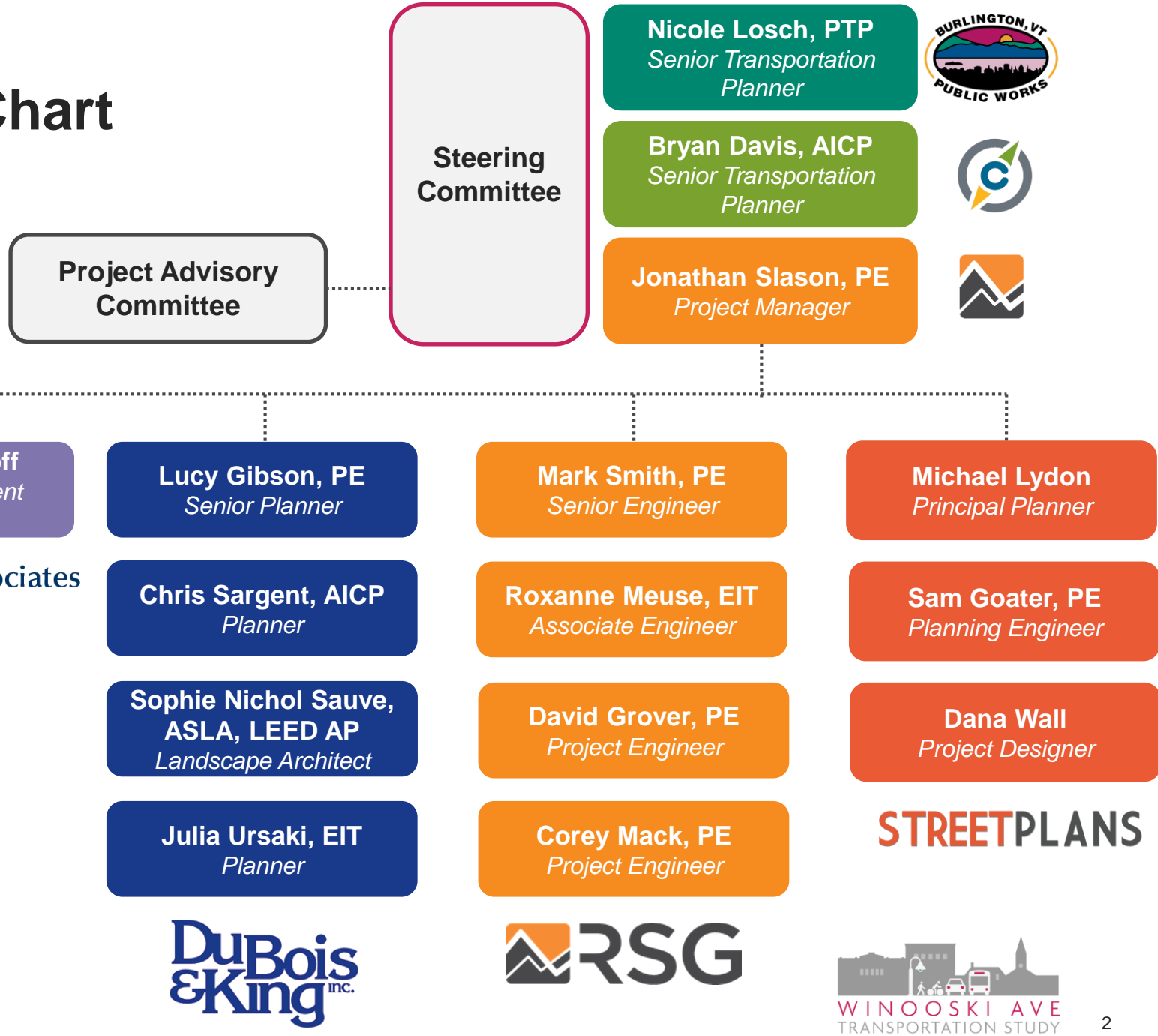


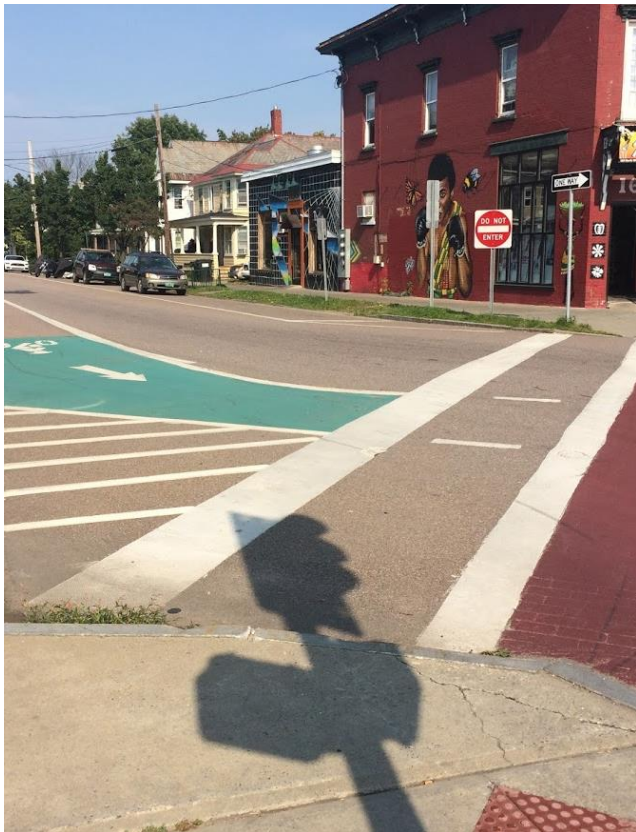


WINOOSKI AVE

TRANSPORTATION STUDY

Org Chart





Introduction to the Winooski Ave Transportation Study

Project Advisory Committee Meeting #1 | Study Kickoff

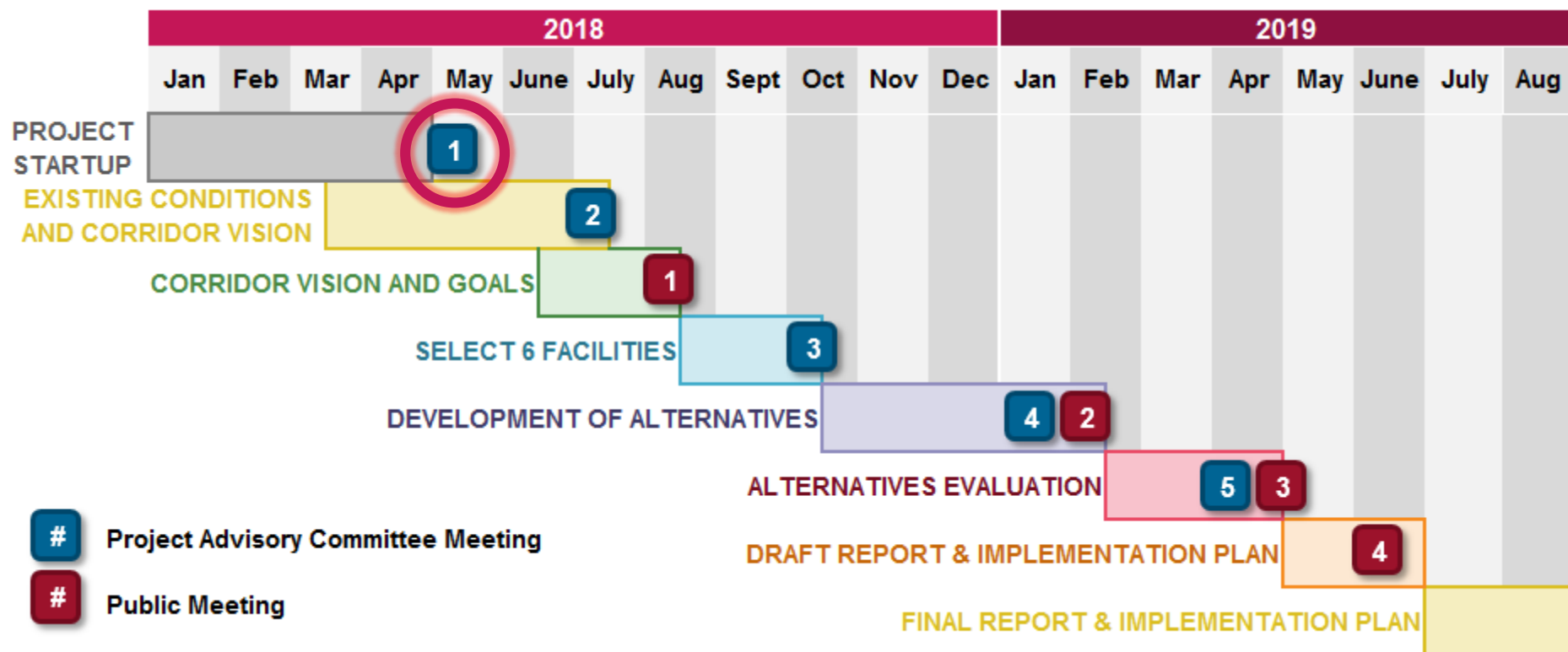
May 2, 2018

What is this study?

