



May 22, 2020

TO: Transportation Energy Utilities Committee of City Council

FROM: Elizabeth Gohringer, Associate Planner

RE: Quick-Build Program and Old North End Greenway

Recommendations

No action is requested at this time.

What is Burlington's Quick-Build Program?

On April 21st 2017, the City Council approved PlanBTV Walk Bike, Burlington's road map to improve walking and biking in Burlington. PlanBTV's two goals are to create safer streets for everyone and to make walking and biking a viable way to get around town. During the community outreach for the PlanBTV Walk Bike, the top priorities identified by the community were implementing more protected bike lanes and creating a more connected and continuous bicycle network with safer and easier intersection crossings.

The Quick-Build Program is one method that Burlington has used to achieve these goals. The Burlington Quick-Build program is an initiative of the City of Burlington Department of Public Works to deliver a phased approach to bicycle and pedestrian infrastructure projects that improve safety and connectivity. The Quick-Build Program is one of the first projects to be realized from the planBTV Walk Bike Master Plan, and helps the City implement street safety and community placemaking projects quickly, with low-cost and flexible materials intended to last one to five years.

The program provides opportunities for residents, businesses, and the City to experience and evaluate projects, and provide real-time feedback, before committing to long-term capital projects. The materials are fully adjustable and can change based on community input. If a Quick-Build project is successful, then it will have the opportunity to be refined and kept in place and maintained until made more permanent with long-lasting materials. If a project is not well-received or does not achieve intended safety and accessibility outcomes, then it may be removed or altered. Quick-Build projects may be implemented citywide but are most appropriate for streets designated by the planBTV Walk Bike Master Plan as a slowzone, neighborhood greenway, placemaking, bike and / or pedestrian priority corridor.

Quick-Build Projects Installed to Date

- Dewey Park Plaza – installed 2014
- The Old North End Neighborhood Greenway (discussed in more detail later in this memo) – installed 2018. Neighborhood Greenways are routes on streets with low vehicle volumes and speeds, designed to prioritize bicycling and enhance conditions for walking.
- Curb extensions for intersection safety, using paint, bollards, and planters:
 - Pearl St at Battery St, George St, Pine St, and North Champlain St - installed 2018
 - Four corners at Main St and South Champlain St - installed 2018
 - Howard St / S Winooski Ave / St Paul St – installed 2018
- North Union St Protected Bike Lane – installed 2017 (currently pending re-installation). This bike lane uses bollards as a physical barrier to define and protect the bike lane from car traffic and encourage drivers to slow down.
- Bike boxes at the intersection of Pearl St and N Union St – installed 2019. A bike box is a painted green space on the road with a white bicycle symbol inside, allowing people on bikes to cross the intersection ahead of traffic.

Maintenance Challenges

Maintenance has proven challenging with our quick-build projects, for a variety of reasons. It is difficult to find materials that are quick to install, but durable enough to stand up to Burlington snow and plows year after year. Inevitably, many bollards are broken throughout a winter and need to be replaced in the spring time, placing an added burden on our work crews. In addition, each spring, the curb extensions need to be cleaned out, as they gather dirt and grime throughout the winter. The blank surfaces of the planters have also become a target for graffiti. There are few products on the market that can successfully remove graffiti from the rough surface of the planters, so our crews have decided to just paint over the graffiti moving forward. All of these tasks can take up a considerable amount of time and staffing capacity is not always sufficient to keep up with the maintenance needs. Quick-build projects are generally intended to be in place for 1 to 5 years, while we program construction funding and adjust the design as needed.

Phasing of Quick-Build to Construction

Several of our quick-build curb extension projects are advancing to construction this year. These locations are: Howard St / S Winooski Ave / St Paul St, Pearl St / Battery St, Pearl St / George St, and Elmwood Ave / Grant St (part of the Old North End Greenway). There are several reasons why we could decide a quick-build project is ready to move to construction, such as: coordination with a nearby paving project, prior studies and engineering evaluation, and community engagement and support.

The Old North End (ONE) Neighborhood Greenway

Background

Neighborhood Greenways are streets with low vehicle volumes and speeds, designed to prioritize bicycling and enhance conditions for walking, while increasing safety for all on the road. To create this condition, Neighborhood Greenways use a variety of traffic calming and placemaking treatments, including traffic calming to encourage travel speeds under 20 miles per hour, clear

wayfinding for people walking and biking, pavement markings to reinforce the shared use of the street, protected crossings at major streets, and green elements such as planters or rain gardens.

The ONE Greenway is an important neighborhood bike route, connecting UVM's campus with Battery Park and the Waterfront, utilizing low volume, appealing residential streets along most of its length (1.15 miles). The ONE Greenway fills a need for a safe east-west bikeway that is parallel and in between North St and Pearl St. As part of PlanBTV Walk Bike, crashes involving people biking and walking were mapped city-wide. The ONE Greenway Route has relatively few crashes compared to North St and Pearl St, which is likely due to lower volumes for all modes, as well as lower vehicle speeds.

Now that the Old North End Greenway has been in place for over a year, we are shifting our focus to the phasing of permanent construction. There are many facets of this project that must be taken into consideration when determining when and how this will be converted from quick-build to permanent construction.

Budget

Given the large number of curb extensions that make up the length of this route, it is likely that the curb extensions would need to be constructed in phases, over a period of at least two construction seasons, if not longer.

Collaboration with Stormwater

Another aspect of the ONE Greenway that needs to be taken into consideration is the potential impact that the curb extensions can have for stormwater. The long-term vision of the Greenway is that the quick-build curb extensions be transformed into green spaces whenever possible, and some locations may even be able to become raingardens. This requires staff to work with the stormwater team to evaluate each curb extension location individually to understand the soil conditions, grades, and other circumstances that impact the viability of a rain garden in that location.

Feedback and Finalizing Design Components

Since the ONE Greenway was installed, the feedback received by staff has been mixed between those who enjoy the added wayfinding and enhanced awareness that the changes bring to bicyclists, and those who feel the curb extensions are unsightly or make it more dangerous to use the street, due to the narrowing effect that they cause.

Due to the conflicting feedback that we have received regarding the curb extensions since the installation, DPW staff decided to conduct intercept surveys in the fall of 2019. We primarily focused on trying to get responses from bicyclists who were riding along the Greenway route. The goal of the survey was to understand how users felt about the changes to the route since the traffic calming, pavement markings, and wayfinding was installed.

Of the respondents who primarily bike on the route, 16% felt that the curb extensions make the road too tight or were unsure about them, 18% felt that the curb extensions worked well while biking or worked to slow cars, and 66% did not have opinions specific to the effect of curb extensions.

In addition, of the respondents who primarily bike on the route, 16% felt that the changes make biking feel more comfortable/safer, 34% felt that the changes make users more aware of bikes, and 32% felt either the changes have had a positive impact or that the green bike markings specifically have helped.

Next Steps

DPW staff plans to share the results of the ONE Greenway Survey to the Burlington WalkBike Council (BWBC) this summer, hopefully at their next scheduled meeting. This group is largely made up of avid bicyclists and pedestrians and we hope that their response to the survey results, as well as their own feedback and thoughts on the curb extensions, will help us make a determination as to whether or not the design of the Greenway needs to be adjusted before we can advance to creating construction plans. If we determine that the design of the Greenway does not need to be adjusted, we hope to begin developing construction plans this fall.