



## MEMORANDUM

June 10, 2015

**TO:** Public Works Commission

**FROM:** Nicole Losch, Transportation Planner

**RE:** Downtown Pearl Street Scoping Study

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At the June 15, 2015 meeting of the Public Works Commission we will present the preferred concept for the Downtown Pearl Street Scoping Study. To keep our agenda item brief during the meeting, this memo provides detail that we will not be presenting at the meeting. Please refer to this memo in advance of the meeting, allowing our agenda item time to focus on any questions or discussion.

### **INTRODUCTION**

With assistance and leadership from the Chittenden County Regional Planning Commission (CCRPC), the City explored opportunities to reconfigure Pearl Street between Battery Street and St. Paul Street as a complete street. This study was initiated to continue streetscape improvements recently completed on Pearl Street between St. Paul Street and Winooski Avenue – while considering the unique characteristics of lower Pearl Street – and also provide a thoughtful transition to the new CCTA Downtown Transit Center on St. Paul Street. Concurrent planning efforts (the Pedestrian & Bicycle Master Plan and the Street Design Guidelines) will be considering additional improvements for Pearl Street, so this study focused on low-cost improvements for installation within the existing curblines – small but transformative improvements.

### **BACKGROUND**

Downtown Pearl Street has been considered in several prior planning studies. PlanBTV Downtown and Waterfront, the Waterfront North Access Study, and Burlington Transportation Plan all emphasize the importance of Pearl Street for pedestrian connectivity between the downtown and waterfront. PlanBTV also describes this corridor as a barrier to connectivity between the Old North End and the downtown and acknowledges that Pearl Street, with connectivity to Colchester Avenue, is one of the main east/west corridors through Burlington – creating the potential for a continuous bike route through the city. The Transportation Plan also recognizes the importance of Pearl Street as a transit street, so careful balance is needed to accommodate transit vehicles and welcome people walking and bicycling.

These prior plans guide the city to consider infill development, bringing street-level activity, streetscape improvements, and amenities such as street trees, benches, civic art and lighting to create an appealing connection for pedestrians; bicycle facilities along Pearl Street; intersection treatments at Battery Street that

remove this obstacle for people walking and bicycling; and transit shelters, stops, sufficient travel lanes (10-12 feet), and features to facilitate efficient transit operations.

### EXPLORING OPPORTUNITIES

The cross-section of Pearl Street changes block-by-block but includes sidewalks that vary in width from 5 to 14.5 feet, roadway width of 40-feet / 46-feet, on-street parking, greenbelts of varying widths, and utilities above and below ground. Crosswalks and pedestrian signals are available at all signalized intersections, but not on all approaches, and an unsignalized crosswalk provides access from George Street. The existing configuration is graphically presented on the following pages.

Concepts were developed that balanced parking, travel lane widths, CCTA buses, and bike lane designs in various configurations. With feedback from city departments, CCTA and other community stakeholders, and the community at large, a preferred alignment was identified. Locations to focus streetscape improvements were also identified, and long-term desires were noted for continued discussion in the concurrent planning studies.

In our outreach and review of prior plans, Pearl Street was described as bleak and generally underwhelming. Although a commercial corridor, the community acknowledged it is vital to some of our most vulnerable residents living at Cathedral Square and on North Champlain Street. As such, pedestrian crossings feel unsafe. For people bicycling, Pearl Street is popular because it is a comparatively flat route and does not dead-end in the downtown core. However, bicycling next to parked cars is not comfortable for many. Parking, especially handicapped parking, is important to Pearl Street, but a “parklet” or outdoor seating could be attractive west of George Street.

