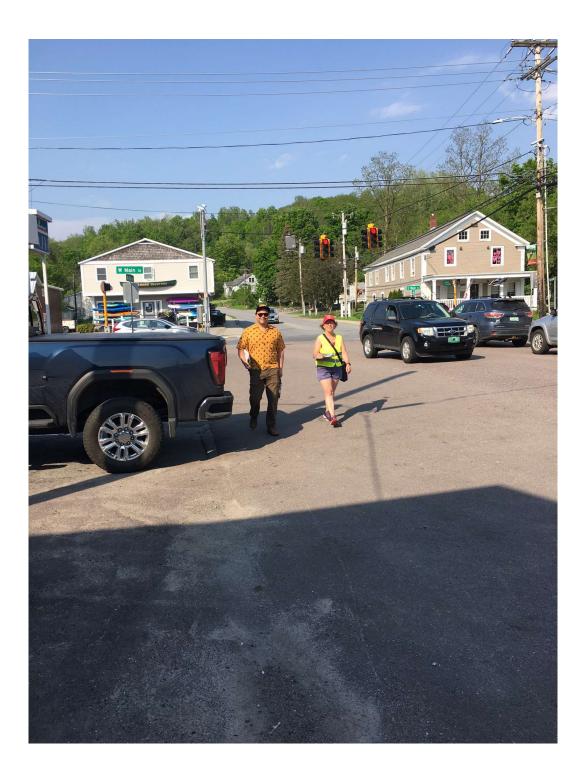
## **Richmond Street and Sidewalk Audit**



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### Introduction

In 2019, the Richmond Transportation Committee was created and charged by the Selectboard with developing a town Transportation Implementation Plan and transportation projects that will support the Town Plan, the regional plan, and public health and safety while avoiding and minimizing environmental impacts.

The 2018 Richmond Town Plan encourages the creation and adaptation of town roads into Complete Streets-streets designed and operated to enable safe use and support mobility for all users-and the cultivation of community partnerships to improve the safety and welfare of individuals using Town roads. Complete Streets also improve the resilience of town transportation systems and support local economic vitality.

### Prelude

To provide guidance on selecting priority projects for the town Transportation Implementation Plan, the Richmond Transportation Committee conducted a systematic evaluation of walkability of three areas of Richmond in Spring 2022:

- The Bridge St-Main St. intersection in Richmond Village,
- The Round Church, and
- The Jonesville Post Office.

The committee used the well-regarded <u>AARP Walk Audit Toolkit</u> to evaluate the walkability of the areas in town. Volunteers were recruited to assist the committee in assessing the walkability of areas. Walk Audits were conducted in small teams throughout late May and early June.

The Walk Audits revealed numerous deficiencies in Richmond's road network. Transportation Committee members and volunteers devised numerous short-term and long-term recommendations to improve upon the existing road network. This report reviews the observations made during the Walk Audits, recommendations to issues with the Town-wide network, and the alignment of the recommendations with the AARP Walk Audit Toolkit.

Using these recommendations, the Richmond Transportation Committee aims to inform the Richmond Selectboard and the public about safety and accessibility on Richmond's roads, and to garner support for investigating means and methods to strengthen the infrastructure.

### Methods

Richmond Transportation Committee members and about 20 volunteers conducted Walk Audits late May and early June of 2022 following protocols detailed in the <u>AARP Walk Audit Toolkit</u>. The walk audits focused on three areas (with a one-half mile radius for each): (1) the intersection of Bridge St./Main St. in Richmond Village, (2) the Round Church, and (3) the Jonesville Post Office.

The Walk Audits were conducted on the following dates and times:

- Saturday, May 21, 2022 at 3 pm Walk audit of Richmond Village area
- Sunday, May 22, 2022 at 8 am Walk audit of Round Church area
- Saturday, May 28, 2022 at 12 pm Walk audit of Richmond Village area
- Saturday, May 28, 2022 at 1 pm Walk audit of Jonesville Post Office area
- Sunday, May 29, 2022 at 3 pm Walk audit of Jonesville Post Office area
- Saturday, June 4, 2022 at 12 pm Walk audit of Round Church area

Committee members and volunteers used AARP's Walk Audit Toolkit worksheets to conduct the audit. These worksheets guided participants in assessing multiple factors that influence the usage of roads and associated sidewalks, including the design of the roads, the condition of infrastructure, the behavior of drivers and pedestrians, and the location of crosswalks and crossing signals.

Additional observations were also made of vehicular speeds and safety of roadways within the focus areas outside of the scheduled Walk Audits, as well as areas adjacent to the focus areas. These observations are also included in this report.

### **Richmond Village: Bridge St to Main St**

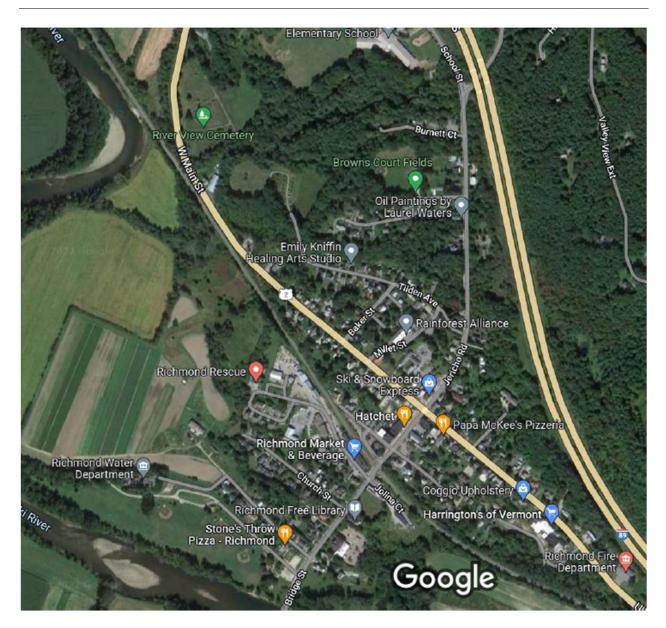


Figure 1: Map of Richmond Village Study Area

### Background

The Richmond Village area centered on the intersection of Bridge and Main Streets is the primary commercial business area for the town and the most densely populated area in town. The Richmond Village study area encompassed the Bridge St.-Main St. intersection and a half-mile radius surrounding this intersection. The area included the Bridge Street corridor between Main Street and the Winooski River, Tilden/Baker/Millet neighborhood, Railroad Street, Depot Street, East Main Street from the Bridge St.-Main

St. intersection to the Richmond Fire Station, West Main Street from the Bridge St.-Main St. intersection to the end of the sidewalk, and Jericho Road from the Bridge St.-Main St. intersection to School Street.

### **Findings**

The Bridge Street Commercial Corridor is the commercial heart of the town. The corridor starts from the Bridge Street bridge and ends at the Main Street intersection. Major landmarks include Volunteers Green, the Richmond Town Offices, the Richmond Library, Richmond Market, the Creamery (a forthcoming medium-sized mixed-use development), and the Masonic Block. The speed limit on Bridge Street is 25 miles per hour.

The corridor has a sidewalk on the west side of Bridge Street from the bridge to the Richmond Market, a sidewalk on the west side of Bridge Street from Depot Street Extension to the Cumberland Farms gas station, and a sidewalk on the east side of Bridge Street from the mid-block crossing in front of the Big Spruce

restaurant to the Bridge Street-Main Street intersection. The sidewalk gap on Bridge Street between Richmond Market and Depot Street Extension is covered by a crosswalk at-grade with the vehicle travel lanes. The corridor has non-intersection crossings in front of the Richmond Town Offices, the Richmond Library, and in the middle of the Masonic Block.

In this section, volunteers observed a range of issues that inhibit pedestrian mobility. Sections of sidewalks along Bridge Street are either too steep or too narrow for wheelchairs and strollers. The curb cuts at the crosswalk on Bridge Street in front of the Town Library are not flush with the road. The sidewalk and roadway in front of the Masonic Block and between Railroad Street and Volunteers Green have many obstructions— including signage, planters, tables, chairs and bicycles in the sidewalks, and utility poles in the Bridge Street roadway and/or sidewalks (as shown in Figure 2). Sidewalk and curbing on Bridge Street are degraded. The midblock placement of the rectangular rapid flashing beacon (RRFB) at the Masonic Block is not adequately visible to drivers. Signage is inadequate on Bridge Street in front of the Town Center and at the Railroad Street intersection.

There is no sidewalk on the east side of Bridge Street. The Town Offices, the police station, the post office, and the public library are all located on that side of the street. People who live or work on the east side of Bridge Street have to cross the street twice to gain access to these public services. For children and residents who are mobility impaired, this presents a challenge



Figure 2: Bridge Street Commercial Corridor



The gap in the sidewalk along Bridge Street in front of the Cumberland Farms gas station, as shown in Figure 3 creates a dangerous situation for pedestrians. This section is a large curb cut in which cars enter and exit the gas station, and park between the convenience store and Bridge Street. This segment has no pedestrian facilities and no clear guidance for pedestrians on how to cross the curb cut. Bollards and trash cans keep parked vehicles about two feet from the exterior building wall, leaving a distance of about 20 feet to the edge of the roadway. Parked Vehicles force pedestrians out into the roadway.

In addition, no sidewalks or paths exist along Railroad Street between the Richmond Market and the residential area on Borden Street. The present condition is a crosswalk on the west side of the roadway, with portions demarcated with temporary bollards.

### East Main St

Figure 3: Gap in Sidewalk near Cumberland Farms

The East Main Street section within the study area starts from the Main Street-Bridge Street intersection and ends at Harrington's, a

food manufacturing and sales establishment approximately 0.2 miles to the east. This section is primarily residential with a range of dwelling types, and has some small-scale businesses, such as the Richmond Veterinary Hospital. The speed limit on East Main Street is 30 miles per hour.

This section has asphalt sidewalks on both sides of the street for the most part. The sidewalks on the south side of the roadway are level with the roadway. The sidewalks on the north side are level with the roadway, and at some points are level with the roadway. The roadway does not have curbing at this time. The sidewalks on both sides of the roadway end at Harrington's; no non-intersection pedestrian crossings across the roadway exist currently.

The sidewalks are deteriorating (as shown in Figure 4), thus rendering them inaccessible for some abilities. Speeding issues and drainage issues are also evident and there is a lack of demarcation between the roadway and the sidewalk. At certain points, the sidewalk looks like a shoulder and is used by cars to park (as shown in Figure 5), thereby obstructing pedestrians.





Figure 4: Sidewalk on East Main Street

Figure 5: Car parked on the sidewalk on East Main Street

### West Main Street

The West Main Street section within the study area starts from the Main Street-Bridge Street intersection and ends 0.2 miles to the west at the end of the sidewalk (approximately 212 West Main Street). The beginning part of the section has commercial uses and the Our Lady of the Holy Rosary Church, but the majority of the section has residential, single-family dwellings. The speed limit on East Main Street is 30 miles per hour.

