, Demonstration Projects in State Highway Right of Way, October 2020.

Each village identified goals and set forth its priorities for addressing pedestrian safety in its application to the Demonstration Project Program. Proposals focused on incremental steps and small connections to make walking and biking easier, safer, and more secure, including road design modifications to encourage lower traffic speeds

Waterville sought to establish a Village Safety Zone in its village core, using pavement markings to delineate an approximately 185' zone for informal pedestrian movement between the Green and Town Hall and the commercial row across the street that includes the Waterville Market. Contrasting pavement marking were proposed to alert all users that they are in a village setting, where cars, pedestrians and bicycles must share the road. Rather than signage, lines, and designated parking areas this bold design would communicate the hierarchy of users in the space. The Village Safety Zone requested by Waterville Village would help address traffic and safety concerns in contiguous areas in the Village Center. *(An overview of the proposal and how it would address local goals is summarized in the slide below).*

### Walk/bike safety in Waterville Village Center

### Traffic calming ideas at the store and the Town Hall/Green

**Proposed Facilities**

- Parking
- Crosswalk
- Pedestrian route
- Tree





Pull-in parking at store remains

As a low-traffic street, Church could become a "yield street" with an enhanced shoulder on the right side; parking at left next to the store and in church lot.

Establish a "Village Safety Zone" between store and the Town Green to slow traffic and allow people to move freely. "Village Pedestrian Zone" signs needed.

Evaluate upgrading the shoulder to accommodate school bus pickup, parking for events at Town Hall/Common, overflow parking, possible commuter parking/park and ride. Plant street trees to define the edge of the Common, help manage stormwater. \*\*Street trees are beyond the scope of the demo project and depicted for visioning work under an ACCD grant; all trees are depicted outside ROW\*\*



A row of trees in line with the Town Hall reinforces the south "gateway" for motorists

Street trees were historically important community character elements, today largely missing. Reinstating this aspect of the Village's identity can help to 'enforce' slower speeds to create a more comfortable and enjoyable pedestrian experience. A more dynamic public realm promotes local businesses.

VTRANS response was to allow a crosswalk. This was rejected by the Waterville Selectboard on the grounds that channelizing pedestrians into a crosswalk in this location did not fit with pedestrian behavior in this context. The Selectboard chose instead a signed “pedestrian zone” approach which more accurately reflects likely pedestrian behavior. However, as this approach relies on signage alone and absent any roadway design changes, significant concern remains that signs will not sufficiently address safety concerns. The pedestrian zone is adjacent to the southern approach to the Village, where many motorists approach at higher than desired speeds. Numerous safety conflicts remain unresolved including parking at the “Waterville Market”, school bus pick up on the Town Green, and civic events at the Waterville Town Hall. ***Current VTRANS standards and the MUTCD lack specific, standardized methods to address these issues on the scale and settings of small mountain villages such as Waterville.***

Conversely, North Hyde Park determined that two marked crosswalks were critical for pedestrian safety, based on the traffic volumes and vehicle speed through the Village Center. However, current VTRANS standards only allow one marked and signed crosswalk in a Village Center without pedestrian volume warrants, notwithstanding that in linear village contexts this significantly constrains access and movement by foot. In Spring 2022 the community will pursue a demonstration project to “test” two locations for a future crosswalk on Route 100. Data collected from this demonstration project will help evaluate the most desirable location for a crosswalk in North Hyde Park. The demonstration project will also help evaluate tradeoffs associated with both crosswalk locations, such as the required twenty-foot loading only/no parking zone on each side of the crosswalk. In the future, should pedestrian volumes warrant need for it to VTRANS, a second location may be pursued. The community may also pursue more robust upgrades to the crosswalk(s) such as removable bump outs or in-road signage. *(An overview objectives and desired scope of VTRANS pilot in slide below).*

MAKING WALKING AND BIKING IN NORTH HYDE PARK SAFER

Village Core: Overview of placemaking goals

Vehicles traveling too fast and inability to walk safely and comfortably to the Post Office and the Gihon Valley Hall limits access and full use. Pedestrian and public space improvements that help slow vehicular traffic would help reestablish sense of “Main Street” lost as VT Rt 100 transformed into a highway. Lack of parking as the Village holds more events is another problem to address.

- The short-term pilot of crosswalks and sidewalks will generate data on their use and effectiveness at slowing traffic.
- Open and vacant properties can provide parking for events and outdoor gathering. ‘Memorandums of Understanding’ let towns and consenting landowners reach formal agreements that serve all needs.
- Visual cues alert drivers they are entering a Main Street pedestrian area. Treatments on the bridge over the Gihon, street trees and banners on utility poles are elements that signal “Village Main Street” area to drivers.

The inset shows where “demonstrations” of facilities like sidewalks, crosswalks, and curb reductions were requested to be temporarily installed under a VTRANS pilot project program that allows testing of facilities. Participation in this program could speed up getting permanent facilities in the Village.

In both North Hyde Park and Waterville, participating in the demonstration program resulted in fewer tangible results than expected. VTRANS review team of engineers determined that tactical short-term interventions proposed and whose implementation would be overseen by Local Motion could not be piloted due to nonconformance with VTRANS standards. While each community found ways to pursue different strategies, challenges faced in North Hyde Park and Waterville reflect the difficulties of retrofitting state highways in historic Main Street contexts where addressing pedestrian behavior and needs requires different approaches than what is considered possible under a strict reading of the MUTCD.

If VTRANS developed more gradient approaches for Village Main Streets this would provide design and operations flexibility to help these communities develop stronger sense of place and improve the physical appearance of historic Villages. The context of State Highways in rural villages like Waterville and North Hyde Park is significantly different from the context in more urbanized settings such as Bethel (featured on the cover of VTRANS guidance document). The preexisting framework in places like Bethel provide attributes familiar to VTRANS, such as parking lanes, curbs and gutters and armatures of buildings as street frontages. This allows for local placemaking in alignment with how VTRANS traffic engineers predict and manage traffic flows. Imposing a model derived from conditions in more urbanized contexts on rural village Main Streets like those in Waterville and North Hyde Park will limit possibilities for their incremental improvement.

A further obstacle that creates barriers to revitalize Main Street in rural towns is the infeasibility of adopting Class 1 status. A town that lacks capacity to plow its own roads, such as Waterville, is not able to adopt Class 1 status and may never be able to do so. Current VTRANS policies and standards based on urban street forms and municipal capacity nonexistent in most rural villages create barriers to achieving vision of place in ways that can help improve local economies. The unintended outcome is widening gaps between more urbanized communities and rural Vermont.

Retrofitting streets for pedestrian use and access enhances communities of all sizes. In the context of rural Vermont making Main Street more pedestrian friendly can be transformative and a catalyst for investment that would otherwise not materialize. This includes broadband and essential infrastructure necessary to support new housing, residents working from home, and new local businesses. In Waterville and North Hyde Park increasing access for pedestrians through road design modifications that result in lowered traffic speeds would access and use of public outdoor spaces, for safe gathering during COVID-19 and help attract public and private investment to improve historic buildings and frontages.

VTRANS has recognized the growing demand for walkable villages and downtowns. Implementing new pedestrian and bicycle facilities in underserved communities requires considering the expense of retrofitting roads and limited resources for this. Current approaches used result in comprehensive transformation to a more urbanized state, as in Danville and Brandon, take considerable resources to bring to fruition. This is unaffordable for Vermont given the need and growing demand, and in very rural settings results in outcomes that appear “overbuilt” for the context.

Our applications on behalf of North Hyde Park and Waterville to the VTRANS Demonstration Program proposed “lighter, quicker, cheaper” strategies in these very rural village settings. While our applications did not win approval from VTRANS engineers, we believe they make a strong case for VTRANS to develop more gradient approaches and standards that calibrate to conditions in these

historic rural contexts. To restore economic vigor to village Main Streets across rural Vermont and do so more cost effectively than currently we ask VTRANS to develop capacity for engineering flexibility in interpreting and applying standards for pedestrian infrastructure in rural contexts. We ask that ACCD partner with VTRANS to promote and facilitate better coordination of state and local planning, including reaching formal agreements between towns seeking to implement local planning and VTRANS.

## **Community Planning and Progress in North Hyde Park and Waterville**

The villages of Waterville and North Hyde Park formed alongside rivers, with the Village Main Street the focus of civic and commercial activity in each community. Historically, the riverfront was used for milling. Today, recreational uses like tubing, gathering and fishing occur at the river edge. Each rural village reached out to LCPC to find ways to address the erosion of the historically walkable and compact setting that has occurred over time due to prioritization of vehicular movement in the State Highways running through these villages. Vehicular orientation depresses vibrancy in the village cores, limits use of the public right of way and prevents access to important public facilities. Each village seeks to restore pedestrian use of the street and activity in village public places.

In Waterville the Village Main Street connects the upper and lower sections of the Village, settings that historically connected but today are separated by a segment of road that is unsafe for walking or biking. The lower village is the Village Core, contains the Town Hall, the Village Green across from the Waterville Market, the church, and residences. The upper village consists of the library, Town Offices, a former mill converted into apartments and the local swimming hole. Waterville wants to restore vibrancy to its village core by making informal and free movement of pedestrians safe from the Town Hall and the Green extending across VT Rt. 109. Instituting a “Village Safety Zone” would slow traffic on VT Rt. 109 entering from the south before it reaches the village. Waterville also wants to restore pedestrian and bicycle connectivity between the lower and upper villages, and calm traffic at the local school north of the village. North Hyde Park seeks to slow traffic in the village from “bridge to bridge”, particularly the section just north of the Post Office and Ferry Street intersection and the Gihon Valley Hall, provide for and manage event parking in the village, and slow traffic on VT Rt. 100 prior to it entering the village from the north and south.

Each community pursued visioning that identified strategies and incremental steps to improve sense of place in the village core. Ideas and recommendations incorporate stakeholder input and have been presented to the public. Due to COVID restrictions meetings were held on Zoom which were advertised on Front Porch Forum and in mailings to residents. In North Hyde Park the Gihon Valley Hall Committee served as project steering committee. This group surveyed residents and took traffic counts during the VTRANS authorized demonstration of two crosswalk options and the road shoulders enhanced for pedestrian safety between them. In Waterville, key challenges and goals to address were identified in consultation with members of the Planning Commission. LCPC staff presented the vision plan in February to the Waterville Selectboard, and to the community at Town Meeting, held outdoors on the Green on June 8, 2021.

