

Comments on Champlain Parkway Design From the Burlington Walk-Bike Council December 2014

The Burlington Walk-Bike Council believes that the goal for the Champlain Parkway should be:

"Achieve a high quality transportation facility that offers safe and equal access for those who walk, bicycle and travel by motor vehicle or transit, and that serves to enhance the social and economic vitality of Burlington's South End."

Burlington city goals, as embodied in various planning documents, call for complete streets including safe accommodation of all transportation modes. The current design for the Champlain Parkway, however, does not fully embrace this concept. While it does include a mixed-use path for cyclists and pedestrians for much of its length, it does not adequately protect safety for all modes, and also does not promote sustainable community principles. In particular, the major gaps in the current design include the following:

- Cutting off the end of Pine St., thus significantly reducing continuity of the street grid
- Lack of adequate accommodation for cyclists on Pine St. between Kilburn St. and Maple St.
- Use of combined paths for cyclists and pedestrians
- Intersection designs that do not fully protect pedestrians and cyclists
- Lane widths and other design elements that encourage motorist speeding

The long term vision for this corridor should be a complete street with separated sidewalks and protected bikes lanes/cycle track (preferably on both sides of the roadway), roundabouts at all major intersections, and safe pedestrian and cyclist crossings. It should also enhance connections with surrounding neighborhoods and create an attractive people-friendly streetscape. The following comments provide more detailed recommendations for bringing the design in line with this long-term vision.

Highest priority recommendations are identified with ↻ symbol.

Ensure continuous and separate bike and pedestrian facilities

Facilities for both biking and walking need to be continuous, without gaps in service, and with minimal crossing of roads, and thus preferably on both sides of the motorized traffic. In addition, it is important for safety and efficiency that facilities for cyclists and pedestrians be separated whenever possible.

Pine St.

↻ **Add protected bike lanes between Kilburn St. and Maple St.** The current design has no accommodation for bicycle traffic between Kilburn St. and Maple St. other than sharrows, which are

inappropriate for a road with this much traffic. This gap negates much of the value of adding protected bike facilities south of this section, as bike traffic would be forced to merge with traffic or ride on the sidewalk. This is a significant safety concern for cyclists (and pedestrians) travelling in both directions on Pine St. This will also discourage biking by those people who are not comfortable riding on the road. Protected bike lanes should be added on both sides of Pine St. in this section in order to provide continuity and enhance safety. To make room for the bike lanes, the following changes should be made to the design:

- Remove on-street parking between Kilburn St. and Maple St. This section sees very little use currently, and parking on the northern portion is already prohibited during peak traffic hours.
- Remove the northbound left turn lane on Pine St. at the intersection with Maple St. The designed lane is much too short for the anticipated traffic anyway, and cars would regularly back up into the main travel lane.
- If roundabouts (see separate recommendation) are not built at the intersections of Pine St. with Maple St. and King St., then consider prohibiting left turns during peak hours both at Maple St. and at King St. Motorists wishing to get over to Battery St. would turn left at Main St., which can better accommodate the traffic. This change would also simplify and improve safety for pedestrian crossings and reduce traffic for the Maple and King St. neighborhoods.

☞ Add separate sidewalk on the west side of Pine St. The current design appears to call for a new mixed use path, without a separate sidewalk, on the west side of Pine St. between Lakeside Ave. and approximately Kilburn St. A separate sidewalk, parallel to the new path and preferably with a distinct paving, should be added along this entire section. The new path, which should remain wide enough for two-way bike traffic, could then be reserved for cyclists, making it into a true separated cycle track. There is plenty of room for both the cycle track and the sidewalk, and it is critically important in this busy area to ensure safety for both cyclists and pedestrians, as well as to improve efficiency for cyclists.

☞ Add protected bike lane on east side of Pine St. The current design does not provide any accommodations for bikes on the east side of Pine St., other than sharrows, which are inappropriate for a road with this much traffic. While northbound traffic can use the new two-way cycle track on the west side, that will not be convenient for all users, since it requires crossing of Pine St. Many cyclists will choose not to cross over to the west side and will ride in the road. In the interest of ensuring safety for these cyclists and improving traffic flow for motor traffic, a separate, protected northbound bike lane should be added on the east side of Pine St. There is room for this if the car travel lanes are reduced in width (see separate recommendation) and if on-street parking can be eliminated or moved in a way that eliminates the risk of dooring for passing bikes. There are several options for accomplishing this.

- **Option 1:** Remove all on-street parking between Lakeside Ave. and Maple St.
- **Option 2:** Move all on-street parking to the west side of Pine St., where south-bound bike traffic can easily use the new protected off-street path.
- **Option 3:** Cut insets for parking on the east side in the high-use portions between Howard St. and Marble Ave., and between Pine Pl. and Kilburn St., with a marked buffer zone between the parked cars and the bike lane to keep bikes out of the door zone. Some of the green strip and pavement along the east side of the road would need to be removed to make room for the

cutouts. This would likely only be possible if the utility poles are removed (see separate recommendation below). On-street parking on the other portions of Pine St. between Lakeside Ave. and Maple St. would be removed. Some of these sections see very little use, while the on-street parking between Lakeside Ave. and Howard St. is primarily used by employees of Dealer.com, which has significant parking facilities elsewhere.