This section has concrete sidewalks on both the north and south sides of Main St. The north side of the street has concrete curbs, and the south side of the street has granite curbs. The south side of the street has a green strip between the roadway and the sidewalk. The north side of the street does lack a buffer between the roadway and the sidewalk. Volunteers observed the degradation of the sidewalks, and the lack of tactile pads for certain wider curb cuts.

### Bridge Street-Main Street Intersection

The Bridge Street-Main Street intersection is one of three signalized intersections in town. Bridge Street (southbound), West Main Street/Route 2 (westbound), East Main Street/Route 2 (eastbound), and Jericho Road (northbound) converge at this intersection. All vehicles turning left must yield to oncoming traffic. The signal does not control vehicular right turns.

Volunteers observed that the walk signal gives pedestrians a five-second advance before the green light signal for traffic going straight. However, the intersection lacks a "no right turn" signal for vehicles when the walk sign is activated. Volunteers also noted the placement of the crosswalk on East Main Street and the lack of a clear sight line from Bridge Street northbound to East Main Street eastbound.



Baker-Tilden-Millet	Residential
Neighborhood	

Figure 6: Bridge St.-Main St. Intersection, from the south side of the intersection and Bridge Street

The Baker-Tilden-Millet neighborhood

primarily has single-family and two-family houses. However, the neighborhood has two outliers: (1) the Goodwin-Baker Building, a former underwear factory turned office building, and (2) a 16-unit apartment building near the end of Tilden Avenue commonly referred to as "the Beehive".

The roadways in the neighborhood are narrow. The speed limit is 25 miles per hour. Baker Street has a raised sidewalk; Tilden Avenue and Millet Street do not have sidewalks.

Volunteers observed the relative safety of the neighborhood for bicyclists and pedestrians because of the lack of traffic and low speeds. Volunteers also noted that because roads are narrow, the possibility of installing sidewalks is slim. During the Walk Audit, volunteers solicited comments from neighborhood residents about the speeds of vehicles.

### Jericho Road to the Schools

This Jericho Road segment begins at the Bridge Street-Main Street intersection and ends at School Street approximately 0.5 miles north. This entire segment is sloped. The speed limit is 25 miles per hour. This section has a sidewalk on the west side of the street with a two-foot green buffer between the sidewalk and the roadway.

Volunteers highlighted the excellent quality of the sidewalk. They also noted vehicle speeds. The observed average vehicle speed southbound was 29 miles per hour, with a peak of 31 miles per hour. The observed average vehicle speed northbound was 31 miles per hour, with a peak of 40 miles per hour.

### Jericho Road North of the Schools to Valley View Road

This Jericho Road segment begins at School Street and ends at Valley View Road approximately 0.4 miles north. This area is adjacent to and outside of the intended study area, and a couple volunteers studied this area. This entire segment is sloped. The speed limit is 25 miles per hour from School Street to Southview Drive, and 35 miles per hour from Southview Drive to Valley View Road. The vehicle travel lanes are 11-12 feet. This segment does not have a sidewalk or a paved shoulder. The shoulders in general in this location are narrow, as shown in Figure 6. The roadway has no fog lines, bike lanes or sharrows.



Figure 7: Edge of Jericho Road southbound

Measurements showed that most vehicles were traveling

above the posted speed limit. The average speed of the observed traffic traveling northbound and southbound was 39 miles per hour. The maximum speed measured of the observed traffic traveling northbound was 54 miles per hour and the maximum speed measured of the observed traffic traveling southbound was 55 miles per hour.

Location	Short-Term Recommendations	Long-Term Recommendations
Bridge St Commercial Corridor	<ul> <li>Make clearer delineations between the vehicle travel portion and the pedestrian facility - Delineations are needed in areas where no sidewalk is visibly present, including along Bridge Street between the entrance of Volunteers Green and the bridge, and in front of the Cumberland Farms gas station. Delineations can be in the form of paint–for crosswalks, fog lines, or boxes–or something more substantially physical–like bollards or jersey barriers.</li> </ul>	<ul> <li>Modify curb cuts - Level curb cuts flush with the surface of the vehicle travel portion of the roadway to improve the accessibility of crossings. Mountable curbs or curb extensions would shorten crossings, improve the visibility of pedestrians to drivers, and force drivers to drive slower under the illusion that the travel lane is narrower.</li> <li>Repair and maintenance of existing sidewalks</li> </ul>
	<ul> <li>Education - Business owners should be reminded to maintain a minimum five-foot path clear of obstructions on the sidewalk.</li> <li>Pop-up pilot projects - The Town could organize a pop-up project using paint to show how facility improvements could improve pedestrian, bicycle and vehicle safety if installed, similar to a project organized by the town and Local Motion in June 2017.</li> <li>Placemaking - Benches could be installed along Bridge Street corridor to improve walkability and placemaking.</li> </ul>	<ul> <li>Implement the recommendations of the Bridge Street Complete Streets Corridor Study and Richmond Sidewalk Scoping Study, including buildout of adequate bicycle and pedestrian facilities with signage and recommended crossings</li> <li>Plan and buildout of pedestrian facilities on Railroad Street - Adding adequate pedestrian facilities to connect Bridge Street to the future location of the Richmond Market at the end of Railroad Street would improve the walkability of the area.</li> <li>Install traffic calming measures to slow vehicle speeds.</li> </ul>

-		1
Bridge Street- Main Street Intersection	<ul> <li>Installation or movement of signage reminding drivers of crossing pedestrians - This includes placing pedestrian crossing signs along Bridge Street that are within the line of sight of drivers, "Right turn yield to pedestrians" signs at the Bridge Street and Main Street intersection, and a "No Right Turn" signal when the walk sign is on to drivers going northbound on Bridge Street at the Bridge Street- Main Street intersection.</li> </ul>	<ul> <li>Modify curb cuts - Level curb cuts flush with the surface of the vehicle travel portion of the roadway to improve the accessibility of crossings. Mountable curbs or curb extensions would shorten crossings, improve the visibility of pedestrians to drivers, and force drivers to drive slower under the illusion that the travel lane is narrower.</li> <li>Shift the crossing signal at the Bridge Street and Main Street intersection to improve the sight lines of cars turning from Bridge Street east onto Main Street.</li> </ul>
Location	Short-Term	Long-Term
Baker-Tilden- Millet Residential Neighborhood	<ul> <li>Traffic Calming - Initiate the Traffic Calming Policy process for the Baker- Tilden-Millet Residential Neighborhood.</li> </ul>	<ul> <li>Install traffic calming measures to slow vehicle speeds.</li> </ul>
East Main Street		Repair and maintain existing     sidewalks.
West Main Street		Repair and maintain of existing sidewalks.
Jericho Road from School Street to Valley View Road		<ul> <li>Install traffic calming measures to slow vehicle speeds</li> </ul>

### Issues

The following issues within the study area were identified:

- Connectivity Gaps
- Obstructions
- Speed
- Deteriorated and/or inadequate facilities
- Obstructed sight lines

- Inadequate notification of pedestrian crossings to vehicles
- Accessibility issues

### Conclusions

Ratings for this section are ("Great", "Acceptable", "Mixed", or "Poor"):

- Bridge Street Commercial Corridor Mixed
- East Main Street Mixed
- West Main Street Acceptable
- Bridge Street-Main Street Intersection Poor
- Baker-Tilden-Millet Residential Neighborhood Acceptable
- Jericho Road to the Schools Great
- Jericho Road from School Street to Valley View Road Poor

### **Round Church**



Figure 8: Map of Round Church study area

### Background

The Round Church is situated southeast of the Bridge Street bridge, and northeast of the Bridge Street-Huntington Road intersection. The church was built in 1812-13. Originally intended to be a town meeting hall and place of worship, the Round Church is now a tourist attraction, and serves as a venue for weddings and community events.

The Round Church study area includes a half-mile radius of the Round Church. Notable landmarks are the Round Church Corners commercial area (Stone Corral Brewery, Mann & Machine, Long Trail Physical Therapy, among other businesses), Little Tots Academy–a day care center–Sterling House–an assisted living facility–and Richmond Terrace–an income-restricted senior housing development. Residential neighborhoods are also in the study area.

### **Findings**

### Bridge Street from the bridge to the Bridge Street-Huntington Road Intersection

Bridge Street south of the bridge has relatively narrow travel lanes and a sidewalk along the west side of the roadway. The road has some streetlights. Along a portion of the sidewalk is an approximately five-foot stone retaining wall. The quality of the sidewalk is deteriorating in several locations. There is no buffer between the travel lane and the sidewalk.

A crosswalk across Bridge Street leads pedestrians to the Round Church exists. The west end of this crosswalk is located in the middle of a curb cut; sediment washes off the road and into this curb cut. The east side of the crosswalk has no pedestrian landing and leads directly to a boulder. No speed limit signs are posted on this segment of Bridge Street.

### Bridge Street-Huntington Road-Cochran Road-Thompson Road Intersection

The Bridge Street-Huntington Road intersection is a near-perpendicular intersection of four roads:(1) Bridge Street, (2) Huntington Road, (3) Thompson Road, and (4) Cochran Road. Currently, the intersection has stop signs on Thompson Road and Cochran Road, giving the impression that Bridge Street and Huntington Road are contiguous. Bridge Street has a sidewalk along the western side of the road, and Huntington Road has a sidewalk for a portion of the northern side of the road. The intersection only has a crosswalk across Huntington Road. The roadways at this intersection do not have bicycle lanes or any indication for bicycle users.

Drivers were observed using left-turn signals when driving straight from Bridge Street to Thompson Road, and drivers stalled at the stop signs at Thompson Road and Cochran Road. It appears that drivers are confused about how to drive through the intersection. Drivers were observed not stopping for pedestrians at the crosswalk on Huntington Road.

Vehicles move quickly through the intersection from Bridge Street to Huntington Road, and vice versa. In addition, drivers were observed driving through the stop sign from Cochran Road onto Bridge Street without stopping.

### Cochran Road

Cochran Road is a major east-west thoroughfare for the town, connecting the Round Church area to Jonesville. Along Cochran Road are the Cochran Road Ski Area and several areas to access the Winooski River. The road is actively used by drivers, bicyclists, and pedestrians. The roadway is a narrow two-lane road with little to no shoulders. A speed detection sign is within the study area, oriented towards drivers approaching the Huntington Road-Bridge Street intersection.

### Thompson Road

Thompson Road is primarily a residential side street but has the Little Tots Daycare (at the corner of Thompson Road and Farr Road), and the town highway garage (at the end of the road). Thompson Road lacks sidewalks and indications to drivers of bicyclists and pedestrians using the vehicle travel portion of the road.

### Huntington Road

Huntington Road is an arterial road, connecting the town to Huntington and to other arterials leading to Hinesburg and Williston. Within the study area, Huntington Road has a short sidewalk connecting the Huntington Road-Bridge Street intersection to the Round Church Corners commercial area. The road has a crosswalk from the sidewalk on the north side of Huntington Road to the parking lot in front of the Round Church Corners commercial area. No pedestrian facility exists at the intersection of Huntington Road and Farr Road. There is a steep slope from the raised sidewalk to the street-level crossing. There are no streetlights.