This section summarizes planning efforts and community engagement as outlined in the FY 20 MPG Scope of Work. Certain tasks have been followed in different order in each community to facilitate needs and project timing and goals.

## ***Task 1: Project Start-up Coordination/ Refine Scope***

### **North Hyde Park and Waterville**

Following the FY 20 Municipal Planning Grant Award notice in winter of 2019-2020, the LCPC revisited the scope of work with Waterville and Hyde Park. Meghan Rodier, LCPC Regional Planner, met with the Waterville Planning Board on January 13<sup>th</sup> to revisit the scope of work and share the below preliminary timeline for the “North Hyde Park and Waterville Main Street Initiative”. On February 10<sup>th</sup> of 2020, the Town of Hyde Park hosted a pre-coordination meeting to revisit the project’s scope of work and proposed timeline below. The meeting was held with community stakeholders including members of the Gihon Valley Hall Committee and Hyde Park Planning Commission as well as other interested residents. While revisiting the scope of work, stakeholders relayed concerns regarding safety and future visioning in North Hyde Park. In early February of 2020, the Town of Hyde Park and Lamoille County Planning Commission entered into an agreement for services to carry out the FY 20 MPG Project scope of work. This agreement included the LCPC’s work with Landscape Architect, Kate Lalley.

## ***Task 2: Project Kickoff Meetings***

### **North Hyde Park**

A virtual Zoom meeting in June 2020 kicked off visioning in North Hyde Park and at the Gihon Valley Hall. Prior to the meeting a “Dear Neighbor” letter sent to the approximately 100 households within the 35mph village zone. The letter invited residents to help develop a strategic plan for the neighborhood to improve safety for pedestrian and bike traffic, to provide more interconnection and access to local businesses, to develop the Gihon Valley Hall as a hub for community gatherings, and then use the plan to help secure grants and State funding to act on these ideas.

*The kickoff meeting identified the following key issues to address:*

*Speed* - Speed is a major concern in the Village. Speed impacts the safety of residents and discourages people from walking in the Village. This reduces the livability of the Village. Lack of access prevents full use of community spaces such as the Gihon Valley Hall and Post Office and discourages residents from walking to local businesses such as the River Valley Store. Vehicle speed also creates challenges for trucks exiting the North Hyde Park Fire Station.

*Poor sense of Entry*- Challenges related to vehicle speed are exacerbated by the lack of clear “visual cues” that drivers are entering a settled area. The southbound lane of Route 100 from Eden, especially, feels like an open road until immediately entering the Village.

*Village crosswalks and sidewalks* - Based on feedback received at the Kick-off Meeting, the segment from the Post Office to Gihon Valley Hall appears to be the highest priority. Short term measures such as providing extended gravel shoulders and/or line stripping would enhance mobility and access for pedestrians.

- The 2015 Dubois and King Study identified a crosswalk at the intersection of Route 100 and Ferry Street. Due to the speed and volume of traffic, especially the south bound traffic on Route 100, a “shelter island” (median) on Route 100 was proposed. VTRANS raised concerns about the shelter island. In addition, due to the requirement for 20-foot clear zones on both sides of a

crosswalk, a crosswalk in this location would result in the loss of parking in front of the Post Office.

- Since the 2015 Study, VTRANS has modified its standards to provide additional flexibility for crosswalks in Designated Village Centers. Two major changes include (a) enabling approval of one crosswalk per Village that does not meet the “warrants” (20 existing pedestrian crossings in peak hour) and (b) allowing expanded shoulders at least three feet wide to serve as “connecting facilities.” These modifications could enable approval of a crosswalk on Route 100 that was not be possible under the prior policy.
- The 2015 study was completed before revitalization of the Gihon Valley Hall had built the current momentum for a crosswalk alternative at the Hall to meet the community’s objectives.

Parking - Lack of parking was noted as a major challenge for events at the Gihon Valley Hall and elsewhere in the Village.

### **Waterville**

On April 27<sup>th</sup>, 2020, the Waterville Selectboard and Planning Board held a joint kickoff meeting via Zoom. The meeting was publicly warned as a regular Selectboard meeting and relevant public officials including the Waterville Emergency Management Director were invited to attend. Waterville officials and LCPC staff discussed the project timeline and focus areas for community visioning efforts to establish a conceptual plan for improved safety, walkability, connectivity and enhanced sense of place in Waterville Village. Focus areas for visioning included Village gateways, the Waterville Village Center near the Town Hall/ Waterville Market, near the Waterville Elementary School, and connecting the north end of the Waterville Village Center to the core. These focus areas served as the primary areas to capture traffic and pedestrian activity through LCPC data collection efforts. Due to the COVID 19 pandemic, Waterville officials revised the outreach strategy to include a public concerns survey in lieu of hosting in-person public concern meetings.

The kickoff meeting identified the following key issues to address:

- Exploring opportunities for a crosswalk and other safety measures for crossing VT 109 in Waterville Center.
- Explore opportunities to enhance parking options in the Village Center to accommodate residents/visitors for community events held at the Town Hall.
- Improve visual cues of the Waterville Village Center through both safety measures and streetscaping opportunities
- Improve visual cues of the Waterville Elementary School through both safety measures and streetscaping opportunities
- Re-evaluate community (Gateway/event signs) and safety signage adjustment/opportunities including quick speed limit changes (50-30mph) when entering the Village Center.

## **Tasks 3 and 4: Data Collection and Site Visits in Village Centers**

### **North Hyde Park and Waterville**

Beginning in Spring 2020 LCPC staff gathered and compiled background data in North Hyde Park and Waterville Village Centers. LCPC staff conducted targeted traffic counts and pedestrian/cyclist data collection to support community visioning efforts and preliminary requests to VTRANS (*see Appendix B for count data collected*). Data gathered revealed important differences between the two villages in terms of local needs and appropriate interventions to increase pedestrian safety. Traffic volumes in North Hyde Park are substantially greater than traffic volumes in Waterville (AADT of 5,102 on Route 100 in North Hyde Park vs 1,572 on Route 109 in Waterville). The counts confirmed anecdotal observations from residents of North Hyde Park of high volumes of truck traffic on Route 100. 22.4% of vehicles recorded were classified as single unit truck and tractor trailer categories on Route 100 in North Hyde Park. In contrast, only 6% of the vehicles in Waterville were classified as single unit trucks and tractor trailers.

Both communities also raised concerns about traffic speed. In North Hyde Park, 58.7% of vehicles were recorded over the speed limit (35MPH) south of the Village, with 72.2% cars recorded over the speed limit (35MPH) south of the village. This confirmed local observations and concerns about excessive vehicular speeds, especially of traffic entering the Village from the north.

In contrast, in Waterville, the average speed was recorded at 34MPH (speed limit is 30MPH). Of those vehicles that were recorded speeding, only 3.4% were recorded over 50MPH. ***While total volume, trucks, and speed represent major safety concerns in North Hyde Park, concerns in Waterville seemed to center on potential conflicts between vehicle movements, cars parked on the roadside near the market and Town Hall, and pedestrians on the shoulder.*** This important distinction in community perceptions and needs was confirmed by traffic count data, and points to the need for fine grained approaches in Village settings.

LCPC staff conducted field meetings in each village in late summer 2020 with stakeholders including local officials, residents, and representatives from the Vermont Agency of Commerce and Community Development, and the Vermont Agency of Transportation (VTRANS). On August 21<sup>st</sup>, 2021, a walking tour/safety audit was held in each village. Attendees included representatives from North Hyde Park and Waterville and key staff from VTRANS including Jon Kaplan, Bike/Ped Program Manager, and Mario Dupigny-Giroux, Traffic Safety Engineer. The visit presented an opportunity to meet with state partners (VTRANS) to gather input on what safety/traffic calming measures are possible to implement in the State right-of-way, and next steps to support those requests. An additional site visit was held on October 14<sup>th</sup>, 2021 with Town officials/staff, Richard Amore, Planning and Outreach Manager for ACCD's Village Center Designation Program, and Kate Lalley, Planner/Landscape Architect. The objective of this site visit was to identify streetscaping/placemaking opportunities to help calm traffic and enhance the presence of the village center. (*See attached notes from these visioning site visits in Appendix B, Supplemental Information*).

## ***Task 5: Public Meetings/ Survey***

### **North Hyde Park**

In North Hyde Park community public meetings were held to get stakeholders and community official input on topics of importance and concern. In the context of COVID isolation community engagement meetings took place on Zoom. Residents of Eden and representatives of the Eden Town government were also invited to participate due to North Hyde Park being located on the Eden Town line and the closest Designated Village Center to Eden.

Lack of access to the Gihon Valley Hall and the Post Office was the immediate concern. Prioritizing the free flow of traffic through the Village has eroded former sense of place, access to civic and public locations has become difficult, and local businesses have struggled or left. As validated by traffic counts, the speed of cars traveling through the village frequently exceeds the 35mph limit and this contributes to safety concerns and discourages pedestrian activity on Main Street. Speeding cars are also a barrier to first responders and their vehicles at the fire house. Moving the 35mph sign north of the fire house would help to slow southbound traffic in advance of the fire house and the village core.