### COMPONENTS OF THE FINAL CONCEPT

- Since an underground utility vault on the south side of Pearl Street west of North Champlain Street prevents street tree planting, utilize planter boxes or civic art to visually narrow the street and bring street-level texture for pedestrians.
- Pedestrians crossing Pearl Street at North Champlain Street can be more visible by shortening the crosswalk with paint, bollards, and planters, which can also beautify the street.
- Pedestrians crossing at George Street can be more visible with a painted curb extension. Bollards and planters could not be utilized here so that CCTA can access parking in the spaces immediately east of the crosswalk.
- Only one inbound turn lane is needed from northbound Battery Street onto Pearl Street. The easternmost turn lane on Battery Street can be reclaimed for another use, and the southeast and northeast corners can be shortened with paint, bollards, and planters to reduce the pedestrian crossing times.
- The greenbelt on the south side of Pearl Street between Pine Street and George Street should be removed and replaced with a wider sidewalk / pavers.
- Add planters, seating, and civic art as often as opportunities allow to visually spruce up the corridor.



Figure 1: Examples of crosswalk improvements with paint, bollards, and planters

## Frequently asked questions & additional information

*Will Pearl Street become congested without the northbound left turn lane onto North Champlain Street?*

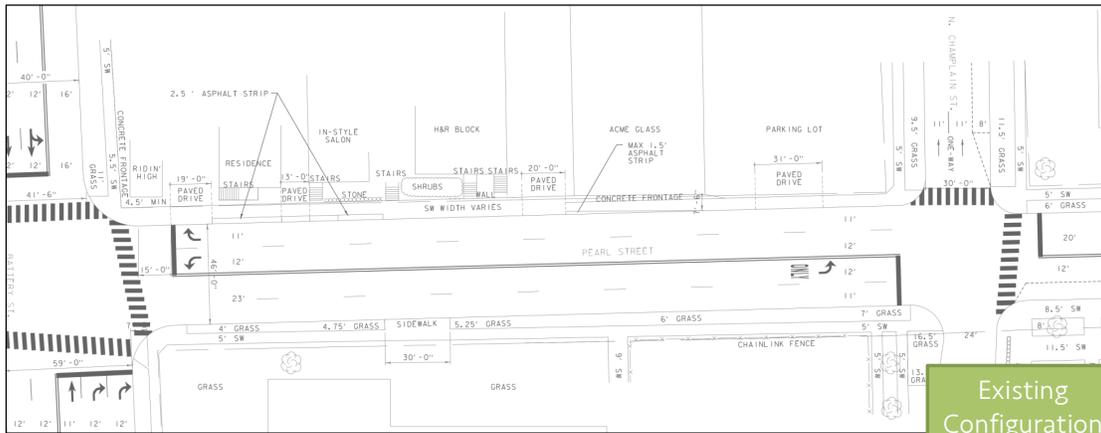
This intersection operates at a Level of Service (LOS) A in the AM and PM peak hours, with a delay of 3 seconds AM / 6 seconds PM and a vehicle-to-capacity (V/C) ratio of .22 AM / .35 PM (i.e. traffic demands are 22% and 35% below the capacity of the intersection). Accounting for future traffic operations, the intersection would operate at LOS A in the AM and PM peak hours, with a delay of 3 seconds AM / 9 seconds PM and a V/C ratio of .29 AM and .72 PM. The vehicle queue itself was calculated to be 248' with a single lane, which is still less than the 340' between North Champlain Street and Battery Street.

*How will parking change?*

There are 28 on-street parking spaces on Pearl Street between Battery Street and George Street and 33 off-street spaces in the city's surface parking lot. The parking locations will shift with this concept, and 1 total parking space will not be replaced.

*What will happen with the flashing signal at the intersection of North Champlain Street / Pearl Street?*