Location	Short-Term Recommendations	Long-Term Recommendations
Bridge St	<ul> <li>Install speed limit signs.</li> <li>Maintain and upgrade existing sidewalks and streetlights.</li> </ul>	<ul> <li>Create adequate buffers between the sidewalk and the roadway.</li> </ul>
Bridge Street- Huntington Road Intersection	<ul> <li>Add additional crossings - Add crosswalks to the Bridge Street- Huntington Road intersection.</li> </ul>	<ul> <li>Install controls to the Bridge Street- Huntington Road Intersection - This could involve implementing the recommendations in the Bridge Street Corridor Scoping Study (2021), installing four-way stop signs, or a roundabout.</li> </ul>
Cochran Road	<ul> <li>Add additional crossings - Add crosswalks to Cochran Road at the entrance of Preston Forest.</li> <li>Install RRFB indicators at the non- intersection pedestrian crossings.</li> <li>Install speed limit signs.</li> <li>Implement recommendations from the 2022 Bike-Walk-Pedestrian Plan.</li> </ul>	<ul> <li>Install pedestrian facilities.</li> <li>Install streetlights.</li> <li>Implement recommendations from the 2022 Bike-Walk-Pedestrian Plan.</li> </ul>
Thompson Road		Install pedestrian facilities.
Huntington Road		<ul> <li>Create adequate buffers between the sidewalk and the roadway.</li> <li>Install pedestrian facilities.</li> </ul>
		Install streetlights.

### Issues

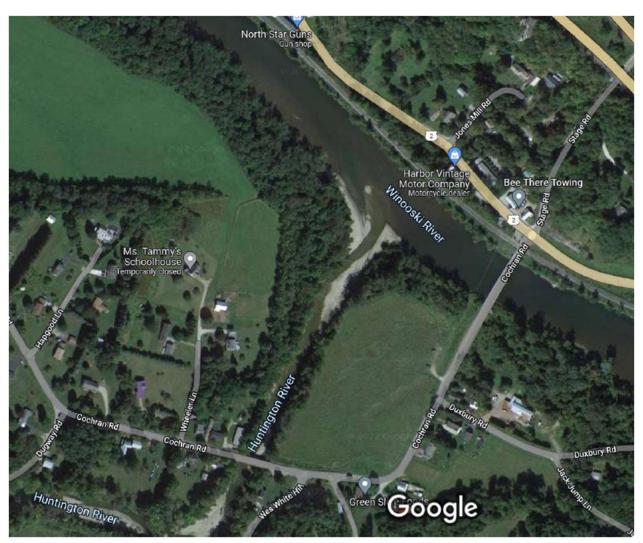
- Disorientation at the Bridge Street-Huntington Road-Cochran-Thompson intersection In addition to non-local drivers unable to understand how to navigate through the intersection, and speeding issues, the lack of crosswalks, crosswalk landings, and traffic controls at Huntington Road and Bridge Street makes the intersection dangerous for pedestrians, bicyclists and drivers.
- Inadequate pedestrian facilities Cochran Road, Thompson Road, and most of Huntington Road have no sidewalks. This inhibits pedestrians from safely accessing trailheads along Cochran Road and Huntington Road. On Thompson Road, the lack of a sidewalk may be a barrier to access for patrons of the daycare and residents of Richmond Terrace. Furthermore, the existing pedestrian facilities are deteriorating, and have accessibility gaps.
- Lack of bicycle facility markers None of the roadways in the study area have paint or markings to inform drivers of bicyclists on the road.
- Poor placement and design of pedestrian crossings The pedestrian crossings at non-intersection locations have accessibility issues for pedestrians, and visibility issues for drivers. The crosswalk across Huntington Road at the Huntington Road-Bridge Street intersection is long and not enough notice of possible pedestrians in the roadway is given to drivers turning from Bridge Street to Huntington Road.
- Lack of buffer between sidewalks and travel lanes The lack of separation between the sidewalk and the travel lane makes pedestrians feel less safe on the sidewalk. Plus, without a grass strip, the sidewalk is not kept clear of snow in the winter.
- High traffic volumes with a significant number of motor vehicles speeding.
- Inadequate street lighting.

### Conclusions

Ratings for this section are ("Great", "Acceptable", "Mixed", or "Poor"):

- Bridge Street Mixed
- Bridge Street-Huntington Road-Cochran Road-Thompson Road intersection Poor
- Cochran Road Poor
- Thompson Road Poor
- Huntington Road Mixed

### Jonesville



### Figure 9: Map of Jonesville study area

### Background

Jonesville is a part of Richmond located east of Richmond Village near the Bolton town line. Jonesville has a post office with limited hours and a handful of shops and businesses, but the area is primarily residential.

The study area was a half-mile radius from the Jonesville Post Office. The area included US Route 2, the eastern end of Cochran Road, and lower parts of Wes White Hill Road.

### **Findings**

### US Route 2

US Route 2 within the study area is a two-lane road with narrow shoulders. The speed limit is 40 miles per hour. The road has neither bicycle nor pedestrian facilities. The roadway lacks signage or markings indicating to drivers of bicycle and pedestrian users. US Route 2 does not have any pedestrian crossings.

### Cochran Road

Cochran Road within the study area is a two-lane road with narrow to no shoulders. The section of the road in the study area includes the bridges over the Winooski River and Huntington River. Only the centerlines are striped on this roadway. The roadway does not have bicycle or pedestrian facilities.

Cochran Road, and the roads stemming from it–Duxbury Road, Wes White Hill Road, and Dugway Road– are used by walkers, runners, bicyclists, and those looking to access the Huntington and Winooski Rivers.



### Figure 10: Wes White Hill Road

### Wes White Hill Road

Wes White Hill Road within the study area is a two-lane road. The road has no striping, and therefore no indication of a centerline or shoulders. The speed limit is 35 miles per hour.

With the slope and turns in the road, the segments of Wes White Hill Road in the study area have poor sight distances.

Location	Short-Term Recommendations	Long-Term Recommendations
US Route 2	<ul> <li>Install a crosswalk and warning signs on US Route 2 in front of the Jonesville Post Office and at the US Route 2 and Stage Road intersection.</li> </ul>	Reduce speed limits
Cochran Road	<ul> <li>Paint Cochran Road with fog lines, centerlines, and a bicycle and pedestrian lane on both sides of the road.</li> </ul>	<ul> <li>Install traffic calming elements to Cochran Road, per the recommendations in the Walk, Bike, and Trails Plan (2022)</li> </ul>
Wes White Hill Rd		Reduce speed limits

### Issues

- No bicycle and pedestrian facilities This includes no sidewalks, and also no striping or markings on the road indicating shared usage to drivers.
- Speeding
- Inadequate sight distances

### Conclusions

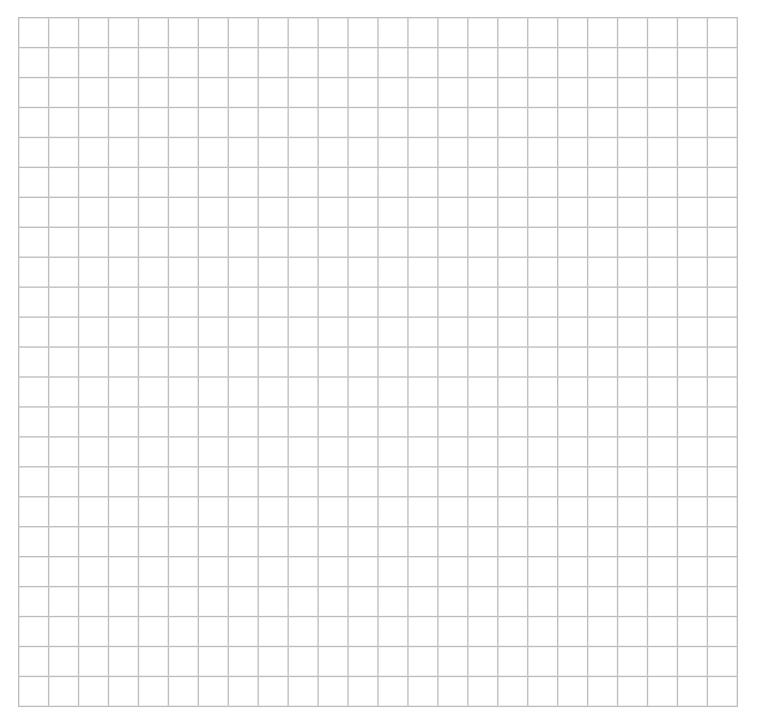
The rating for this area is **poor.** 

## Appendix A

AARP Bridge St Sidewalks, Streets, and Crossings Audit Worksheet

# **Make a Map**

- Use a mapping website to capture and print a bird's-eye-view image of the walk audit area or draw a simple map of the location in the space below.
- Label the streets and make note of any key features, such as stores, schools and (if they exist) sidewalks.
- Take photographs and/or video of the area so others can see the challenges and strengths of the audit location. Match and mark the images on the map.
- Indicate any other problem spots or areas of opportunity (e.g., a bus stop with no seating or shelter).





# Who's Using the Street — and Why?

Community Name:							
Location/Street Name(s):							
Audit date:	Start time:	AM   PM End time:	AM   PM				

Use hash marks (##!) for counting the number of people observed. (Yes, some will likely be counted more than once.) Use your best guess to determine each person's age range and reason for walking.

WHO'S WALKING?	NUMBER OF PEOPLE
Young children (e.g. elementary school students)	
Teens	
Adults	
Older Adults	
HOW:	
While pushing a baby stroller and/or walking with a child or children	
While using a mobility aid (i.e., a wheelchair, cane, walker)	
While riding a bicycle, scooter, skateboard or other mobility device	
POSSIBLE REASONS:	
Traveling to/from school	
Waiting for and/or heading to public transit	
Commuting to/from work	
Shopping and/or getting something to eat	
Walking/running for fitness	
Walking a dog	
Walking to a park or outdoor public space	
Just out for a walk	
Other/unknown	

**ALSO, WHO'S NOT WALKING?** Do the observed pedestrians represent the demographic composition of the neighborhood? If not, which segments of the population appear to be missing? Why might that be the case? (Use a notebook or the back of this worksheet to record these answers and observations.)