### **Waterville**

In Waterville publicly warned Selectboard Meetings hosted several discussions about the “Waterville Main Street Initiative” project. These included the kickoff meeting, project prioritization meeting, and presentation of conceptual plans. Conceptual visioning plans were also presented at the 2021 Waterville Town Meeting Day and to local business owners including the Waterville Market owner. Waterville Planning Board members let residents and neighbors in the Village Center know about the draft conceptual plans, proposed safety measures, and a potential for a demonstration project. To gather additional public input on the social acceptability of potential safety and streetscaping improvements in Waterville Village Center, the Town worked with LCPC to issue a Public Concerns Survey. The Survey was developed in consultation with the Waterville Planning Board and Selectboard and issued on Front Porch Forum in the summer of 2020. A follow-up issue of this survey occurred in spring of 2021. The survey demonstrated that community members and village residents want both safety improvements (safe pedestrian crossing area) and streetscaping (street trees and flower boxes) improvements to enhance safety and improve the appearance of the Village. The survey also measured community concerns about limited parking for Town events and other future aspirations such as establishing connections to local trail networks. *(See survey results in Appendix B, Supplemental Information).*

## ***Task 6: Prioritization Meetings***

### **North Hyde Park**

*In North Hyde Park the kickoff meeting generated the following synthesis of ideas and recommendations to pursue during the visioning phase of the project:*

*Speed* - Speed impacts both safety and visibility. Major injuries and fatalities increase exponentially as vehicle speed increases above 30 miles per hour. Slower vehicles increase the visual field for motorists, enabling them to react more swiftly to the environment. Signage for businesses on the Village “Main Street” is another way to increase the visual field. In addition, advertising small businesses, signage

encourages patronage of passersby and residents, creating activity and interest that fosters lower speeds.

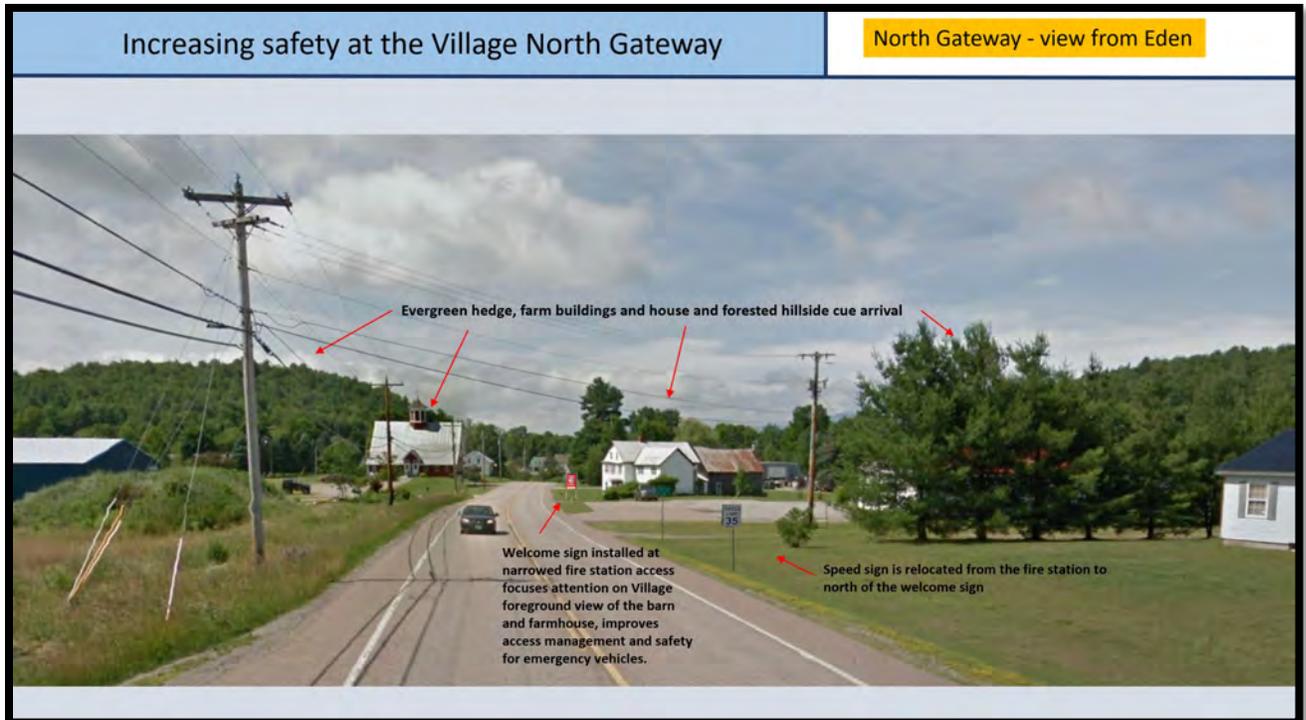
- Extend the 35mph zones farther out on the northbound and southbound approaches to the village.
- Extend the 35mph zone at least north of the fire station
- Reduce the speed limit in the Village Core to 25mph.
- Within the village reduce travel lanes on Route 100 to 10.5 or 10 feet. Narrower travel lanes send a subtle visual cue that motorists are entering a settled area and encourage slower speeds. Narrower travel lanes also provide wider shoulders.
- Use the additional space to provide more safety for pedestrians and cyclists.

Enhance Entry with Gateway Signage and treatments – Pursue gateway signs and treatments to announce “arrival” into the Village. Per VTRANS, most gateway signs must be outside of the right-of-way and should generally not exceed 64 square feet in area, excluding panel and frame. (10 V.S.A. § 494 (4))

- The effectiveness of Gateway signs is enhanced when they combine with other “visual cues” in the surrounding context.
- Examples appropriate in the Village core include street trees, sidewalks and crosswalks, and banners.
- Examples useful on the Village edge are lowering speed limits, using trees and fences to indicate a transition from open highway, and begin to narrow the visual field

*The images below depict the current location where 35mph begins and proposed relocation farther north in plan (below) and how this would appear to a motorist (following page).*





**Street Trees** - Street trees can help to reduce speed because they narrow the visual field in two directions – at the sides of the road and from their spreading crowns above the road. Trees are typically not allowed within the State right-of-way. However, in Designated Village Centers, street trees can be allowed in the State right-of-way provided the community is willing to sign a maintenance agreement and meet design and species selection standards.

- The community could reach out to property owners open to hosting trees in front yards.
- A “first step” to consider could be street trees immediately at the Gihon Valley Hall and neighboring properties. This would provide a noticeable visual cue of the activity occurring in the Village Core.
- If the community wishes to pursue trees in the State right-of-way it should begin discussing what local group will be responsible for maintenance and how this maintenance will be funded.

**Village crosswalks and sidewalks** - The segment from the Post Office to Gihon Valley Hall was identified as the highest priority.

- Extend gravel shoulders and line stripping to enhance mobility and access for pedestrians on both sides of VT Rt 100.
- Install two crosswalks in the Village Core on VT Rt. 100 – a midblock crosswalk at the Gihon Valley Hall; a crosswalk at Ferry Street to the Post Office.
- Reduce the curb radius at the south side of Ferry Street by installing mountable curbing and contrasting paving
- The Town of Hyde Park should install a crosswalk in its ROW across Ferry Street.

Parking - Lack of parking is a major challenge for events at the Gihon Valley Hall and elsewhere in the Village. Improving pedestrian circulation within the Village core would reduce the need for parking by making it possible for residents in the Village to walk rather than drive and by enabling visitors from elsewhere in Hyde Park and surrounding communities to park offsite.

- The Gihon Valley Hall Committee is investigating parking areas sufficient for large events.
- The community has developed informal agreements with the property owner north of the Post Office. A similar arrangement could be developed with the owner of the Bullard Lumber Company property on the opposite side of Route 100.
- It may also be possible to locate some overflow parking in conjunction with the potential river access discussed below. The viability of offsite parking will be dependent on safe pedestrian connections from the parking areas to the Hall.

The image below depicts the community's priorities within the Village Core



Other idea and opportunities:

Event Banners - Recent changes to Statute have also modified the VTRANS policy for banners over State highways that meet the following conditions. State law now allows, "A sign that is a banner erected over a highway right-of-way for not more than 21 days if the bottom of the banner is not less than 16 feet 6 inches above the surface of the highway and is securely fastened with breakaway fasteners." (10 V.S.A. § 494 (4))

- A **banner** over Route 100 at the Gihon Valley Hall could complement the Gateway Signs by providing an additional visual cue within the Village Core. To meet VTRANS requirements, the banner would likely need to be limited to special events. The temporary nature of a banner could

enhance its traffic calming benefits, since it would provide a change in the visual field of motorists. The community would need to develop a plan for installing and removing the banner.

*River Access/Riverside Park* -- Several participants expressed desire for improved river access.

- There is **significant river frontage** at a Town-owned parcel between Route 100 and the Gihon River. This parcel may be large enough to support other amenities desired by residents such as a small playground for neighborhood children and a small parking area.

*Pop-up Businesses and Food Trucks* – Participants in the forum expressed a desire for a central gathering spot such as a food venue. Unfortunately, the lack of public wastewater presents a significant barrier for a brick-and-mortar café or restaurant. While not insurmountable, onsite septic capacity likely limits the number of seats or meals such a business could offer. Food trucks and mobile food vendors may offer an opportunity to overcome this barrier. These outdoor venues can support the success of local business in the age of COVID-19.

- The community could **adopt an ordinance for food trucks and mobile food vendors**, and/or establishing active sites for vendors with public visibility, such as the Gihon Valley Hall or Riverside Park.
- At the **Gihon Valley Hall** consider working with local entrepreneurs to purchase pooled products from local farms, whether for sale via a food truck/mobile vendor or for use at events at the Hall.

*Cubit Farm Trails* -- Members of the community noted that the Cubit family allows community members to use the trails in their former sugar woods located on a hill behind the Village.

- Explore **long term access to Cubit Farm Trails**. The community may want to reach out to family members to discuss if they are open to long term access. The lower areas also appear to have suitable soils for on-site wastewater, which could potentially serve the Village core. Other communities have established town forests that provide for forestry, trails, and on-site community scale wastewater. Any of these options would be contingent on agreement from the landowners.

*A Library Connection* -- Hyde Park has a vibrant local library – the Lanphere Memorial Library in the Village of Hyde Park (aka the South Village). It is a vital asset to the families in the Village – a nearby friendly place to browse at and take out books, a resource right in town, and in-town children centered reading and learning activities. The library receives numerous requests for events it is not able to accommodate due to limited meeting space.

- **Explore collaborations between the Library and Gihon Valley Hall** to expand opportunities for both locations of the Town. Consider a shared calendar of events to accommodate different groups/needs, and even joint activities. An example of one such collaboration opportunity could be a “Little Free Library” and public sitting/reading area in the front yard of the Gihon Valley Hall.