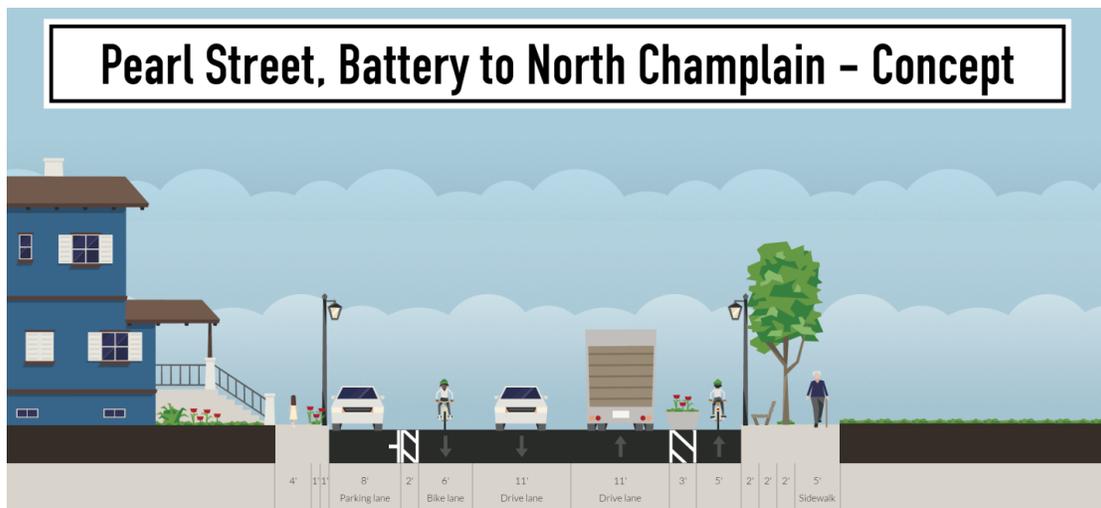
This signal is in the current workplan through the city's annual Traffic Program improvements. The flashing signal will be replaced with a pedestrian-activated hybrid beacon, also called a HAWK signal.



## Pearl Street, Battery to North Champlain

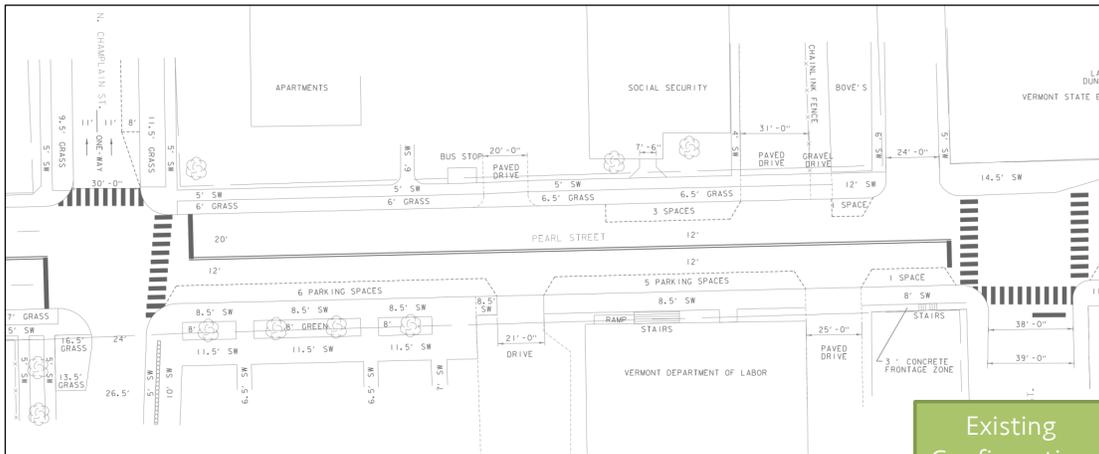


## Pearl Street, Battery to North Champlain - Concept



Existing
46' Curb-to-curb
Sidewalk width varies
Greenbelt width varies
4 travel lanes
No parking
Bikes share the road