# Sidewalks, Streets and Crossings SINGLE-LOCATION AUDIT

Со	nmu	inity	Name:				
Loc	atio	n/Str	eet Name(s):				
Au	dit d	ate: _		Start time:	AM   PM	End time:	АМ   РМ
Pos	sted	spee	d limit(s):	Do the motorists ap	pear to be ob	eying the speed limit(s)?	
Tot	alnı	umbe	r of vehicle lanes:	The street is: 🗆 one	e-way∣□ two	way	
lfn	nore	than	one lane: Does the roadv	vay have □ a median and/or □	a pedestrian i	sland?	
The	e stro	eet ha	<b>as:</b> 🗆 no sidewalk	□ no sidewalk but needs	one	□ no sidewalk but needs two	0
			partial sidewalks	□ a sidewalk on one side	of the street	□ sidewalks on both sides o	f the street
YES	NO	OTHE	R Skip any statements that	don't apply			
			THE SIDEWALK:				
			1. Is separated from the	street by a barrier or buffer (a cu	rb, grass, land	lscaping)	
			2. Is surfaced with a mate	erial that is smooth and consiste	ent (e.g., or asj	ohalt rather than bricks)	
			3. Is in good condition, w	ithout cracks or raised sections			
			4. Is free of obstacles (hy	drants, utility poles, overgrown	landscaping,	trash receptacles)	
			5. Is free of interruptions	from driveways (such as to/from	n homes, park	ing lots, etc.)	
			6. Is continuous (no segn	nents are missing) and complete	e (it doesn't ra	ndomly end)	
			7. Is wide enough (at leas	t 5 feet) for two people to walk	side by side or	pass one another	
			8. Has tactile ground sur	face indicators so pedestrians w	vith vision imp	airment will know when the path	is ending
			9. Has a curb cut ramp (fe	or use by wheelchairs, baby stro	llers, etc.) wh	erever it is interrupted by a street	t
			THE STREET:				
			1. Has traffic lights and/o	r stop signs at intersections and	l crossings		
			2. The traffic lights and/o	or stop signs are clearly visible to	odrivers and p	edestrians	
			3. Has crosswalks				
			4. The crosswalks are we	ll marked and clearly visible to o	drivers and pe	destrians	
			5. Has signage alerting d	rivers to the presence of pedest	rians		
			6. Has a designated bicy	cle lane			
			7. Has a pedestrian cross	ing signal, also called a beacon	(if yes, comple	ete the next section)	
			THE PEDESTRIAN CR	DSSING SIGNALS:			
			1. Are working				
			2. Have a "push-to-walk'	mechanism, meaning pedestria	ans can stop v	ehicle traffic	
				for people with vision impairme			
				ate locations (if not, make note			
			5. Provide enough time t	o cross (indicate the amount of	time: r	minutes seconds)	
				•		pedestrians must wait for a traff	ic light
			change in order to cros	ss: minutes sec	onds)		

Consider using the "Build a Better Block" worksheet as well.

### Walkability of the area, based on the findings above: 🗆 Great 🗆 Acceptable 🗆 Mixed 🗆 Poor



# Sidewalks, Streets and Crossings WALKING AUDIT

Co	mmu	inity	Name:				
Sta	rtin	g loca	ition:		nding location:		
Ro	ute:						
Au	dit d	ate: _		Start time:	AM   PM	End time:	AM   PM
Po	sted	spee	d limit(s):	Do the motorist	s appear to be ob	eying the speed limit(s)?	
Tot	alnı	umbe	r of vehicle lanes:	The street is: 🗆	] one-way   □ two-	way	
lfn	nore	than	one lane: Does the roadwa	y have □ a median and/c	or 🛛 a pedestrian is	sland?	
Th	e str	eet ha	as: □ no sidewalk □ partial sidewalks	□ no sidewalk but n □ a sidewalk on one		□ no sidewalk but needs two □ sidewalks on both sides of	
YES	NO	отне	R Skip any statements that do	on't apply			
			THE SIDEWALK:				
			<ol> <li>Is in good condition, wit</li> <li>Is free of obstacles (hydrights)</li> <li>Is free of interruptions frictions</li> <li>Is continuous (no segment</li> <li>Is wide enough (at least</li> <li>Has tactile ground surfations)</li> <li>Has a curb cut ramp (for THE STREET:</li> </ol>	ial that is smooth and cor hout cracks or raised sect rants, utility poles, overgr rom driveways (such as to ents are missing) and com 5 feet) for two people to v ice indicators so pedestria use by wheelchairs, baby	isistent (e.g., concre ions own landscaping, t /from homes, parki plete (it doesn't rar valk side by side or ins with vision impa strollers, etc.) whe	ete or asphalt rather than bricks) rash receptacles) ng lots, etc.) idomly end)	is ending
			<ol> <li>Has traffic lights and/or</li> <li>The traffic lights and/or</li> <li>Has crosswalks</li> <li>The crosswalks are well</li> <li>Has signage alerting driv</li> <li>Has a designated bicycle</li> <li>Has a pedestrian crossin</li> </ol>	stop signs are clearly visib marked and clearly visible vers to the presence of pe e lane	ble to drivers and po e to drivers and peo destrians	lestrians	
			6. Provide suitable opport	nechanism, meaning pede or people with vision impa te locations (if not, make r cross (indicate the amour	irment note of where more nt of time provided: he amount of time		

Consider using the "Build a Better Block" worksheet as well.

### Walkability of the area, based on the findings above: 🗆 Great 🗆 Acceptable 🗆 Mixed 🗆 Poor

# ARP Sidewalks

Community Name:							
Location/Street Name(s):							
dit da	ate:_			Start time:	_AM   PM	End time:	_AM   PM
nore	than	on	<b>e lane:</b> Does the roadway	have □ a median and/or □ ped	estrian isl	and?	
e stre	eet h	as:	□ no sidewalk □ partial sidewalks			□ no sidewalk but needs two □ sidewalks on both sides of t	he street
NO	отне	R	Skip any statements that dor	't apply			
			THE SIDEWALK:				
		1.	Is separated from the stre	eet by a barrier or buffer (a curb, §	grass, land	lscaping)	
		2.	Is surfaced with a materia	al that is smooth and consistent (	concrete c	or asphalt rather than bricks)	
		3.	Is in good condition, with	out cracks or raised blocks			
		4.	Is free of obstacles (hydra	ints, utility poles, overgrown land	dscaping, t	trash receptacles)	
		5.	Is free of interruptions fro	om driveways (such as to/from ho	mes, park	ing lots, etc.)	
		6.	Is continuous (no segmer	ts are missing) and complete (it o	doesn't rai	ndomly end)	
		7.	Is wide enough (at least 5	feet) for two people to walk side	by side or	pass one another	
		8.	Has tactile ground surfac	e indicators so pedestrians with	vision imp	airment will know when the path is	s ending
		9.	Has a curb cut ramp (for u	use by wheelchairs, baby strollers	s, etc.) whe	erever the sidewalk is interrupted b	oy a street
	atio dit da nore estro  NO	ation/Str dit date: nore than e street ha street ha NO   OTHE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ation/Street         dit date:         nore than on         e street has:         NO   OTHER         I	cation/Street Name(s):         dit date:         more than one lane:         nore than one lane:         Does the roadway         e street has: <ul> <li>no sidewalk</li> <li>partial sidewalks</li> </ul> NO   OTHER       Skip any statements that dom         THE SIDEWALK:       Image: State of the state	Start time:   Start time: I a median and/or I ped Street has: I no sidewalk I no sidewalk I no sidewalk but needs one I a sidewalk on one side of the street has: I a sidewalk on one side of the street by a barrier or buffer (a curb, start time: I 1. Is separated from the street by a barrier or buffer (a curb, start time: I 2. Is surfaced with a material that is smooth and consistent (a in the street by a barrier or buffer (a curb, start time: I 3. Is in good condition, without cracks or raised blocks I 4. Is free of obstacles (hydrants, utility poles, overgrown land I 5. Is free of interruptions from driveways (such as to/from ho I 6. Is continuous (no segments are missing) and complete (it define) I 1. Is wide enough (at least 5 feet) for two people to walk side I 8. Has tactile ground surface indicators so pedestrians with the start time:	dit date:	dit date: Start time:   AM   PM End time:   once than one lane: Does the roadway have   a median and/or   pedestrian island? e street has:   no sidewalk   no sidewalk   no sidewalk but needs one   no sidewalk but needs two   partial sidewalks   a sidewalk on one side of the street   sidewalks on both sides of the street   sidewalks on both sides of the street   Start time:   no sidewalk but needs two   partial sidewalks   a sidewalk on one side of the street   sidewalks on both sides of the street   sidewalks   a sidewalk on one side of the street   sidewalks on both sides of the street   sidewalks on both sides of the street   sidewalks   a sidewalk   a sidewalk on one side of the street   sidewalks on both sides of the street   sidewalks   a sidewalk   a sidewalk on one side of the street   sidewalks   a sidewalk   a sidewalk on one side of the street   a sidewalk on one sidewalk   a sidewalk on one side of the street   a sidewalk on one sidewalk on one side of the st

### NOTES OR OTHER OBSERVATIONS:

Walkability of the area, based on the findings above:  $\Box$  Great  $\Box$  Acceptable  $\Box$  Mixed  $\Box$  Poor

# ARP Streets and Crossings

Co	mmu	inity	Na	me:
Lo	catio	n/Stı	ree	t Name(s):
Au	dit d	ate: _		AM   PM End time: AM   PM
YES	NO	отне	R	Skip any statements that don't apply
				THE STREET:
			1.	Has traffic lights and/or stop signs at intersections and crossings
			2.	The traffic lights and/or stop signs are clearly visible to drivers and pedestrians
			3.	Has crosswalks
			4.	The crosswalks are well marked and clearly visible to drivers and pedestrians
			5.	Has signage alerting drivers to the presence of pedestrians
			6.	Has a designated bicycle lane
			7.	Has a pedestrian crossing signal, also called a beacon. (If yes, complete the next section.)
				THE PEDESTRIAN CROSSING SIGNALS:
			1.	Are working
			2.	Have a push-to-walk functionality, meaning pedestrians can stop vehicle traffic
			3.	Have audible prompts for people with vision impairment
				Are placed in appropriate locations (if not, make note of where more are needed)
			5.	Provide enough time to cross (indicate the amount of time provided: minutes seconds)
			6.	Provide suitable opportunities to cross (indicate the amount of time pedestrians must wait for a traffic light change in order to cross: minutes seconds)

#### NOTES OR OTHER OBSERVATIONS:

Walkability of the area, based on the findings above:  $\Box$  Great  $\Box$  Acceptable  $\Box$  Mixed  $\Box$  Poor

# ARP Street Safety and Appeal

Co	mmı	inity	/ Na	ame:					
Lo	atio	n/St	ree	t Name(s):					
Au	dit d	ate:		AM   PM End time:	AM   PM				
YES   NO   OTHER Skip any statements the				Skip any statements that don't apply					
				THE LOCATION HAS:					
			1.	Places to sit					
			2.	Shade trees					
			3.	Grass, flowers and landscaping (if yes, is the greenery well maintained?)					
			4.	Awnings, outdoor umbrellas or other shelter from rain and other weather conditions					
			5.	Drinking fountains (if yes, are they working and clean?)					
			6.	Public restrooms (if yes, are they clean and safe?)					
			7.	A transit or bus shelter (if yes, is there seating?)					
			8.	Trash receptacles (if yes, so they appear to be regularly emptied?)					
			9.	Buildings and/or homes that are well-maintained					
			10.	Informative signage					
			11.	Well-placed signage					
			12.	Streetscape features (art, signage, etc.) that are representative of/suitable for the community					
			13.	Pedestrian-scaled lighting					
			14.	A posted speed limit that seems suitable (if yes, does it appear that drivers are obeying the limit?	)				
				IMPRESSIONS:					
			1.	The location/street is a safe and appealing destination					
			2.	The location/street is a safe and appealing travel route					
			3.	The location/street appears to be safe for users of all ages, abilities, races, income levels, etc.					
			4.	The location/street appears to be safe for pedestrians during both the day and night					
			5.	Pedestrians appear to be safe from moving vehicles					
			6.	Pedestrians appear to be safe from crime, harassment or similar threats					
For	"No"	or "C	) ther	answers, use the space below or on the back of this worksheet to briefly explain the response.					