## **Waterville**

In Waterville a project prioritization meeting was held on November 23<sup>rd</sup>, 2020. This meeting was held during a Waterville Selectboard meeting. In addition to the Selectboard, the Town Clerk, Waterville Planning Board members, Waterville Emergency Management Director, LCPC staff, and Landscape Architect, Kate Lalley, were present for this project prioritization discussion. The outcome of this meeting generated the following synthesis of ideas and recommendations to pursue during the visioning phase of this project:

*Pedestrian Crossings* - Explore the idea of establishing a “pedestrian area/zone.” This alleviates the concern Town’s concern about where to appropriately locate a crosswalk and more closely resembles existing pedestrian activity in Waterville Village Center.

*Parking* – With a pedestrian zone you can still have organized parking. Explore options to expand parking in the Village Center to better accommodate residents/visitors during town events.

*Safe Village Connections* – Explore ideas for a connecting path or bike lane to connect the Village Center to the north end of the village near the Town Clerk’s Office/Waterville Library and popular swimming hole. Being able to connect by bike safely around town is important to the community.

*Improve Safety near the Waterville Elementary School* -Explore improving visual cues to alert drivers of the presence of the Waterville Elementary School. Signage, streetscaping, and other visual cues that promote visibility for the school should be explored. This helps promote safer connections for kids walking/ biking to school, and resident/visitor cyclists touring the scenic countryside.

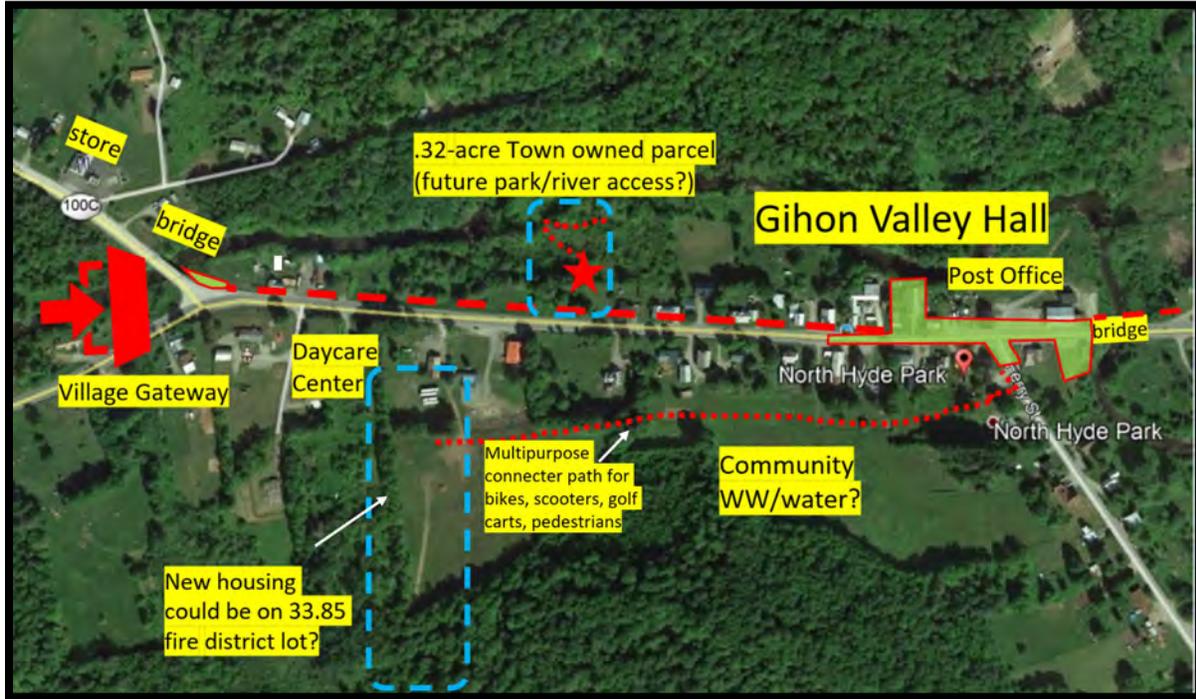
## ***Task 7: Develop Conceptual Plans***

### **North Hyde Park and Waterville**

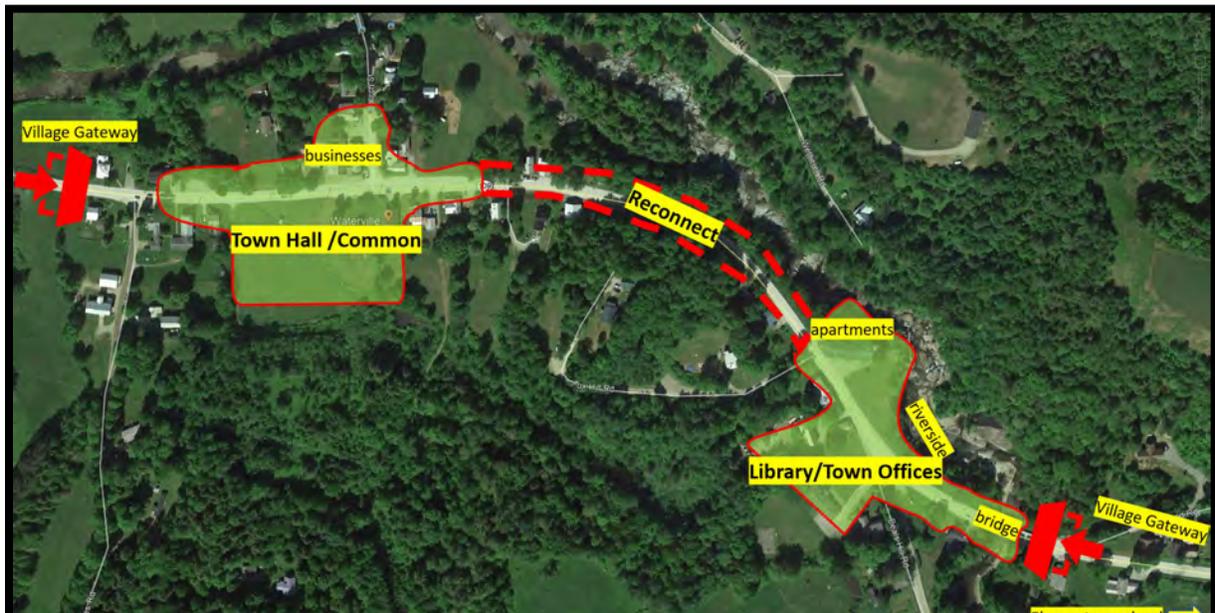
In North Hyde Park and Waterville project kickoff and prioritization meetings identified community needs and goals that set a foundation for developing conceptual plans and improvements. LCPC staff ‘groundtruthed’ comments from community members with observed facts on the ground, translating this into a future vision plan the community can implement incrementally and over time.

In North Hyde Park, the conceptual plan study area extends south from bridge intersection of VT Routes 100 and 100A to a few hundred yards north of the firehouse on VT Rt. 100. Within the project area are proposed improvements to encourage reduced overall traffic speed in the area; in the Village core improvements for pedestrian safety, accessibility and comfort to walkers, and that help restore sense of the street as a public space connecting village destinations. At the village edges, landscape and gateway enhancements have been proposed to complement and improve aesthetic quality, slow traffic and enhance sense of arrival/entry to the village.

The future goals in North Hyde Park extend “bridge to bridge”. The community’s top priority is the enhancing safety for pedestrians within the Village Core (depicted below as the green shaded area).



In Waterville, the study area for conceptual planning extends from just south of the Waterville Town Green to the northern portion of the Village near the Town Clerks Office.



Goals of the conceptual plan highlight priorities identified during community visioning. The overarching goals were to explore solutions for improving safety, visibility, and sense of place in the Village Center and surrounding service areas, while promoting safer connections and a walkable/ bikeable environment. Additionally, this conceptual plan also proposes visual cue improvements near the Waterville Elementary School.

## ***Task 8: Present Conceptual Plans***

### **North Hyde Park and Waterville**

Conceptual Plans developed for North Hyde Park were presented publicly in the community, in a Zoom meeting in April 2021, and during the Fall Festival held the weekend of September 25 at the Gihon Valley Hall. Presentation materials were also available on LCPC's website. The Plan presented on a Zoom meeting was advertised by flier and announcements on Front Porch Forum and Facebook by the Gihon Valley Hall Committee in North Hyde Park.

Draft conceptual plans were presented to Waterville public officials and community members on two occasions; 1) at the February 1<sup>st</sup>, 2021, Waterville Selectboard meeting and 2) at the 2021 June Town Meeting Day held outside on the Town Green. The Waterville Planning Board conducted additional outreach of draft conceptual plans to local business owners including the Waterville Market owner and residents living in the Village Center in the immediate study area. This outreach took place leading up to the 2021 Town Meeting Day presentation. *(The draft conceptual plans and final presentations are Appendix A of this report).*

## ***Task 9: Draft Preliminary Requests to VTRANS on behalf of North Hyde Park and Waterville***

Treatment of the highway through the village is the most important determiner of 'sense of place' in a rural Village Main Street. Possibilities for revitalizing Village Main Streets along State Highways therefore depends on VTRANS which holds jurisdiction over the public right of way, agreeing to approaches and proposals that increase pedestrian friendliness. Achieving improvements consistent with VTRANS standards can be a lengthy and costly process. To reduce the length of time and level of study necessary for improving Village and Downtown Main Streets within State ROWs, North Hyde Park and Waterville each applied to a new VTRANS program, Demonstration Projects in State Highway Right of Way. This program was developed by VTRANS as a means for testing common-sense interventions for improving safety and comfort for pedestrians in context. In communities that participate in the program, this can streamline permanent implementation of those interventions that succeed.

With assistance from LCPC, each community decided to test facilities to increase pedestrian safety in its village core by applying to pilot an active transportation project under the new Demonstration Program, Demonstration Projects in State Highway Right of Way, October 2020. VTRANS has recognized the growing demand for walkable villages and downtowns and developed this program to find easier methods to meet this demand considering the expense of retrofitting roads, limited resources for this, and to a desire to deliver more facilities to underserved communities.

Each village identified and set forth its priorities for addressing pedestrian safety in its application to the Demonstration Project Program. In both North Hyde Park and Waterville, tactical short-term interventions proposed would be implemented Local Motion. Local Motion would be responsible for all demonstrations in Waterville with traffic management provided by the Sheriff; in North Hyde Park, the Town Road Foreman would assist with installation, maintenance and taking down, with the sheriff's department assisting with traffic management.

