

MEMORANDUM

To: Chapin Spencer, Norm Baldwin, & Corey Mims
Burlington Department of Public Works

From: Jon Rose
Dunkiel Saunders Elliott Raubvogel & Hand, PLLC

Date: May 17, 2022

Re: Impact of the Federal Infrastructure Investment and Jobs Act on Potential
Champlain Parkway Federal Repayment Obligations

You have asked Dunkiel Saunders to assess the position taken—and recently reaffirmed—by the Federal Highway Administration (“FHWA”) and the Vermont Agency of Transportation (“VTrans”) that the City of Burlington (the “City”) would be responsible for repayment of certain federal funds expended to date in the development of the Champlain Parkway Public Transportation Project (the “Parkway”) in the event the City fails to advance the Project to construction.

Specifically, you asked whether the recently enacted, federal Infrastructure Investment and Jobs Act (the “IIJA”), P.L. 117-58 (Nov. 2021), eliminated the authority FHWA and VTrans have relied on in recent communications to take the position that the City would be responsible for repayment of federal funds if it refused to advance the Parkway.

Executive Summary

The short answer is no, the IIJA did not eliminate the repayment provision on which FHWA’s and VTrans’ recent communications regarding repayment were based. The IIJA did strike language in 23 U.S.C. § 102(b) that required repayment of “preliminary engineering” costs if a project was not completed within 10 years “after the date on which Federal funds are first made available.” However, FHWA’s and VTrans’ warnings regarding repayment appear to be based instead on what they have called the “20-Year Rule” found at 23 U.S.C. § 108, which requires repayment of certain federal funds if property acquired for project right-of-way is not incorporated into a federal aid project within 20 years (subject to discretionary extensions for “reasonable” delays). The IIJA did not repeal or alter that reimbursement provision.

Therefore, while one federal repayment provision giving FHWA the discretion to demand repayment was eliminated by the IIJA, the IIJA did not entirely eliminate FHWA’s authority to

pursue repayment and left in place the provision on which FHWA has relied in its most recent correspondence on this issue.¹

Background

In the years since 1998, when the City first assumed primary responsibility for its development, the Parkway has gone through various iterations and lengthy (and costly) engineering and permitting processes, as well as several rounds of right-of-way acquisition. Those development costs were covered using a favorable 95/3/2 federal/state/local funding mechanism that is no longer available to new projects of this type.² In recent correspondence, FHWA and VTrans have represented that the total project costs expended to date for the project (i.e., federal, state and local costs together) exceed \$45 million.

Moreover, FHWA and VTrans have repeatedly informed the City over the years that if it abandons the project in its current, federally-approved and permitted configuration, the City would be responsible for repayment of certain federal funds expended to date on the Project.

Most recently, in September 2021, both FHWA and VTrans reiterated their longstanding position that reimbursement of federal funds would be required if the Parkway is not advanced in its current form. By letter dated September 10, 2021, FHWA Division Administrator Matthew Hake wrote to VTrans Secretary Joe Flynn, noting that Secretary Flynn

had asked if the City was unable to maintain the momentum to advance this project would this project be subject to FHWA 20-Year Rule requirements for repayment/payback of federal funds. The answer to this question is yes. This project would fall under the terms of the FHWA 20-Year Rule and would require repayment of Federal funds. The FHWA 20-Year rule states that projects must advance from the acquisition of right of way to construction within 20 years or require payback of Federal funds.

See Letter from Matthew Hake to Joe Flynn (Sept. 10, 2021) (attached as **Exhibit A**). Secretary Flynn attached a copy of that letter to a September 13, 2021 letter to Mayor Weinberger, and repeated its position—expressed in similar letters in 2012 and 2020—that VTrans would hold the City responsible for any federal repayment obligation pursuant to the terms of the “existing agreement between the City and [VTrans].” See Letter from Joe Flynn to Miro Weinberger (Sept. 13, 2021) (copy attached as **Exhibit B**).

¹ In the event that FHWA were to pursue repayment in a legal action, the City may have arguments regarding the precise categories and amounts of repayment required. Nothing in this Memorandum is intended to opine on the strength of those legal arguments or any issue beyond the question of whether IJA eliminated the authority FHWA has recently relied in claiming authorization to seek repayment. We understand further questions regarding the amount of any repayment owed to be beyond the scope of the City’s instant request and would need to collect more detailed information about the use of federal funding and VTrans’ agreements with FHWA to complete that analysis.

² The current funding split would be 80% federal/20% state and/or local, typically broken down as 10% state and 10% local.



In April 2022, we understand that after Congress passed the IIJA, FHWA Deputy Division Administrator Larry Dwyer confirmed to the City that the reasoning in the September 2021 letter FHWA had sent to VTrans was still valid insofar as the repayment obligation FHWA referred to was not repealed by the IIJA. You have asked us to confirm FHWA's analysis that the IIJA did not repeal the reimbursement obligations on which its recent communications regarding cost reimbursement have been based.

Discussion

The City's repayment obligations with respect to the Parkway are governed by a combination of federal and state law, and the City's project agreements with VTrans. Technically, federal repayment obligations apply in the first instance to VTrans. However, under both state law and the City's 1998 "Cooperative Agreement" with VTrans, the City is generally responsible for any federal repayment obligations arising as a result of the "cancellation of the project by the municipality . . . due to circumstances wholly or partly within the municipality's . . . control," unless VTrans consents to a different payment allocation or arrangement. 19 V.S.A. § 309c; *see also* 1998 Cooperative Agreement ¶ 18. Thus, VTrans likely would have both the statutory and contractual discretion to shift any federal repayment obligation to the City.

Prior to the passage of the IIJA last November, FHWA had the ability to pursue repayment of Federal highway funds under two separate statutes. The first, 23 U.S.C. § 102(b), required repayment of preliminary engineering funds if a project did not reach the construction or right-of-way acquisition phase within 10 years (subject to extensions for reasonable circumstances). The FHWA's September 2021 repayment letters (and more recent confirmations) did not rely on that statute as the source of its repayment rights, and in any event, the IIJA repealed the repayment language in § 102(b). *See* IIJA § 11310.

The IIJA did not, however, repeal the second federal highway repayment statute, which is found at 23 U.S.C. § 108, and which authorizes FHWA to seek reimbursement of federal funds if "Federal-aid reimbursement is made for real property interests . . . and the real property interests are not subsequently incorporated into a project eligible for surface transportation funds within [20 years of acquisition]." *See* 23 U.S.C. § 108(a)(2) & (d)(7). FHWA regulations take a broad view of this authorization, and provide that "[i]n the event that actual construction of a road on [right-of-way acquired for a project] is not undertaken by the close of the twentieth fiscal year following the fiscal year in which the project is authorized, the State DOT will repay to the FHWA the sum or sums of Federal funds paid to the transportation department under the terms of the [project agreement]." 23 C.F.R. § 630.112(c)(1).

FHWA has relied on this authority, and not the recently repealed § 102(b), in asserting in its most recent correspondence that repayment of federal funds would be required had the City decided not to advance construction. Therefore, we believe the FHWA is correct in asserting that it still maintains authority following enactment of the IIJA to pursue repayment of at least certain categories of federal funds under § 108, and enactment of the IIJA does not alter the analysis in FHWA's September 2021 correspondence.

* * *



U.S. Department
of Transportation

**Federal Highway
Administration**

Vermont Division

September 10, 2021

87 State Street
Montpelier, VT 05602
802 828-4423
802 828-4424 Fax
Vermont.FHWA@dot.gov

In Reply Refer To:
HDA-VT

Vermont Agency of Transportation
Joe Flynn, Secretary
219 North Main Street, Suite 101
Barre, Vermont 05641

Subject: Burlington MEGC 5000(1) – Champlain Parkway Repayment/Payback of Federal-Aid Funds

Dear Secretary Flynn:

This letter is in response to your recent request for clarification of the FHWA 20-Year Rule requirements for repayment/payback of Federal funds invested in the project to date.

The Federal Highway Administration, along with the Vermont Agency of Transportation and the City of Burlington, have been working for 50 years to advance the Champlain Parkway project also called the Southern Connector project in the past. This project was authorized under an old funding category of 95/3/2 (Federal/State/Local) match share and is one of the last projects in the country to have this level of formula based Federal funding. New projects of this type would fall under an (80/20) Federal/State or Local share.

In reviewing recent financial documents for this project, we have found that the total of Federal/State/Local taxpayer funds that has been spent on this project to date is over \$45 million dollars. These funds have been spent on consultant efforts, environmental documents, preliminary engineering, and acquisition of right-of-way for this project.

We are aware of the significant efforts of the City and State to advance this project over the past few years and have also spent considerable Federal funds and staff time advancing this project. We do look forward to this work continuing as this project moves towards construction.

You had asked if the City was unable to maintain the momentum to advance this project would this project be subject to the FHWA 20-Year Rule requirements for repayment/payback of Federal funds. The answer to this question is yes. This project would fall under the terms of the FHWA 20-Year Rule and would require repayment of Federal funds. The FHWA 20-Year Rule states that projects must advance from the acquisition of right of way to construction within 20 years or require payback of Federal funds. The FHWA 20-Year Rule is based on Federal law 23 USC, 108;

(2) Construction. - The agreement between the Secretary and the State for the reimbursement of the cost of the real property interests shall provide for the actual construction of the

transportation improvement within a period not to exceed 20 years following the fiscal year for which the request is made, unless the Secretary determines that a longer period is reasonable.

(7) Reimbursement. - If Federal-aid reimbursement is made for real property interests acquired early under this section and the real property interests are not subsequently incorporated into a project eligible for surface transportation funds within the time allowed by subsection (a)(2), the Secretary shall offset the amount reimbursed against funds apportioned to the State.

This provision is also incorporated into Federal regulations found at 23 CFR Section 630.112. The Federal law and Federal regulations do not allow for a waiver or exemption of this provision. FHWA can grant time extensions for projects that are progressing to construction on a reasonable basis. The FHWA Division Administrator may grant reasonable time extensions to a State DOT if the State DOT submits to the Division office sufficient justification. The delay must be reasonable and beyond the State DOT's control. Shifting priorities, insufficient transportation budgets, State appropriation constraints, and staffing levels are not valid justification for granting time extensions. Our office has previously sent you examples of repayment/payback of Federal funds in Vermont and other states for projects that have not advanced in a timely manner.

I hope this addresses your questions on the FHWA 20-Year Rule and repayment/payback of Federal funds on projects that do not advance in a timely manner. Please let me know if you have further questions or concerns.

Sincerely

Matthew R. Hake, P.E.
Division Administrator
FHWA

State of Vermont
Office of the Secretary
219 North Main Street, Suite 101
Barre, VT 05641
vtrans.vermont.gov

[phone] 802-476-2690
[fax] 802-479-2210
[ttd] 802-253-0191

Agency of Transportation

September 13, 2021

Miro Weinberger, Mayor
149 Church Street, Room 34
Burlington, VT 05401

Re: Burlington MEGC 5000(1) - Champlain Parkway
Repayment/Payback

Dear Mayor Weinberger,

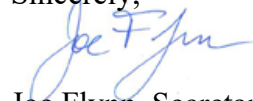
The Agency is pleased with the progress the City has made in advancing the Champlain Parkway project over the past few years. Significant positive momentum has allowed this 50 year project to now be on the verge of construction, this momentum must continue and VTrans stands at the ready to continue to support the City to assure you are able to meet the construction implementation objectives.

It is our understanding that the City is hearing from residents and others who are alleging that the repayment/payback provisions will not be exercised if Burlington were to opt out of the project. As of the date of this letter the total Federal/State/Local tax payer funding spent on all efforts associated with this project through September 3, 2021, is over \$45 million. The construction costs for the project are currently estimated at approximately \$37 million.

In the unfortunate event that the City is unable to maintain the momentum to advance this project, the Agency will be required to seek project cost recovery action against the City under the FHWA 20 Year Rule (23 U.S.C. 108) requirements for repayment/payback of Federal funds invested in the project, as well as State funds invested and recoverable under the existing agreement between the City and the Agency. Attached to this correspondence you will find recent communications between the Agency and the FHWA Vermont Division office articulating details related to the 20 Year Rule and repayment/payback of Federal funds.

The Agency remains optimistic that the City will advance the Parkway project to construction and is pleased with the planned phasing schedule recently developed by the City to assure coordination between this project and other transportation project implementation the City is undertaking. Should you have questions regarding this communication, please feel free to reach out at any time.

Sincerely,



Joe Flynn, Secretary of Transportation

Attachment: Letter from FHWA Division Office to VTrans; September 10, 2021



CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works
645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849

802.863.9094 VOX
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov

Councilor Jack Hanson, Chair, *East District*
Councilor Mark Barlow, *North District*
Councilor Eugene Bergman, *Ward 2*

Inquiries:
Madeline Suender
802.735.5324
msuender@burlingtonvt.gov

Transportation, Energy and Utilities Committee of the City Council

Tuesday, May 24, 2022 5PM

DPW Front Conference Room
645 Pine St, Burlington, VT 05482
Masks Optional

Join via Zoom, <https://us02web.zoom.us/j/84603122855>

To call into the meeting, including to speak during public comment:

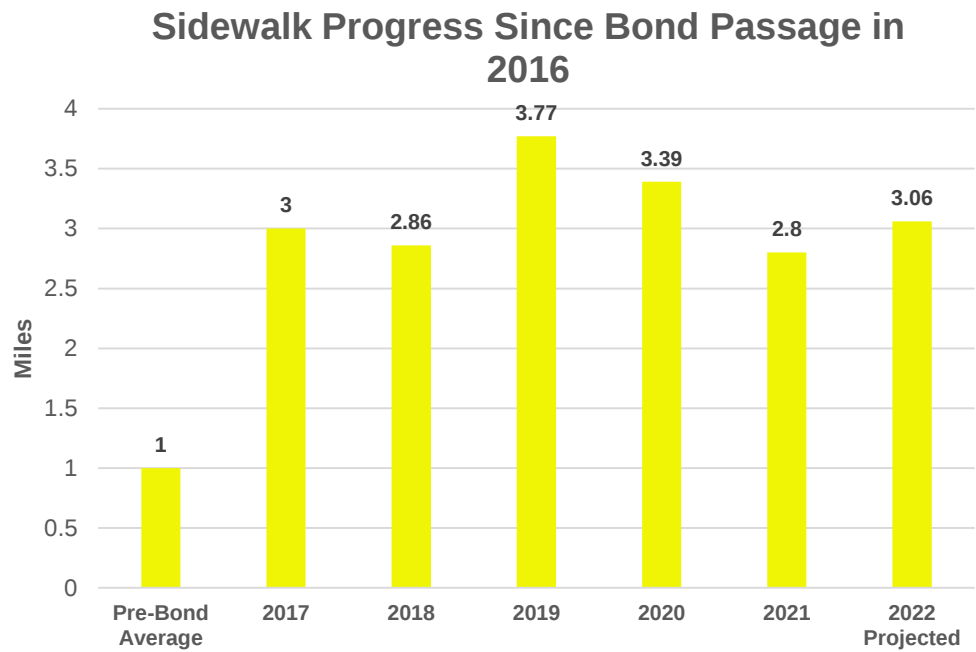
Phone number: 312-626-6799, Webinar ID: 846 0312 2855

If you prefer to attend in a physical location, you may join us at 645 Pine St in the front conference room

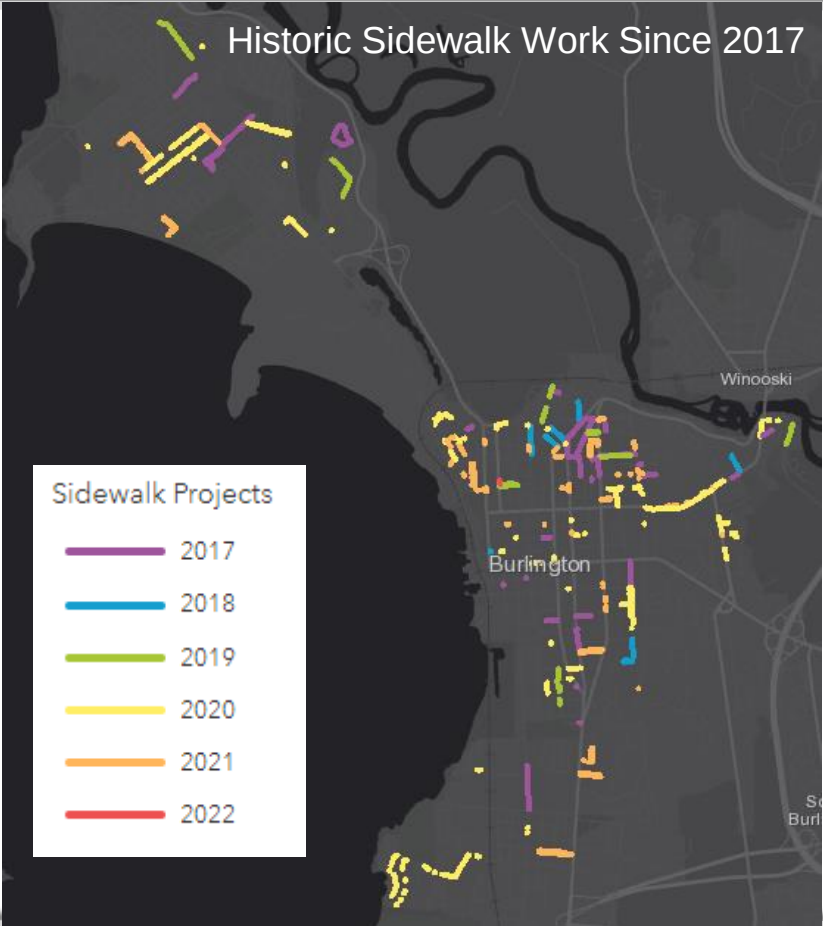
–DRAFT AGENDA–

- 1. Agenda**
- 2. Minutes of 4/26/22**
- 3. Public Forum**
- 4. Sidewalk Workplan and Prioritization**
 - Laura Wheelock, Maddy Suender
 - Information
- 5. Queen City Park Rd/Austin Drive Scoping**
 - Elizabeth Ross
 - Action
- 6. North Winooski Avenue Implementation Update**
 - Chapin Spencer, Elizabeth Ross
 - Information
- 7. Market Place Garage Assessment**
 - Jeff Padgett
 - Information
- 8. Champlain Parkway Update – Repayment Provision Analysis**
 - Norm Baldwin, Corey Mims, Jon Rose
 - Information
- 9. Director's Report**
- 10. Councilors' Update**
- 11. Next Meeting 6/28/22**
- 12. Adjourn**

Sidewalk Reconstruction Under Sustainable Infrastructure Plan



- 15.82 miles of sidewalk replaced since passage of 2016 Bond (not including 2022).
- Sidewalk network is 130 miles.
- Current trajectory keeps us on the 40 year replacement cycle.