A comprehensive **transportation study** of the **entire Winooski Avenue corridor**, developing **multimodal improvement strategies** that address **safety, capacity, and connectivity**.

Final deliverable: An actionable implementation plan with near-term and longer-term recommendations.

Scope/Schedule



BTV Complete Streets Vision

Burlington streets will evolve into complete streets corridors that provide **safe, inviting, and convenient travel for all users of all ages and abilities**—including motorists, pedestrians, bicyclists, and public transportation riders.

Within each neighborhood, the **need to move people through the corridor will be balanced with the need to provide access to homes, businesses, and local institutions** within the corridor. The most effective use of finite public space will be determined through interdisciplinary collaboration with a wide range of community members considering economic, environmental, and equity concerns.

The corridor will develop into an **attractive public space** through creative streetscape, signage, and other site design features. The corridor will become **more livable and desirable by promoting social interaction and public health.**

Past Studies and Plans

PLANS:



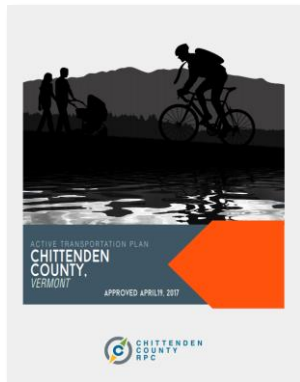
*Great Streets
Downtown Standards*



GMT NextGen Plan



PlanBTV Walk Bike



*CCRPC Active
Transportation Plan*



*VTTrans On-Road
Bicycle Plan*



*PlanBTV Downtown
& Waterfront*

STUDIES:

- Winooski-Howard-St. Paul Intersection Scoping Study (2018)
- Winooski Ave Circulation Study Technical Assessment (2017)
- N. Winooski Ave & Archibald Street Intersection: Pedestrian Safety and Mobility Evaluation (2011)
- South Winooski Ave Lane Reduction (2002)

Winooski Ave Circulation Study Technical Assessment (2017)



- 5 traffic circulation scenarios
- Scenario **#1 Complete Street** on Winooski Ave has least impact on traffic, has two-way vehicle traffic, and two-way bicycle facilities entire corridor
 - 4-to-3 lane conversion Pearl to Main
 - Changes to on-street parking likely; must consider tradeoffs

Other scenarios:

- #2** Two-way flow on North Winooski Ave
- #3** Two-way flow on all of Winooski Ave; Union Street as primary bicycle corridor
- #4** One-way pair with Union Street: Counter-Clockwise Flow
- #5** One-way pair with Union Street: Clockwise Flow

PlanBTV Walk Bike (2017)

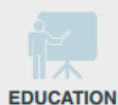
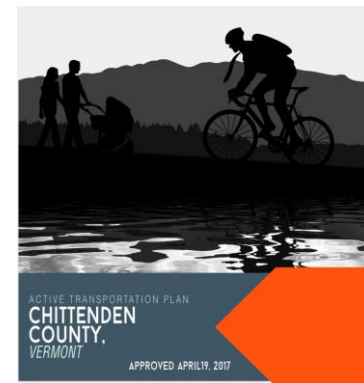


- Multimodal connectivity
- 7 of the 20 **priority intersections** are located along Winooski Ave
- Proposed long-term network: **protected bike lanes** (low-stress) entire corridor to **improve connectivity**

Relevant guidance:

- Serve all ages and abilities
- Expand use of pilot and demonstration projects
- Improve integration of cycling and bus travel
- Improve pavement markings at bus stop conflict points
- Continue to design/retrofit streets to include sufficient snow storage space

CCRPC Active Transportation Plan (2017)



EDUCATION



ENCOURAGEMENT



ENFORCEMENT



ENGINEERING



EVALUATION

Through the process of developing the Chittenden County ATP, a number of important points and issues were identified:

1. Active transportation has numerous benefits to people in Chittenden County. It is an important part of transportation, recreation, and health. There are also economic, environmental, health, and quality of life benefits that affect the entire population, even those who do not walk or bike.
2. Enforcement and education, in addition to engineering and infrastructure design, are important factors for safety and reducing crashes. This is particularly critical for people using active transportation, as they are more vulnerable to injuries and fatalities than people who are protected by a vehicle.
3. Connecting bicycling and walking to other transportation modes such as transit and carsharing is an important part of an effective and efficient system that supports quality of life in Chittenden County.
4. Proper maintenance is imperative to support a usable and safe active transportation network. Local government and public works should (if they haven't already) develop inspection programs to document facility conditions and needed repairs.
5. Lack of lighting and snow clearance can significantly limit usability of the active transportation network. Snow and ice clearance should be included in path projects whenever possible. Responsibilities for snow and ice clearance (between public and private abutter) should be clarified on a municipal level.
6. In order to be fully accessible to everyone regardless of age or ability, the infrastructure recommendations should incorporate universal design. Snow and ice removal is particularly important for accessibility during winter months.
7. Many of the segments identified as high priority-high feasibility in the ATP are already on the Chittenden County Transportation Improvement Program (TIP). Coordinating with these projects provides an excellent opportunity to begin implementing connections within the active transportation network.