North Hyde Park's demonstration focused on testing two crosswalk locations, narrowing lanes in the Village Core to reduce vehicular speeds and testing line striping enhancements to the Route 100 shoulder to enhance pedestrian access to community anchors in the Village core, the Gihon Valley Hall and the local post office. Speeding was identified as a problem at the Village's south and north gateways. The Village also proposed demonstrating pedestrian and public space improvements to introduce safer conditions and visual cues (enhanced shoulders crosswalks, curb extensions and if VTRANS allowed, small trees in pots to represent where the Village might introduce future street trees). VTRANS Street Tree Policy provides special provisions for Village Centers. The addition of these elements was intended to make driving through the Village a more interactive experience for motorists and to enhance sense of place. The Village sought to learn if these interventions could enhance pedestrian safety and slow traffic in North Hyde Park's Village core.

Proposals were guided by the North Hyde Park 2016 Streetscape Study and community needs arisen since the study. The pilot would demonstrate sidewalks on both sides of a 380' segment of Main Street, two crosswalks over Rt. 100, and a crosswalk at Ferry Street, a town road. These facilities would provide pedestrian access between two of the Village's most important public destinations - the Post Office and the Gihon Valley Hall, a new community facility and gathering spot. The demonstration would let residents see what such facilities in the Village Core could look like and evaluate their impacts on daily pedestrian functions and access. (*The pilot application North Hyde Park submitted to VTRANS is Appendix B of this report*).

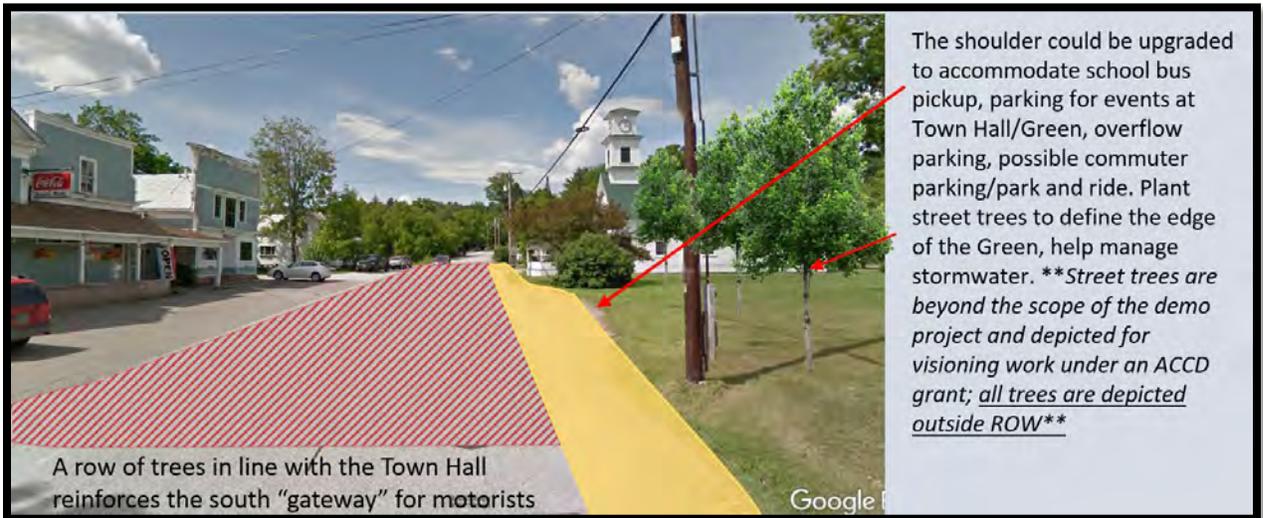
### **The experience in Waterville**

In Waterville VT Rt. 109 runs through the village but today reads as a highway through two unrelated settings, a lower village core and an upper village. Waterville wants to restore the pedestrian connection lost when VTRANS removed the former sidewalk and replaced it with a guardrail next to the travel lane. However, it decided its highest priority was increasing walkability and access in the Village Core (lower village), where the store, Town Hall, Green, church and most residences are located. Given numerous identified conflicts of parked cars, thru-traffic, and pedestrian activity Waterville proposed a painted "pedestrian zone" treatment extending from the Town Hall at north to the south edge of the Green including crossing Vt Rt 109, an area approximately 185' in length. The pavement markings would serve as a visual cue alerting drivers to the high and unpredictable levels of activity in this area. Along Church Street advisory striping would provide safer access from the Church parking lot used for overflow and continue the pedestrian scale and function. Along VT Rt. 109 extending the shoulder at the Green would provide for a school bus pick up, and parking for events at the Town Hall.

Waterville recognized that for proposed Village Core improvements, it was necessary to slow traffic prior to reaching the Village Core. Traffic count data identified speeding south of the village as a concern. Relocating the 30mph sign farther south of Village would encourage approaching cars to drive at slower speeds prior to entering the Village Core. LCPC recommended that the 30mph sign be relocated to a vantage (depicted in image below) where Town Green is visible, and that street trees be planted at the edge of the Green to increase its visibility to motorists. Adding street trees and/or decorative fencing at the point when the speed limit changed are additional ways to further narrow the visual field at the entry to the village. If trees were planted outside of the VTRANS ROW the Village could implement this at will. *Below, what planting trees to narrow the visual field at the Village south entry might look like.*



In addition to adding street trees and an upgraded shoulder to expand and manage parking and school bus pickup, Waterville could further enhance the Green as a social space by adding amenities like benches, a bike rack, banners to announce special events, lighting, and art created by local artists.



*Below, over of the "Village Safety Zone" and facilities that Waterville sought to win approval to pilot through the new VTRANS program, Demonstration Projects in State Highway Right of Way.*



While beyond the scope of the VTRANS pilot project, establishing better sense of entry to the north end of village was another pillar of visioning for Waterville. Gateway treatments suggested by LCPC included a sign, banners on utility poles by bridge, and painting a ‘sidewalk’ on the bridge – all measures designed to slow traffic before the parking area for Waterville’s very popular waterhole, located immediately on the other side of the bridge. Slowing traffic in a part of the village that today reads as a ‘hamlet’ neighborhood with apartments in the former mill, the library, Town Offices, and swimming hole access, would improve quality of life in this section of the village and build momentum for its formal reconnection to the Village Core in the future. *Below, a ‘Welcome to Waterville Village’ sign and street trees narrow the visual field and signal to motorists that they are entering a settled area.*



A safer connection between the upper and lower village would improve access especially for kids that live in the ‘apartment’, catch the bus to school at the Town Hall, and run errands to the store. The Town wants highway guard rail moved over and replaced w pedestrian friendlier guardrail moved as far away from the road as possible to provide a shoulder for walking and biking. This should be authorized when VTRANS repaves. *Below, an overview of how a pedestrian connection between two sections of Waterville Village could reestablish over time.*

Walk/bike safety in Waterville Village Center

Reconnecting the linear Village




Aspire for a curb and sidewalk in the long term  
(view of river through the trees)



Short-term --- Mid-term ---- Long-term

Waterville's Village Center (store/Town Hall/Green) is ready to be remade for walking, but there are impediments to walking to what this area offers from adjacent areas. The need to walk on a highway where visibility is lacking and there is insufficient shoulder begs to be addressed. Adequate and welcoming signage is also important to welcome visitors and cyclists reaching the village on Route 109.




During the next VTRANS paving or guardrail project, request that the guardrail be relocated to accommodate a wider shoulder for pedestrians. Shoulder should be a minimum 4-6' wide. Alternatively, replace guardrail with a box beam style guardrail that protrudes less into the shoulder. Longer term solutions include a multipurpose trail or a sidewalk.

Waterville also wants to establish safer connections between the Village and the Waterville Elementary School. This is a long-term goal that will require physical infrastructure beyond project scope due to the distance between the Village and school. In the short term the Town is pursuing reduced speed zone signage. Other recommendations include flashing beacons, enrollment in the Safe Routes To School Program (SRTS), and planting trees near VT Rt. 109 outside of the ROW.

In both North Hyde Park and Waterville, VTRANS review team of engineers determined that tactical short-term interventions proposed and whose implementation would be overseen by Local Motion could not be piloted due to nonconformance with VTRANS MUTCD standards (*see Appendix B for a copy of the North Hyde Park and Waterville Phase 1 applications*). Learning that participating in the demonstration program would lead to few if any tangible outcomes elicited a different response in each community.

VTRANS offered Waterville the option to demonstrate a single crosswalk or submit a work order request to VTRANS for a signed “pedestrian zone”. The Selectboard decided the single crosswalk approach was ineffective and insufficient because channelizing pedestrians into a crosswalk in this location did not fit with pedestrian behavior in this context. On this basis the Selectboard chose to pursue work orders for a signed “pedestrian zone” instead. While this more accurately reflects likely pedestrian behavior, as an approach that relies on signage alone and will not result in roadway design changes, significant concern