- **Option 4:** Add a protected one-way cycle track path on the east side between the parked cars and the sidewalk. This too is dependent on removal of the existing utility poles, as well as some of the green strip. The design would need to ensure safe passage of the cycle track past driveways and side roads, including use of no parking zones as needed to ensure better sightlines.

Add cycling accommodations for Maple St. to Main St. Although it may be outside the scope of this project, in the long term, the section of Pine St. between Maple St. and Main St. (and beyond) should also be modified to incorporate protected bike lanes/cycle track.

Lakeside Ave.

☞ **Add separate sidewalk on north side of Lakeside Ave.** It is not clear in the current design whether the sidewalk and bike path are separated on the north side of Lakeside Ave. If they are not already designed to be separate, they should be, especially given the volume of pedestrian traffic in this area.

Add protected bike lane on south side of Lakeside Ave. The current design has a bike path only on the north side of Lakeside Ave. A protected bike lane/cycle track (separate from the sidewalk) should be added also to the south side to improve continuity and safety.

Shelburne Rd. to Lakeside Ave.

☞ **Separate bike and pedestrian facilities.** The current design appears to call for a mixed use path, without a separate sidewalk, along this portion of the Parkway. Facilities for cycling and pedestrians should be separated wherever possible to enhance safety and also to improve efficiency for biking. A separate sidewalk, parallel to the new path and preferably with a distinct paving, should be added along this entire section. If physically separated protected bike lane/cycle track and sidewalk are not currently possible in some portions, the path should be made wide enough to allow separate lanes (demarcated by paint) for bicycles and pedestrians.

Continue to Shelburne Rd. The path should be continued along the south side of Queen City Park Road (with connections at key points) out to Shelburne Rd.

Full cycle track and sidewalk on both sides. There appears to be plenty of room in the portions between Shelburne Rd. and Home Ave., and between Flynn Ave. and Lakeside Ave., to put cycle track and a sidewalk on both sides of the Parkway. This will substantially improve continuity for both cyclists and pedestrians, and minimize road crossing. While there may not be room for full cycle track on the west side of the portion between Home Ave. and Flynn Ave., Briggs Ave. (see below) can serve as an alternative route in that portion.

Add sidewalk on Briggs St. A sidewalk should be added to the west side of Briggs St. to enable pedestrian access to the businesses on that road, as well as pedestrian traffic between Home Ave. and Flynn Ave.

Preserve and enhance connections

The Parkway should be designed in such a way as not to separate neighborhoods, but rather allow them to connect to enhance social and financial commerce.

☞ **Preserve continuity of Pine St.** The current design calls for making Pine Street a cul-de-sac, ending just short of the intersection with the Parkway. This severely reduces continuity of the street grid, affecting motorists, cyclists, pedestrians, and transit service. Removing the option of using Pine St. will concentrate traffic on the Parkway, simply moving traffic issues from one location to another.

This portion of the Parkway needs to be redesigned to intersect with Pine Street, preferably with a roundabout, with a connection through to Queen City Park Road. Allowing use of Pine St. as a through street (excluding trucks) would diffuse traffic, thus reducing safety concerns and improving efficiency.

There is plenty of room to slow down traffic prior to the Pine St. intersection, and the roundabout itself would result in reduced traffic speeds and improved safety for all participants.

☞ **Add pedestrian and bike facilities on Sears Lane.** Sears Lane is an important route for school children and others in the Lakeside neighborhood. Given the likely increase in traffic on this road, it should have a sidewalk on at least one side, as well as adjoining protected bike lanes/cycle track to enhance safety for cyclists and pedestrians on this road.

☞ **Include mid-block crosswalks.** There are several mid-block crosswalks along the existing Pine St., which should be preserved and enhanced with refuge islands and/or raised pavement to slow down traffic and improve visibility and safety for crossing pedestrians. In addition, a mid-block crosswalk should be added to the section between Home Ave. and Flynn Ave. to allow pedestrians from the adjoining neighborhood to access the businesses on the west side of the parkway.

☞ **Connect with cul-de-sacs.** While it appears that there are connections for cyclists and pedestrians between the Parkway path and the west ends of Lyman and Ferguson Avenues, it is less clear that one exists at the west end of Morse Place and the south end of Batchelder Street. There should be connections to the path at the ends of each of these roads.

Connect Home Ave. and Briggs Rd. Briggs Road from Flynn Ave. along the west side of the Parkway ends in a cul-de-sac. There should be a connection for pedestrians and cyclists from the end of the cul-de-sac to Home Ave., both to provide access to the businesses on that spur road and also to provide a continuous connection on the west side of the Parkway between Flynn Ave. and Home Ave.

Extend path spur across railroad tracks to Industrial Parkway. The current design shows a spur of the path from the intersection of the Parkway and Home Ave. to the railroad tracks. This spur should be extended over the railroad tracks to Industrial Ave. to enhance safety and improve access

Add new spur path to Battery St. Although outside the scope of this project, a new path and sidewalk extending from the path on Pine St. along the existing railroad right-of-way past the end of S. Champlain St. to Battery St. would significantly improve continuity for cyclists and pedestrians.