1. Benefits of active transportation

2. Enforcement & education

3. Connecting to transit and carsharing

4. Maintenance

5. Snow clearance

6. Universal design, accessibility

7. Project coordination

		PRIORITY		
FEASIBILITY		High	Medium	Low
	High			
	Medium			
	Low			

Winooski Ave is identified as a **High Priority, Medium Feasibility** project



Capital Projects

DPW Engineering Projects

Engineering CIP Projects

Roadway Capital Projects

- 2018
- 2019
- 2020
- 2021
- 2022

Paving & Street Reconstruction

- 2018
- 2019
- 2020
- 2021
- 2022

Transportation Projects

Transportation Project Areas



Transportation Project Lines



Parks Recreation & Waterfront Projects

Parks Recreation & Waterfront Projects

PR&W Project Line

- 2017
- 2018
- 2019
- 2020
- 2021

PR&W Project Area

- 2017
- 2018
- 2019
- 2020
- 2021

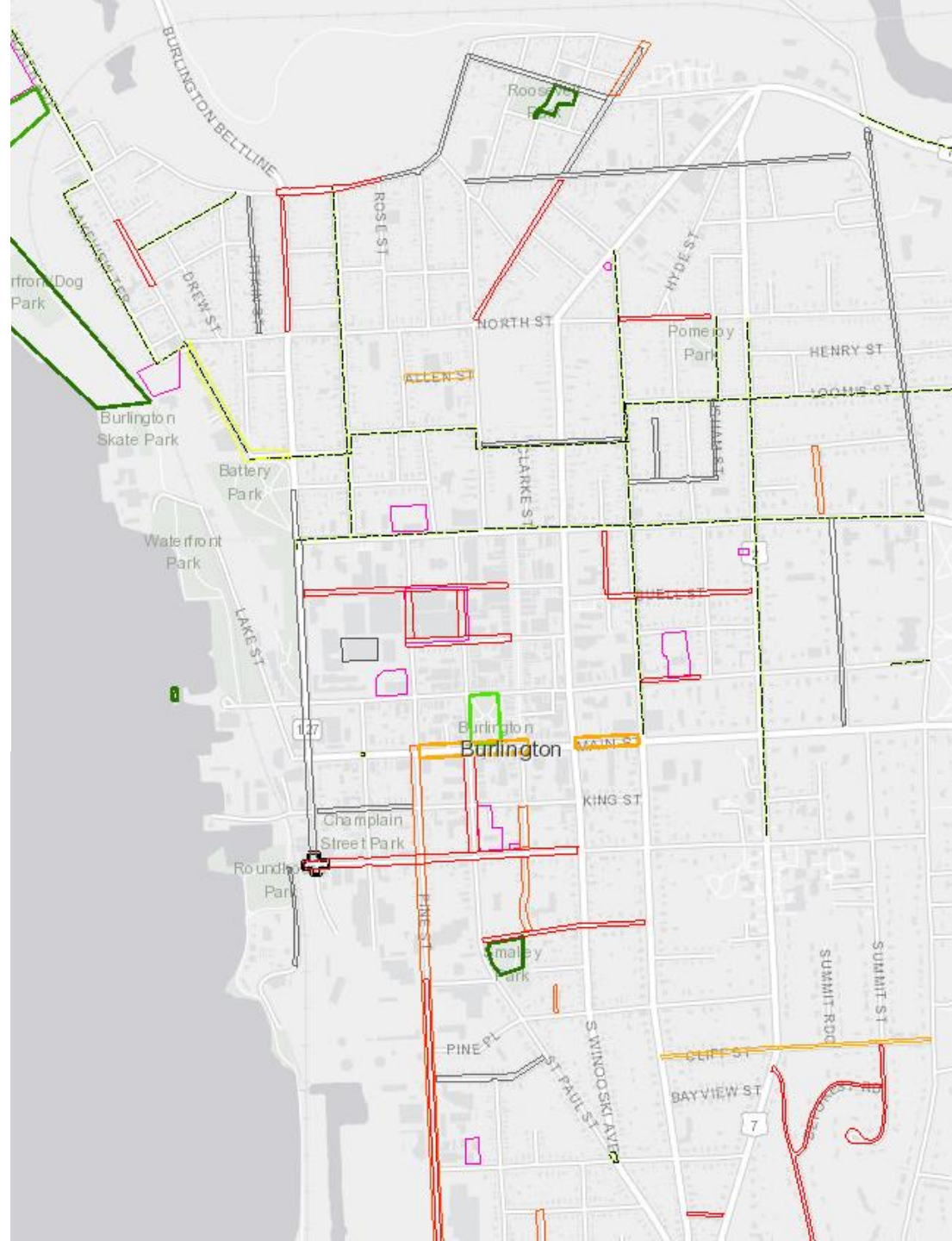
Traffic Projects

Traffic Projects



Projects proposed, approved, in design, under construction or completed since the passage of the capital bonds in November 2016

Source: Burlington DPW Construction Portal



Public Participation

Objective: The public will be engaged during **every stage** of the study using a **variety of tools and formats** to arrive at recommendations that **reflect the needs of the community** and **minimize undesirable impacts**.

Four Elements:

1. Stakeholder Interviews
2. Project Advisory Committee
3. Public Forums
4. Continuous Communication

Guided by a **Public Participation Plan** based on:

- CCRPC Public Participation Plan
- DPW Public Engagement Plan

Spectrum of Participation

Spectrum of Participation			
INFORM	CONSULT	INVOLVE	COLLABORATE
The CCRPC will provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	The CCRPC will obtain public feedback on analysis, alternatives and/or decisions.	The CCRPC will work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered. <i>At the INVOLVE level and above, staff will complete the CCRPC Equity Impact Worksheet.</i>	The CCRPC will partner with the public in each aspect of the decision-making process including the development of alternatives and the identification of the preferred solution.
			EMPOWER The CCRPC will place decision-making in the hands of the public.

Draft Public Participation Plan

1. Stakeholder Group Interviews

- Public Health & Safety
- Students/Schools
- Colleges
- Under-represented groups
- Community spaces
- Businesses on Winooski Ave

2. Public Advisory Committee (5 meetings)

- Planning & Zoning
- City Council
- CEDO
- BBA
- Church Street Marketplace
- Old North End Arts & Business Network
- Burlington Walk-Bike Council
- Green Mountain Transit
- AARP Vermont
- Central, East, and South Districts

3. Public Forums

- Innovative formats
- Interpretation and stipends as needed
- Advertisement through multiple channels
- Documents posted ahead of time
- Sign-in sheet for tracking participation
- Feedback collected, shared, addressed

4. Continuous Communication

- Two-way communication
- Notification of project updates and available documents
- Coordinate with community liaisons (NPAs, churches, schools, etc)
- Pop-up meetings
- Online surveys, crowd-sourced mapping



“Humans of Winooski Ave”

@ Winooski Laundry

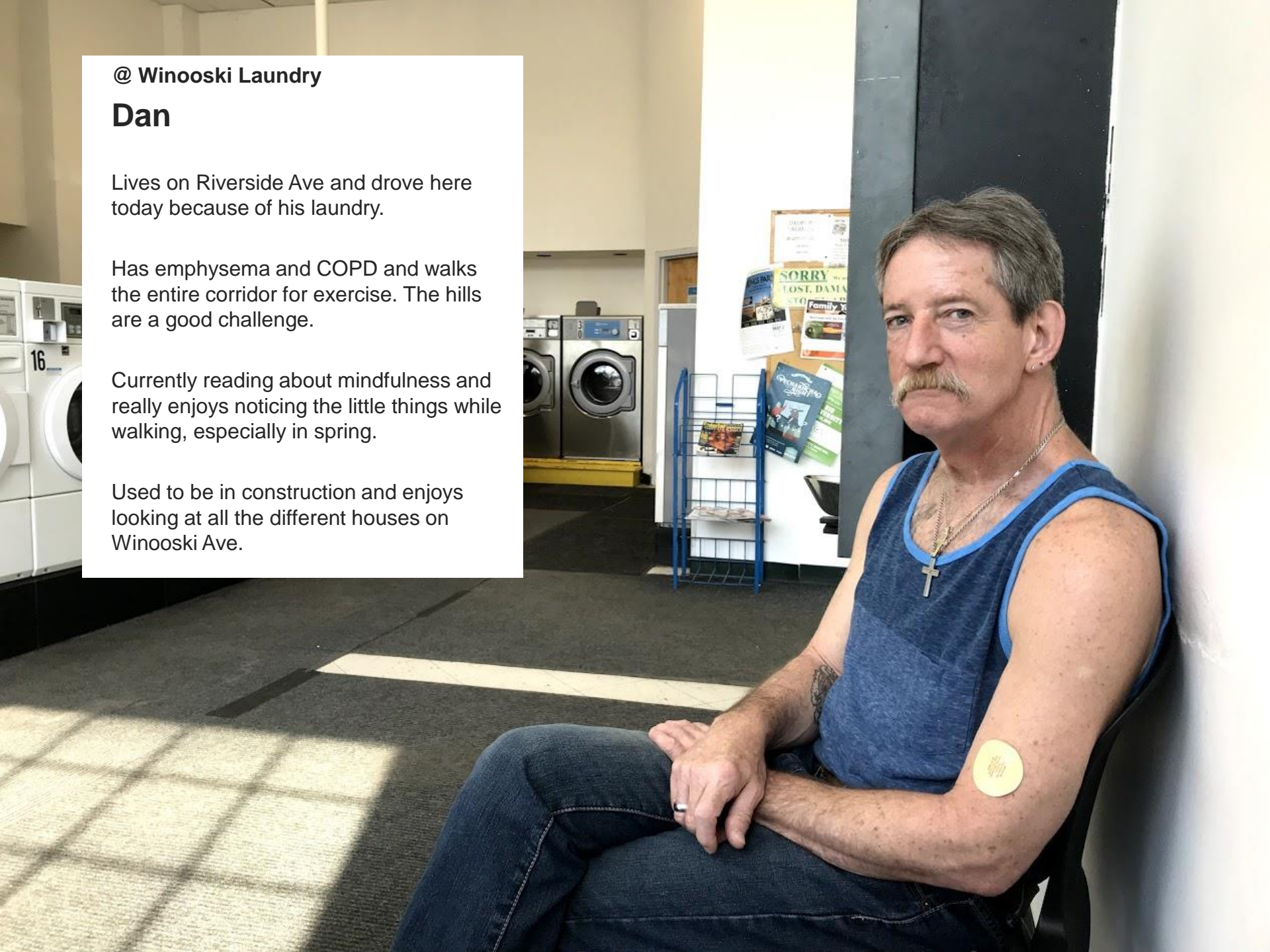
Dan

Lives on Riverside Ave and drove here today because of his laundry.