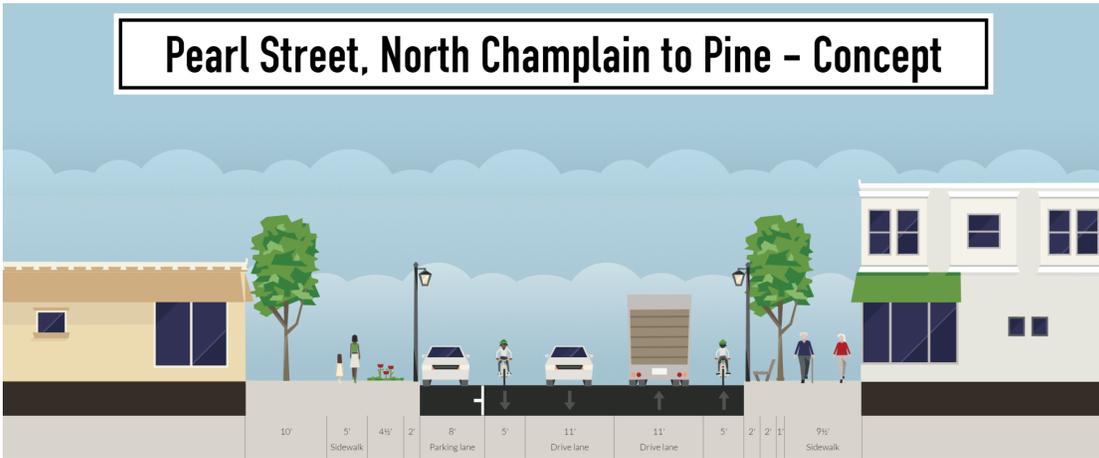
Proposed
46' Curb-to-curb
Sidewalk width varies
Greenbelts: add planters, benches
2 travel lanes
Parking, north side (8 spaces)
Bike lane (varies)



## Pearl Street, North Champlain to Pine

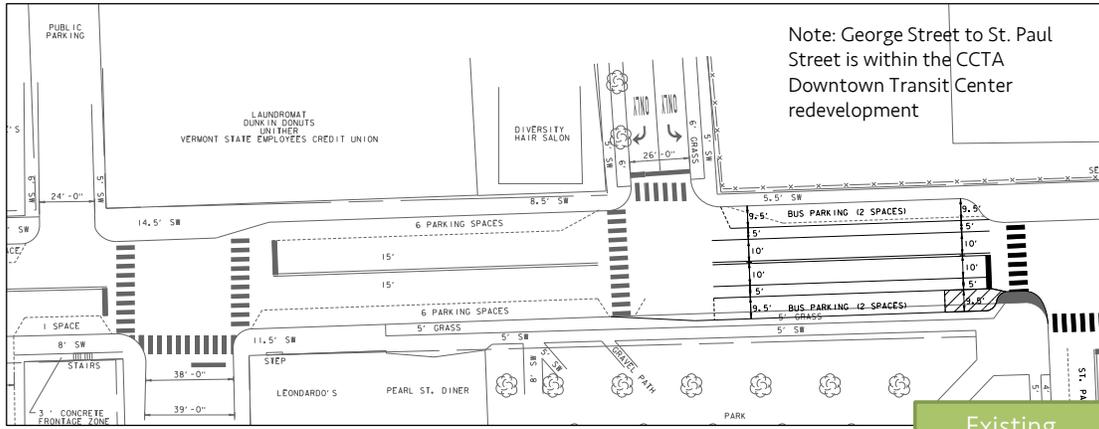


## Pearl Street, North Champlain to Pine - Concept



Existing
40' Curb-to-curb
Sidewalk width varies
Greenbelt: 6.5' north side only
2 travel lanes
Parking, (4 spaces north, 12 south)
Bikes share the road

Proposed
40' Curb-to-curb
Sidewalk width varies
Greenbelts: add planters, benches
2 travel lanes
Parking, north side (7 spaces)
5' bike lanes



Existing Configuration

## Pearl Street, Pine St to George St



## Pearl Street, Pine St to George St - Concept



Existing
46' curb-to-curb
Sidewalk width varies
Greenbelt 5' south side only
2 travel lanes
Parking, both sides (12 spaces)
Bikes share the road

Proposed
40' Curb-to-curb
Sidewalk width varies
Greenbelts: add planters, consider pavers over greenbelt
2 travel lanes
Parking unchanged
5' bike lanes