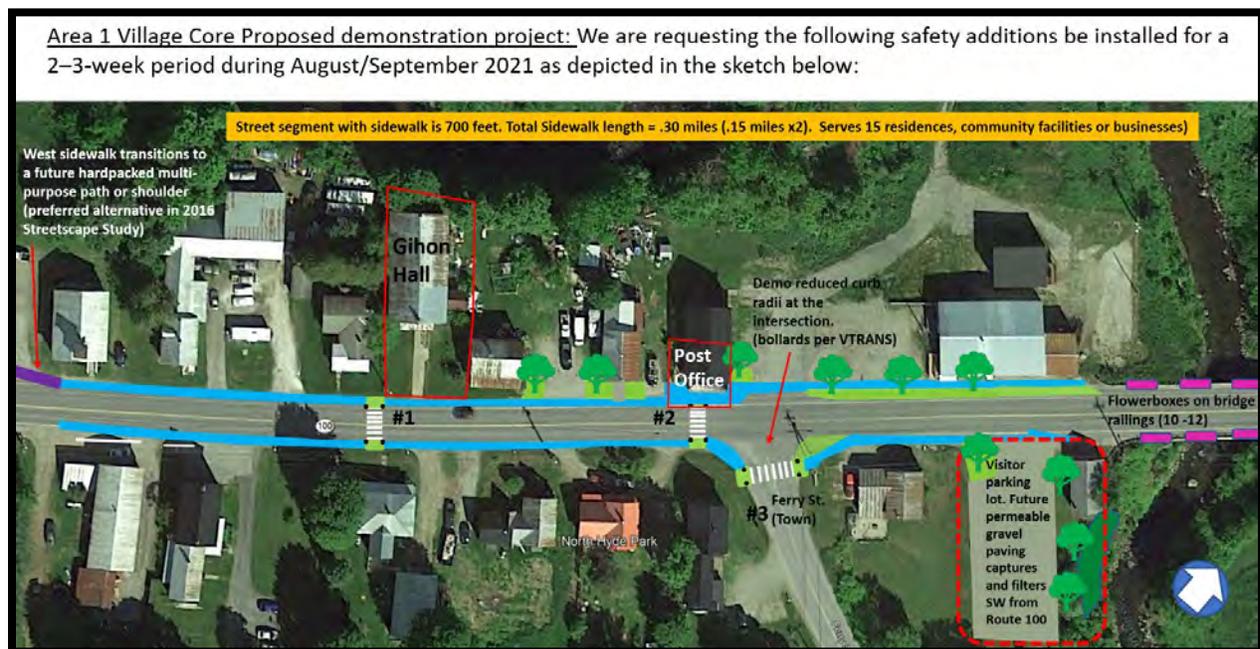
remains that signs does not sufficiently address safety concerns. The experience in Waterville shows that in small, low volume village settings current highway design standards lack formal tools such as pavement markers that alert motorists to the need for increased alertness and caution, to complement and make a pedestrian zone operational.

Waterville took additional first steps to improve safety in the Village Center and near the Elementary School. This was accomplished by LCPC assisting the Town of Waterville in submitting work order requests to VTrans for the following Town requests:

- Refreshing and installing new school area signs (will be gate posted in each direction of travel).
- Removal of the existing pedestrian signs near the apartment building outside of the Designated Village Center with no clear destinations for pedestrian travel.
- Installing new "school bus stop ahead" signs to warn vehicles of the bus transfer location in front of the store.
- Installing new "pedestrian area next x feet" signs to warn vehicles of the pedestrian activity in the village core area.

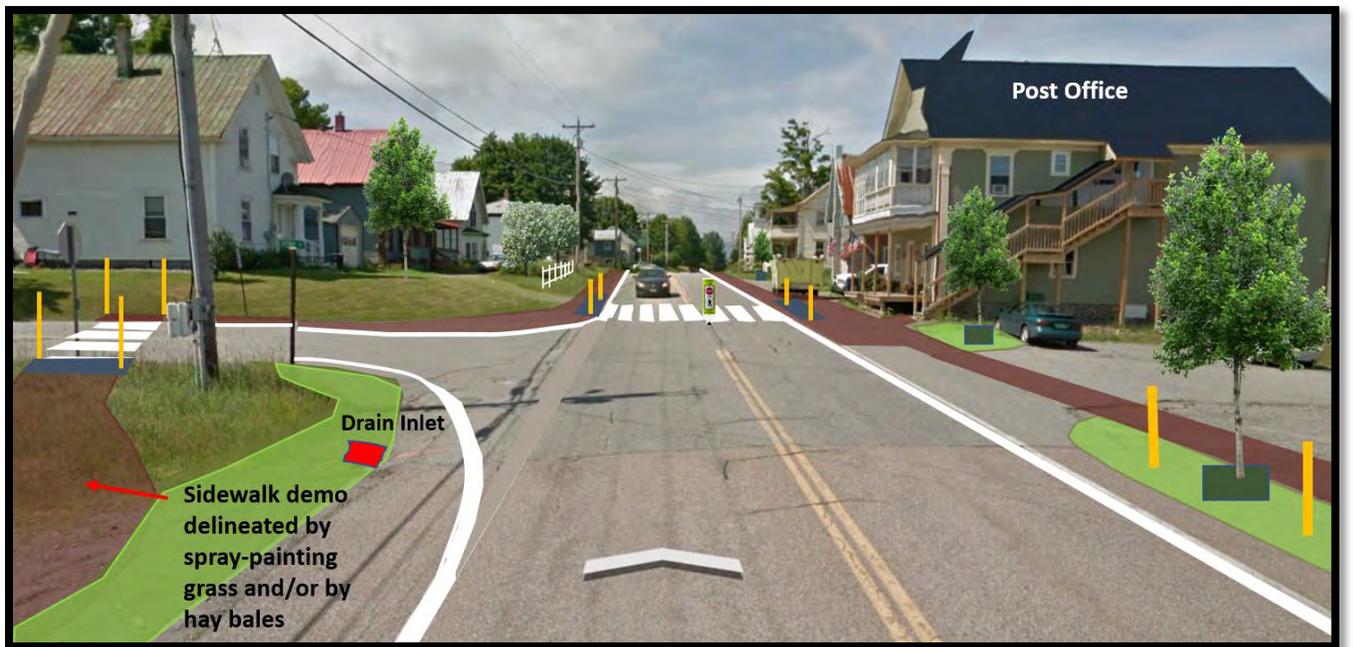
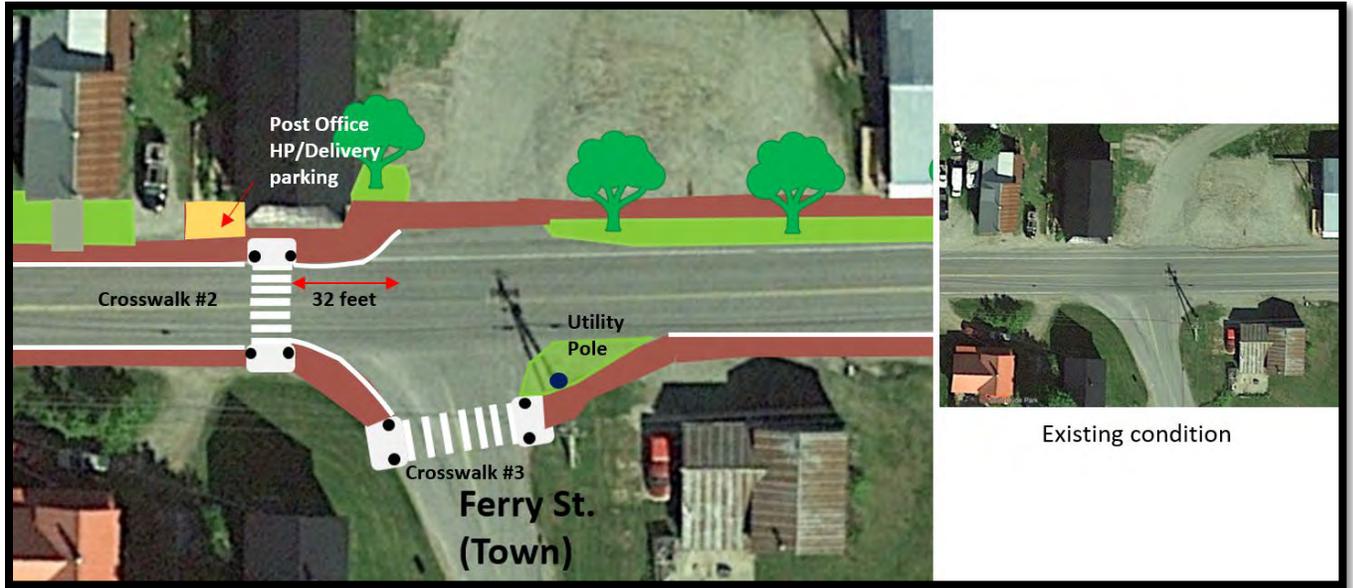
### The experience in North Hyde Park

North Hyde Park proposed context-sensitive facilities reflecting the unique conditions in the local Main Street environment and focus attention on conditions hostile to pedestrians at the Village gateways. Proposals sought to lower traffic speeds and provide safe, increased access for pedestrians. *Overview of the pilot presented in the application to VTRANS below.*



The pilot would connect the Village's most important public destinations. Lack of pedestrian facilities limits access, makes getting around on foot unsafe and difficult in what could be a highly walkable area. Sidewalks are proposed on both sides of Main Street to maximize access and mobility in the Village Core. Sidewalks are proposed to retain frontages, sense of place and maximize pedestrian circulation and access within the Village core. Due to numerous culverts and catch basins that manage SW runoff

from Rt. 100, street trees are not proposed except in for a 200-foot section on the west side of Main Street. In this location a sidewalk separated by street trees from motorist and bike traffic is proposed. The Village lacks parking and unmanaged roadside parking during events poses hazards. Coinciding with the VTRANS project the Town of Hyde Park will demo a cross walk at Ferry Street, a Town road. Below, details of the intersection with Ferry Road.



VTRANS comments focused on how proposals to temporarily modify existing conditions met or did not meet MUTCD or AASHTO minimum standards. This response did not consider VTRANS own rules for projects in designated villages. Designated Villages currently are eligible for (a) approval of one crosswalk per Village that does not meet the “warrants” (20 existing pedestrian crossings in peak hour)

and (b) expanded shoulders at least three feet wide to serve as “connecting facilities.” The emphasis on compliance with federal standards for a short term and limited installation resulted in a drastically reduced in scope demonstration project. In Spring 2022 the Village will test alternative locations for a single crosswalk in their village and narrowing lanes to 11’ by widening the shoulder stripes on both sides of the road between the Gihon Hall and the Post Office.

Challenges faced in North Hyde Park and Waterville reflect the difficulties of retrofitting state highways in historic Main Street contexts where pedestrian behavior and needs require different approaches than what is allowed under a strict reading of the MUTCD. The framework for decision-making that traffic engineers use is guided by the existing context. The photo of Bethel, on the cover of VTRANS guidance document, captures the context VTRANS engineers are expecting. Places with formal elements like parking lanes, curbs and gutters and an armature of buildings as street frontages. Rural Vermont villages lacking these features and elements. This requires engineers to interpret how standards apply, limits or foreclose much incremental improvement of these settings.