### NOTES OR OTHER OBSERVATIONS:

Walkability of the area, based on the findings above: 🗆 Great 🗆 Acceptable 🗆 Mixed 🗆 Poor

# ARP Public Transit Access

Community Name:										
Lo	catio	n/St	tree	t Name(s):						
Au	dit d	ate:		AM   PM End time: AM   PM						
YES   NO   OTHER			ER	Skip any statements that don't apply						
				IMPRESSIONS:						
			1.	Pedestrians can safely access and depart from the transit stop or station						
			2.	The transit stop or station is in a useful location						
			3.	The transit stop or station protects waiting passengers from moving vehicles						
			4.	The transit stop or station has suitable seating for waiting passengers						
			5.	The transit stop or station features shelter from (check all that apply) 🛛 rain 🗖 sun 🗖 heat 🗖 cold 🗖 wind						
			6.	The transit stop or station is clean and well-maintained						
			7.	The transit stop or station is well lighted						
			8.	The transit stop or station has useful amenities (if yes, describe what they are)						
			9.	The transit stop or station feels safe from crime						
			10.	I would feel safe and comfortable waiting in this location						
NO	TES	OR	отн	ER OBSERVATIONS:						

Walkability of the area, based on the findings above: 🗆 Great 🗆 Acceptable 🗆 Mixed 🗆 Poor

# ARP Build a Better Block

# Would the safe walkability and appeal of the walk audit location or route be improved by any of the following features? Select those you think could help:

- □ 1. Sidewalks (because there aren't any at all)
- □ 2. Sidewalk repairs
- □ 3. Wider sidewalks
- 4. Safety barriers between the sidewalk and street (landscaping, low walls, fencing, etc.)
- **5**. Decorative sidewalk features (hanging flower baskets, planters)
- □ 6. Crosswalks (because there aren't any at all)
- □ 7. Raised crosswalks
- □ 8. Artistic crosswalks
- 9. Pedestrian "bulb-outs" at intersections or crossings
- □ 10. Pedestrian island(s)
- □ 11. Pedestrian-friendly lighting
- □ 12. One-way rather than two-way traffic
- □ 13. Outdoor seating and furnishings for public use (benches, tables, parklets, etc.)
- □ 14. Decorative and/or directional (also called "wayfinding") signage
- □ 15. Public art (sculpture, wall murals, banners)
- □ 16. More street-level/street-facing shops and businesses
- □ 17. Shelter from the elements (awnings, outdoor umbrellas, etc.)
- □ 18. Green space (such as a small park or "pocket park")
- □ 19. Street trees and landscaping
- □ 20. Improved landscape maintenance
- □ 21. Drinking fountains
- □ 22. Public restrooms (or, if already present, better maintenance)
- □ 23. Litter removal
- □ 24. Graffiti removal
- □ 25. Trash receptacles
- □ 26. Security features (cameras, call-boxes, etc.)
- □ 27. Management of off-leash dogs
- □ 28. Repair or removal of vacant or rundown buildings
- □ 29. On-street parking
- □ 30. Parking garage or structure

### **OTHER FEATURES:**

# **AARP** Summary

### Record the score totals for each observation type

- Record the total number of yes responses for the category
- Record the total number of no responses for the category
- Record the one-word rating for the category

This information — as well as all notes, photographs, videos and observation discussions — will be helpful for writing a short report and/or preparing a PowerPoint presentation.

Community Name: \_\_\_\_\_

Street/Intersection Observed: \_\_\_\_\_\_ and \_\_\_\_\_

Audit Date: \_

WORKSHEET	YES RESPONSES	NO RESPONSES	<b>RATING</b> Great   Acceptable   Mixed   Poor	
Sidewalks, Streets and Crossings (Single-Location Audit)				
Sidewalks, Streets and Crossings (Walking Audit)				
Sidewalks				
Streets and Crossings				
Street Safety and Appeal				
Public Transit Access				

#### NOTES OR OTHER OBSERVATIONS:

Visit AARP.org/WalkAudit to download, print, copy and/or share additional worksheets.

## Appendix B

Walk Audit Worksheets and Notes of Richmond Village Area

### **Community Walk Audit:**

### **Background:**

- **What:** A systematic evaluation of the walkability of several areas of Richmond: Bridge St., Main St. within the village, Tilden/Baker/Millet area, Jericho Rd. to School St. and to Valley View Rd., the US2/Bridge/Jericho intersection, and the Jonesville area.
- **Why:** Problems with walkability were identified in public comment meetings during Richmond Town projects involving the CCRPC/UPWP process. Information obtained through the Walk Audit process can be used to guide expenditures of Town transportation dollars and as supporting data in grant applications.
- How: Using the AARP Walk Audit Toolkit and worksheets.
- When: Late May and early June of 2022
- **Who:** Approximately 18 community volunteers, including 4 members of the Richmond Transportation Committee, and the Town Planner.
- **N.B.** For descriptive purposes, US2 is regarded as running east/west, and Bridge St. and Jericho Rd. as running north/south.

### Bridge Street North of the Winooski River

Overall walkability of the area: Mixed (options are: Great; Acceptable; Mixed; and Poor)

### **The Problems:**

- 1) The Bridge St. side of the Cumberland Farms lot is a dangerous and problematic spot on a route used by schoolchildren. The 2021 Bridge Street Corridor Study seems to have ignored this spot.
  - a) There is no sidewalk and no curb cuts, just an expanse of flat asphalt leading to the gas pumps and the 2 parking spaces on the east side of the Cumberland Farms building. One of these spaces is "handicap", and a third vehicle frequently occupies the space designated for handicap access.
  - b) Vehicles in these parking spaces, especially large pickup trucks and SUV's, block the walkable path and force pedestrians out into the roadway. Bollards and trash cans keep parked vehicles about two feet from the exterior building wall, leaving a distance of about 20 feet to the edge of roadway. A standard sedan, at about 15 ft. long, leaves about 5 ft. for pedestrians, albeit with no protection from the roadway. A full size pickup truck or large SUV, at about 19 ft. long, leaves no sidewalk and pedestrians are forced into the roadway.
  - c) Parked vehicles back out across the pedestrian traverse. The tailgate of a full size pickup is about 5 ft. high; pedestrians shorter than this are invisible to a backing pickup driver unless they go even further out into the roadway. (insert pictures #1 & #2)

#### **Recommendations:**

<u>Short term</u>: At a minimum, a painted, highly visible sidewalk or crosswalk should be put down traversing this expanse, along with signs prohibiting truck and large vehicle parking and "yield to

pedestrians" signage. Another option would be using bollards or jersey barriers to move the portion of sidewalk crossing the parking spaces next to the building, along with painted sidewalk or crosswalk on the rest traverse.

- Long term: Curbs and curb cuts would channel vehicles entering and exiting into predictable paths and give pedestrians safe spaces between shorter crossings. A "mountable curb" type elevation to an actual sidewalk where it traverses curb cuts would calm the traffic pulling across it. The sidewalk in the area of the parking spaces should be routed inside the parking spaces.
- 2) The concrete sidewalks going south from the bike shop to Depot St. Ext. are in good condition, however:
  - On the west side they have many obstructions: signs, planters, tables and chairs and bicycles. Auditors note that this adds vibrancy to the area, but is a challenge to traverse for all but the sighted and nimble.
  - b) On the east side the sidewalk ends abruptly and requires crossing Bridge St. The placement of the pedestrian signals (Rectangular Rapid Flashing Beacons; RRFB's) makes them awkward to access, decreases their visibility to drivers, and increases how long it takes to cross while the signal duration is only 10 seconds. Large vehicles in the angled parking block the sight line for the crosswalk both for southbound drivers and for pedestrians who, having activated the RRFB, then have to walk out and peer around the parked vehicle. (insert pictures #3, #4, #5 & #6)

### **Recommendations:**

- <u>Short term:</u> Business owners should be reminded to maintain a minimum 5 ft. path clear of obstructions on the sidewalk. A temporary "bump out" on the west side of the mid-block crosswalk should be constructed to give pedestrians protected space to get out to the end of parked cars, and the RRFB's should be moved to the end of the "bumpout" space on the west side, and to the near the edge of the sidewalk on the right side. Traffic calming is needed to prevent vehicles turning right from US2 from accelerating into the crosswalk.
- Long term: Institute the measures in the Bridge Street Complete Streets Corridor Study (August 2021, VHB) and the Bridge Street East Sidewalk portion of the Sidewalk Scoping Study (June 2022, Stantec). A complete sidewalk on the east side of Bridge St. will reduce congestion on the west side in the business block (for example, dog walkers will not have to traverse restaurant sidewalk tables). A crosswalk with bumpout at Pleasant St. will have better site lines than the mid-block crosswalk.
- 3) West sidewalk between Depot St. Ext. and the Winooski River Bridge:
  - a) Sidewalks and curbs are deteriorated asphalt.
  - b) Crossings have worn paint.
  - c) Crossings to the Library and The Town Center lack curb cut ramps and tactile pads on the west side, and lack tactile pads on the east side.
  - d) The crossing of the uncontrolled intersection at Railroad St. is quite long and traffic is often heavy there. Tactile pads are lacking on the west side and on the southwest corner of RR and

Bridge there is no safe place for pedestrians to launch and land as the sidewalk is not delineated from the street. (insert pictures #7, #8, #9, #10 & #11)

### **Recommendations:**

<u>Short and long term:</u> Current plans to rebuild this sidewalk in 2022 address these issues and should go forward.

4. Posted speed limit is 25 mph, or 37 ft/sec, which some drivers take as a suggestion rather than a limit.

a) On a weekend mid-morning, at the Bridge/Railroad St intersection, average speed of 186 consecutive cars on Bridge St was about 18 mph, with a maximum speed of 30 mph.
b) In the business block at the north end sight lines are short and busy with diagonal parking, pedestrians, bicycles and crosswalks. Traffic turning right from US2 can be confronted with a complex situation in a short distance.

c) At times eastbound traffic backs up on US2, such that drivers turning right are impatient and accelerate quickly into the mid-block crosswalk.

d) Traffic exiting Railroad St also backs up at times and drivers accelerate quickly into the Jolina Ct. and Library crosswalks. Drivers tend to have been looking left for oncoming traffic, not right for pedestrians in the crosswalks.