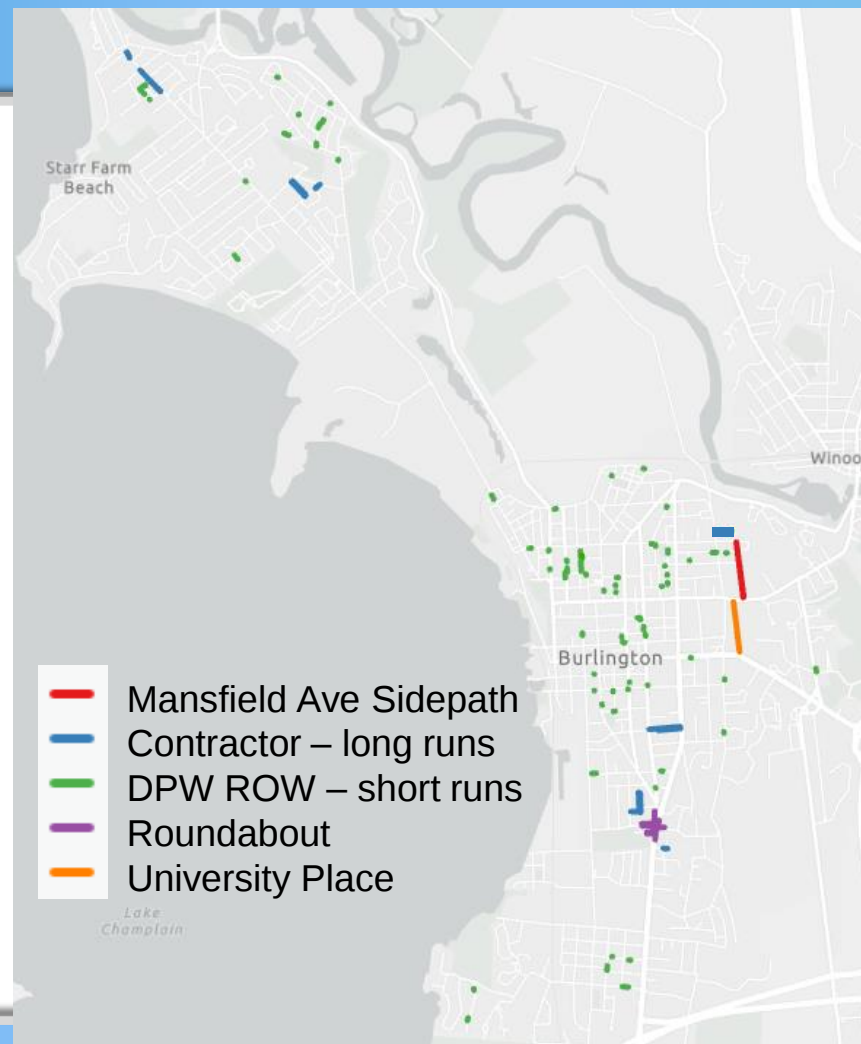


2022 Sidewalk Work Plan



Contractor Long Run List

Street	Limits	Linear Footage
Spruce St	Willard - Union: North Side, South Side Partial	1635
North Ave	Simms – Northgate	753
Ledgemere/Margaret	All, North Side partial	1150
Marshall Dr	Gosse - Heineberg, both sides	1300
Prospect Hill	All	690



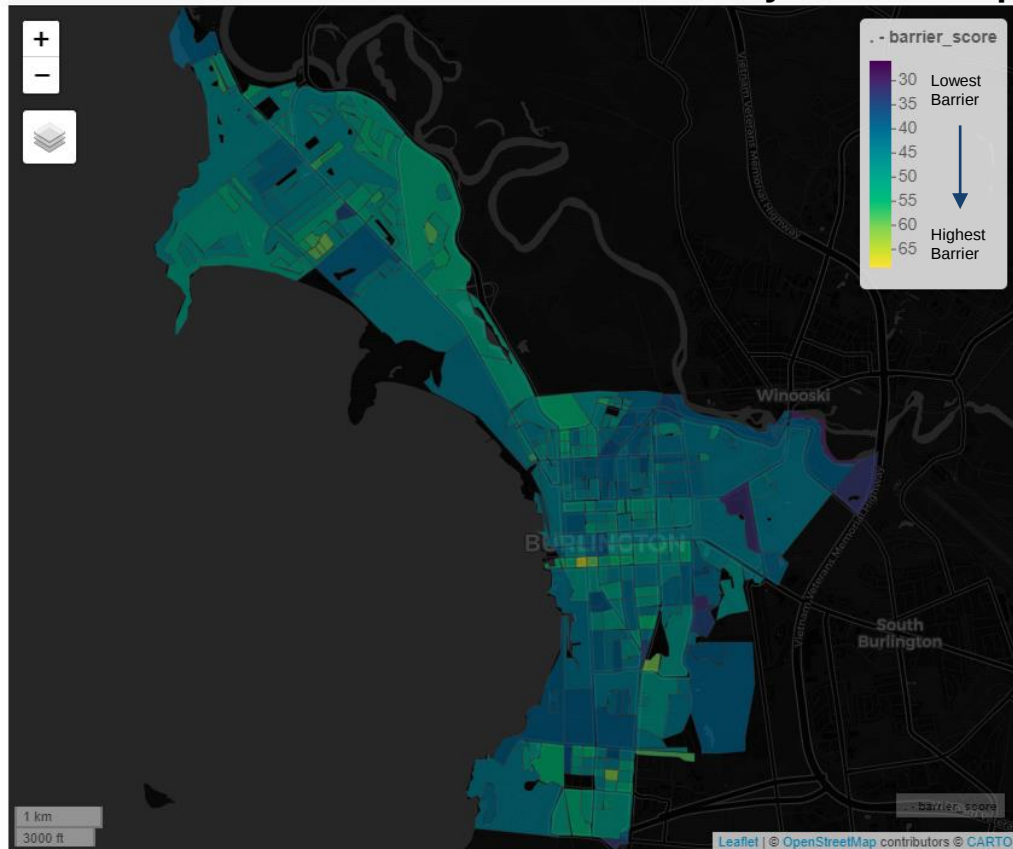
Combines deficiencies of a sidewalk section with the anticipated usage by pedestrians

Barrier Score = Raw Condition of a Sidewalk Panel

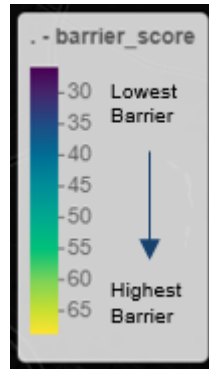
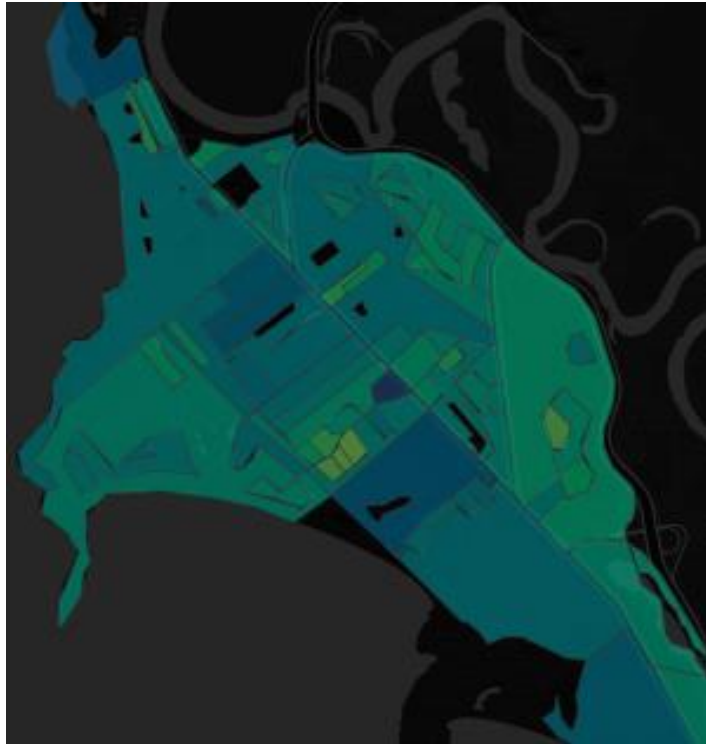
2022 Barrier Score Factors

- Heaving
- Cross Slope
- Running Slope
- Puddling
- Roughness
- Gapping

Barrier Score by Block Group



Barrier Score by Block Group



Good



Satisfactory



Poor



Serious



	2021
Good	51.9 miles
Satisfactory	58.8 miles
Poor	19.2 miles
Serious	3.2 miles
Average Score	Satisfactory

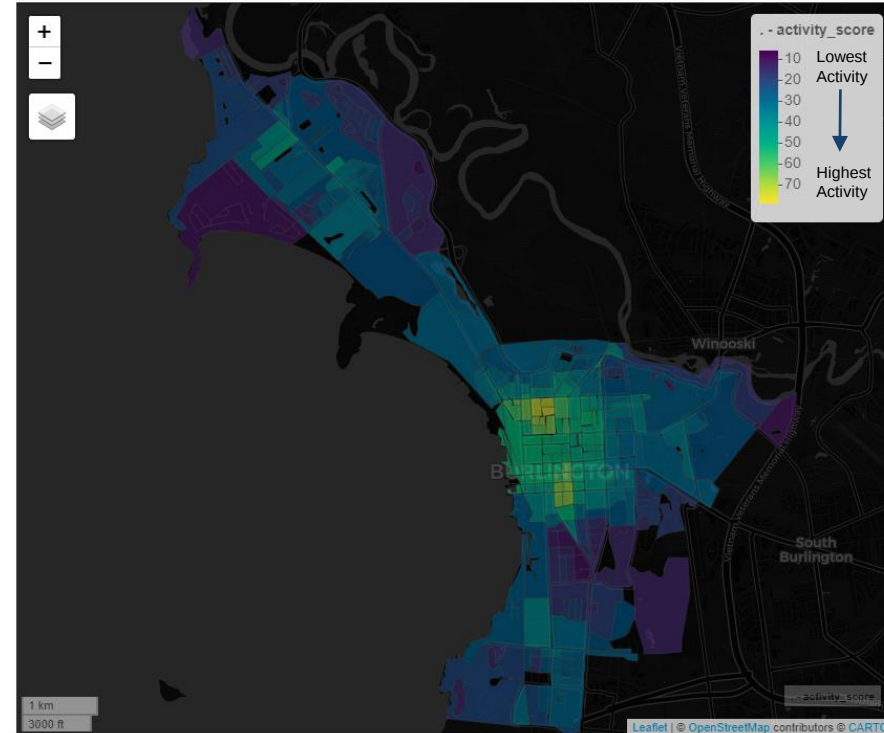
Activity & Equity Score – Anticipated Potential for Pedestrian Use

Adapted to City's current transportation goals in recognition of current communities.
Added criteria shown in red.

2022 Activity/Equity Score (with room to expand)

- Transit Stops
- School Proximity
- Park Proximity
- City Attraction
- Pedestrian Generator
 - Senior, Community, Medical, or Employment Center
- Downtown District
- Mobility Challenges
 - Age and neurodiverse populations
- High Minority Population
- High Low Income Population
- High No Vehicle Households

Activity/Equity Score By Block Group



Sidewalk Work Plan

Blocks – long runs

Group 1

Barrier

- ½ Mile
- Highest proportion of high Barrier Score

Group 2

Barrier + Activity/Equity

- 1 ½ Miles
- Highest proportion of remaining high Total Score
- Best 50% of Barrier scores not prioritized regardless of Activity/Equity

Segments – short runs

Group 3

Barrier

- ½ Mile
- Highest remaining Barrier Score

Group 4

Barrier + Activity/Equity

- ½ Mile
- Highest remaining Total Score
- Best 50% of Barrier scores not prioritized regardless of Activity/Equity



Step 1: Assign Weights

Enter Weights & View Scores

View Scores

To begin exploring the tool, click the 'View Scores' button to the left. This allows the user to begin visualizing and exploring the dataset. You must click this button before exploring the other sections of the tool. If desired, the user has the ability to enter different values into the category weights and then click the 'View Scores' button again to view the updated data. You can download the data as a shapefile or as csv by hitting the Download Data buttons. Scroll downward to see the full dataset with photos.

Barrier Score Weights

Minor Heaving

15

Major Heaving

30

Cross Slope Low

8

Cross Slope Medium

16

Cross Slope High

24

Running Slope Low

8

Running Slope Medium

13

Running Slope High

18

Roughness Low

10

Roughness Med-Low

18

Roughness Med-High

20

Roughness High

28

100%
Total Barrier Weight (Max)
(%)

Activity Score Weights

Transit Stops

6

Schools

12

Neighborhood Activity Center

10

Parks

6

Employment Attractors

10

Downtown

10

Senior Center

6

Elderly Population (High)

10

Minority Population (High)

10

Low-Income Population (High)

10

No Vehicle Households (High)

10

100%
Total Activity Weight (%)

Step 2: Analyze Output – By Block

Street Priorities

Show 10 entries

Search:

Street Name	Priority	Percent of Bad Segments	Number of Bad Segments	Total Segments	Activity Score	Distance (Feet)	Group
PINE ST	1	63.24%	43	68		662.6	Group 1
POPLAR ST	2	58.02%	47	81		768.8	Group 1
CANFIELD ST	3	57.78%	26	45		425.6	Group 1
SARATOGA AVE	4	57.14%	32	56		541.2	Group 1
NORTH AVE	5	53.85%	14	26		274	Group 1
SPRUCE CT	6	53.66%	22	41		390.2	Group 1
HOME AVE	7	50.00%	15	30		283	Group 1
OAK BEACH DR	7	50.00%	13	26		255.6	Group 1
CHURCH ST	8	46.15%	30	65		620.9	Group 1
BENNINGTON CT	9	45.61%	26	57		550.7	Group 1