Has emphysema and COPD and walks the entire corridor for exercise. The hills are a good challenge.

Currently reading about mindfulness and really enjoys noticing the little things while walking, especially in spring.

Used to be in construction and enjoys looking at all the different houses on Winooski Ave.



@ Old Spokes Home

Laura Jacoby

Executive Director

“A lot of our customers rely on bikes for transportation. They can’t afford a car, and the bus system isn’t complete.”

“This is a social equity issue. There’s a segment of the City’s population that can’t get in a car. We have to accommodate them.”



@ City Market

Steph

Nurse at UVMMC

Drove to City Market this morning on her way to go kayaking.

Winooski Ave: "I avoid it like the plague" (whether driving or bicycling). "Bicycling is terrifying" (on Winooski Ave).

Uses Union Street as an alternative.





@ City Market

Tom

Drove to City Market today and dropped his wife off elsewhere downtown.

Lives on Shelburne Road and has lived in Burlington his whole life.

Both drives and rides a bicycle on Winooski Ave.

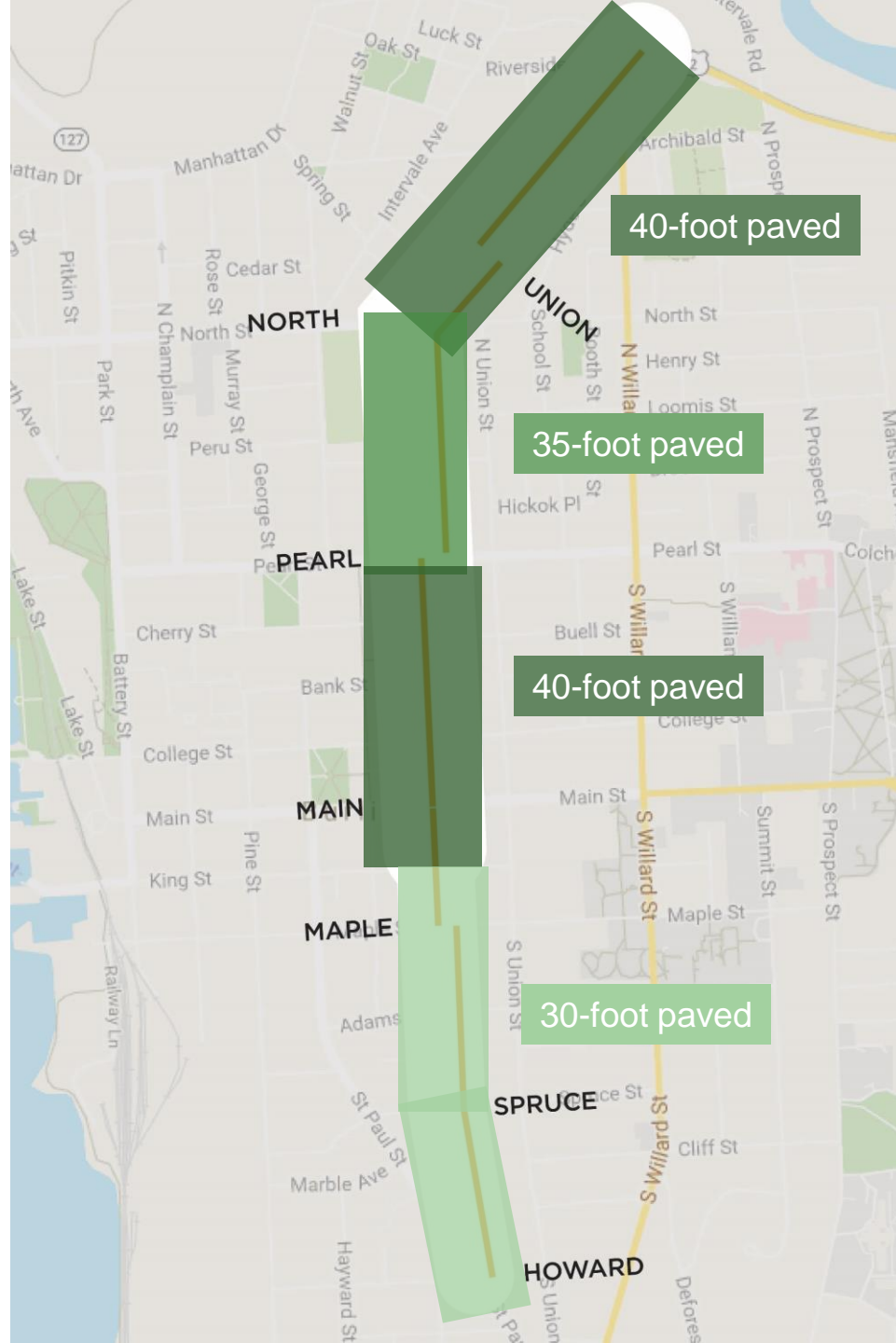
Bikes the whole city just for fun. Enjoys observing the urban landscape.