### **Recommendations:**

<u>Short and long term</u>: Traffic calming measure are needed for the length of Bridge St, so that 25 mph is a limit, not a suggestion. The only way to achieve this is to engineer the street so that drivers are not comfortable traveling faster than 25 mph. Methods from paint and signage to chicanes to speed tables are available. Temporary installations are possible to evaluate effectiveness.

### East Main St (US2)

### Overall walkability of the area: Mixed

### The Problems:

1. Sidewalks are deteriorated asphalt. (insert pictures #12 & #13)

2. There are no curbs, and thus no curb cuts. Cars pull in and back out along the entire frontage of the pizza restaurant property. Cars use the shoulder and sidewalk as parking. (insert pictures #14 & #15)

3. Poor drainage causes ponding and dousing of sidewalks from passing vehicles. (insert picture #16)

4. Posted speed limit is 30 mph, which many drivers take as a suggestion. The traffic light slows vehicle speeds, with speeds increasing as you travel away from it. At 112 E Main, average speed of 13 consecutive vehicles late afternoon on 5-25-22 was 32 mph, with a maximum of 39 mph. Although zoned "residential commercial", this is in fact primarily a residential street.

### **Recommendations:**

<u>Short and long term:</u> The long planned VTRANS repaving project is starting, and the Town has concurrent plans to rebuild the curbs and sidewalks. These projects will solve all of the problems except speeding. Traffic calming measures are needed. What is possible on a state controlled roadway?

### West Main St (US2)

### Overall walkability of the area: Acceptable

#### The Problems:

1. Concrete sidewalks and curbs on both sides of the street have some areas that need repairs. Driveways at the church and medical offices have no tactile pads. (Insert picture #17)

2. Sidewalk in front of Ski and Snowboard Express is in very poor condition. (Insert picture #18)

#### **Recommendations:**

<u>Short and long term</u>: The Town plans to repair these sidewalks in 2022, and those plans should go forward.

#### Baker St, Millet St, and Tilden Ave

### Overall walkability of the area: Acceptable

### The Problems:

1. Baker St has a sidewalk in excellent condition on one side of the street. Tilden Ave and Millet St lack sidewalks and my understanding from public comment meetings is that the residents do not want them, as there is not much room. These are low traffic residential streets that pedestrians walk on and children play on. Residents complain of occasional vehicles that travel too fast for conditions and safety.

#### **Recommendations:**

The residents of the area should talk with Town staff to discuss preferred traffic calming measures. Advisory bike/ped lanes, chicanes, and speed tables are options for this area.

#### Jericho Rd from Main St to School St

### **Overall walkability: Great**

### The Problem:

1. The sidewalk along the west side of Jericho Rd from Main St to School St is in excellent condition. The only problem is vehicle speed on Jericho Rd. On the afternoon of 5-25-22, while there were 43 children and 6 adults on the sidewalk 2 ft from the vehicle traffic, downhill traffic averaged 29 mph with a maximum of 35 mph, and uphill traffic averaged 31 mph with a maximum of 40 mph. There are no traffic calming measure such as fog lines, sharrows, etc.

#### **Recommendations:**

Traffic calming measure are needed for this section of Jericho Rd, so that 25 mph is a limit, not a suggestion. The only way to achieve this is to engineer the street so that drivers are not comfortable traveling faster than 25 mph. Methods from paint and signage to chicanes to speed tables are available. Temporary installations are possible to evaluate effectiveness. Phase one of the Bike/Ped Master Plan (June 2021, Toole) suggested advisory bike lanes for this section.

#### Jericho Rd from School St to Valley View Rd

#### Overall walkability of the area: Poor

#### The Problems:

1. There are two travel lanes of 11 ft. to 12 ft. wide. There is no sidewalk and there is no paved shoulder. The shoulder is generally quite narrow, bordered in many places by a guardrail and at other spots by a drop off. In places the shoulder is quite rough and eroded. Vegetation is not cut back and sight lines are poor. There are no fog lines, bike lanes or sharrows. (Insert pictures #19 & #20)

2. Posted speed limits drop from 45 mph to 35 mph at Valley View Rd and 35 mph to 25 mph at Southview Rd. Speeds of 68 vehicles were recorded on 5-27-22 starting at 7:30 AM. Most traffic was traveling to or from School St. In the 35 mph zone, average northbound speed was 39 mph with a maximum of 54 mph; average southbound speed was 39 mph with a maximum of 55 mph. In the 25 mph zone, average northbound speed was 32 mph with a maximum of 39 mph; average southbound speed was 27 mph with a maximum of 32 mph.

#### **Recommendations:**

<u>Short term:</u> Phase one of the Bike/Ped Master Plan (June 2021, Toole) recommended reducing the speed limit to 25 mph for the entire length of this section. The only way to achieve this is to engineer the street so that drivers are not comfortable traveling faster than 25 mph. Toole also recommended installing mirrors at blind turns. Advisory bike lanes where feasible and narrowing travel lanes to 10 ft. elsewhere would give pedestrians and cyclists space and help calm traffic.

Long term: A sidewalk on the west side has been scoped (June 2022, Stantec). Funding should be sought to construct it. In addition, the Bike/Ped Master plan recommends narrowing the travel lanes to 10 ft. on a long term basis.

#### US2/Bridge St./Jericho Rd. Intersection

#### **Overall Walkability: Poor**

#### **The Problems:**

1. There is no control of right turns, which are frequent both on green and on red. The walk signals give a head start of 5 seconds on the green light signal for traffic going straight, however, there is nothing to tell the drivers turning right on red that a pedestrian now has a walk signal, unless they happen to be looking at the walk signal. Most are looking left to see if they are clear of oncoming cars. At busy times when eastbound traffic backs up on US2 and many are turning right onto Bridge St., traffic feels pressured and aggressive.

2. The crosswalk across US2 on the east side of the intersection has an obstructed sight line for traffic on Bridge St. northbound that wants to turn right onto US2. This is a problem at all times, but especially in the "right turn on red" scenario, when the driver tends to be looking left. (Insert pictures #21 & #22)

#### **Recommendations:**

<u>Short term:</u> On the southeast corner, the landscaping on the Greensea property needs to be changed so that it does not obstruct the site line to the crosswalk. Signage "Right Turn Yield to Pedestrians" needs to be installed for all 4 corners.

<u>Long term</u>: When US2 is repaved the crosswalk across US2 on the east side of the intersection and the crossing signal should be moved westerly to be nearer the intersection, so that northbound drivers on Bridge St. have a sight line to it. The new traffic signals should have a signal that says "no right turn" when the pedestrian "walk" signal is lit up.



## Sidewalks, Streets and Crossings WALKING AUDIT

Community Name:			Name	Richmond, VT	
Starting location: Bridge St at Winooski River Bridge Ending location: Bridge St at US 2					
	Route: West sidewalk, crossings, and East Sidewalk in front of Big Spruce and Greensea				
	dit d			21/22 Start time: <u>3 PM</u> AM   PM End time: <u>5 PM</u>	
				Start time: Am   PM End time:	
		· ·	d limit		it(s)?
				ehicle lanes: The street is: 🗆 one-way   🗗 two-way	
lfn	nore	than	one la	ane: Does the roadway have 🛛 a median and/or 🖓 a pedestrian island? No	
Th	e str	eet h	as: 🗆	no sidewalk 🛛 no sidewalk but needs one 🖓 no sidewalk b	ut needs two
We YES	st si  NO	dewa отне	lk con <mark>R Ski</mark>	A no sidewalk but needs one in a sidewalk on one side of the street □ sidewalks on plete except at Cumberland Farms. East sidewalk only from US 2 to Big Spip any statements that don't apply	both sides of the street ruce
				IE SIDEWALK:	
		Ľ <b>X</b>	1. Is s	separated from the street by a barrier or buffer (a curb, grass, landscaping) Some part	S
Ď			2. Is s	surfaced with a material that is smooth and consistent (e.g., concrete or asphalt rather	than bricks)
		Ľ <b>X</b>	3. ls i	n good condition, without cracks or raised sections Concrete sections in good con-	dition. Asphalt sections
	<b>⊠</b>		4. ls f W 5. ls f	ree of obstacles (hydrants, utility poles, overgrown landscaping, trash receptacles) ar lest side between Depot St and Cumberland Farms has signs, planters, tables ree of interruptions from driveways (such as to/from homes, parking lots, etc.)	e in poor condition , chairs, etc.
				continuous (no segments are missing) and complete (it doesn't randomly end) ast side ends at Cumberland Farms parking spaces; West side after Big Sprue wide enough (at least 5 feet) for two people to walk side by side or pass one another W	
		⊡¥ □¥	9. Ha Sc	s tactile ground surface indicators so pedestrians with vision impairment will know wi ome but not all s a curb cut ramp (for use by wheelchairs, baby strollers, etc.) wherever it is interrupte ome but not all. Crossings at Town Center and Library lack curb cut ramps on IE STREET:	nen the path is ending d by a street west side.
₫			1. Ha	s traffic lights and/or stop signs at intersections and crossings	
K			2. Th	e traffic lights and/or stop signs are clearly visible to drivers and pedestrians	
Ľ <b>X</b>			3. Ha	s crosswalks	
	Ľ		4. Th	e crosswalks are well marked and clearly visible to drivers and pedestrians Paint wo	rn off
ば			5. Ha	s signage alerting drivers to the presence of pedestrians	
	Ă			s a designated bicycle lane	
Ď			7. Ha	s a pedestrian crossing signal, also called a beacon (if yes, complete the next section)	
			тн		at Big Spruce/Sweet Simone's
Ď			1. Are	e working	olimone s
ď			2. Ha	ve a "push-to-walk" mechanism, meaning pedestrians can stop the vehicle traffic	
	Ď		3. Ha	ve audible prompts for people with vision impairment	
		$\bowtie$			0
	Ľ <b>X</b>		5. Pro	ovide enough time to cross (indicate the amount of time provided: minutes	seconds)
				ovide suitable opportunities to cross (indicate the amount of time pedestrians must wa ange in order to cross: minutes seconds)	ait for a traffic light

Consider using the "Build a Better Block" worksheet as well.