Showing 1 to 10 of 33 entries

Previous

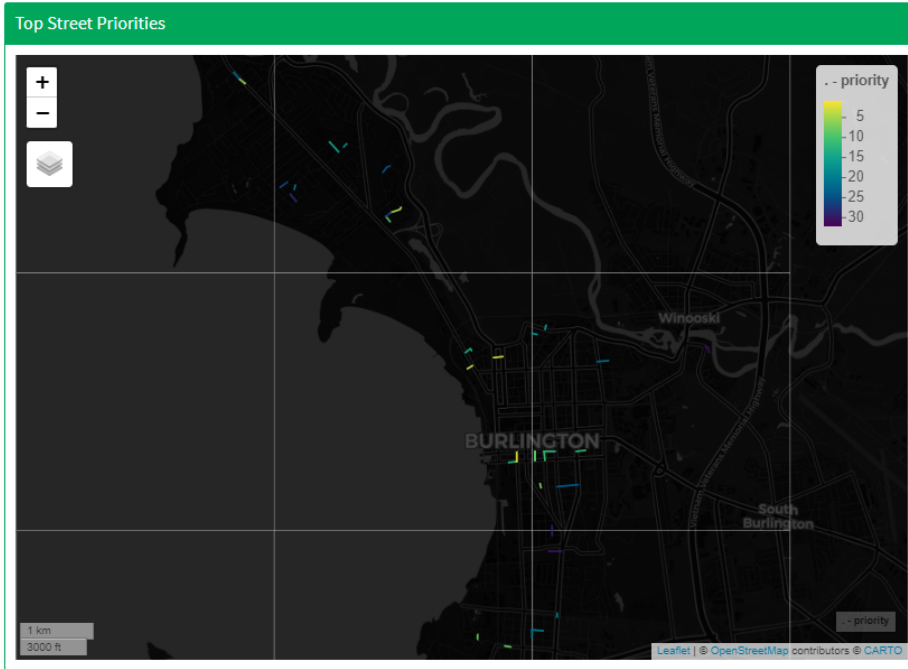
1

2

3

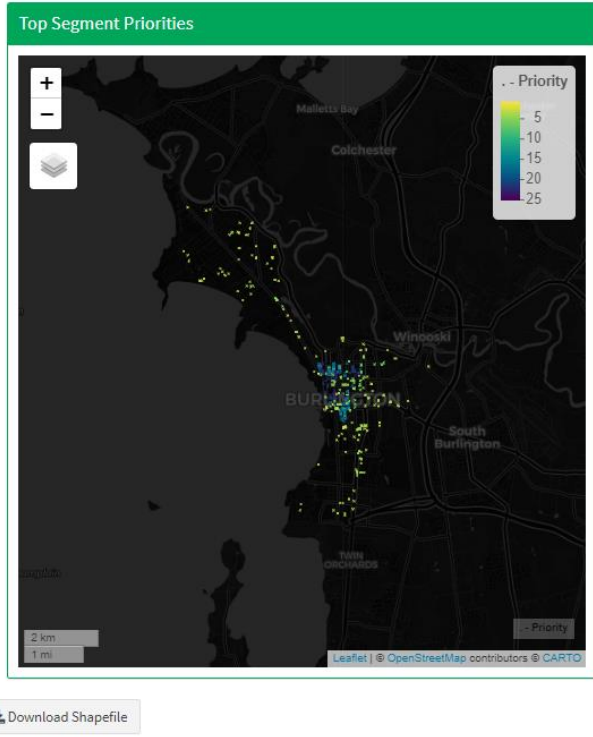
4

Next



Step 3: Analyze Output – By Segment

Segment Priorities							
Show 10 entries		Search:					
	Segment ID	Location	Priority	Total Score	Activity Score	Barrier	Group
	40231	210-214 COLLEGE ST	1	164	64	100	Group 3
	55726	197-209 BATTERY ST	1	158	58	100	Group 3
	23318	362 NORTH WINOOSKI AVE	1	152	52	100	Group 3



- Inventory QA/QC
- Site visits
- Resident reports: Calls, SCF, emails, etc.
- Coordination: Private or City funded
 - Avoid replacing sidewalks within planned work from other projects
- Logistics – Budget, Constructability, Efficiency

New Short Run Repair on N Champlain St



FPF & Signage will let neighbors know when work is about to start

https://frontporchforum.com/

Published

Sidewalk Repairs on Murray & N Champlain to Begin Soon

ONE Central - No. 5461 • Customer Service • Dept. of Public Works, Burlington
Posted to: ONE Central
Apr 6, 2022

Announcement

DPW crews will begin sidewalk spot repairs as early as Monday. This work will occur on:

- North Champlain Street between North Street and Peru St.
- Murray Street between North St and Peru St.

****DETAILS****

Work takes place Monday - Friday, 7AM-3PM. Construction schedules can change due to weather circumstances, and we thank you for your patience. There may be occasional gaps in work.

****IMPACTS****

- There will be stretches of the street where parking may be prohibited at times during work hours. Any on-street signage.
- Properties with any sidewalk in front of driveways will be given at least 24 hours advance notice of Impacts.
- The limits of work extend to 1 foot on either side of the sidewalk. Please ensure that any personal possessions, including flowers, etc are clear from the work zone during this project.

With the additional public support for infrastructure work, we are continuing our efforts at the enhanced rebuilding of our 130 mile sidewalk network. You can learn about the projects we have planned at <http://burlingtonvt.gov/construction> (still in the process of being updated for 2022).

Thank you for your patience during this project. For any questions, please feel free to reach out to customer service at 802-863-9094 or dpw-pinecustomerservice@burlingtonvt.gov.

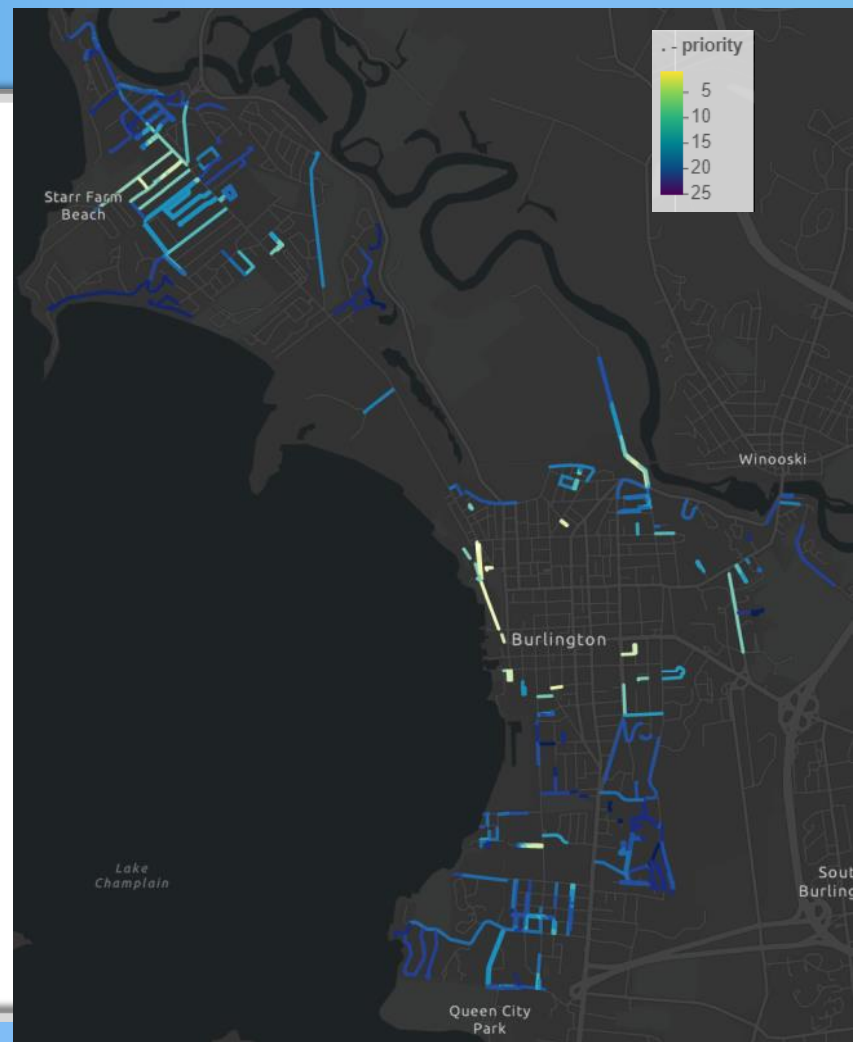
Freshly Poured Concrete on Murray St



New Sidewalk



- Prioritized by:
 - Activity/Equity score
 - No sidewalk on either side of street
 - Staff input and QA/QC
- Funded through State/Federal grants
- Past: Cliff St, Flynn Ave, Colchester Ave, Saratoga Ave
- Current: Intervale Road Shared Use Path, Lake St Shared Use Path





City of Burlington
Department of Public Works

Technical Services Engineering Division
645 Pine Street, Suite A
Burlington, VT 05402
P 802-863-9094 / F 802-863-0466 / TTY 802-863-0450
www.burlingtonvt.gov/DPW

Memo

Date: May 24, 2022

To: Transportation, Energy, and Utilities Committee

From: Christine Forde, AICP, Senior Transportation Planner, CCRPC
Lucy Gibson, Senior Engineer, Toole Design
Elizabeth Ross, Planner, DPW

Subject: Queen City Park Road & Austin Drive Scoping Study

Recommendation

We respectfully request that the Transportation, Energy, and Utilities Committee approve the following motion:

- To accept the Queen City Park Road and Austin Drive Bicycle and Pedestrian Scoping Study;
- To endorse the Advisory Committee's recommendation as the preferred alternative to advance for funding and construction: continuous shared use paths and improved crossings; and
- To recommend that the City Council accept and endorse the same through Resolution.

Introduction

The Cities of Burlington and South Burlington requested assistance from the Chittenden County Regional Planning Commission (CCRPC) to complete a scoping process that will assist in selecting a preferred alternative for pedestrian and bicycle improvements along Queen City Park Road and Austin Drive. Improvements will fill a gap in the regional walk-bike network by connecting existing sidewalks and bikeways in Burlington and South Burlington.

A project Advisory Committee was established and met several times throughout the project. The public provided feedback through an online survey and a public meeting. The Committee considered public input and technical analysis to inform their selection of the alternative they recommend the City select: continuous shared use paths. This was selected over separated bike lanes and sidewalks, which would have similar costs, similar impacts to utilities and environmental resources, but would not provide the continuity and ease of navigation that shared use paths would. This preferred alternative would:

- replace the sidewalk with a wider shared use path on the east side of Shelburne Road between Lindenwood Drive and Queen City Park Road in South Burlington;
- upgrade the Shelburne Road crossing;
- replace and widen the existing shared use path between Shelburne Road and Hannaford Plaza;
- narrow the roadway, remove the sidewalk, and construct a shared use path on the south side of Queen City Park Road between Hannaford Plaza and Central Avenue;
- add a crosswalk to the Champlain Parkway shared use path near Pine Street;
- add a crosswalk from Central Ave to the north side of Queen City Park Road;
- construct a shared use path on the north / east side of Queen City Park Road between Central Avenue and Austin Drive; and
- remove the sidewalk and construct a shared use path on the south side of Austin Drive to Oakledge Park.

This preferred alternative can be constructed within the public right-of-way, preserves existing on-street parking, and does not preclude any future upgrade of the Queen City Park bridge over the railroad (in the queue for funding to construct a 2-lane bridge based on the 2008 Project Definition Report).

There are also a number of short-term recommendations, which would improve traffic circulation, slow vehicle speeds and improve the pedestrian and bicyclist experience. These recommendations can be found on pages 28 and 29 of the report.

Next Steps

City and CCRPC staff will present to the TEUC a summary and outcomes of this Scoping Study. Following the TEUC's consideration and approval, a communication will be advanced to City Council at an upcoming meeting suggested by the TEUC. City staff will work with any TEUC or area Councilors interested in sponsoring the Resolution for City Council consideration.

The Cities of Burlington and South Burlington recognize that improvements to this regional corridor are important projects and a strong grant candidate. As annual grant opportunities arise, this project will be considered for a joint application. Separately, the CCRPC and Vermont Agency of Transportation are adding the Queen City Park Road bridge over the railroad into the regional bridge project list to be prioritized for state and/or federal funding.

Scoping Study

Executive Summary and Scoping Study – Available online:

<https://www.ccrpcvt.org/our-work/transportation/current-projects/scoping/queen-city-park-road-austin-drive-bicycle-and-pedestrian-connections-scoping-study/>

Please don't hesitate to reach out with any questions: eross@burlingtonvt.gov, 802-391-6808

Attachment

Queen City Park / Austin Drive Bicycle Pedestrian Connections Scoping Study, Final Draft Report

QUEEN CITY PARK – AUSTIN DRIVE BICYCLE PEDESTRIAN CONNECTIONS SCOPING STUDY



Prepared for the CCRPC, City of Burlington and City of South Burlington

4 May 2022 | DRAFT

CONTENTS

Introduction	1	Pedestrian Alternatives	14
Regional Connections	1	Bicycle Alternatives	14
Purpose and Need statement	1	Segment A	15
Project Context	2	Segment B	17
Relevant Projects and Studies	3	Segment C	19
Study Process	4	Segment D	21
Engagement and Outreach	4	Segment E	25
Existing Conditions	7	Alternative Cost Estimates	27
Transportation	7	Preferred Alternative	27
Project Area Environment	10	Implementation Strategy	27
Alternatives	14	Short Term Recommendations	28
		Attachments	29

INTRODUCTION

The Chittenden County Regional Planning Commission (CCRPC), in association with the Cities of Burlington and South Burlington, initiated a Scoping Study for a bicycle and pedestrian connection between the Lindenwood Drive intersection on US Route 7 in South Burlington, along Queen City Park Road and Austin Drive, to the Burlington Waterfront Greenway (commonly called the Burlington bike path). Toole Design was retained to conduct the study, which includes the required elements of a VTrans scoping study. This will allow the City of Burlington or City of South Burlington to pursue funding through the VTrans Bicycle and Pedestrian Program or other similar funding sources.

This study evaluates connections between the South Burlington Recreation Path network at Lindenwood Drive, the Hannaford Plaza, Red Rocks Park, Oakledge Park, Green Mountain Transit (GMT) transit stops, the existing shared use path along the Champlain Parkway corridor, and many other destinations.

The UVM Consulting Archaeology Program was also retained to conduct an evaluation of the cultural resources in the study area, which is required for a VTrans scoping study.

REGIONAL CONNECTIONS

One intent of this project is to address several gaps in the regional bicycle network that can be seen in Figure 1. The project has regional implications for bike tourism and transportation, enhancing access to Lake Champlain and the

Champlain Islands as well as strengthening the local network of on and off-street bike facilities.



Figure 1: Regional Bike Network

PURPOSE AND NEED STATEMENT

This study explores options, costs and feasibility for two primary purposes:

- Provide a regional bike connection between several existing shared use paths (the Burlington Waterfront Greenway, the Champlain Parkway Shared Use Path, and the South Burlington path network), and key destinations in the study area: Oakledge Park and Red Rocks Park.
- Provide a safe and comfortable movement for people to travel by all modes of transportation throughout the study area.

The need for these connections is due to gaps in the network for both walking and biking, and transit stops that are not served by sidewalks. These are described in detail in the following sections.

PROJECT CONTEXT

The study area, shown in Figure 2, has diverse land uses in and adjacent that include industrial and manufacturing facilities, major waterfront parks, residential neighborhoods, smaller commercial properties, the Champlain

Water District, electrical utility installations, and other uses, as shown in Figure 2.



Figure 2: Land Uses in the Study Area

RELEVANT PROJECTS AND STUDIES

This project is one of several transportation-related initiatives in the area:

2020 Queen City Park Road Pedestrian Facility Assessment

This study was conducted by the City of Burlington and Clough Harbor Associates, and provides an assessment of alternatives for either a new sidewalk or shared use path on Queen City Park Road in Burlington, between Central Ave and Home Ave. The intent was to investigate both drainage considerations and sidewalk feasibility in advance of a resurfacing and drainage project. The resurfacing project was completed in 2021, altering the drainage patterns on the road that will facilitate the construction of a sidewalk or shared use path on the east side of the road.

2008 Queen City Park Road Bridge Initial Project Definition Report

This study evaluated the condition and operations of the one-lane bridge over the Vermont Railroad. Key findings include the following:

- The bridge is generally structurally sound, but is deteriorating due to age, and there is a failing retaining wall adjacent to the bridge abutment.
- There is not sufficient vertical clearance for double stack rail cars. Accommodating them would require increasing the vertical clearance by about 2 feet.
- The one-lane width causes delay for people driving or biking across the bridge.
- The open grating sidewalk is not desirable to walk on, especially for those walking with dogs, and people often walk across in the vehicle lane.
- Public comments also noted that eastbound vehicles tend to pull onto the right side to make room for oncoming traffic across the bridge, blocking the pedestrian access to the sidewalk.

The report recommended replacing the bridge with a bridge wide enough to carry two lanes of traffic (one in each direction).

At this time the project is not funded for design and construction.

Champlain Parkway Project

This project has been decades in the planning, and is expected to break ground in 2022. Figure 3 shows elements of this project that impact the study area.



Figure 3: Champlain Parkway Project Features

The closure of Pine Street will significantly affect circulation in the study area, and will create a barrier for walking and biking between Burlington's south end and Queen City Park Road.

STUDY PROCESS

The study was guided by a project management committee including the following people.

Member	Representing
Christine Forde	CCRPC
Nicole Losch	City of Burlington Department of Public Works
Marla Keene	City of South Burlington Planning and Zoning
Lucy Gibson	Toole Design Group
Julie Shapiro	Toole Design Group

This study also coordinated with a Project Advisory Committee, with members appointed by the City of Burlington and the City of South Burlington. This committee met four times during the study.

Member	Representing
Peter Keating	Burlington Walk Bike Council
Gillian Bell	Burlington Neighborhood Planning Assembly
Chip Mason	Burlington City Council
Doug Goodman	South Burlington Neighborhood Representative
Bob Britt	South Burlington Bicycle & Pedestrian Committee
Amanda Holland	South Burlington Bicycle & Pedestrian Committee
Tim Barrett	South Burlington City Council
Chris Damiani	Green Mountain Transit

The committee met the following dates:

- September 23, 2021
- November 18, 2021
- February 22, 2022

Meeting notes are attached to this report as Appendix 1.

ENGAGEMENT AND OUTREACH

This project had three opportunities for the public to weigh in on the project, early as the issues and concerns were identified, mid-way through the project when alternatives were developed, and at the project conclusion to review the final report and recommendations.