Infeasibility of such communities adopting Class 1 status further widens the gap between what is wanted and what is possible in many rural Vermont villages. North Hyde Park and Waterville provide object lessons for why pedestrian access in village settings is so hard to achieve in Vermont.

1. Policies and standards biased towards urban street forms out of scale with and unrepresented in rural villages settings.
2. A focus on adoption of Class 1 status where this is unrealistic due to factors like local inability to plow roads and lack of professional staff.
3. Constraints on VTRANS ability to be guided by community visions of place and local economic goals related to how MUTCD guidance has been interpreted.

### **Potential opportunities/models for retrofitting Villages for pedestrians and cycling**

Retrofitting Village Main Streets to be more pedestrian friendly can spur investment to modernize rural settings with essential infrastructure necessary to support new housing, residents working from home, and new local businesses. While elements within the visioning proposals are not currently compliant with applicable VTRANS standards, if VTRANS agrees on the need for design exceptions, more flexible design, such as represented in the pilot applications, could become appropriate for applications. The final section of this report includes recommendations for VTRANS to adopt design and technical guidance sensitive of and respectful of local contexts in rural villages.

#### **1. Tools used to enhance safety in construction and work zones**

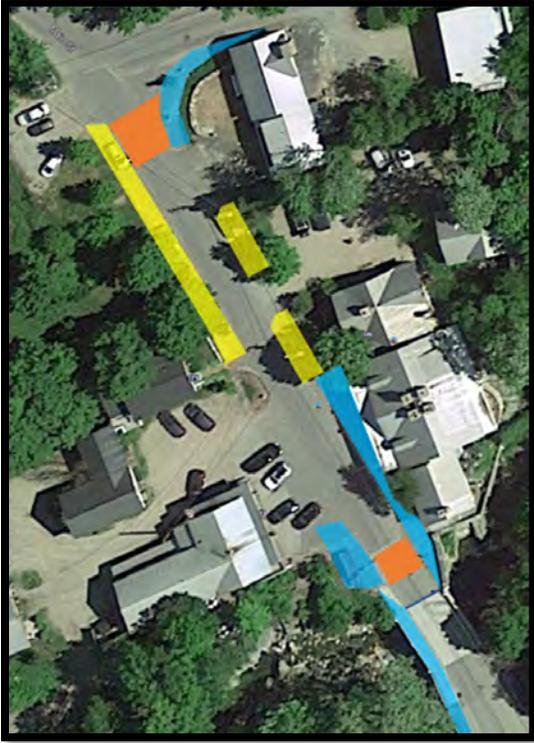
How VTRANS pursues construction in State ROWs could serve as a model for new standardized treatments suitable for rural village settings. The open road that transitions to a rural Villages correlates with how construction zones appear on State Highways and is a model that could be adapted for motorists entering villages –the core of many rural Vermont communities’ social and economic activities. VTRANS road crews are accustomed to working conditions in flux. Lowering road speeds allow for temporary and iterative changes so roads can be improved over time. This offers a model to allow a wider range of approved temporary and interim changes within rural Village Main Streets. Gate posting the entries to rural Villages and using removable devices such as cones and bollards could make it easier, safer and more cost-effective to improve safety in village settings.

## 2. Stormwater management

Managing stormwater is another area that gradient approaches and standards can make easier to address. Drain inlets at the side of the road are costly obstacles when retrofitting roads with curb and gutters, the conventional infrastructure used to separate foot, bicycle and vehicular traffic. In the historic context of rural villages such 'urban' treatment of the roadside can appear discordant and overbuilt. A shared enhanced shoulder can be the cost-effective solution that filters and conveys stormwater, provides additional and sufficient mobility for pedestrians and cyclist and 'fits' the setting. Particularly if speeds are lowered to 25mph. This approach was used following Hurricane Irene to rebuild a 300-foot-long section of Main Street in the Village of Warren, the location of the Village store, library, and inn/restaurant. To put pedestrians on a par with vehicles this short segment of town owned road was retrofitted with 10' travel lanes and enhanced shoulders defined by a granite edge set flush with the road with the shoulder paved in bricks set in sand. The shoulder is used for on-street parking, deliveries and for sidewalks. The contrasting pavement and narrowed travel lanes narrow the visual field, naturally slowing traffic to 20mph or less. It is easy to maintain, easy to plow and if used in North Hyde Park would not disturb existing stormwater drains. The approaches used in Warren provide a template for engineering standards to provide pedestrian infrastructure in other rural village settings cost-effectively, with materials that are durable, compatible with historic contexts and enhance resiliency to stormwater. *Below, stormwater friendly enhanced shoulder in Village Core of Warren, built in the aftermath of Hurricane Irene.*



### 3. Setting clear boundaries



Warren's village core features a 275' long pedestrian zone where cars defer to people. Granite cobbled wide crosswalks (orange) frame the pedestrian zone. Yellow indicates on-street parking/shared use sidewalk; in blue are sidewalks.

In comparison, the pedestrian zone proposed for Waterville is just 185' long. Proposed interventions in North Hyde Park's village core is also similar in scale and size. Just 210' feet separate the Post Office and Gihon Hall.

In the defined and limited spaces of Village Cores tactics like those used in Warren provide a means to restore pedestrian environment to reinvigorate Main Street without unduly compromising mobility along State Highways.

### 4. Layering textured pavement

Layers of textured pavement calm traffic and create a pedestrian-friendly environment. Paving units set in sand help to filter SW, are easy to maintain. At a corner in Warren, a bollard and a street tree establish entry to the Village Core, calming traffic while providing comfortable access for pedestrians.



### ***VTRANS authorized Demonstration Project***

In the end, the demonstration project through VTRANS was pursued only in North Hyde Park. The pilot makes use of recent modifications to VTRANS standards that provide additional flexibility in Designated Village Centers. Two major changes include (a) enabling approval of one crosswalk per Village that does not meet the “warrants” (20 existing pedestrian crossings in peak hour) and (b) allowing expanded shoulders at least three feet wide to serve as “connecting facilities.”

The demonstration project was scheduled to coincide with the first annual North Hyde Park “Fall Fest.” Unfortunately, reflective tape required by VTRANS standards was not available due to ongoing COVID-19 supply chain issues, and the alternative “chalk paint with reflective glass adherents,” could not be installed due to wet road conditions. The need for these complex materials could be avoided if VTRANS standards were modified to allow use of temporary vertical delineators in conjunction with demonstration project applications. The community plans to conduct the demonstration project in Spring 2022.

Despite this, traffic counts in North Hyde Park were collected during the 4–5-day timeframe of the Fall Fest. These counts found a slight reduction in the percentage of vehicles speeding compared to the previous counts. This suggests that the increased, visible activity in the village may create the “friction” needed to increase motorist alertness and lower speed. While definitive conclusions cannot be drawn from a single event, it is worth noting and further evaluating as activity and special events increase in North Hyde Park.

### ***Task 10: Develop Scope of Work/ Timeline***

As North Hyde Park and Waterville look to the future, vision plans created with input from the community provide springboards for action taking to improve the pedestrian appeal and friendliness of the village Main Street, to link important places to provide access for residents, and to attract new investment. Strategies proposed in the vision plans for these communities capture the value inherent in their historic and walkable Village Core settings. The proposals within should be considered conceptual. Implementing any facilities in the state highway will require the consent of VTRANS. Implementing other aspects of these plans will require agreements from consenting landowners and in the case of water and sewer infrastructure, additional investigation, site design and engineering.

Having a timeline for implementation reflects assessments of what could feasibly occur when. In the 1-5-year timeframe are elements within the community’s scope to realize. The 5-10-year timeframe includes elements that require State and/or Federal authorization and funding to achieve; in the 10-20-year timeframe are longer term goals for infrastructure planning and natural resource protection.

### **North Hyde Park Proposed Implementation Timeline**

#### **1-5 years:**

Objective: Set the foundation for reimagining the village gateways to improve sense of arrival, slow traffic before it reaches the Village Core, and extend ‘sense of the village’ beyond the Village Core.

### Projects to begin immediately:

- On VT Rt. 100 settle on the best location for an initial village crosswalk and insist that VTRANS strip lanes to 11' wide. Narrower travel lanes send a subtle visual cue that motorists are entering a settled area and encourage slower speeds. Narrower travel lanes also provide wider shoulders. The additional space can provide more safety for pedestrians and cyclists.
- Build momentum for doing more by implementing projects quickly and inexpensively on publicly owned properties:
  - develop a temporary “walk/explore your Village” trail system to connect venues, promote exercise, celebrate history and community. The Cubit family allows community members to use the trails in their former sugar woods located on a hill behind the Village.
  - continue to work with LCPC on gathering traffic ‘warrants’ data to pursue a second crosswalk through VTRANS
  - Continue to inform and survey residents and business owners to determine what is effective, build support to make permanent changes, attract donors
  - Encourage tree planting in front yards outside of the VTRANS ROW to enhance Main Street.
- Explore collaborations between the Library and Gihon Valley Hall to expand opportunities for both locations of the Town. Consider a shared calendar of events to accommodate different groups/needs, and even joint activities. An example of one such collaboration opportunity could be a “Little Free Library” and public sitting/reading area in the front yard of the Gihon Valley Hall.
- Lack of parking was noted as a major challenge for events at the Gihon Valley Hall and elsewhere in the Village. Work with the owners of the Bullard Lumber and Manosh properties on agreements to allow event parking.
- Work with the owner of the Bullard lumber company owner to use the former fire station property for overflow parking, outdoor events such as community bonfires in winter, an ice rink with lighting, a Farmers Market in summer
- Continue to enhance safety for pedestrians on Ferry Street
- Adopt an ordinance for food trucks and mobile food vendors, and/or establishing active sites for vendors with public visibility, such as the Gihon Valley Hall, Bullard Lumber Mill site
- Work with LCPC to secure an ACCD MPG to develop North Hyde Park Village gateway signage, banners for utility poles, and a road banner at the Gihon Valley Hall for use during events, and introduce visual cues at the village edges to help encourage slower speeds
- Investigate with VTRANS relocating the guardrail at northwest side of Rt. 100 and Rt 100A to reduce the curb radius and provide safer access for more pedestrians and cyclists reaching the convenience store on 100A that is walking distance to the village.