Ensure safety at intersections

All intersections should be designed primarily for the safety of all users, including motorists, cyclists, and pedestrians, while also allowing for efficient traffic flow.

 **Install roundabouts.** Roundabouts should be installed at all major intersections to enhance safety for pedestrians, cyclists, and motorized traffic, and to improve traffic flow and reduce delay while also regulating speed. They also reduce stop and go traffic, reducing pollution and improving air quality.

Mini-roundabouts are appropriate at less significant intersections (currently indicated to be regulated with stop signs), and in addition to helping enhance safety will make left turns much easier.

Roundabout designs should incorporate accommodations for on-road bicycle traffic and full protected crosswalks for pedestrians as described below. Note that roundabouts along Pine St. were strongly recommended during the recent South End walk-throughs with Dan Burden. The intersections for which roundabouts would be appropriate include the following:

- Parkway/Pine St./Queen City Park Rd.
- Parkway/Home Ave.
- Parkway/Flynn Ave.
- Parkway/Sears Lane. (mini)
- Parkway/Lakeside Ave.
- Lakeside Ave/Pine St.
- Pine St./Locust St. (mini)
- Pine St./Howard St. (mini)
- Pine St./Kilburn St. (mini)
- Pine St./Maple St.
- Pine St./King St.
- Pine St./Main St.

 **Reduce all curb radii.** In the current design it appears that the curb radii at many of the intersections are much too large. This poses a significant safety risk for all users by encouraging higher speed turns and by increasing crossing distances cyclists and pedestrians. This is particularly concerning at the intersections of the Parkway with Lakeside Ave. and with Flynn Ave., but also at Lakeside and Pine St. and all of the other intersections along the new section of the Parkway. Curb radii at all locations should be significantly tightened to reduce turn speed. This change is especially important where roundabouts are not installed, but is still a relevant concern in roundabout design.

 **Install full crosswalks with refuge islands.** In the current design, most of the intersections along Pine St. are shown with crosswalks on only one side of the intersection. Whether or not roundabouts are installed, all intersections along Pine St. should include crosswalks on all three (or four) sides.

Crosswalks in all locations (including along the Parkway) should include refuge islands, and perhaps raised pavement, to slow down traffic and reduce crossing distances.

Allow for diagonal crossing at Home Ave. Cyclists and pedestrians travelling on the path as currently designed must cross both the Parkway and Home Ave. If a roundabout is not built at this intersection, the traffic signal should include an exclusive bike/ped crossing phase, with right turns prohibited, and accommodation should be made for diagonal crossing so that cyclists and pedestrians can cross both lanes of traffic on a single cycle.

Square up on- and off-ramps at Shelburne Rd. The many on and off-ramps at Shelburne Rd. are currently designed for fast traffic flow at the expense of safety for all users. These intersections should be made more square with Shelburne Rd., with reduced curb radii.

Separate Parkway and Queen City Park Road. The current design continues and worsens the existing confusing crisscross of Queen City Park Rd. and the eastbound Parkway off-ramp. The off-ramp should be combined into a single intersection with the on-ramp for eastbound traffic, and should be separated from Queen City Park Rd. The intersection of Queen City Park Rd. with Shelburne Rd. can then be consolidated into a single location for both entrance and exit, along with a bike path continued from the intersection with Pine St. (see separate recommendation).

Align the Parkway and the Innovation Center driveway. Either the Parkway should be relocated to across from the Innovation Center driveway, or the driveway should be relocated to across from the Parkway location. In either case, the driveways for the Innovation Center and DPW should be merged. This will reduce conflict points and left turns for all users of the intersection.

Reduce driveway widths on Pine St. In the current design it appears that several of the driveways along Pine St. are unnecessarily wide. This poses a safety risk for cyclists and pedestrians by increasing crossing distances and potentially encouraging higher speed turns into and out of the driveways. The widths of these driveways should be limited to 22' or 24' wide.

Other recommendations

☞ **Underground utilities on Pine Street.** While work is being done on Pine Street, do a full reconstruction of the street, including replacement of the sewer system as needed and putting electric and phone utilities underground. Although this would have to be funded separately, it would be much cheaper to do these now than at a later date. This would support other goals in the South End and would significantly improve the environment for walking and biking in the area, contributing to the vitality of the neighborhood. In addition, removal of poles along Pine Street would allow considerably more flexibility with regard to placement of facilities for walking, biking, driving and parking.

☞ **Reduce lane widths.** Current lane widths in many portions appear to be 12 to 14 feet wide, which encourages speeding. Travel lanes for cars and busses should be a maximum of 11 feet wide, and preferably 10 feet wide, to reduce travel speeds and allow room for recommended on-road bicycle facilities as discussed above.

☞ **Include bus stops.** The design should indicate the location and treatment of bus stops. Bus stops should be located and designed in a way that ensures safety of all users, including passing bikes and pedestrians exiting the bus.