Survey

An online survey was open for responses between September 17 and October 18, 2021 to obtain information from the public on issues, concerns, and needs in the study area. It was advertised on the Front Porch Forum, City and CCRPC websites, and via lawn signs that were placed at numerous locations in the study area and in surrounding neighborhoods. The survey yielded over 250 individual responses and 896 comments on issues and concerns. The survey respondents were generally representative of Burlington and South Burlington demographics in terms of age, gender, and ethnicity. In terms of barriers to walking, the following chart summarizes the survey responses.

The charts presented here summarize some data on why people travel to the study area, and what they find to be barriers to walking and biking. Additional questions and data are provided in Appendix 2.

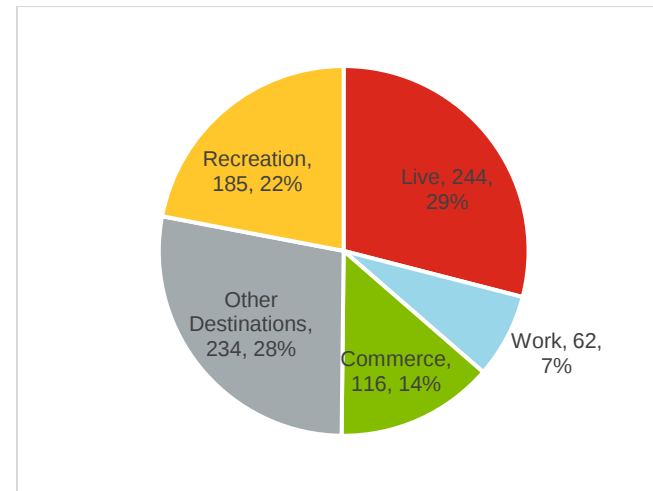


Figure 4: Purpose of trips in study area

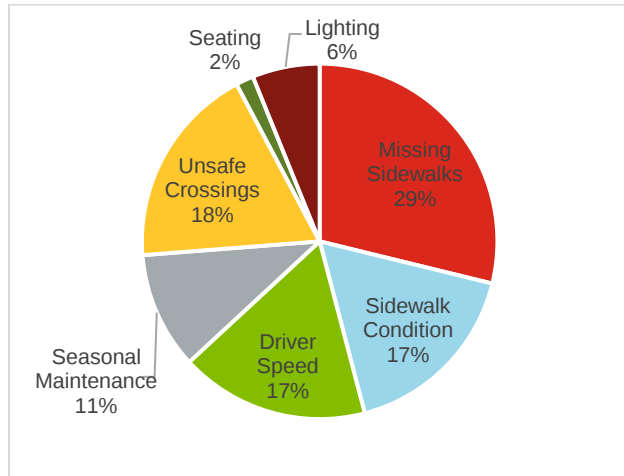


Figure 5: Barriers to Walking

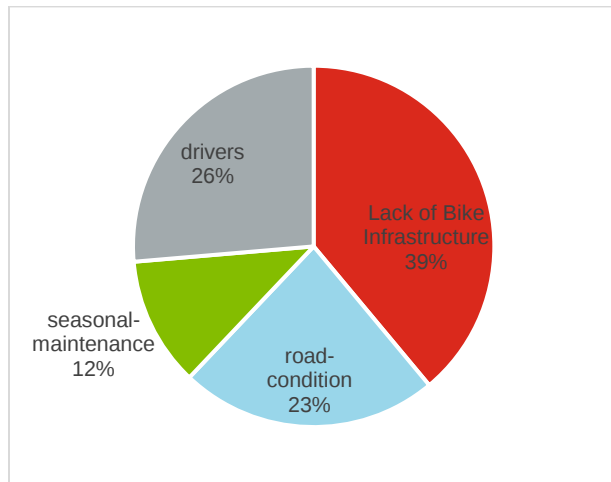


Figure 6: Barriers to Biking

The most useful information came in the form of location-specific comments for issues related to travel by all modes throughout the study area. These comments are summarized in Figure 7.

Alternatives Presentation

A public meeting was held on Wednesday, March 9, 2022, hosted by the South Burlington Bicycle and Pedestrian Committee Meeting, to share project alternatives and gather feedback. This virtual event was well attended, allowing participants to hear a presentation on the project progress and alternatives, and provide feedback. Concerns expressed by attendees included parking in the vicinity of Red Rocks Park, the one lane bridge safety, and speeding traffic. There was general support for the alternatives that were reviewed. Meeting notes are attached to this report in Appendix 3.

QUEEN CITY PARK-AUSTIN DRIVE BICYCLE PEDESTRIAN CONNECTIONS SCOPING STUDY | FINAL DRAFT

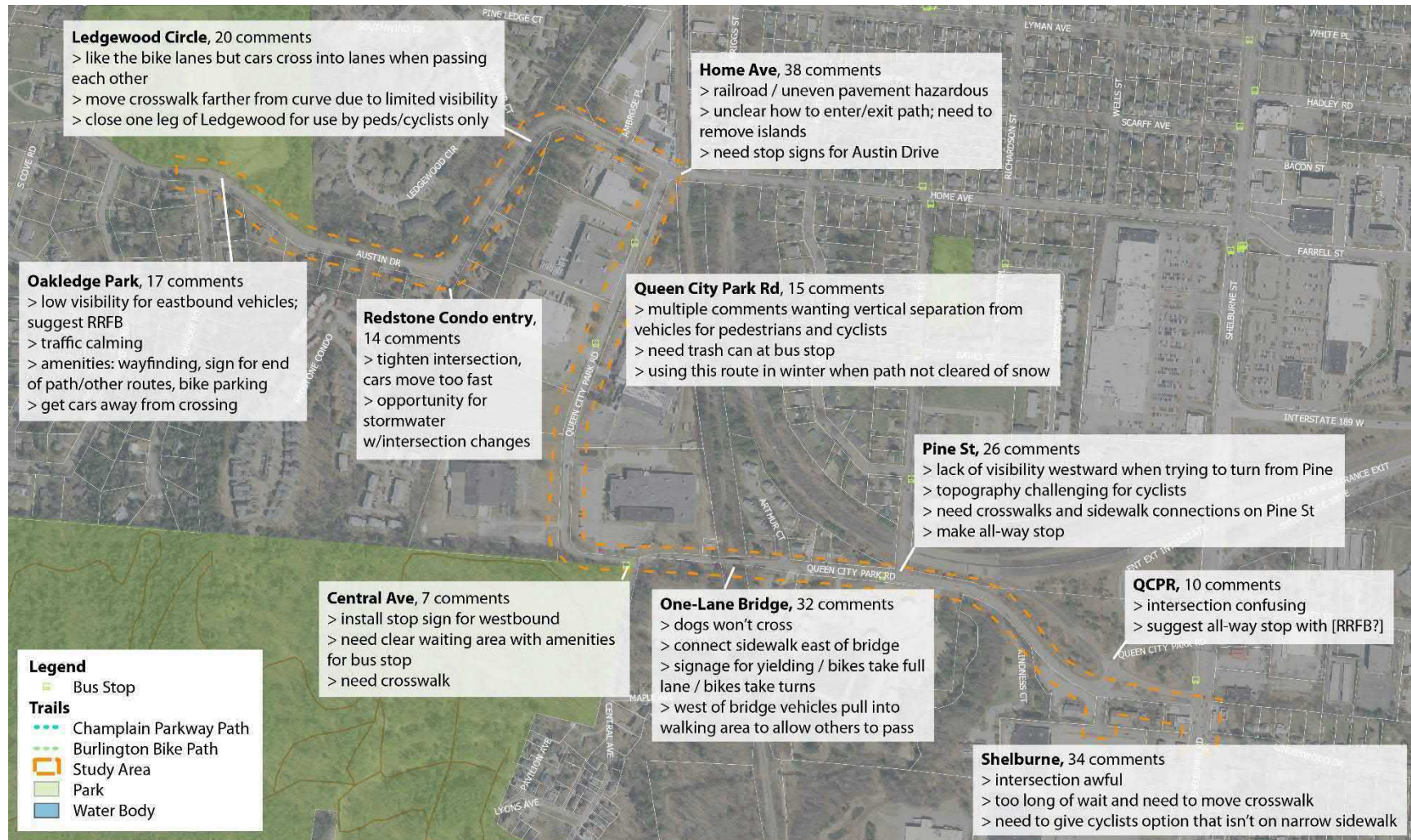


Figure 7: Public Comments for Transportation-related Issues and Concerns

EXISTING CONDITIONS

The study area spans from the Burlington Waterfront Greenway terminus on Austin Drive, and the intersection of Shelburne Road/US Route 7 and Lindenwood Drive. The following sections review all relevant aspects of the study area, including all applicable modes of transportation, safety, and environmental resources.

TRANSPORTATION

The following sections provide an overview of conditions for each mode of transportation. More detailed descriptions are provided in later sections of the report.

Walking

There are sidewalks and shared use paths serving some portions of the study area streets, as shown in Figure 10. The notable lack of sidewalks is along Queen City Park Road, generally between Arthur Court and Home Avenue/Austin Drive. In addition, while the bridge over the railroad has a sidewalk, its metal grate material is undesirable, and many walkers avoid using the sidewalk.

Bicycling

As shown in Figure 10, there are a variety of bicycle facility types in the study area, including shared use paths, bicycle lanes, shared lanes and advisory lanes. The bicycle level of traffic stress is a method to measure how comfortable a bicycle facility is for people, with a low stress environment (1 or 2 on a scale of 4) being completely separated from traffic, or shared with traffic on a low volume, low speed street. Stress levels are associated with user types, illustrated in Figure 8, with stress level 1 being most suitable for less experienced riders or mixed ability groups, and stress level 4 representative of riding on a busy road with no separation from traffic. As the goal of this project is to provide a bicycle connection through the study area for all ages and abilities of riders, a level of stress target of 1 is appropriate. As shown in Figure 9, the existing bicycle level of stress ranges from 1 on the shared use paths in the study area to 4 along Shelburne Road, due to the high volumes of traffic and lack of bicycle facilities. Queen City Park Road and Austin Drive have level of stress 2 where bike lanes exist, and 3 elsewhere.

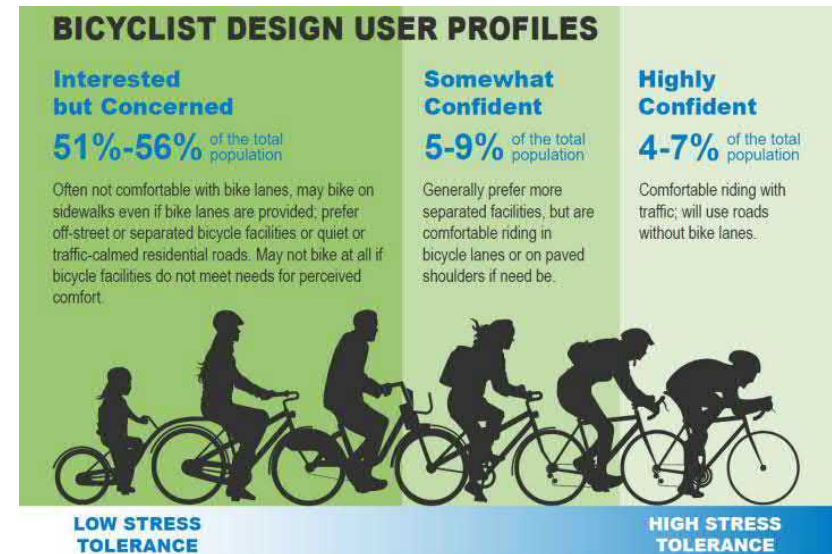


Figure 8: Bicycle User Profiles and Traffic Stress Tolerance



Figure 9: Existing Bicycle Level of Traffic Stress

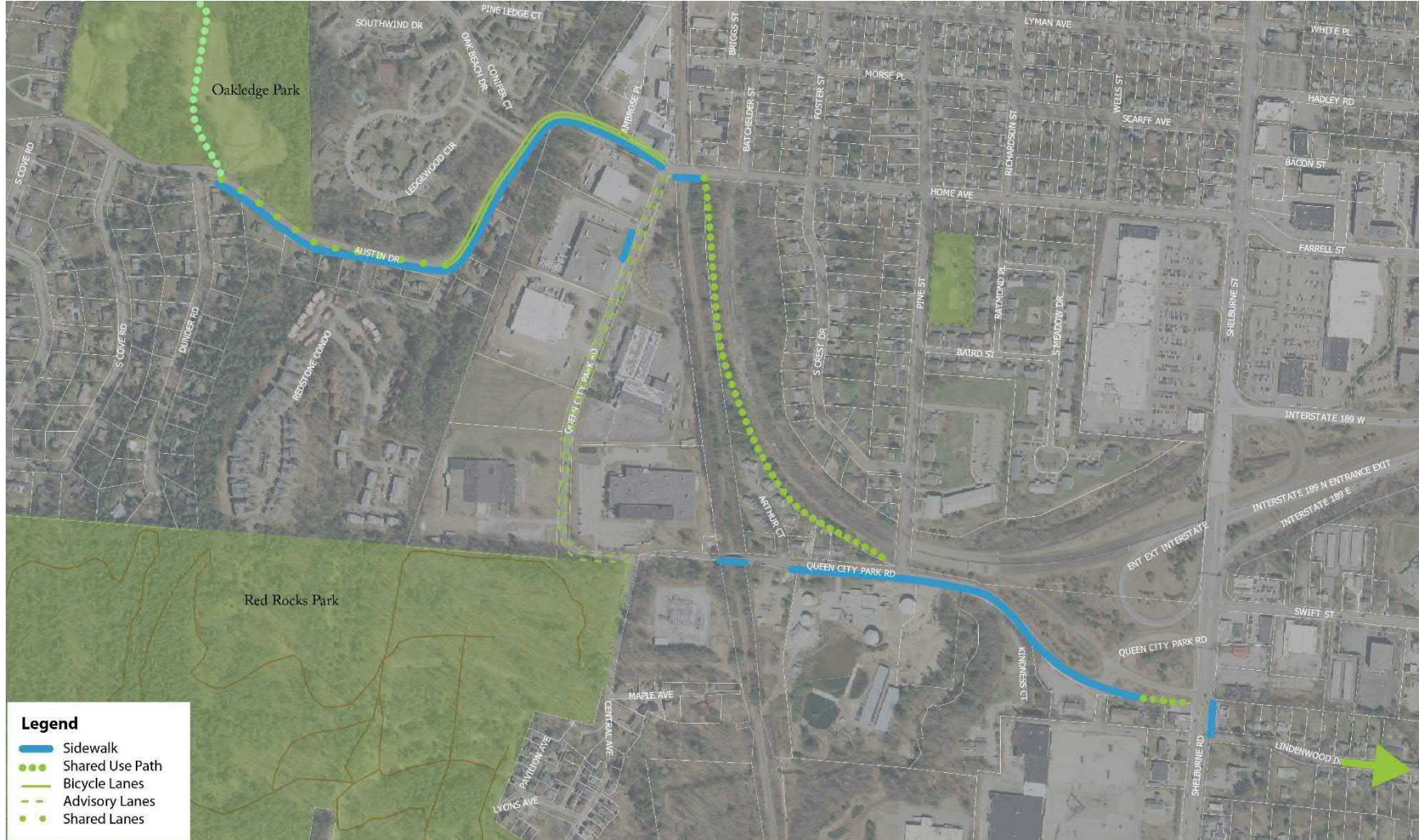


Figure 10: Bicycle and Pedestrian Facilities in the Project study Area

Transit

Several routes are operated by Green Mountain Transit within or adjacent to the study area:

Route #5 runs on Pine Street, terminating in a loop at the end of Pine Street via Queen City Park. This route runs on 60 minute headways, and serves the Howard Center on Pine Street.

Route #6 runs on Shelburne Road on 20 to 30 minute headways, with a southbound stop at the Queen City Park Road intersection, and northbound at Lindenwood Drive.

Bus stop locations are shown in Figure 11. In addition to these fixed routes, the Green Mountain Transit service center is within the study area on Queen City Park Road, where all GMTA buses are serviced. This facility generates nearly 200 bus trips per day on Queen City Park Road.

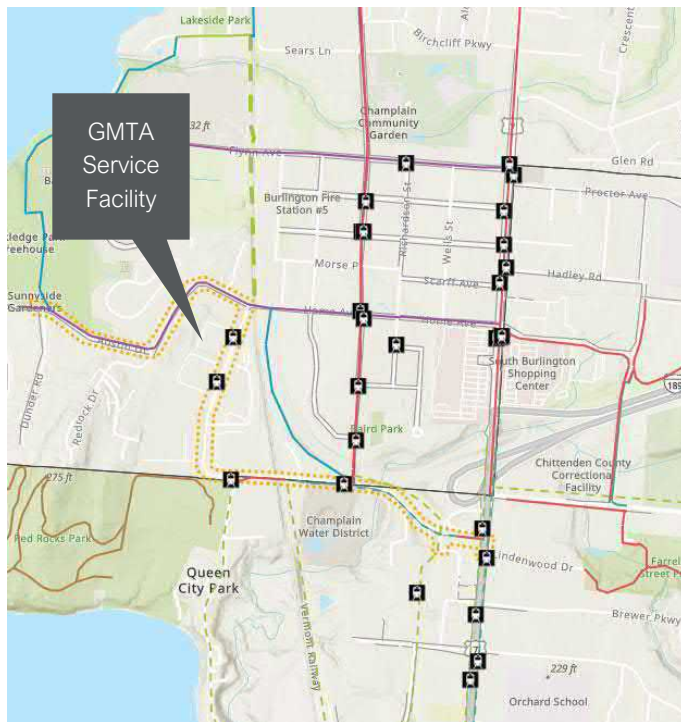


Figure 11: Bus Stop locations for GMTA Routes 5 and 6

Driving

Study area traffic volumes are shown on Figure 12. The highest traffic is on Shelburne Road, followed by Queen City Park Road between Pine Street and Shelburne Road. The lowest volumes are on Queen City Park Road north of Central Avenue. It is expected that, after construction of the Champlain Parkway, traffic on Queen City Park Road east of Pine Street will be considerably lower than today.