#### Walkability of the area, based on the findings above: 🗆 Great 🗆 Acceptable 🖾 Mixed 🗆 Poor

AARP Walk Audit Richmond Crosswalks

Saturday 5/21/2022 3:00-5:00 PM & 90-degree day Diane Mariano & John Cohn

Crosswalks & Impressions

- 1. Crossing Bridge Street in front of Town Center
  - ... No crossing signal
  - ... No "push to walk"
  - ... No sound
  - ... Paint is worn and barely visible
  - ... No curb cut on western side, across from Town Center
  - ... Most cars appear to be traveling greater than speed limit
  - ... Sidewalk uneven at crosswalk
  - ... No pedestrians observed
- 2. Crossing Bridge Street in front of Library
  - ... Push to walk works
  - ... Light partially out on western side (across from library)
  - ... Inadequate curb cut
  - ... Observed 10 pedestrians
  - ... Out of state car went through crosswalk while blinking
- 2.5. Church Street crossing
  - ... all looks good!
- 3. Crossing Bridge Street Jolina Court
  - ... No crosswalk sign on East side
  - ... No push to walk
  - ... Curb cut on east side steep and uneven
  - ... West side no safe place to wait to cross
  - ... Driver's exiting Railroad St focus is on turning...not people
  - ... Driver's rolling stop...creeping out
- 4. Front of Market crossing railroad
  - ... good ADA access stomp pad
  - ... crossing bars for Railroad need to extent into pedestrian walkway

- 4.5. Crossing Depot Street
  - ... ADA access steep
  - ... ADA stomp pad good
  - ... needs painting
- 5. Crossing Bridge Street between Sweet Simone's and Big Spruce
  - ... needs painting
  - ...hard to see around parked cars
  - ... quick light to cross
- 5.5. Cross walk across parking lot between Big Spruce and Green Seed
  - ... good ADA
  - ... needs painting

6, 7, 8, & 9 Crossings around the Main Street intersection

- ... paint needed
- ... short crossing time
- ... ADA audible...works well

Overall Impressions of Richmond – what is needed to feel like a town

... Richmond has a busy (fast cars) feel as a through town.

... From a pedestrian perspective there are no rest rooms, a water source nor a place to rest like benches.

... Bristol is a good example of a walking village. Richmond lacks a uniformity...like similar lighting, plantings and even perhaps awnings.

...While we love our town...it could be spruced up a bit.

A suggestion...it might be nice to have this audit done through an app and/or perhaps on a tablet.

Glad Richmond has decided to get a pedestrian look at our town. Thank you all for making this happen.

Village Audit – May 28, 2022: Cathleen Gent, Melissa Wolaver, Lisa Kory, John Hamerslough Notes by Lisa Kory

Bridge Street - Starting at the bridge and heading North to Railroad Street

- 1. We might want to get input from parents about the railing on the bridge, but otherwise the bridge crossing seems fine.
  - 2. Immediately coming off the bridge, it is steep for wheelchairs.
  - 3. The blacktop on the sidewalk is degrading on the edges. It is very uneven. There are washout materials on the sidewalk.
  - 4. We understand this sidewalk will be rebuilt and recommend moving the sidewalk slightly to the West and adding green space between the sidewalk and street.
  - 5. The entrance to the park is dangerous to cross when there is a lot of park activity.
  - Esplanade might also benefit from a sidewalk due to walkers and kids on bikes there. Also
    people can more easily take advantage of a walking path at the end of Esplanade that goes up to
    Railroad or Borden St.
  - 7. Esplanade seems to be missing the different material at the edge of the crosswalk.
  - 8. Continuing on Bridge St, it is dangerous for bikes, considering utility poles are in the road. When this part of the sidewalk is rebuilt, having a curb and green space between the sidewalk and street might be good.
  - 9. Can we sign Bridge St so that bikes can use the regular traffic lanes, instead of being squeezed on the edge?
  - 10. There are no flashers at crosswalk in front of Town Hall. Also no flashers at either crosswalk at the market. Consider that people have reported that flashers do not always work if there is no solar power.
  - 11. Curb cuts at crosswalk to library are not flush with road.
  - 12. Curbs all through this section are very degraded.
  - 13. There is a question as to where the new sidewalk will go at the market. As described by the painted red lines on the road, it is unclear how walkers will continue straight across Railroad Street heading South.
  - 14. Near the RR tracks, the sidewalk could be moved West, away from the road.
  - 15. This area has strollers with parents bring kids to childcare on Thompson Rd. Also throughout this part of Bridge St. there are school children coming from RES, CHMS and Mansfield (can't remember the full name of that school).

Railroad St. Only

- 1. Due to market items on the sidewalk, a wheelchair could not get through.
- 2. The sidewalk ends at the end of the market. There is no safe way for people to walk between market and hardware store. Also no safe way to walk from Borden St. area out to Bridge Street.

Bridge St from Railroad Street continuing North:

- 1. Lighting is required at the market / creamery area, and near the Food Shelf.
- 2. It would be nice to have a couple of benches near the RR tracks to enjoy the spectacular view of Camels Hump while enjoying Sweet Simones coffee and treats.
- 3. There is no crosswalk from Pleasant St. to the West side of Bridge St. If people don't walk through former bank parking lot, they have to walk in the road.

- 4. In front of Sweet Simone's, sidewalk slants towards the street.
- 5. In front of Hatchet when people are gathered around the tables there is little room to walk.
- 6. At the gas station, multiple cars will line up, crossing walking area. This section is dangerous with cars pulling in and out, without marked pedestrian paths.
- 7. At the intersection it is still dangerous to cross. This will be a subject of more intense study.

#### Special Report: Melissa Wolaver – May 28, 2022

Bridge Street Business Block (see photo and drawing CG BS 1 Bus Block)

- Sidewalk in front of Sweet Simone's and Hatchet was narrowed to almost being impassable. Tables, people sitting, waiting in line, dogs with people sitting and standing at Hatchet tables and cars pulled over curb in front of Sweet Simone's.
- 2. Drink/beverage truck unloading at Cumberland Farms is parked in walkway. Car in Cumberland Farms parking space on Bridge Street on Bridge Street is blocking walkway so that pedestrians must go out into street.
- 3. People in cars trying to turn left from Bridge Street onto Route 2 even though pedestrians have walk signal.
- Street Safety and Appeal Drivers disregarded pedestrian walk signal, cars waiting for gas forced pedestrians at Cumberland Fars into street, and poorly parked cars at Cumberland Farms forced pedestrians into road.

East on Main St:

- 1. Uneven sidewalk with multiple materials.
- 2. At Papa McKees it is unknown where the sidewalk is, where the parking lot is and where the tables and chairs should end.
- 3. Cars sometimes park on sidewalk.
- 4. Curbs are rotting,
- 5. Drainage is across sidewalks and there is runoff from driveways onto sidewalks. Lots of large puddles.
- 6. The sidewalk ends at Harringtons. It should be extended to Lemroy on the South and the fire station on the North side. There should also be a crosswalk near the end of the sidewalks.
- 7. On the North side, there is water pipe access in the middle of the sidewalk so there is no way it can be level for a walker or wheelchair.
- 8. There are overhanging bushes in sections.

E Main 4:15-4:30 PM 5-25-22	at 112 E Main	
28		
29		
32		
30		
29		
39		
34		
30		
32		
34		
34		
34		
35		
Average 32 mph		

Bridge St at Railr		
NB	SB	
10:00am	24	15
	24	24
	21	12
	18	26
	12	19
	18	19
	18	19
	13	19
	12	17
	24	17
	14	13
	20	23
	17	19 22
	12	22 22
	18 23	22
	25 11	16
	23	15
	23 15	17
	17	17
	15	25
	21	13
	21	19
	13	20
	16	25
	23	20
	22	15
	30	20
	15	20
	21	16
	21	16
10:30am	16	18
	20	20
	20	15
	16	15
	16	15
	20	18
	20	15
	20	16
	16	19
	16	18
	16	16

NB Averag SB Average 18.51136 17.04255

	19	16
	20	16
	18	17
	19	16
	22	14
	23	13
	22	25
	25	23
	25	20
	19	18
	22	25
	22	20
	30	20
	15	18
	19	17
10:45	15	15
	12	15
	17	15
	15	15
	15	17
	15	13
	24	11
	17	12
	18	11
	18	16
	17	16
	16	18
	15	17
	19	18
	26	17
	25	15
	16	15
	18	19
	17	22
	11	14
	15	20
	11	10
	20	17
	20	18
11:00am	19	13
	22	10
	22	10
	23	10

	17	10
	14	22
11:12am	12	13
	18.51136	14
		14
		16
		10
		22
		18

Jericho Rd	Speed Stud	ly: Main St to School St 5-26-22 0700-0800	
Northbour Southbound			
28	31		
29	27		
28	34		
34	41		
17	29		
24	30		
32	31		
29	25		
29	27		
37	28		
28	30		
32	26		
28	29		
26	31		
32	31		
28.86667	29		
	~~ ~~		

29.9375

-		erson Count - Jericho Road - May 25 - 2:30 PM- 3:00 PM
Speed	Speed	
Uphill	Downhill	Adults Children
28	30	1 1 school
28	30	1 2 school
26	30	0 2 school
31	28	1 1 school
30	25	1 3 school
28 26	28 28	0 1 school 0 2 school
30	33	0 11 school
23 bus	28	0 2 school
23 503	34	0 5 school
27	34	0 4 school
27	30	0 1 school
34	29	0 6 school
27	25	1 2 school
32	28	1 0 going to softball
35	28	
31	28	
28	27	
33	28	
35	29	
35	29	
35	35	
32 bus	29	
29	30	
29	30	
28 34	27	
26	23	
42	28	
40	26	
34	30	
28	33	
30.64516 uphil	l 24	
	27	
	27	
	35	
	33	
	33	
	30	29.87143 Total average (up and down)
	30	
		Avg. downhill speed

Upper Jericho Rd. Scł	nool St to Valley View	25-May-22	
35 zone northbound	25 zone northbound	35 zone southbound	25 zone northbound
40	36	55	29
38	28	38	25
34	34	39	21
36	36	38	32
34	33	45	26.75
40	33	36	
34	29	36	
41	29	37	
36	31	40	
44	29	33	
36	39	39	
36	32	35	
40	37	35	
37	32	35	
39	29	37	
34	33	38	
36	31	36	
43	26	37	
38	34	43	
35	27	38.526316	
49	31.9		
47			
54			
44			
39.375			

## Appendix C

Walk Audit Worksheets and Notes of Round Church Area

#### **Richmond Walkability Audit**

Date/Time: Saturday June 4th, noon-1:30pm, beautiful sunny day with temps in the 70s

Area: Round Church district

Observed: Many vehicles including at least 1 motorcycle & 1 dump truck, ~20 bicyclists (teen to adults, ~75% mountain bike, a few small groups of 2-3, mostly single riders), 2 runners

Biggest challenge: 4-way intersection between Bridge St., Huntington Rd., Thompson Rd., and Cochran Rd.

Current setup = stop signs on Thompson and Cochran Roads while Bridge St. / Huntington St. is considered to be a continuous road.

Pro: Keeps vehicle delays / backups to a minimum

Con: Confusing intersection for drivers (use of left turn signal when going straight on Thompson Rd. from Bridge St., which car goes 1st when cars are waiting at both the Cochran and Thompson Rd. stop signs for a while)? This intersection is notorious for vehicle close-calls.

Especially difficult for non-local drivers who are not familiar with it (and we observed many out of state plates - OR, NY, CT, DE, MA).