### Projects to investigate/consider over 5-10 years:

Investigate developing the significant river frontage at a Town-owned parcel between Route 100 and the Gihon River as a ‘riverside park’ with amenities desired by residents such as a small playground for neighborhood children and a small parking area.

Consider encouraging the Town to acquire the property by the bridge which could provide public access to the river.

The 2015 Dubois and King Study included depiction of a sidewalk on the west side of Route 100 in the Village Core transitioning at the bridge to a gravel shoulder extending to the Fire House. The VTRANS “small” bicycle/pedestrian program could provide funding for segments of this sidewalk.

Explore long term access to Cubit Farm Trails by reaching out to family members to discuss if they are open to long term access. The lower areas also appear to have suitable soils for on-site wastewater, which could potentially serve the Village core. Other communities have established town forests that provide for forestry, trails, and on-site community scale wastewater. Any of these options would be contingent on agreement from the landowners.

Reestablishing street trees would provide a noticeable visual cue of the activity occurring in the Village Core. The community may want to reach out to property owners who may be interested/open to hosting street trees. If the community wishes to pursue trees in the State right-of-way it should begin discussing what local group will be responsible for maintenance and how this maintenance will be funded. A “first step” to consider could be street trees immediately at the Gihon Valley Hall and neighboring properties.

### **Waterville Proposed Implementation Timeline**

To enhance the vibrancy and safety of Waterville Village Center as a destination for visitors, residents, and community activities, Waterville needs to leverage those local assets that are the reason people come here. These include a local culture that supports the arts and recreation, open spaces with potential for outdoor events, a quaint Village Main Street, and an existing compact street network ready to be improved and expanded.

As Waterville looks to the future this timeline and attached Conceptual Plans can be a springboard for action taken by the community. This visioning document presents opportunities for linking important places together in the Village to boost local business, attract new investment, and improve the safety of pedestrian and cyclist connections. In the process Waterville will enhance quality of life for residents. Strategies proposed capture the value of the Village’s historic and walkable setting, and its proximity to recreational opportunities such as local swimming holes and nearby trail networks. The proposals within should be considered “conceptual”. Prior to implementation certain aspects of this plan will require additional investigation, site design, and engineering.

Having a cohesive future vision ensures changes will reflect what the community wants and needs. This proposal presents safety, streetscaping, and connectivity recommendations to implement over a 20-year timeframe. To help with the transfer of knowledge from the current leadership generation to the next information about the historic and current setting and how this informed priority setting are included in this Final Report. The timeline for implementation reflects assessments of what could feasibly occur. In the 1-5-year timeframe are elements from this visioning effort that could be accomplished in a shorter timeframe with investment from the community and Town of Waterville. The 5-10-year timeframe includes elements that require State and/or Federal funding and authorization to achieve. In the 10-20-year timeframe are longer term goals for infrastructure planning. *See Appendix B “Supplemental Information” for ballpark cost estimates for short and medium-term Town recommendations identified in this implementation timeline.*

**1-5 years:**

Objective: Set the foundation for reimagining Waterville Village Center with vibrancy that improves sense place, pedestrian/cyclist connections, safe access to recreational opportunities, and visual cues for motorists traveling through or to the Village.

**Short-term Projects:**

- Participate in upcoming Traffic Safety Committee meetings as VTRANS reviews improved VT 109 signage and pedestrian zone signage requests.
- Use public art and other means to enhance Main Street/VT 109 to improve visual cues
  - Install a northern village gateway sign before the bridge and plant more trees to provide cues that narrow the visual field (install outside the right-of-way)
  - Communicate with Vermont Electric Coop regarding permission to hang “Welcome to Waterville” banners on the utility poles entering the Village Center. This could also serve as a northern Village Gateway sign.
- Plant street trees out of the right-of-way to define the edge of the Town Green and help manage stormwater runoff
- Establish more sense of the school on VT Rt. 109 by adding a row of trees in the front yard (plant outside the right-of-way) and a school garden
- Budget for future local demonstration materials to evaluate installing a permanent yield lane (walking lane), crosswalk, and defined on-street parking on Church Street (outside the state right-of-way)

**Projects feasible in 5-10 years:**

- Work with LCPC to initiate conversation with VTRANS to accommodate the following during the next VT 109 paving project
  - Relocate the guardrail to accommodate a wider shoulder for pedestrians. Shoulder should be a minimum 4-6’ wide, OR replace the guardrail with a box beam style guardrail that protrudes less into the shoulder
- Explore cost share of a school zone beacon with VTRANS and the School District
- Install a radar speed feedback sign in the Village Center to encourage motorist compliance or renegotiate local agreements to enhance the presence of law enforcement
- Evaluate upgrading the shoulder to accommodate school bus pickup, parking for events at Town Hall/Town Green
- Conduct a scoping study to evaluate routes to accommodate a multi-purpose trail to connect the north end of the village to the designated Village Center
- Conduct a sidewalk and bike lane feasibility study to connect the north end of the village to the designated Village Center
- Consider establishing designated parking and a crosswalk for pedestrians and cyclists at Beals Hill Rd and/or the Town Library/Clerk’s Office
- Install a permanent yield lane (walking lane), crosswalk, and defined on-street parking on Church Street (outside the state right-of-way)

**Long term projects 10 + years:**

Objective: Encourage areas along the VT 109 with existing development to become walkable ‘nodes’ and enhance them with pedestrian and cyclist friendliness.

- Install a multi-purpose trail and/or sidewalk to connect the north end of the village near the Town Clerks Office to the heart of the Village Center (near the Town Hall/ Green/ Waterville Market)

**Recommendations and Considerations for Future Planning Efforts**

This section highlights considerations and recommendations to help further future pedestrian/cyclist safety and streetscaping improvements in rural village centers. To further community goals outlined in the FY 20 MPG Conceptual Plans, the following recommendations are provided for consideration by the municipalities and state partners (ex: VTRANS/ACCD).

**Recommendations for North Hyde Park**

- Review Class I Highway Jurisdiction preliminary cost analysis to see if exploring this option for a portion of Main Street in the Village Center is viable (*see analysis and summary in Appendix B*).
- Explore grant opportunities to conduct a scoping study to explore options for connecting trail networks in North Hyde Park Village.
- Based on the outcome of the demonstration project, work with LCPC and VTRANS to pursue pedestrian crossings and other streetscape enhancements to improve visibility and safety of the North Hyde Park Main Street.
- If the community desires conducting future demonstrations on municipally owned roads or the State Right-of-way, consider budgeting for basic demonstration materials.

**Recommendation for Waterville**

- Review Class I Highway Jurisdiction preliminary cost analysis to see if exploring this option for a portion of Main Street in the Village Center is viable (*see analysis and summary in Appendix B*)
- Explore grant opportunities to conduct a scoping study to explore alternatives for a bike path or road shoulder facility to connect cyclist and pedestrians safely from Waterville Village Center to the north portion of the Village near the Library/Clerk’s Office.
- Explore options for speed feedback signs and/or speed enforcement in the Waterville Village Center.
- Explore grant opportunities to further visioning and implement streetscape/ stormwater improvements near Waterville Elementary School to enhance the visual cue for drivers and provide an educational opportunity for students.
- If the community desires conducting future demonstrations on municipally owned roads or the State Right-of-way, consider budgeting for basic demonstration materials and traffic control.

**Policy Recommendations for VTrans Consideration:**

- Partner with ACCD to provide outreach and better documentation/public awareness regarding existing options for Designated Village Centers, such as:
  - the special parameters for a single crosswalk without volume warrants,

- the recognition of shoulders as acceptable pedestrian facilities,
- the process for enabling and approving street trees within the State Right-of-Way via a long-term Memorandum of Understanding, including the municipality's ongoing maintenance responsibilities
- The recently adopted statute that allows banners over State Highways.
- Ensure that District staff and permitting officials are aware of the procedures and parameters for the options outlined above.
- Update Demonstration Project Program guidance and procedures to allow temporary vertical delineators and similar vertical elements.
- Develop a process for incremental pedestrian safety upgrades on State Highway's, such as allowing seasonal bollards and temporary curbs, subject to a MOU requiring removal prior to winter plow season.
- Update VTRANS guardrail installation policy to encourage bike/ped friendly guardrails (placement/type) in Village Centers and other growth centers.
- Work with Regional Planning Commissions and other relevant partners to update current standards/policies to promote road shoulder pedestrian facilities and encourage guardrail replacements along State Highways to be bike/ped friendly.
- When planning/implementing future capital road projects along the state highway in Village Centers, place the same level of caution for a pedestrian as you would for a driver during a construction zone.
- Work with Regional Planning Commissions and ACCD to update the Demonstration Program Guidance to provide more flexibility regarding the types of projects and materials that can be used during a demonstration in the State Right-of-way.
- Develop a State MUTCD Addendum addressing the specific needs of rural Village Centers. This Addendum should include elements including but not limited to effective gateway treatments (such as gate posting) and shoulder enhancements for pedestrians (such as wider shoulder lines) and narrowing of the visual travel lane. Such standards would allow for uniform application in Designated Village Centers, and important goal of the MUTCD.

**Policy Recommendations for ACCD's Consideration:**

- Continue to promote the Better Places Program annually and other ACCD grant opportunities to help communities demonstrate revitalization projects and projects that promote more walkable neighborhoods. Grant opportunities would assist communities in affording demonstration materials and required safety measures such as traffic control.
- Work with Regional Planning Commissions and VTRANS to update the Demonstration Program Guidance to provide more flexibility regarding the types of projects and materials that can be used during a demonstration in the State Right-of-way.
- Continue to extend Downtown Transportation Fund eligibility to Designated Village Centers that have completed a comprehensive planning process.
- Partner with VTRANS to provide outreach and better documentation/public awareness regarding existing options for Designated Village Centers, such as:
  - the special parameters for a single crosswalk without volume warrants,
  - the recognition of shoulders as acceptable pedestrian facilities,

- the process for enabling and approving street trees within the State Right-of-Way via a long-term Memorandum of Understanding, including the municipality's ongoing maintenance responsibilities
- The recently adopted statute that allows banners over State Highways.