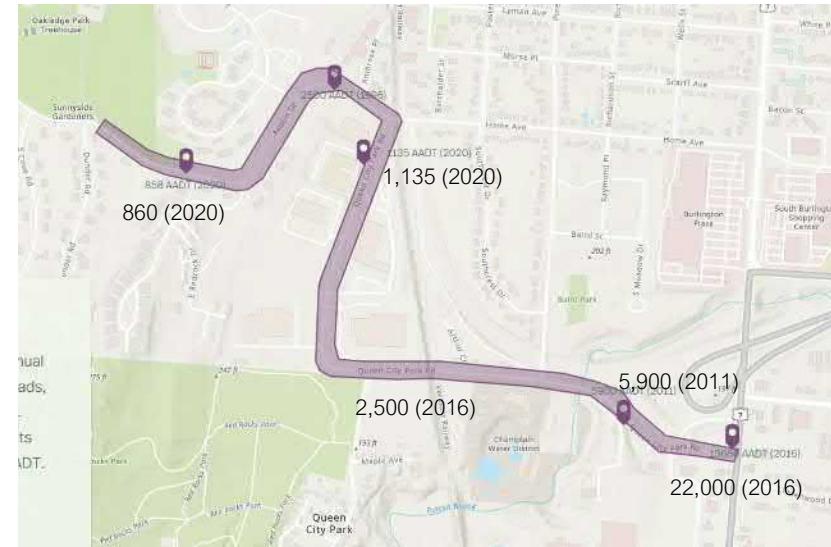


Figure 12: Average Annual Daily Traffic (VTrans)

Crash Summary

Between January 2016 and April 2021, fifteen (15) crashes occurred in the study area (Figure 13):

- Eight (8) at the intersection of Queen City Park Road and Pine Street.
- Two (2) at the intersection of Austin Drive and Ledgewood Circle.
- One (1) at the intersection of Queen City Park Road and Central Avenue
- One (1) at the intersection of Shelburne Road and Lindenwood Drive.
- One (1) occurred along Queen City Park Road near the one-lane bridge over the railroad.

Three (3) of the fifteen were injury crashes. None were fatal. All crashes were vehicular, and no pedestrians or people on bikes were involved. Sight distance

from Pine Street appears to be a factor for the number of crashes at this intersection.

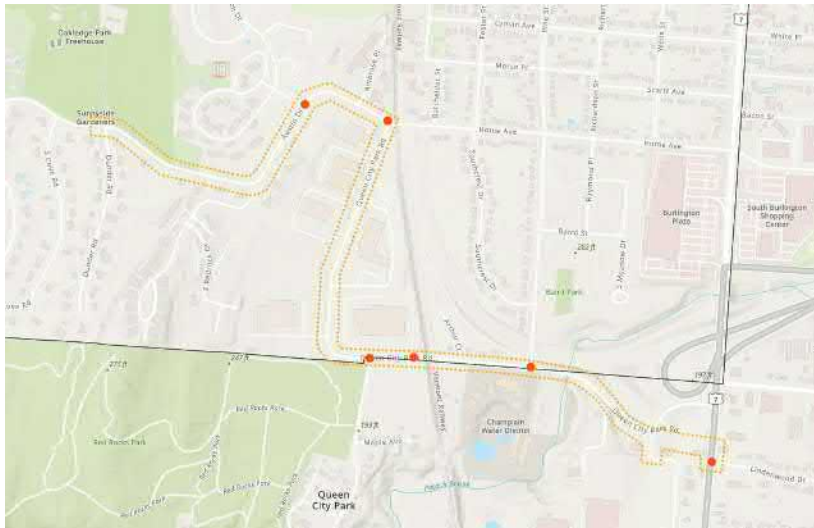


Figure 13: Crash Locations (Source: VTrans, 2016-2021)

PROJECT AREA ENVIRONMENT

The study area was evaluated for environmental resources that may affect the design, location, or feasibility of alternatives.

Natural Resources

Several natural resources in the study area will be considered in the planning and design of transportation projects:

- The project area drains either into Potash Brook or Lake Champlain, both of which are considered water quality impaired. This status emphasizes the need to reduce the amount of additional pavement resulting from the project. Incorporation of green stormwater infrastructure may be helpful to reduce any impacts to these waters.
- Wetlands are in the vicinity of the study area. Figure 14 shows that there are both Class 2 and possible Class 3 wetlands associated with Potash Brook, and additional areas in Red Rocks Park. None of these

are within 50 feet of the project corridor streets. There are additional wet areas in the project vicinity, including in drainage swales along Queen City Park Road. Some of these have recently been determined in the Burton Snowboards permitting process to not be wetlands under state jurisdiction.

- There are some rare species in the vicinity of the study area, primarily in Red Rocks and Oakledge Parks (Figure 15). There are also several sites on the south side of Queen City Park Road with rare plants, which may require documentation for any work outside of the roadway.

Hazardous Material Sites

The Vermont Agency of Natural Resources hazardous material site inventory indicates that there are eight sites in the vicinity of the project area where hazardous materials have been discharged or spilled (Figure 16). All of these currently have a status of “SMAC - Site Management Activities Completed” or “NFAP - No Further Action Planned” with the exception of the Hoechner/Gulf site at 793 Shelburne Road, which has a status of “MED - Site with sensitive receptors that are threatened by contamination.” Contamination from this site was found during site investigations after a property sale, and was found to have spread to the Limoge apartment complex, adjacent to the site. Monitoring and the development of a corrective action plan (CAP) is currently underway. As any project work occurs in this area, it will need to be done in coordination with the Vermont Agency of Natural Resources. A summary table of all hazardous material sites is included in the report Appendix 4.

Historic and Archaeologic

The UVM Consulting Archaeology Program conducted an assessment of cultural resources in the project area, including both architectural history and archaeological resources. While there is a rich agricultural and archaeological history in the project area, their report concludes that there are no intact resources in the project area that might be affected by the project. This is due to the proposed path being located on land that has already been disturbed, and any historic buildings in the area have been so significantly altered that they are no longer contributing to the area’s historic landscape.

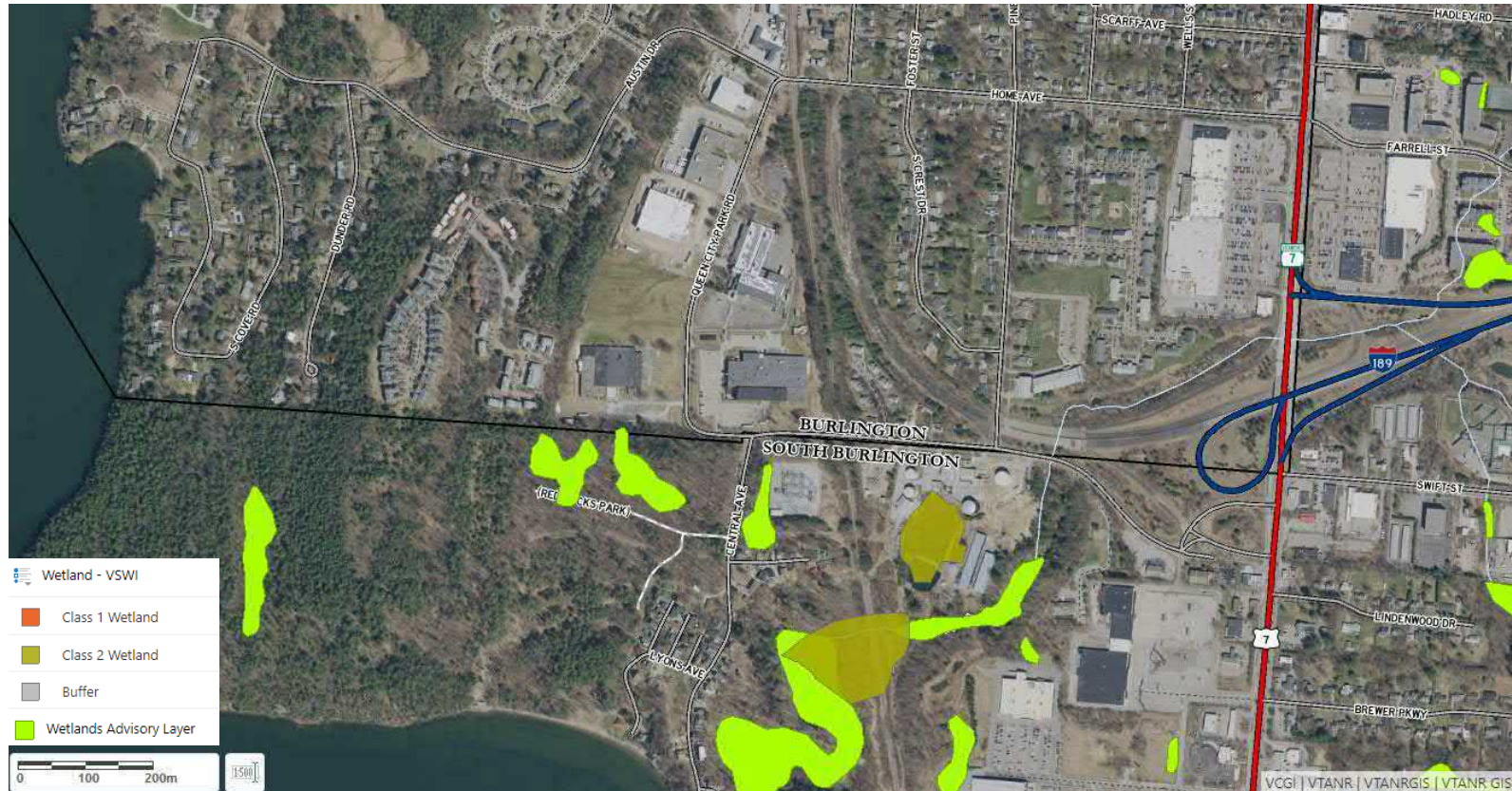


Figure 14: Vermont Wetlands Mapping for Project Area



Figure 15: Rare, threatened and endangered species in the vicinity of the study area



Figure 16: Hazardous Waste Sites in or adjacent to project area (Source: Vermont Agency of Natural Resources)

ALTERNATIVES

The project area has broken up into segments (Figure 17) in order to evaluate the existing conditions and alternatives for each segment.

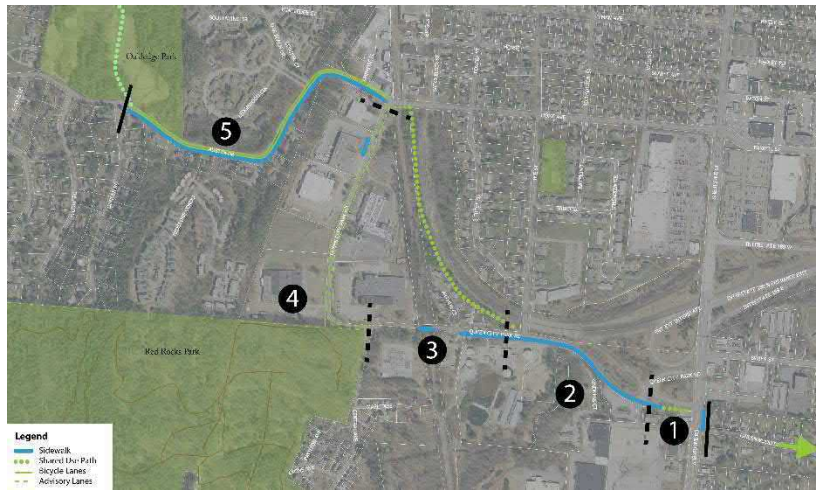


Figure 17: Project Area Segments

Alternatives for the project are specific to each segment, as conditions vary considerably. In general, pedestrian accommodations include sidewalks or shared use paths, and bicycle accommodations include shared use paths or separated bicycle lanes in order to achieve the low stress/all ages and abilities bicycle network.

PEDESTRIAN ALTERNATIVES

To provide for safe and comfortable pedestrian travel on the study area streets, dedicated pedestrian infrastructure – either a sidewalk or shared use path – is considered for all streets in the project area, and marked/signed crosswalks where needed. While the advisory walk-bike lanes provide an indication to drivers to keep to the center of the road, and reserve the edges for walking and biking, input from people who currently walk in this area supports providing separated facilities. In the bend of Queen City Park Road just west of Central Avenue, the tracking of larger trucks and buses while turning puts people walking or biking at risk, especially in winter when snowbanks are present.

BICYCLE ALTERNATIVES

Several different types of bicycle infrastructure were considered for each segment, as described and illustrated below.

Shared Used Paths

Similar to the Champlain Parkway Path, these are 10 feet wide and typically surfaced with asphalt pavement. Pedestrians and bicycles share the space, so they are not well suited to corridors with high volumes of either people walking or biking. They can provide an enjoyable recreational experience as they allow for side-by-side riding.



Separated Bicycle Lanes

These allow bicycles to be separated from moving traffic by curbing, flex-posts, planters, or other materials. They can be constructed as one-way facilities on each side of a street, or two-way facilities on one side. These provide a comfortable riding experience for a range of abilities. Two-way facilities offer some advantages including greater ease of passing, side-by-side riding, and the ability of a small plow to perform snow removal. The disadvantage is that bicycles are sometimes traveling in a direction not expected by motorists, which can result in greater risk of conflicts at intersections and driveways.



SEGMENT 1

This segment connects Lindenwood Drive with Queen City Park Road (Figure 18). An ongoing VTrans signal project will provide a crosswalk over the south side of the intersection of US 7/Shelburne Road and Queen City Park Road, which will significantly improve access from Shelburne Road to the existing segment of path, addressing many concerns about this location that were expressed early in this study process.

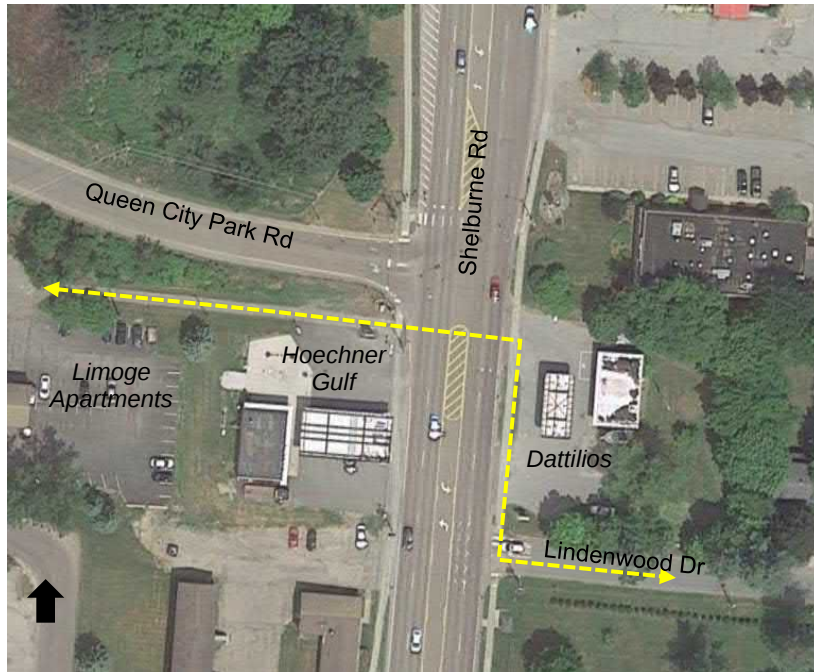


Figure 18: Segment A – Shelburne Road to Existing Shared Use Path

Conditions along the corridor include a sidewalk that many bicyclists will use to travel this segment of Shelburne Road, and the existing shared use path segment that is narrow at about 8 feet wide, with pavement and drainage that is in poor condition, and with a grade of approximately 7.5%.

With the high traffic volumes along Shelburne Road, and the current strong desire line to cross at the Queen City Park intersection to access the project area, the recommended improvements include widening the sidewalk on the

east side to a 10 or 12 feet wide shared use path, and widening the curb ramp on the west side to provide convenient access to the existing shared use path entrance. In addition, a bollard-style push button unit should be provided in a location that is convenient for people riding a bike to activate. See Figure 19 for an illustration of these recommendations.