The pedestrian crosswalk from Bridge St. to Thompson Rd. is key for people in the neighborhood and for families traveling to/from the Little Tots daycare at the intersection of Thompson and Farr Roads, but the crosswalk is somewhat hidden being located after Bridge St. starts curving into Huntington Rd.

- this crosswalk is very risky to pedestrians between drivers being distracted by the unusual intersection and not seeing the crosswalk due to the curve in the road

No pedestrian crosswalk from Huntington Rd. to Cochran Rd. There is a crosswalk at the Farr Complex but not at the south end of Round Church park accessing Cochran Road, without jaywalking or crossing all the way down by the Round Church.

Short-term improvement options:

- Add crosswalk ahead signs to both Bridge St. and Huntington Rd. (none between intersection and crosswalks at Round Church and Farr plaza (Stone Corral)

- Upgrade crosswalk to flashing light signs

- Add crosswalks in front of stop signs on Thompson and Cochran Roads

Longer-term options (no clear best answer here):

- 4 way stop sign: concern = increased traffic backups, pro = drivers & pedestrians very familiar with this type of intersection

- Round-about: good for vehicle flow, but concerns about pedestrian/bike friendliness (VT drivers not super comfortable with rotaries) and larger footprint

- Block off end of Thompson Rd. forcing vehicle traffic to use Farr Rd. to make a T intersection instead (husband's idea when we were discussing). concerns = increases Farr Rd. traffic (forces daycare traffic parking on roadsides to turn around instead of looping), delays to town garage and for ambulances to nursing home

- Increased cross-walk visibility beyond simple flashing lights - perhaps overhead blinking red light when crosswalk button pressed? elevated cross-walks?

#### Other observations:

#### Bridge St.:

strengths - street lights (although no working street light near bridge), awesome pedestrian lane on bridge, nice stone walls next to sidewalk, Round Church crosswalk.

weaknesses - no green strip between road and sidewalk so sidewalk plow unable to keep clear due to high frequency of road snowplows, no speed limit signs in either direction between Huntington Rd. intersection and bridge (observed speeds all 27-30mph with dip in road here), concerns about cars attempting to pass bicycles on the bridge, very low drain on shoulder coming off bridge forces bicycles to take the full lane right when cars want to pass after the bridge, we observed an out of state vehicle not stopping for one of us in the Round Church crosswalk

short-term improvements: Add speed limit signs in both directions, add sign about no passing on bridge (maybe even explicitly no passing bicycles on bridge or a share the road style sign), fix 1st drain after bridge so it is more inline with the road

longer term - protect sidewalk with greens strip?

Cochran Rd.:

strengths - awesome trails for biking & hiking/running close to down, speed detection sign for cars coming into the village, nice bicycle share the road sign

weaknesses - no streetlights (may want to add if add sidewalks), small shoulder makes access to trails less inviting to pedestrians, vehicles start increasing speed soon after starting on road, wild parsnip on south side of road near 1st Preston Forest entry, sand & gravel from driveway at 142 Cochran Rd. eroding onto road making it tricky for road bikes who need to bike through sand or take the lane.

short-term improvements: Add pedestrian cross-walk connecting River Trail to Preston Forest entry by cemetery right when speed limit drops to 25mph (we observed a bicyclist crossing the road here), and additional 25mph sign on Cochran Rd. a little farther away from Round Church as drivers are relaxing and starting to speed up (we clocked one car accelerating to 34mph), address dirt/rocks on road from driveway at 142 Cochran Rd.

mid-range improvement: Add sidewalk to one side of road to 1st entry to Preston Forest to improve access to pedestrians (may need crosswalk at trailhead if crosswalk on other side of road)

long range improvement: Add sidewalk to one side of road all the way to the River Trail (this is ambitious)

Huntington Rd.:

strengths - sidewalk to business plaza and crosswalk

weaknesses - sidewalk ends at start of plaza and plaza parking lot is unfriendly to pedestrians, no way to get even to Farr farm pumpkin patch / sunflower stroll just past Farr Rd.

mid-term improvement - extend sidewalk to Farr Rd. or just beyond to their initial field entry with 2nd crosswalk at Farr Rd. (makes Stone Corral and Mann & Machine more accessible to pedestrians and opens up the Farr Rd. loops as a nice walk option)

long range improvement: extend sidewalk all the way to the cross VT trail? (ambitious)

#### Thompson Rd:

OK with no sidewalks at current traffic levels (but would need them with additional development), sidewalks might also be nice to enable residents of senior center to venture outside more easily

Concerns with Farr Road stop sign visibility and placement at end Thompson Rd. and with vegetation growth on other side of Farr Rd. limiting driver visibility of oncoming traffic (note: vegetation was mowed down by 4:30pm on Monday 6/6!)

#### Vehicle Speeds:

Huntington Rd. near intersection: 27, 13, 27, 26, 20, 20, 23, 20 23, 30

Bridge St.: 30, 29, 30, 28, 29, 30, 30, 27

Cochran Rd.: did note 1 vehicle accelerating to 34 by the 1st Preston Forest trail entry

## Appendix D

Walk Audit Worksheets and Notes of Jonesville Area

#### Jonesville Area

#### Overall walkability of the area: Poor

#### The Problems:

1. US2 in this area has narrow, broken shoulders, no sidewalks, no crosswalks, and stretches with poor sight lines. This includes no crosswalk at the post office. The speed limit is 40 mph at the post office.

2. Cochran Rd. has no sidewalks and narrow, unpaved shoulders. This area, and adjacent stretches of Duxbury Rd., Wes White Hill Rd., and Dugway Rd., are used by walkers, runners, bicyclists and people accessing the Huntington and Winooski Rivers. (Insert picture #23)

3. The bridge over Huntington R. on Cochran Rd. has no shoulders at all and is narrow. (Insert picture #24)

4. The bridge over Winooski R. on Cochran Rd. is 31 ft. wide, but has no raised sidewalks, no painted sidewalks, no painted bike lanes, or any delineation of space for non-motor vehicle traffic.

5. Wes White Hill Rd. has little to no shoulder and poor sight lines for stretches of its lower section. The speed limit is 35 mph. (Insert picture #25)

6. The speed limit on Cochran Rd. in this area is 25 mph. A radar speed sign when approaching eastbound slows traffic into the area. Traffic turning off US2 and proceeding westbound seems to move noticeably faster.

#### **Recommendations:**

US2: The speed limit on US2 should be reduced to 35 mph at the post office and Stage/Cochran intersections, and for an appropriate distance to either side. A crosswalk and warning signs should be installed at the post office or at the Stage/Cochran intersection. 5 ft. shoulders on US2 are needed, as planned for the upcoming VTRANS repaying project.

Cochran Rd: The entire stretch needs traffic calming engineering to bring vehicle speed into compliance with the posted 25 mph speed limit. Advisory bike/ped lanes, chicanes and speed tables are all suggestions in the draft phase 2 bike/ped master plan (current draft version, D&K, June 2022). The bridge over the Winooski River is wide enough for painted bike/ped lanes on each side and this should be done. The bridge over the Huntington River is narrower. Advisory bike/ped lanes with a single center lane for motor vehicles would allow safe sharing of the space. On Wes White Hill Rd. the speed limit in the lower portion should be reduced to 25 mph.

# Laura Silverstein <laura.schutz@gmail.com>

May 28, 2022, 4:17 PM

to me, timschon

#### Allen & Tim -

Here's the file with the observed car speeds and my notes from today... Please let me know if you have any questions or need anything from me here. One other thought is that it might be helpful to find out from the school district where the school bus stops are in the neighborhood and maybe check out the area in the morning or afternoon on a school day...

Laura

#### Saturday, 5/28/22, 1-2pm or so

note: Jonesville zip code is 05466, google defines as narrow neighborhood between Winooski River and I89:

**Non motorized traffic:** 1 runner (middle aged male), 1 road bicyclist (middle aged male), 1 pedestrian with a child in a stroller (older female, child unknown), and 1 dog walker (dog on leash, femail ~30yo), all on Cochran Rd.

(Cochran Rd. is a popular area for bicycles, runners & swimming hole access. It was relatively quiet today, but had just rained heavily 11am-12:30pm and Vermont City Marathon race is tomorrow)

#### Pros:

Railroad x-ing at end of Cochran rd. has flashing lights & gates Plowed Bombardier meadow parking with mowed paths allows river (Winooski & Huntington) access without walking on roads

Overall cars on Cochran Rd. were quite responsive to pedestrian traffic (us) 90 degree turn on Cochran Rd. naturally slows traffic.

Little wild parsnip observed on this section of Cochran Rd.

Decent amount of public parking available between plowed meadow, spots next to Huntington River Bridge on Cochran Rd., and next to train tracks on rte 2.

All intersections have stop signs for smaller crossing road that are clearly visible. Signage inviting people to park in Bombardier meadow and to access River from north

side of Huntington River Bridge on Cochran Rd.

Overall homes along Cochran Rd. area are well maintained.

#### Cons / areas for improvement:

- Cochran Rd. bridge over Winooski River doesn't have white lane lines on the side, might help slow traffic, separate pedestrians from vehicles (bridge is plenty wide)

- Cochran Rd. bridge over Huntington River is quite narrow - no room for pedestrians with vehicles

- Access to Huntington River from East side of bridge over river on Cochran Rd. is steep, muddy, eroding - stairs or some other solution needed

- Wild Parsnip observed on rte 2 near Cochran Rd.

- Significant poison ivy on Bombardier meadow shoulder and along mowed paths

- 35mph speed limit on Wes White Hill Rd. where it meets Cochran Rd. - popular swimming hole here, recommend decreasing speed limit to 25mi for approx 1/2mi closest to Cochran Rd.

- No Parking sign on east shoulder of Wes White Hill Rd. at intersection of Cochran Rd. is hard to read for cars approaching on Wes Whilte Hill Rd., might be good to add a 2nd angled to approaching cars

- No sidewalks, crosswalks, or bike lanes. Dirt shoulders along road vary in width from 0-18 inches. They are flat & good for walking in some places and angled so that walking on them is difficult in others.

- Rte 2 is simply not pedestrian friendly in Jonesville - even with speed reduced to 40mph, the road is curvy and the shoulders aren't great. Even walking from the post office to the self storage business isn't really appropriate.

- Additional signage about sharing the road and/or Speed Limit with radar signs might help calm traffic on Cochran Rd., not sure what/if anything will help on rte 2...

- Buildings / businesses along rte 2 in Jonesville are older and showing signs of age (esp. North Star Guns) making it intimidating to outsiders

Measured Speed	Speed LIMIT = 25mph
28	42 vehicles observed & monitored with radar gone
23	note: may be influenced by group of 5 pedestrians doing the audit
24	(someone even stopped to ask if there was a race or parade in progress)
22	
18	
17	
23	JONESVILLE CAR SPEEDS - MAY 28, 2022
19	
21	
19	
16	
24 motorcycle	2
18	
14	
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31	
25	
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24	
24	
25	
28	
28	
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