Existing Conditions Overview

Space Use and Connectivity

CURB-TO-CURB WIDTH



TRAVEL LANES

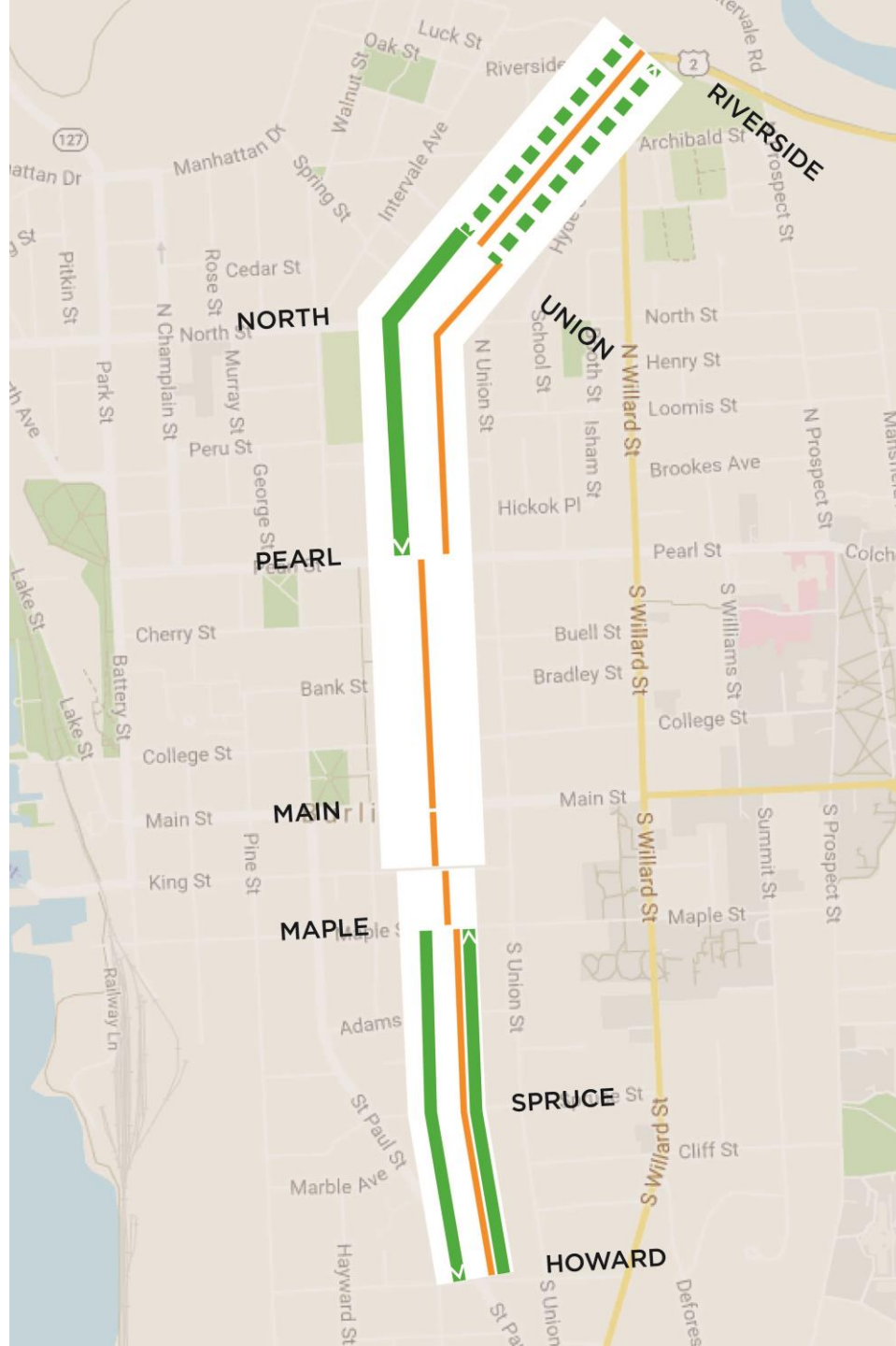


Space Use and Connectivity

BIKE LANES

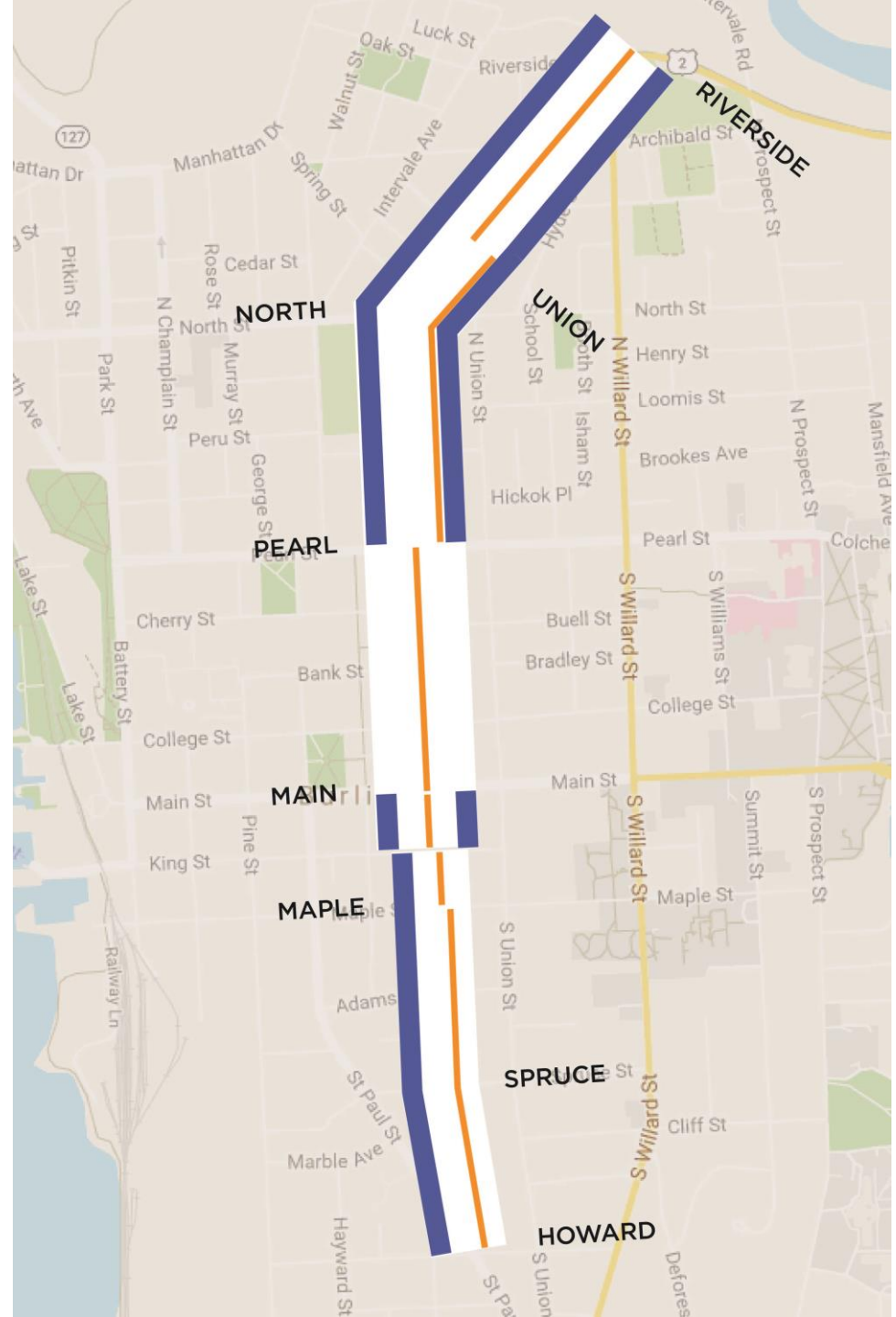


SHARROWS



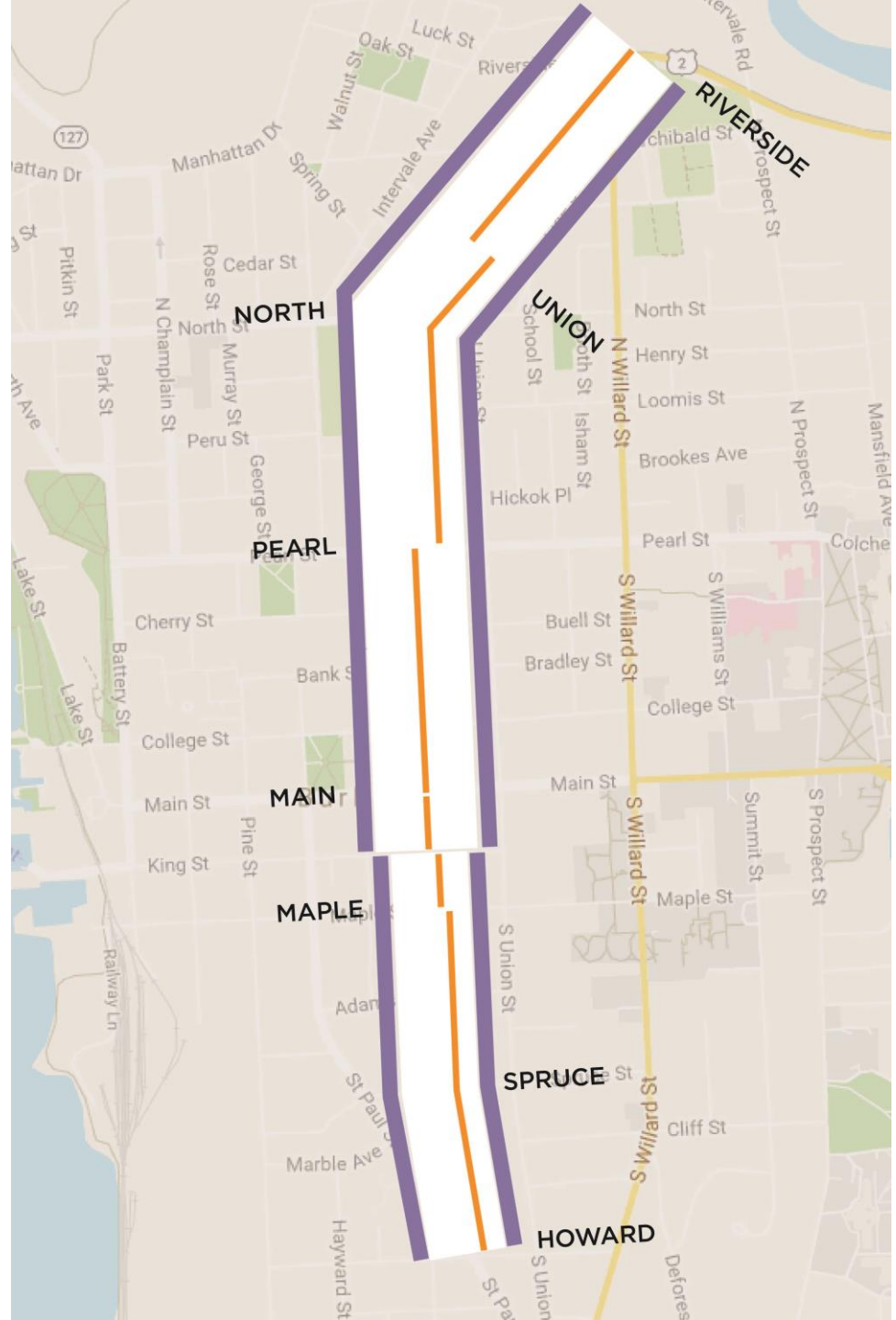