Site Photos



Shared Use Path connecting Shelburne Road with Queen City Park Road



Bicycle rider waiting to cross at Shelburne Road

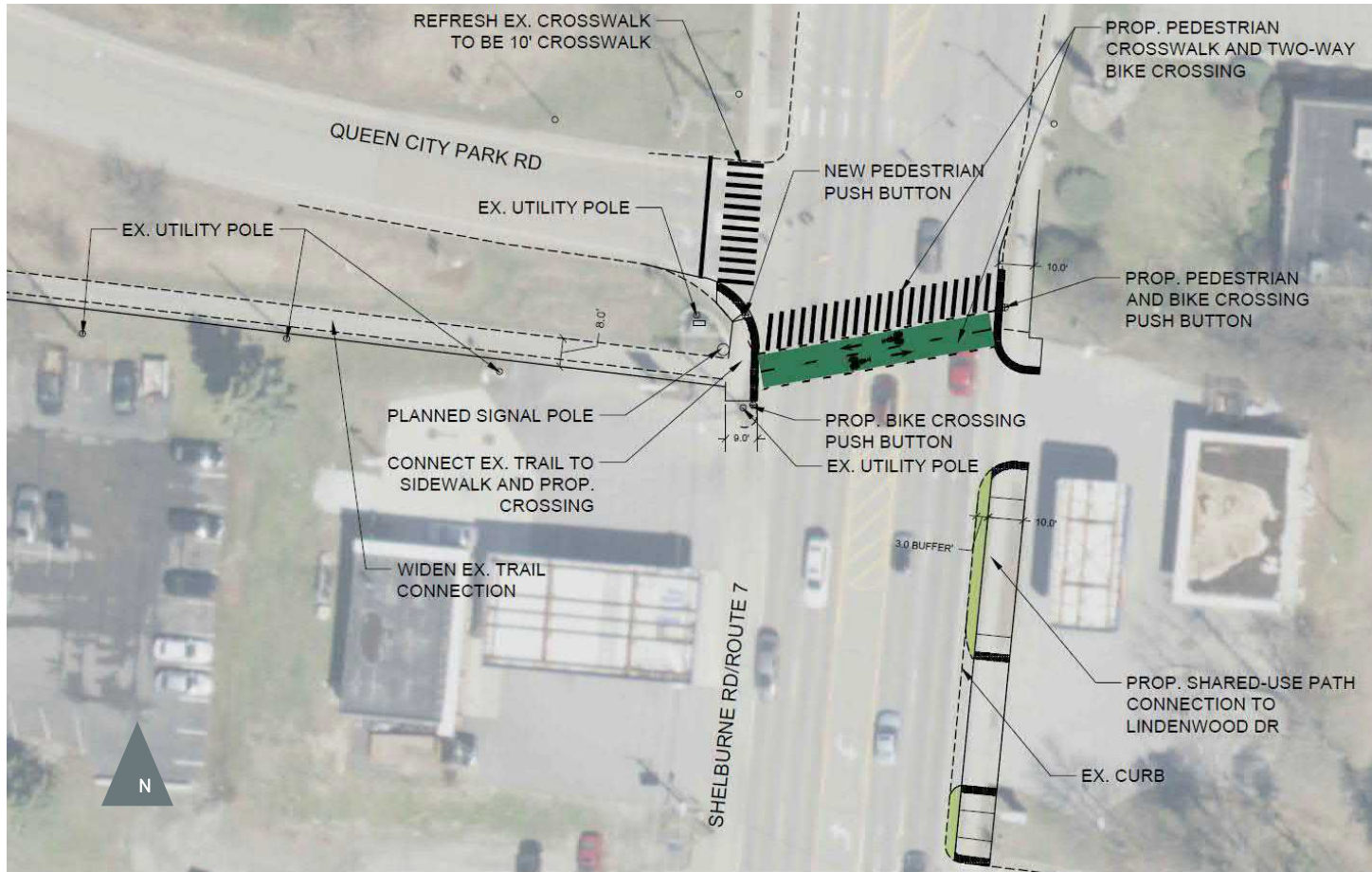


Figure 19: Proposed Recommendations for Segment A

SEGMENT B

This segment extends from the Hannaford Plaza entrance at Queen City Park Road to the intersection of the Champlain Parkway Shared Use Path, just west of the intersection with Pine Street. This segment has a continuous sidewalk on the south side of Queen City Park Road and no dedicated bicycle facilities. There is no crosswalk, nor accessible curb ramp connecting the sidewalk to the Champlain Parkway Path.

DESIGN CONSIDERATIONS

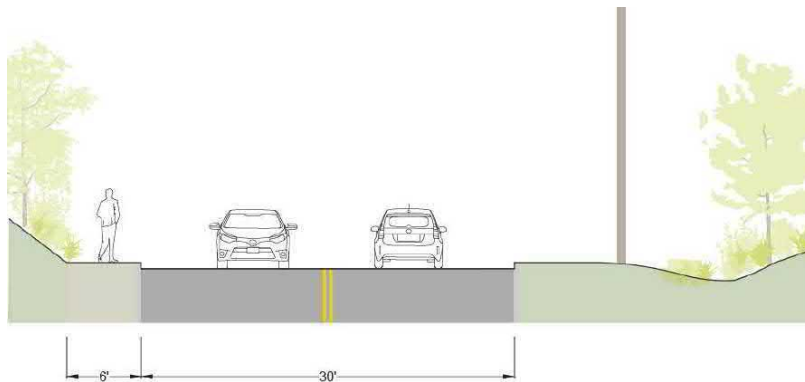
SEGMENT LENGTH	1,120 feet
TRAFFIC VOLUME	5,900 ADT
POSTED SPEED	25 mph
RIGHT-OF-WAY WIDTH	49.5 ft +/-
PEDESTRIAN FACILITIES	Sidewalk on south side
BICYCLE FACILITIES	Shoulders of approximately 4 feet

Public input for this segment expressed significant concerns at the intersection of Pine Street and Queen City Park Road due to sight distance and grades.

The City of South Burlington noted that the drainage infrastructure along the sides of this segment are in poor condition, and may need to be replaced if any proposed work involves relocation of catch basins.

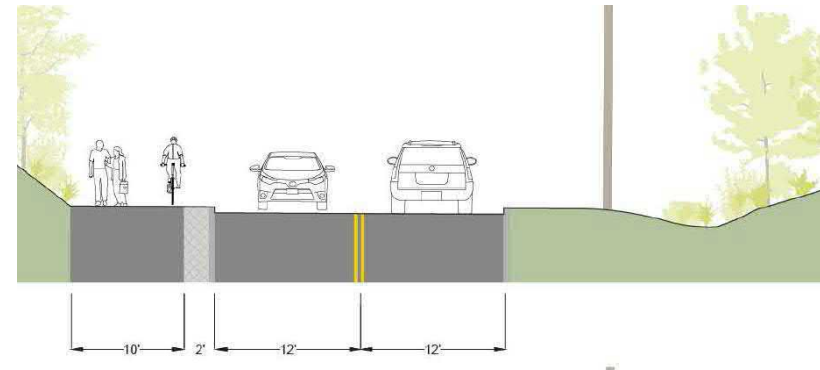
Existing Width and Configuration

While the width varies somewhat along the length of this segment, the typical width of Queen City Park Road is 30 feet from curb to curb, and a 5 foot sidewalk with a 6 inch granite curb. This is shown below.



Alternative: Shared Use Path

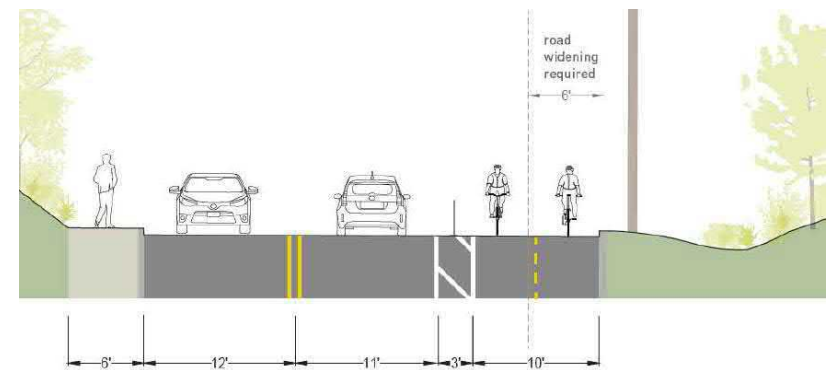
A shared use path can be constructed along the south side of Queen City Park Road such that the roadway width is narrowed by about 6 feet, and the sidewalk is essentially widened to the width of a shared use path, which has a minimum width of 10 feet.



This alternative would not result in any additional paved area, but would require relocating catch basins, and possibly associated reconstruction of the stormwater collection system on the south side of this street.

Alternative: Separated Bicycle Lanes

In this alternative, Queen City Park Road would be widened to a total width of 36 feet to provide room for 2-way separated bicycle lanes on the north side of the street. This will also potentially require reconstruction of stormwater infrastructure, and examination of possible wetland impacts along the north side of the street.



Site Photos



Looking east from south side of street at Kindness Court



Possible wet area alongside of Queen City Park Road



Looking east from south side of street



Pine Street intersection

SEGMENT C

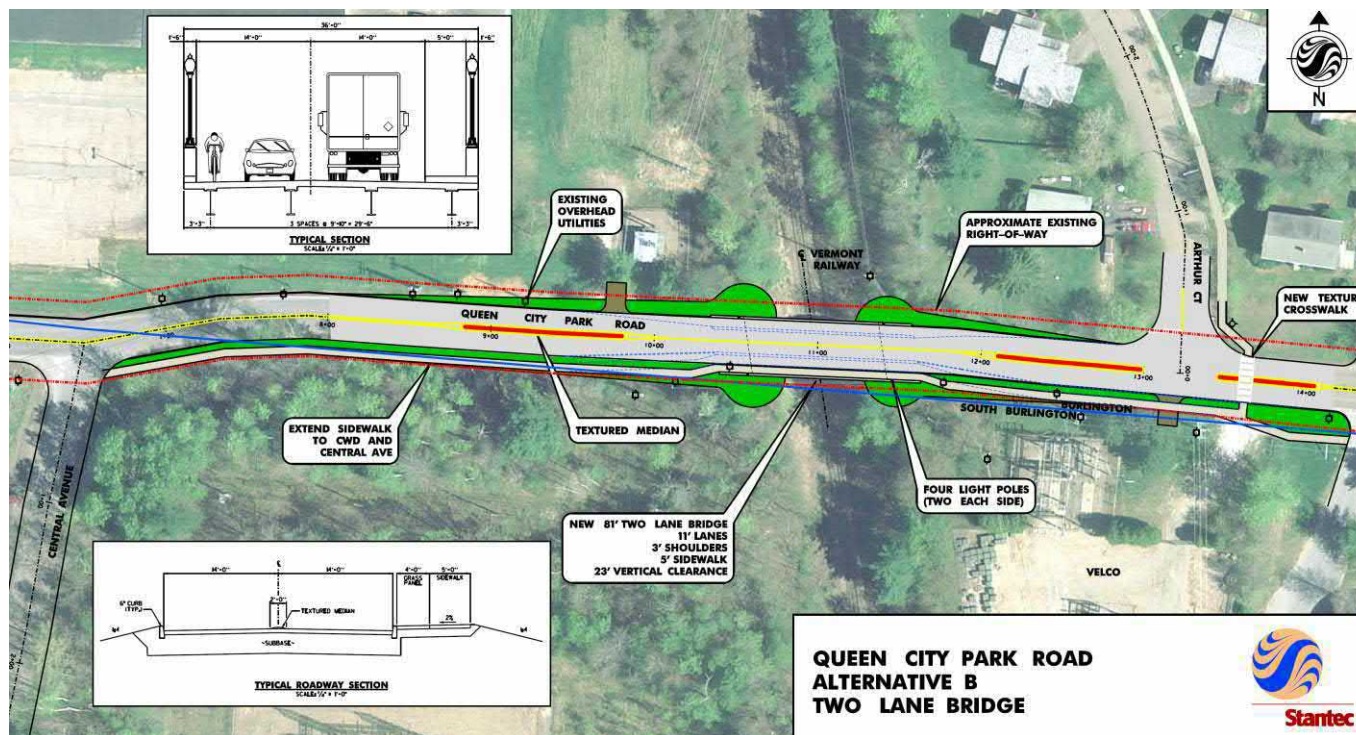
This segment leads from the Champlain Parkway Path crossing to the intersection of Central Avenue. A sidewalk extends along Queen City Park Road for the frontage of the Champlain Water District, and there is a sidewalk on the bridge over the railroad. West of the bridge over the railroad, there is a gravel path or shoulder on the south side that leads to Red Rocks Park.

DESIGN CONSIDERATIONS

SEGMENT LENGTH	1,300 feet
TRAFFIC VOLUME	2,500 ADT
POSTED SPEED	25 mph
RIGHT-OF-WAY WIDTH	49.5 feet +/-
PEDESTRIAN FACILITIES	Intermittent sidewalk on south side
BICYCLE FACILITIES	Shared lane (unmarked) or shoulder

Public concerns noted in this section included a lack of a continuous sidewalk, and inadequate parking at Red Rocks Park. Among the intent of the project is to provide better access to Red Rocks Park for people biking and walking, which could potentially help to alleviate the parking situation.

The one-lane bridge over the Vermont Railway corridor has also been the subject of study and concern. Its current condition requires motorists to yield to oncoming traffic due to the narrow width. There is a sidewalk on the bridge, but its metal grate surface makes it unusable for anyone walking a pet. While there is a sidewalk on the bridge, the lack of curbed sidewalks approaching the bridge allows waiting vehicles to pull along side of the road, waiting for oncoming traffic to pass, which hinders safe pedestrian access. A study was conducted in 2008 that evaluated alternatives for rehabilitation or replacement, and identified a preferred alternative for the bridge replacement to have two lanes for traffic, plus a sidewalk. At this time, no funding for the bridge replacement has been identified.



Site Photos



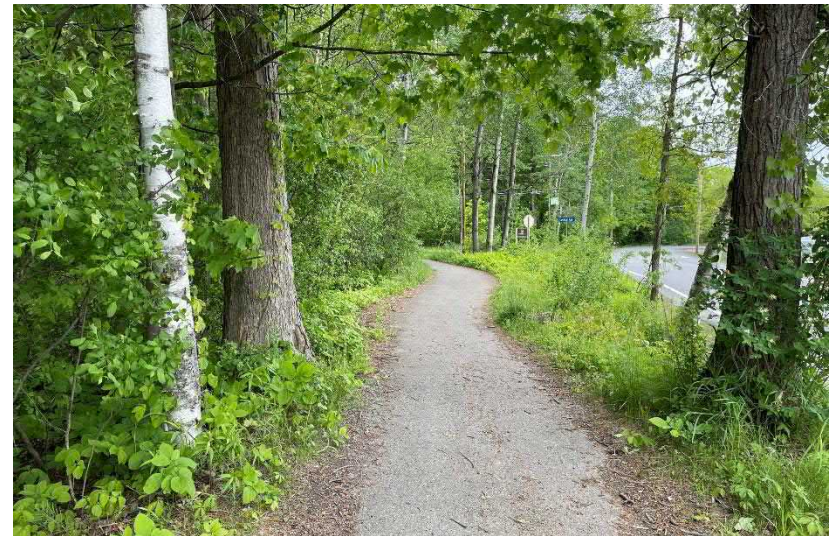
Wide buffer and utility poles between sidewalk and street



Bus stop near Pine Street



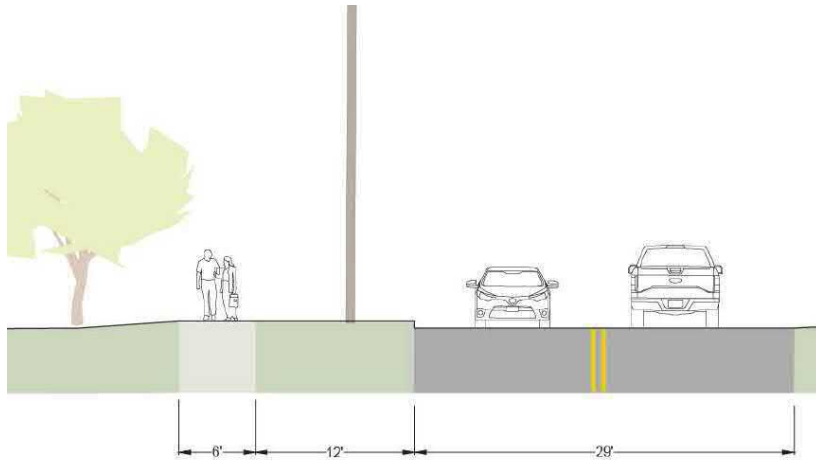
Approach to bridge from west



Path leading to Red Rocks Park

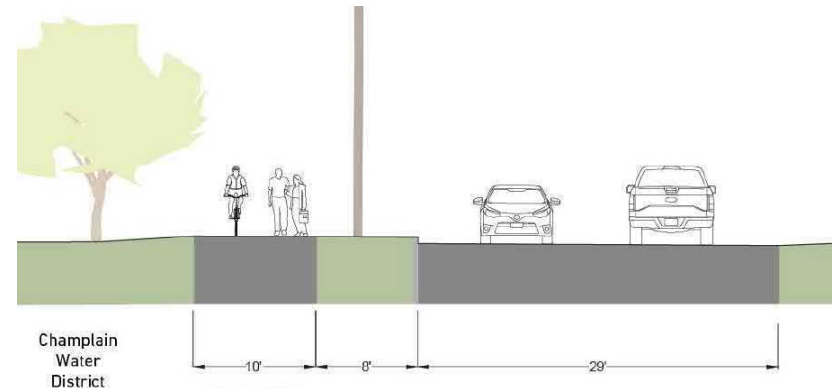
Project Alternatives

Two options were explored for this alternative: a shared use path on the south side, or widening the road by approximately 8 feet to provide for separated bicycle lanes. As the timeline for the bridge replacement is uncertain at this time, it is expected that the bridge project could be designed and constructed to accommodate the preferred alternative as identified in this report.



Shared Use Path Alternative

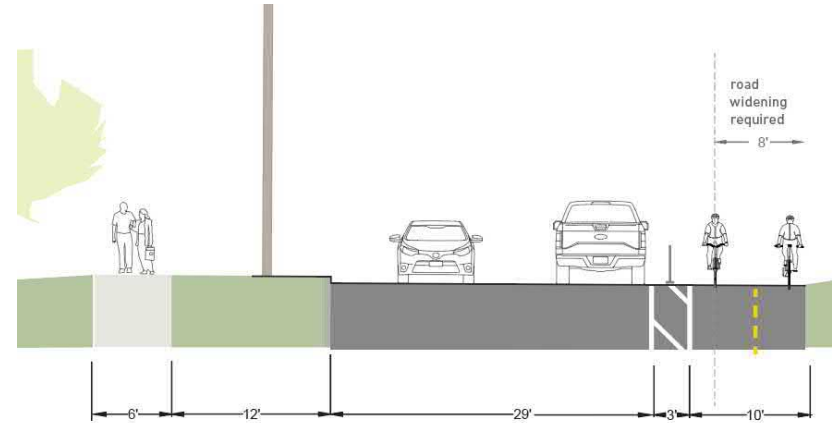
The shared use path would be established by widening the sidewalk to a width of 10 feet where it exists, and constructing a new path where there is no sidewalk. This is illustrated on an aerial photograph above, right. In general, the shared use path could avoid conflicting with utilities that are present along the south side of the street.



Shared Use Path on south side

Separated Bicycle Lanes

This option involves widening the road to the north side by about 8 feet, and providing two-way separated bicycle lanes. This would allow riders to access the Champlain Parkway Path without crossing the road. There would be relatively few utility impacts, and all widening would be within the city right-of-way.



Separated Bicycle Lanes on north side

SEGMENT D

This segment runs between the intersection of Central Avenue and Home Avenue/Austin Drive, through an industrial zone with commercial, manufacturing, and transportation uses. This section currently has advisory lanes for walking and biking, which were installed after a recent resurfacing project.

DESIGN CONSIDERATIONS

SEGMENT LENGTH	2,000 feet
TRAFFIC VOLUME	1,200 ADT
POSTED SPEED	25 mph
RIGHT-OF-WAY WIDTH	49.5 feet +/-
PEDESTRIAN FACILITIES	Advisory lanes
BICYCLE FACILITIES	Advisory lanes

While overall traffic volumes for this segment are relatively low, the land uses in this area generate significant heavy vehicle traffic. Rhino Foods and Edlund have deliveries in and out with tractor trailers, and Green Mountain Transit buses move in and out of their site for maintenance throughout the day.

The level topography and the high water table in this area create a challenge for stormwater drainage. There are currently large swales on each side of Queen City Park Road to manage stormwater from both private land and the street right-of-way. Burton Snowboards is in the process of design and permitting of a site renovation that will include new stormwater infrastructure so that all of their stormwater is handled on-site. The drainage pattern for Queen City Park Road was altered during the recent resurfacing such that for its frontage with the Burton Snowboards site, it now drains to the east. This was done in part to facilitate the construction of a sidewalk or shared use path on the east side of Queen City Park Road. This alteration in drainage patterns, in conjunction with the proposed alterations at Burton Snowboards, obviates the need for the swale on the eastern side of Queen City Park Road in this segment

The proposed layout of the Burton Snowboards site is shown on Figure 20, with the potential alignment of a sidewalk or shared use path shown in red.



Figure 20: Burton Snowboards Site Plan

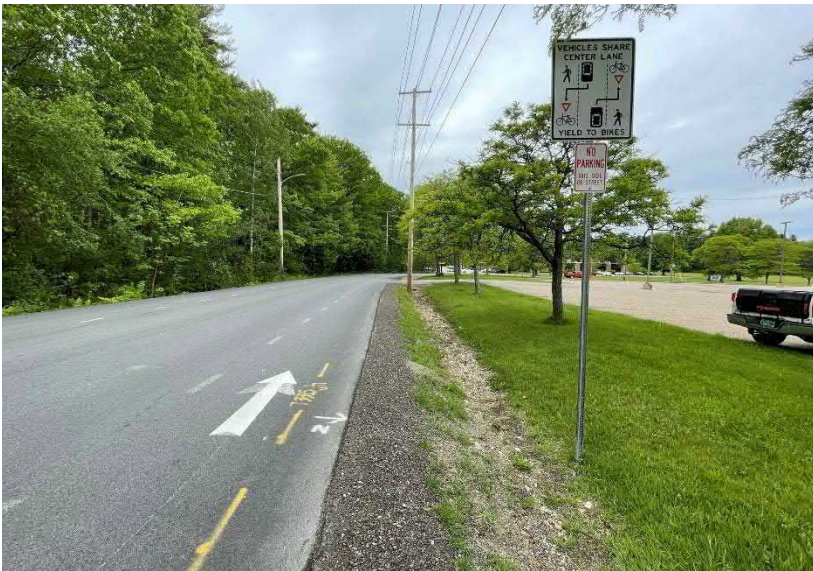
Site Photos



Approach to Central Avenue from the east



Drainage swale and utilities in front of Burton Snowboards site



Advisory Lanes signage



Drainage swale and utilities near Rhino Foods

QUEEN CITY PARK-AUSTIN DRIVE BICYCLE PEDESTRIAN CONNECTIONS SCOPING STUDY | FINAL DRAFT

Other planned changes to this area include changes at the Queen City Park/Home Avenue/Austin Drive intersection, associated with the Champlain Parkway (Figure 21). These include a new shared use path connection from the intersection to the existing Champlain Parkway Path, as well as its northern extension up to Pine Street. The intersection of the Champlain Parkway will be signalized, which will affect traffic circulation in this area. In addition, traffic circulation may be affected by planned AMTRAK service along the Vermont Railway corridor.

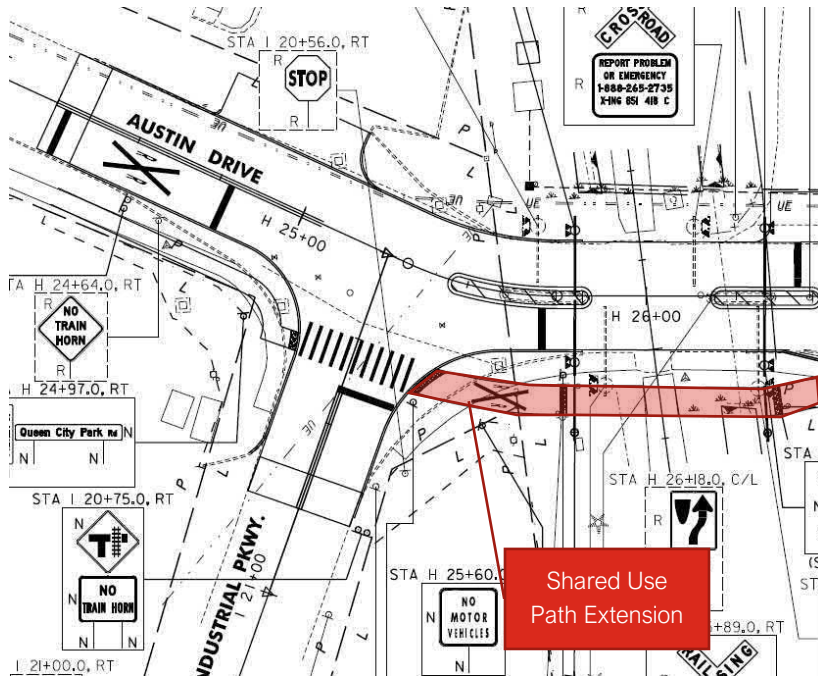
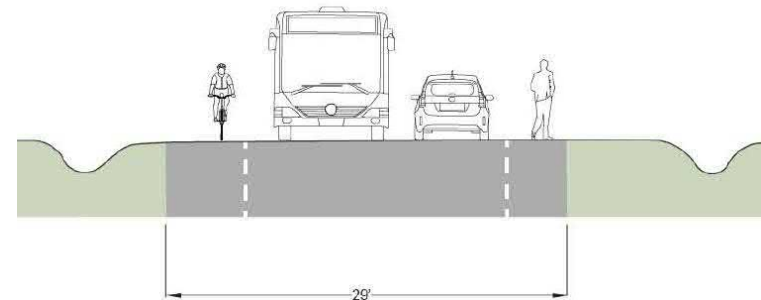


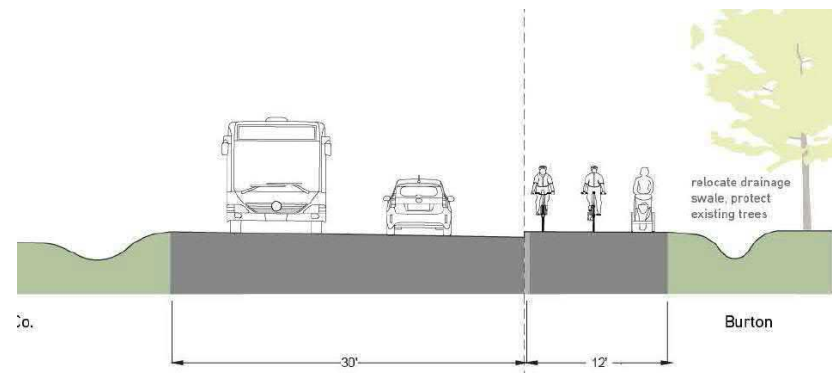
Figure 21: Plan Excerpt for Champlain Parkway project

Proposed Alternatives

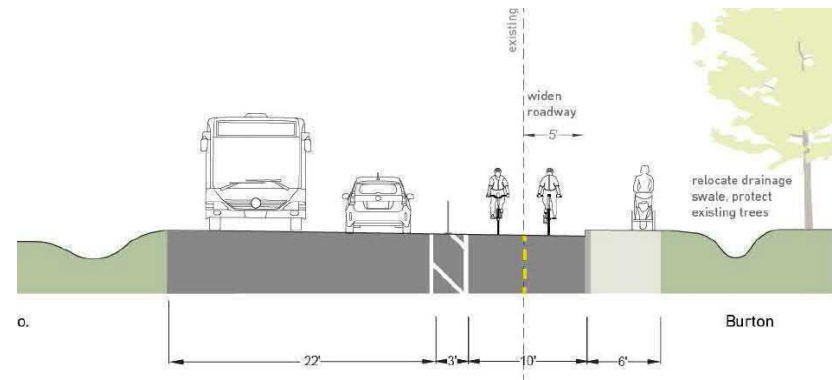
Queen City Park Road has a width of 28 to 30 feet, and is marked with Advisory lanes for walking or biking. Two alternatives are considered: one with a new shared use path constructed on the east side of Queen City Park Road, and one with a new sidewalk constructed, plus separated bicycle lanes. The option of constructing a new sidewalk and maintaining the advisory lanes for bicycles was considered, but as the costs were higher and impacts were similar to construction of a shared use path, so this alternative was less favorable.



Existing Cross Section



Shared Use Path on east side of Queen City Park Road



Sidewalk and separated bicycle lanes

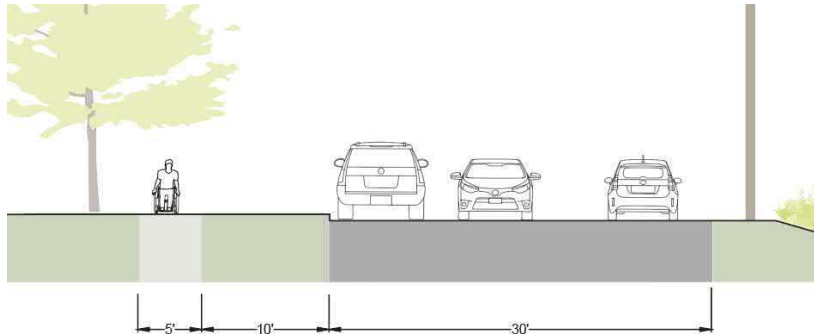
SEGMENT E

Austin Drive between the Home Avenue/Queen City Park intersection and the crossing to the Burlington Waterfront Greenway makes up this segment, which includes bike lanes on the eastern portion and shared lanes with parallel parking on the western section. Land uses are all residential, and the parking usage is primarily for people accessing Oakledge Park, which charges a fee for parking in its dedicated lot on Flynn Avenue.

DESIGN CONSIDERATIONS

SEGMENT LENGTH	2,600 feet
TRAFFIC VOLUME	1,100 ADT
POSTED SPEED	25 mph
RIGHT-OF-WAY WIDTH	60 feet
PEDESTRIAN FACILITIES	Sidewalk on south side
BICYCLE FACILITIES	Bicycle lanes, shared lanes (marked)

The right-of-way of 60 feet is wider than other streets in the study area, and the existing sidewalk has a generous tree lawn, with tree plantings and utilities present.

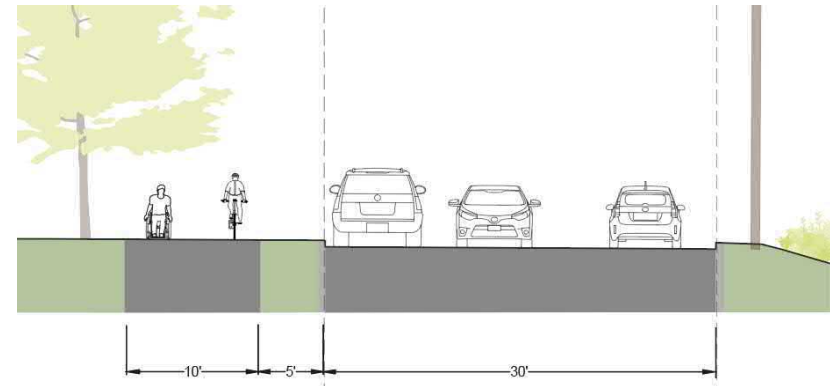


Alternatives

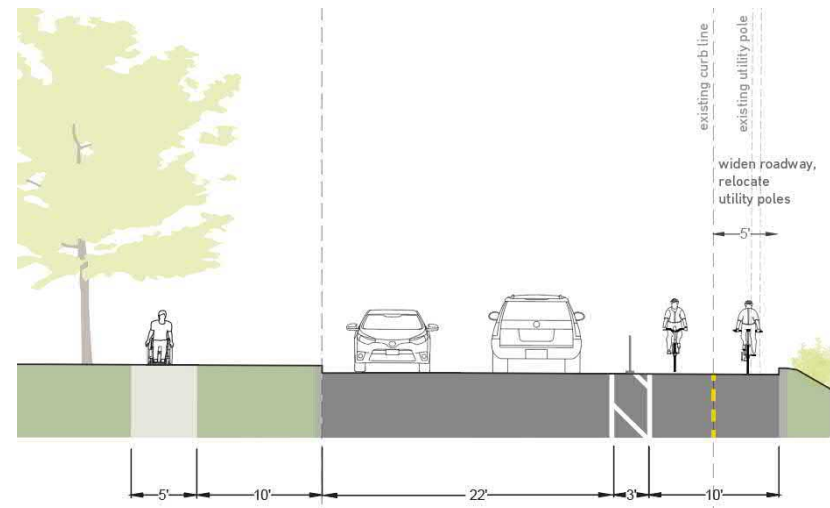
Two alternatives were developed for this section to address the project goal to provide low stress bicycling along Austin Drive:

Widen sidewalk to a 10 feet shared use path. This will be possible to do within the public right-of-way, and can avoid utility impacts by aligning the path around trees and existing electric and telecom utilities. This will not affect stormwater drainage patterns on Austin Drive, but it will increase the paved area surface by approximately 10,000 square feet, which is less than a quarter

acre. This option will preserve the on-street parking along Austin Drive that provides free access to Oakledge Park.



Widen Austin Drive to provide separated bicycle lanes. In this alternative, the existing street width would be widened by approximately 5 feet to provide space for separated bicycle facilities. This will require some utility relocation, including electric, telecom, and stormwater infrastructure. It will require either prohibition of on-street parking, or additional street widening of about 8 feet to accommodate a parking lane. This option will also result in about 10,000 square feet of additional paved area.



Site Photos



Looking east toward Home/Queen City Park intersection



Shared lanes and sidewalk on Austin Drive



Intersection of Red Rocks Condominium Entrance



Crosswalk to Burlington Waterfront Greenway

ALTERNATIVE COST ESTIMATES

A planning level cost estimate has been prepared for each alternative, incorporating the following assumptions:

- The most recent available VTrans unit costs were used for major items such as excavation, pavement, curbing, catch basins, pavement markings and plantings.
- A contingency of 25% has been included to cover costs of items that have not specifically been quantified due to the planning level of this analysis.
- Allowances were also included for items including mobilization, erosion control, traffic control, design engineering, and construction engineering.