Space Use and Connectivity

PARKING LANES



Space Use and Connectivity

SIDEWALKS



Space Use and Connectivity

TRAVEL LANES



BIKE LANES



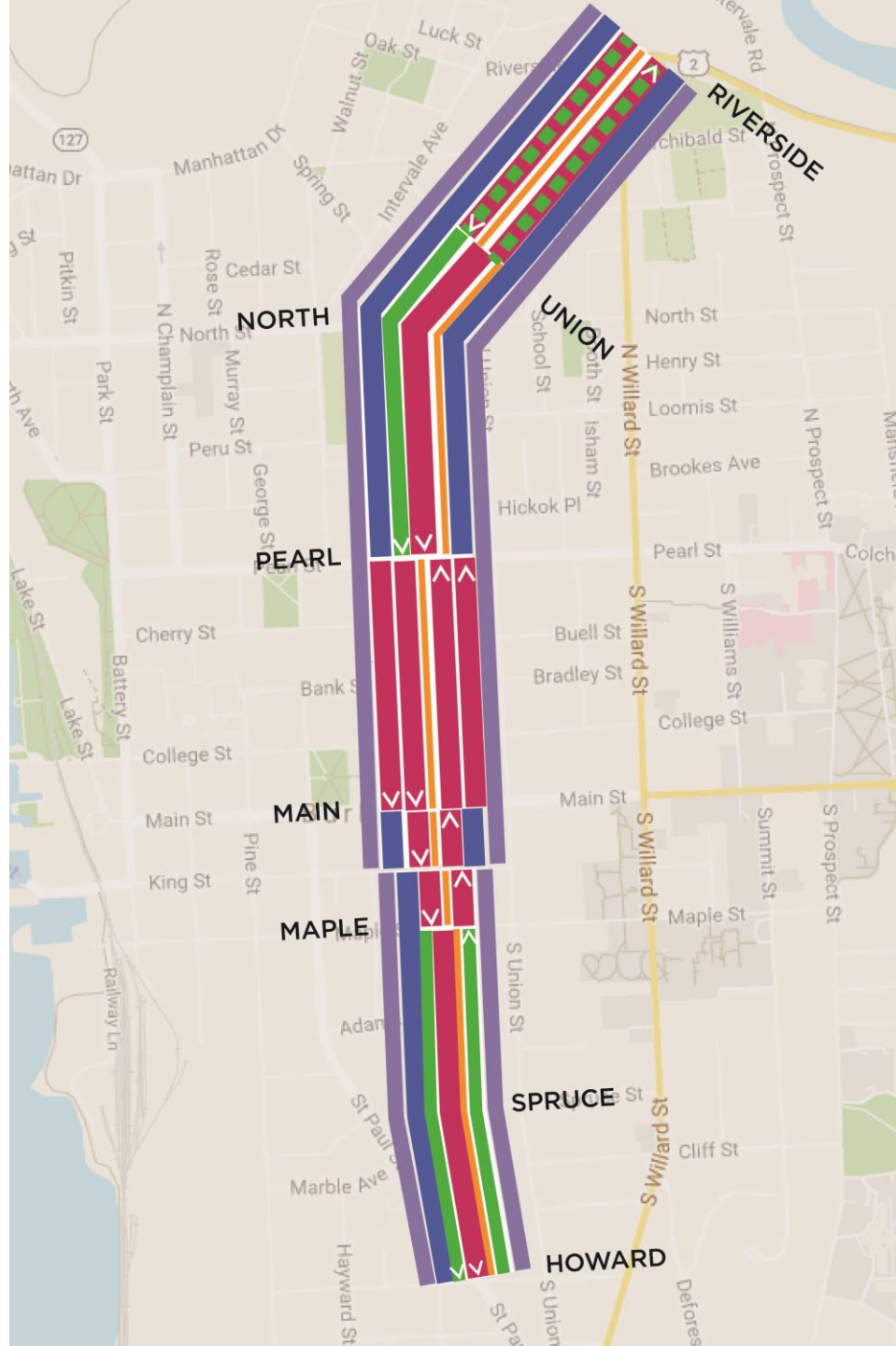
SHARROWS



PARKING LANES



SIDEWALKS



Average Annual Daily Traffic (AADT)