The following table summarizes the cost for each project segment for the alternatives of a shared use path or separated bicycle lanes.

Segment	Length	Shared Use Path	Bicycle Lanes and Sidewalk
1	450	\$ 138,150	\$ 138,150
2	1,120	\$ 333,760	\$ 273,280
3	1,300	\$ 265,200	\$ 364,000
4	2,000	\$ 476,000	\$ 866,000
5	2,600	\$ 943,800	\$ 894,400
TOTAL	7470	\$ 2,157,000	\$ 2,536,000

For the segments that have an existing sidewalk, the bicycle lanes alternative has a slightly lower cost estimate than the shared use path option. For segments that do not have a continuous sidewalk, the cost estimate for a shared use path is significantly lower. Segment cost estimates are provided in Appendix 5.

PREFERRED ALTERNATIVE

After consideration of the advantages and constraints of each alternative, project costs, and public input, the Shared Use Path alternative is recommended for implementation. The following factors were important in this recommendation:

- The project costs are lower for the shared use path in segments 3 and 4, and only slightly more costly for segments 2 and 5. (Bicycle lanes were not considered an alternative for segment 1).
- The project impacts to utilities and environmental resources are nearly identical for each alternative, and therefore not a significant factor in the recommendation.
- Providing a continuous shared use path connecting the entire study area will provide continuity in the rider experience, and will be easier to navigate for less experienced riders. It would be possible to select different alternatives for each segment, but the consistent type of facility is desirable to make this connection.

IMPLEMENTATION STRATEGY

The project will require the coordination of the cities of Burlington and South Burlington to implement this regional project. While it is likely to be completed in phases due to funding constraints, the following are considerations for implementation.

Funding Sources

There are many possible funding sources for this project. Several of the most commonly-used funding sources include the following:

- VTrans Bicycle-Pedestrian Program. This program uses up to 80% federal funds and 10% state funds for projects to improve bicycle and pedestrian transportation. There is a 10% local match, and no project funding limit, though it is rare for a project exceeding a total cost of \$1 million to be funded in a single year/grant cycle.
- VTrans Transportation Alternatives Program. This program provides 80% federal funds and requires at least a 10% local match. The projects are capped at \$500,000 total cost (\$375,000 grant award), and are sometimes used to provide additional funding for large bicycle/pedestrian projects.

- RAISE grants. This is a new federal funding source that may be a source for funding the entire project, as typical grants exceed \$2 million.

There may be options to augment funding with urban forestry or stormwater project funding for project elements such as tree planting or green stormwater infrastructure.

Prioritization and Phasing

Each segment has a different role in this network, and the prioritization among segments should consider the relative needs. Some considerations for prioritization include the following:

- Segments 1 and 2 should be considered for implementation at the same time and with the same priority, as they are both essential to make the connection from South Burlington's Recreation Path network to the Champlain Parkway path, which will eventually continue towards downtown Burlington when the Champlain Parkway is completed. Segment 1 will require coordination with the State of Vermont both because part of this is within the right-of-way of US Route 7, and because of potential hazardous materials issues adjacent to the Hoechner Gulf/Limoge Apartments hazardous materials site.
- Segment 3 addresses connectivity for all modes to Red Rocks Park. With the current issues related to inadequate parking, providing safe and comfortable walking and biking access to the park will be beneficial.
- Segment 4 addresses needs for access to significant employment opportunities, and currently has pedestrian and bicycle accommodations that do not provide any separation from traffic that includes heavy trucks and buses.
- Segment 5 may be relatively lower priority due to the presence of bicycle lanes for part of this route, and the lower volumes on Austin Drive. There may be greater opportunity to reduce traffic speeds through installation of traffic calming measures, making the street more suitable to shared use by people biking and driving. As any sidewalk repairs or utility work are done in this segment, consideration should be made for the eventual widening of the sidewalk to a 10 feet wide shared use path.

SHORT TERM RECOMMENDATIONS

The following are proposed as near-term projects for consideration, to address issues raised in the public engagement, and result in some benefits to safety and accessibility.

Queen City Park/Hannaford Intersection. This location had numerous complaints for confusing circulation. One factor is that the street network is confusing, and overly wide paved area doesn't define travel ways. In observed field conditions, the pavement markings indicating that this is an all-way stop intersection are barely visible, likely due to the heavy traffic in this area. Figure 22 shows potential rapid implementation changes using paint, flex-posts, and other low cost materials to clarify circulation and reduce vehicle speeds.

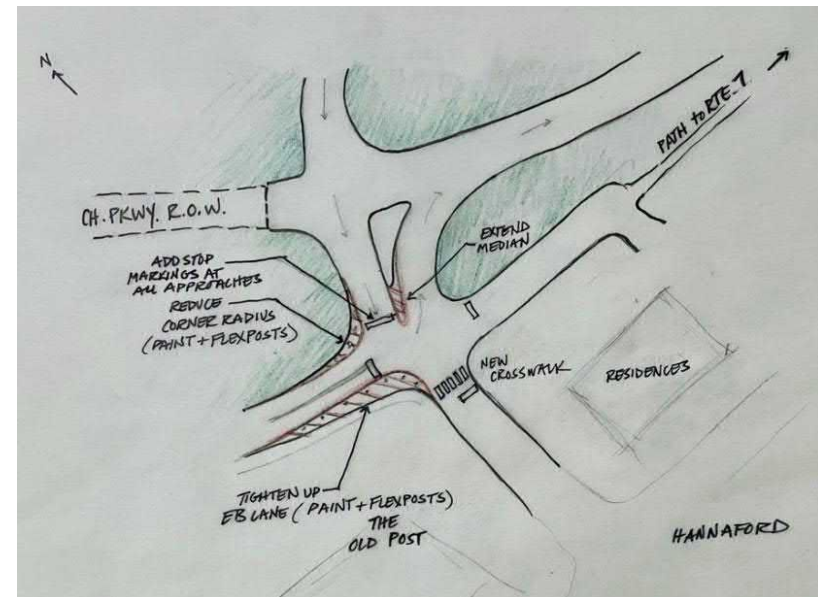


Figure 22: Short Term Recommendations for Queen City Park Road at the Hannaford entrance

Queen City Park Road between Hannaford and Pine Street. Narrow travel lanes to 10 feet, and provide 5 ft bicycle lanes. This provides some additional space and may have the effect of reducing traffic speeds.

Pine Street/Queen City Park. Initial analysis using available data suggests that all-way stop would be appropriate for the traffic volumes at this intersection. Pine Street carries a similar amount of traffic as Queen City Park Road, making an all way stop advantageous. This change could be beneficial for speed reduction and improved safety.

Queen City Park Road Bridge over the Railroad. Re-deck sidewalk with a material that can be more easily cleared of snow, and that will be comfortable for pets to walk on in all seasons. At bridge approaches, provide some protection for pedestrians approaching sidewalk on the western side of bridge with quick build materials, as vehicles pull into the shoulder waiting for oncoming vehicles, not leaving any space for people crossing bridge on foot.

Queen City Park Road/Central. Consider all-way stop to reduce confusion, as only two approaches stop currently. Traffic count would be useful to confirm traffic operations.

Queen City Park Road/Home/Austin. Consider all way stop as an interim measure before the Champlain Parkway is constructed. Traffic count would be useful to confirm traffic operations

Austin Drive/Redstone Condo Drive - Reinforce the painted curb extensions with quick build materials, such as planters, flex posts, or reflective elements, and solid colored paint.

Austin Drive Traffic Calming – Consider traffic calming measures such as speed lumps, chicanes or choke points to reduce speeds along this street and make it more suitable for shared use for bicycling.

ATTACHMENTS

1. Advisory Committee Meeting notes –
2. Survey results
3. Public Meeting Notes and Presentation
4. Hazardous Materials Table
5. Cost Estimates by Segment



CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works
645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849

802.863.9094 VOX
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov

Councilor Jack Hanson, Chair, *East District*
Councilor Mark Barlow, *North District*
Councilor Eugene Bergman, *Ward 2*

Inquiries:
Madeline Suender
802.735.5324
msuender@burlingtonvt.gov

Transportation, Energy and Utilities Committee of the City Council

Tuesday, May 24, 2022 5PM

DPW Front Conference Room
645 Pine St, Burlington, VT 05482
Masks Optional

–DRAFT MINUTES–

Meeting called to order at 5:10 PM by Chair Hanson

1. Agenda

Councilor Bergman moved to approve agenda with deletion of item number 7. Seconded by Councilor Barlow. All in favor passed unanimously.

2. Minutes of 4/26/22

Councilor Barlow moved to approve 4/26/22 minutes. Seconded by Bergman. All in favor passed unanimously.

3. Public Forum

No Comments

4. Sidewalk Workplan and Prioritization

- Maddy Suender, Laura Wheelock
- Information

See Sidewalk Presentation. Maddy Suender/Laura Wheelock presenting

Councilor Gene Bergman – Are there any characterizations of sidewalk conditions that aren't listed?

Maddy Suender – Runing sloping is difficult as Burlington has many hills

Laura Wheelock – Panels that may rock and differing material sidewalks are noted but not scored

GB – Requested that the previous presentation slides from Council be re-provided.

Councilor Mark Barlow – Barrier blocks on slide 3 and 4; this scoring is important to sidewalk

maintenance but wants to know if there is a singular panel that needs attention, how is it identified?

Director Chapin Spencer – The short run maintenance addresses that type of condition

MB – Thinks public input could better provide guidance for the maintenance program

GB – Are the long run numbers just this year (based on slide 7)?

MS – These numbers are the template.

LW – This process is innovative in that it provides information for both long runs as short runs. Some other streets such as Sherman requires more coordination and conditions that do not fit into the standard "maintenance" category; detailed information is difficult to provide to public but is being worked on by City's consultant.

Cindy Cook - Would love process to be more transparent. Lives on East Ave. UVM parking center leads to large ped volumes. Does not think the measure of sidewalks should be on the amount of work done but the number of hazards reduced. Asks DPW focus on major tripping hazards and ponding icing locations. Hopes that safety and accessibility be key focus. Asks for reference points to provide public additional information to understand mapping.

MB – Clarification question on 50ft section, what is the area around location that's reviewed to meet minimum?

MS – varies but ~standard city block

Chair Jack Hanson – Is there a way for the public to request the score for a given street? Is there a way to give justification or comparison of streets to demonstrate the process? How is the foot traffic calculated? Process question, how would council modify the process in the future?

LW – The process is being worked on for public facing data. The process will go to DPW Commission. Could informally take feedback from councilors or residents. We can look into comparisons.

JH – East Ave would be a good street to use as an example to show how the process works and why that street did not make the list

GB – Unable to easily find this information on the DPW website; urges continued conversation about transparency; could this be in September?

5. Queen City Park Rd/Austin Drive Scoping

- Elizabeth Ross
- Action

Elizabeth Ross – New PM for the project

Cristine Forde, CCRPC Transportation Planner – Scoping was a joint app from Burl and S Burl to CCRPC. Funded by CCRPC, Toole Design hired. Alternatives will be proposed today.

See Memo and Presentation, Lucy Gibson, Toole Design presenting.

Councilor Mark Barlow – Is Bridge part of Capital Plan?

Laura Wheelock – It fits in capital bond as a bridge maintenance. Expansion would look for fed/state funding. It is entirely owned by Burlington.

MB – Is plan to keep existing Champlain Parkway bike path?

Chapin Spencer – Yes, just renovated path and it will be kept as part of Parkway plans.

MB – Familiar and aware with navigating this and safety concerns here.

Councilor Gene Bergman – Is thought to have shared application as a joint community with S Burl?

LW – Meeting with Grant Director to review an application for section 4 of this project for this year's VTrans ped grant. This would be independent of S Burl as they are not ready. Bike/Ped grants in Burlington usually take time.

CS – Regional connections score more so we are positioned well even if not applying together.

GB- Most serious safety concerns are in S Burl.

Norm Baldwin – This is a connect with larger network in S Burl that is important and could solve a lot of connectivity problems.

GB – Bike path as it relates to Parkway?

CS – Pine St will dead end. This path will continue to be accessible by QCPR.

MB – What happens to the east at Lydonwood in S Burl?

Lucy Gibson – Nothing more to this project in S Burl. Key connection to large S Burl Network.

Chair Jack Hanson – Any action needed?

ER – Action for Preferred alternative. Fully supported by advisory committee which served four meetings over the course of a year.

GB makes motion to accept the scoping study to endorse the recommendation of the advisory committee for the continuous shared use path and advisory crossings and to recommend the Council do the same.

Seconded by MB.

JH – Preference to separate peds and bikes but support the committee's findings.

Unanimously passes.

Item closes at 6:37PM

6. North Winooski Avenue Implementation Update

- Chapin Spencer
- Information

Chapin Spencer – Continuing to follow through with the council's direction whose motion supported delaying paving until 2023, looking into off street parking opportunities, talking to adjacent property owners. Looking into night time shared use parking and daytime weekday parking to accommodate different types of use at different locations. TDM discussions. Bike and ped facilities being built out. In contact with CATMA. Looking into use of 15k TMD funding. Have reached out to BHA to meet with new executive director early June with Mayor. Could provide potential off-street parking.

Norm Baldwin – DPW participates in public development review. We play a significant role in bike ped infrastructure through this in the private sector. We are looking into developing parking lots.

Sandy Thibault, CATMA – In conversations with Chapin and Gene in regards to the opportunity to further educate those effected in this corridor for potential TDM assistance. Information on CATMA recourses and TDM options. Corridor CATMA membership could be explored if that would be useful. Would need to look into this nontraditional membership possibility. Meeting with Community Health Center (CHC) in June. Would like to learn more about dynamics of businesses in this area to provide better/more assistance.

GB – Have had a number of conversations regarding this. Focus on CHC is the biggest issue. CHC expressed interest in getting back into TDM. Could we subsidize part of their first year's membership to incentivize them to join CATMA membership? How much would this cost?

ST – Employer membership is based on number of employees, \$2500/yr likely.

GB – Opportunity for TDM corridor study. In conversations with employers, there is an openness to doing this. What does CATMA need to explore this more fully?

ST – We hired a consultant to evaluate current membership structure. Expecting to be done in October. Plan to have consultant explore this potential. See if this is done at other TMAs nationally. CHC employees would be eligible for 30% bike share discount. Hub is expanding and will potentially be there.

GB – Potential for lot behind QC Steel. Potential disincentive for TDM if they build the lot so still want to press TDM. Discusses conversations had with various businesses in the area and the specific TDM needs they have.

Want TEUC to consider a percentage of 1-year CATMA membership, put in money for 10 shopping trolleys at African Market, hold a community meeting (2 meetings, splitting corridor N/S) to let people know what is happening. Status of project and available resources if there is interest. This is probably a good site to test the sidewalk matrix. Better sidewalk was top improvement ONE identified in Transportation Mobility Model. Good place to test transparency concerns of sidewalk analysis. Work with CATMA on the corridor TMA if we have that potential membership.

Making a motion but differing action until next meeting.

MB – Supportive of this but think it needs more formulation. Would like to meet with all businesses so we can determine what the best use is based on all stakeholders and their needs.

GB – Integration of all staff who are involved in this to get working together.

CS – This is happening currently. Working with Cara and Will.

Chair Hanson – To build new parking lot would undermine goal. We want to reduce the need for parking not increase supply.

We set aside \$15k to help businesses reduce parking demand and agrees with Mark and Chapin that this should be done through the process that is underway rather than from this committee. Think the businesses should apply through a simple application. Then we can take a higher-level view. Could allow joint applications from businesses. Want to leave it to businesses to proactively tell us what they need.

GB – Transportation is not seen as business's responsibilities so making them do this may require more help getting to the point of an application. As long as we are proactive with outreach and assistance that applications would be effective.

CH – Businesses have been active through process regarding how they will be served by TDM resources. ST – The benefit of the ETC network was to engage more businesses on TDM and value and benefits and collaborate and work with others. Would be great to get even 2 businesses to come to June event to talk with businesses from all over the region and engage in TDM solutions and learn more.

Item closes at 7:23PM

~~7. Market Place Garage Assessment~~

~~— Jeff Padgett~~

~~— Information~~

REMOVED FROM AGENDA.

8. Champlain Parkway Update – Repayment Provision Analysis

- Norm Baldwin, Corey Mims, Jon Rose
- Information

See Memo.

Jon Rose – The memo states the Federal Highway clause does not rescind Parkway repayment.

GB – Is there any reason to publicize this.

JR – Hesitant with ongoing litigations.

CS – Memo is a public document so if you are contacted you should point constituents to this document.

NB – Will look into this being posted to the project website.

GB – Its publicly available and straightforward. The less diverting the more time we have to spend on important arguments.

Item closes at 7:29PM

9. Director's Report

Defer.

10. Councilors' Update

No updates.

11. Next Meeting 6/28/22

Potentially will need to change.

21st pending room change.

12. Adjourn

Meeting ends 7:32 PM.