Bicycle and pedestrian count data is still being compiled

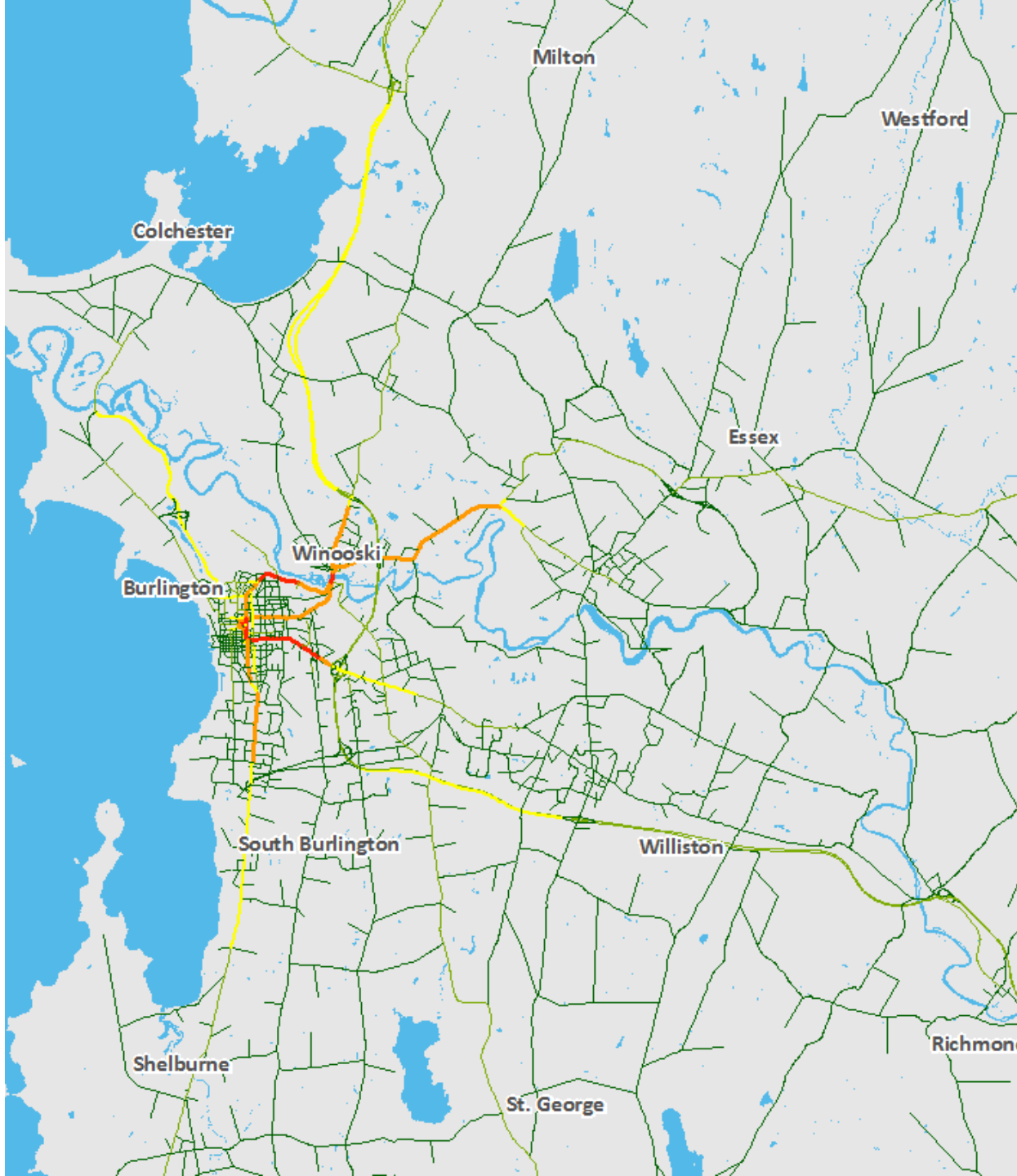
2016 data

Source: VTrans via Vermont Open Geodata Portal



Where Winooski Ave Traffic Comes From

Region-level

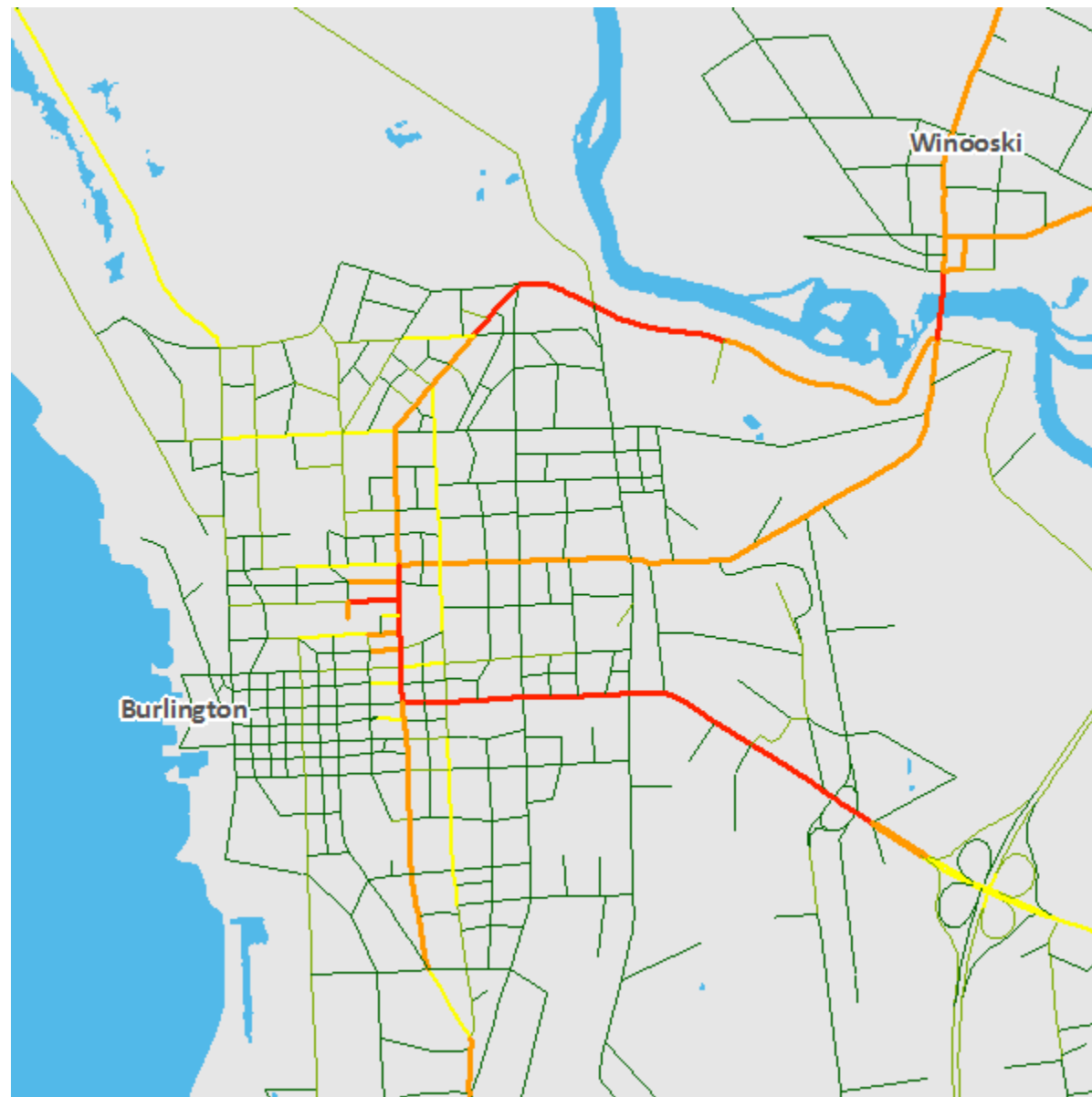


2015 data

Source: CCRPC Regional Model

Where Winooski Ave Traffic Comes From

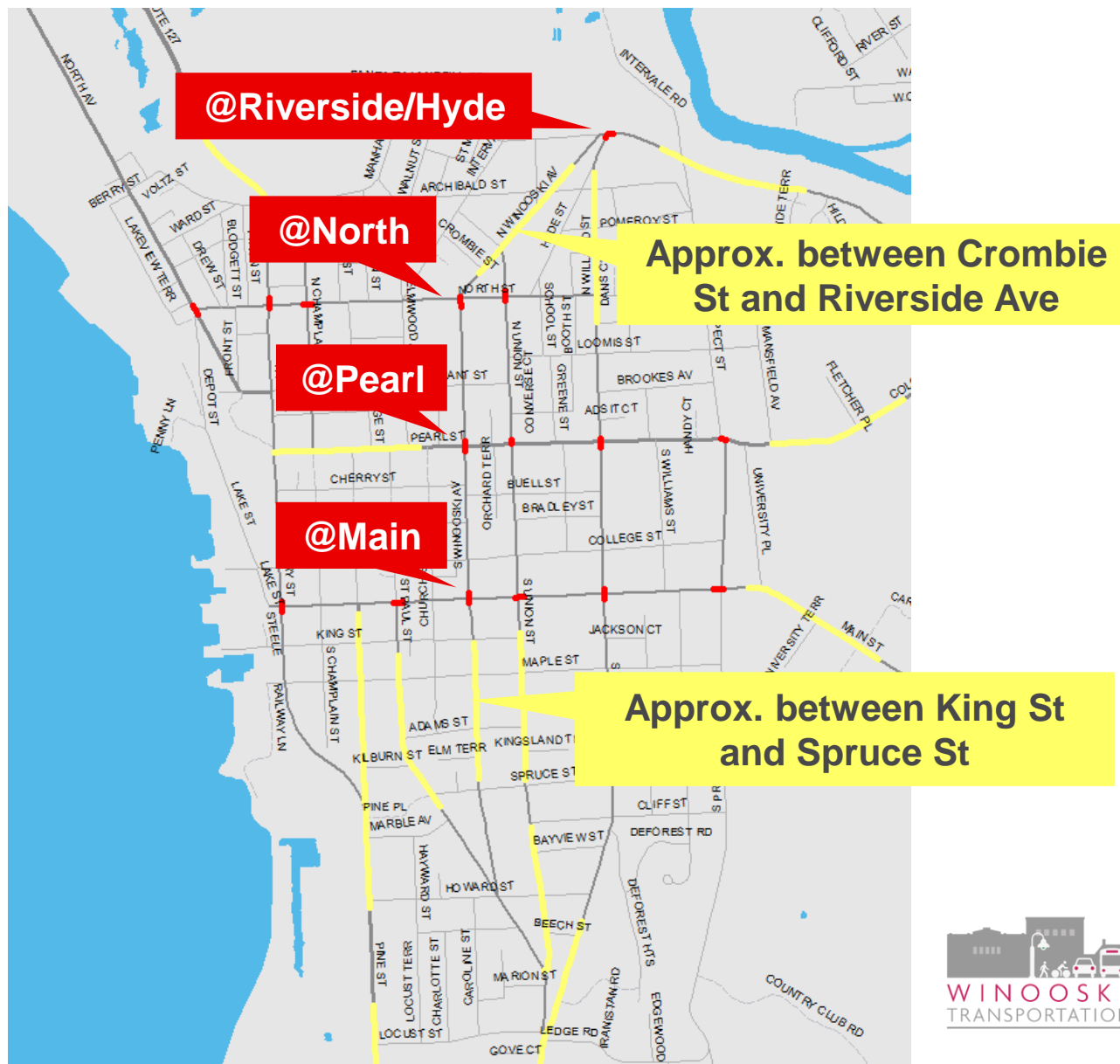
City-level



2015 data

Source: CCRPC Regional Model

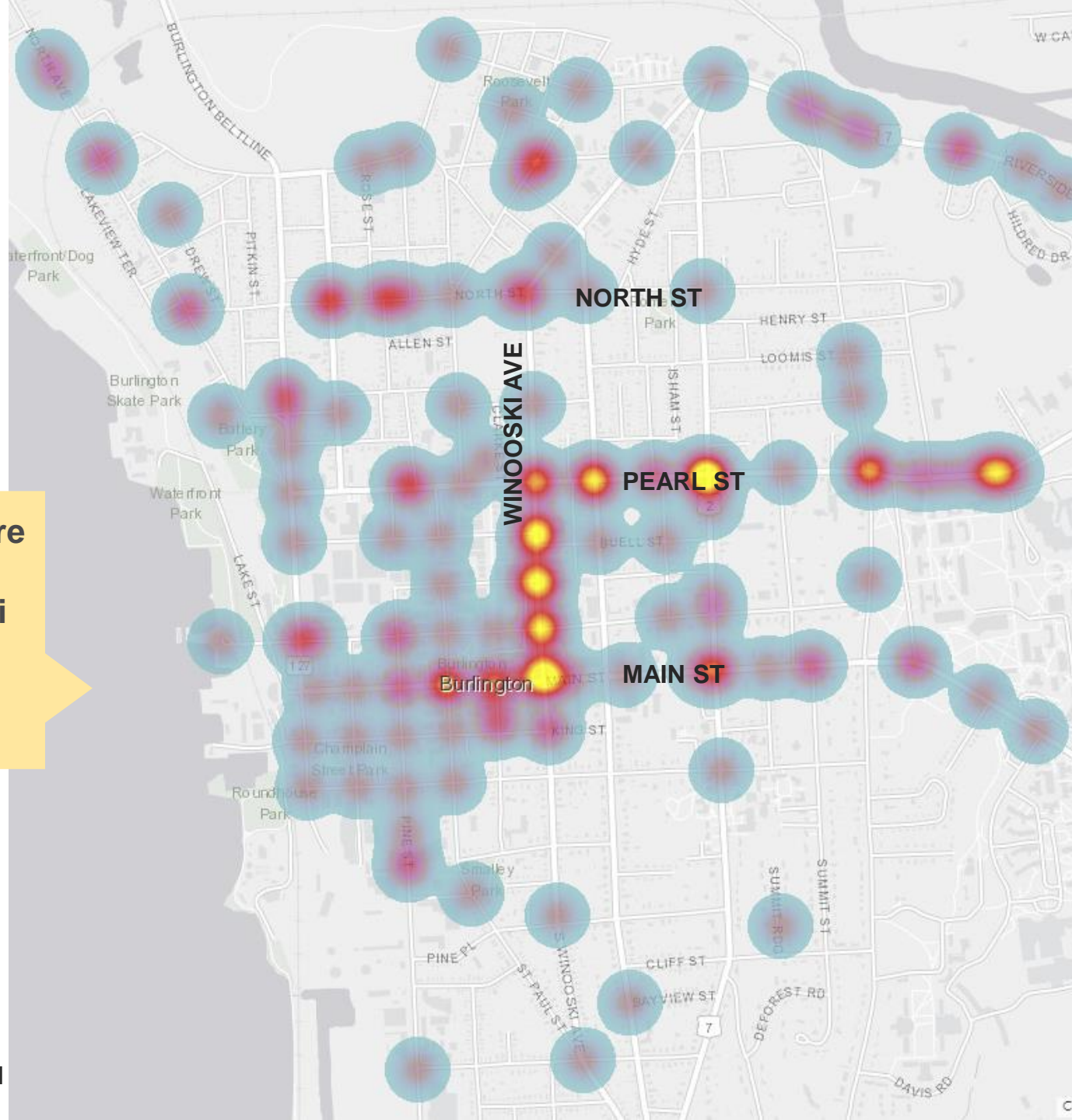
High Crash Locations



2012-2016 data
Source: VTrans

Bicycle and Pedestrian Crashes

For reference, there were 6 bicycle or pedestrian crashes at the Winooski Ave-Main Street intersection in this period



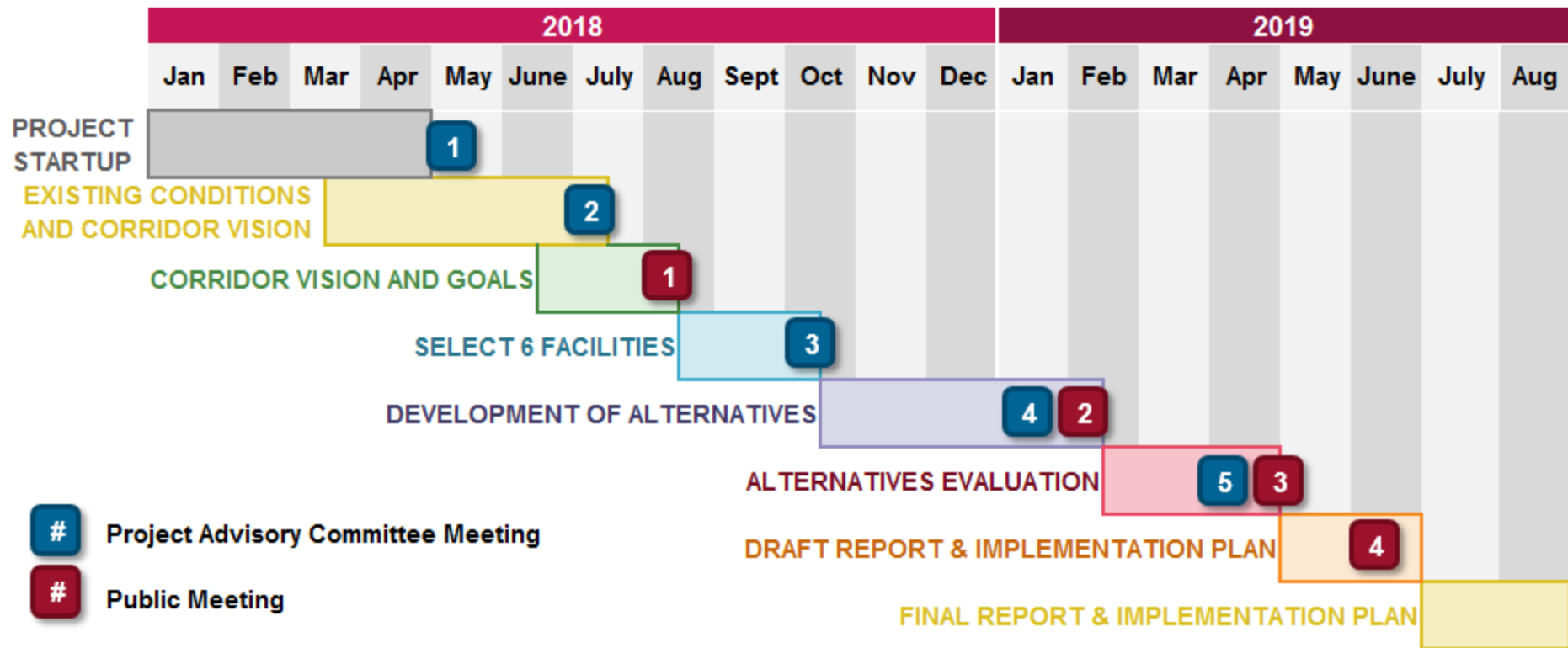
2013-2017 data (5 years)
Source: VTrans Crash Data Tool

What have we heard?

- Complete Street goals and visions of multimodal corridor
- Heavily utilized corridor
- Access to heart of the city
- Regional connections
- Inconsistent mobility facilities
- Timing for action is now
- Opportunity to enhance safety

What's Next?

- Draft vision and goals
- Public engagement
- Get people on mailing list



Discussion Time!

1. Why is this project important to you?
2. What are your goals for the study?
3. How can this study and its outcomes be most useful?
4. Specific issues or opportunities that we should know about?



Thank You!



CONTACTS

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Steering Committee



CHITTENDEN COUNTY RPC
Communities Planning Together



the science of insight



STREETPLANS
MIAMI SAN FRANCISCO NEW YORK

Third Sector Associates

Consultant Team