



Providence Bicycle and Pedestrian Advisory Commission

Jorge O. Elorza, Mayor

“LaSalle Square Resurfacing” – Downtown - Ward 1 (For Action)

Presented at September 20, 2017 BPAC meeting

Project Description

The City seeks comments from the BPAC regarding changes to the configuration of Broadway and Empire Street in LaSalle Square as part of a planned resurfacing project. This will be the only time this project comes before the Commission, as its scoping phase occurred before the BPAC was formed.

This area was reconfigured as part of the Downtown Circulator improvements in 2015, but funding did not allow for this portion to be repaved at that time. After complaints of cars parking in the westbound bike lane between Empire and Atwells (the “Starbucks bike lane”) delineators were installed in early 2017, which effectively ended the encroachment in the bike lane. However, there is a valid license for valet parking for the businesses in 21 Atwells Avenue (Hilton Hotel, Starbucks, at The Vig) which necessitates on-street parking on Broadway. Consequently, the City has proposed new striping plans to accommodate these parking spaces. Major proposed changes involve:

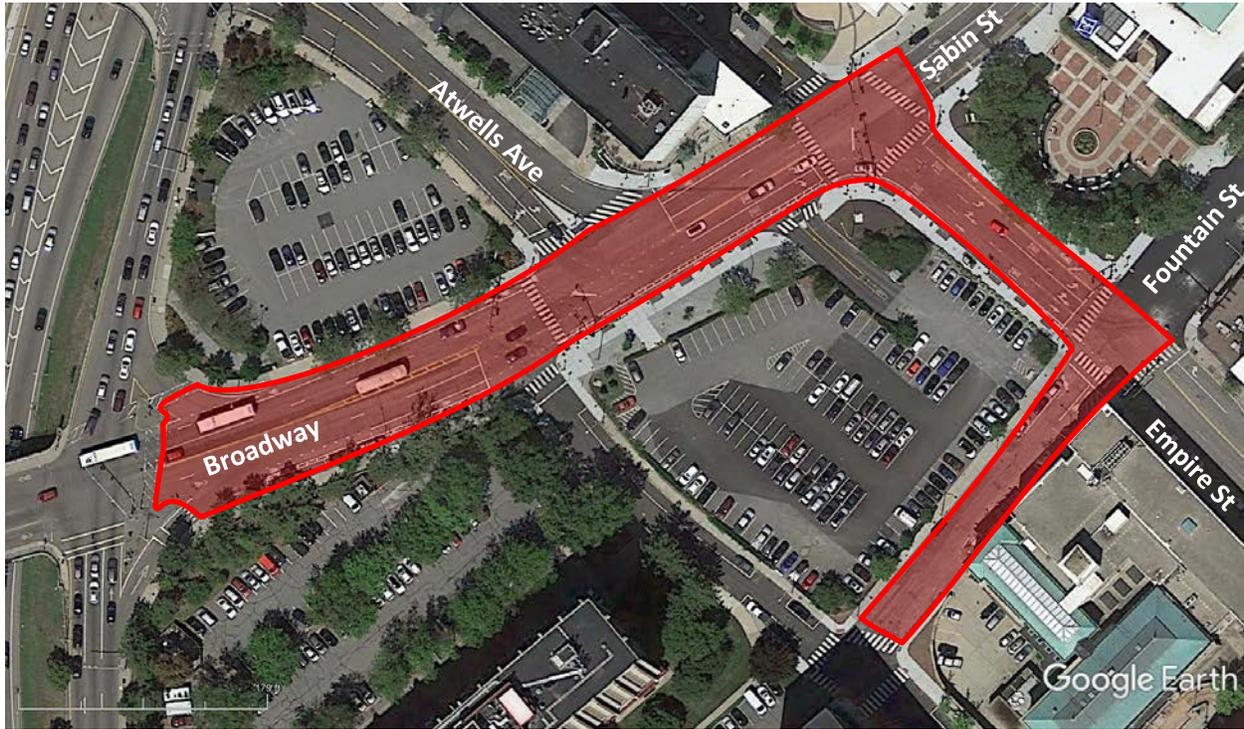
- Narrowing the vehicular travel lanes from 11-12 ft to 10-10.5 ft.
- Removing the buffer for the eastbound bike lane.
- Removing the flexible delineators.
- Creating a parking lane between the travel lanes and westbound bike lane.



Providence Bicycle and Pedestrian Advisory Commission

Jorge O. Elorza, Mayor

Project Map



Impact to Existing Bike Lanes

Empire Street	None
Broadway (Greene to Empire) eastbound	Buffer removal to accommodate parking lane
Broadway (Empire to Atwells) westbound	Shifting to accommodate parking lane
Broadway (Dave Gavitt Way to Greene) eastbound	None
Broadway (Atwells to Dave Gavitt Way) westbound	None
Fountain Street (Empire to Greene)	Extend bike lane from just at Empire intersection back to Greene intersection

Vulnerable Road User Safety Impacts

This project may have an impact on vulnerable road user safety. The main risk to bicyclists in the project area is from right-turning vehicles onto Atwells Ave from Broadway, one of the highest risk intersections in the city for bicyclists. As presented, the plans for this project could decrease visibility of westbound bicyclists approaching this intersection, due to parked cars between the bike lane and travel lane. If the staff recommendation to flip the parking lane and bike lane is incorporated, there will be little change to the safety of the intersection. The plans as presented would slightly reduce the maximum speed that

P

Providence Bicycle and Pedestrian Advisory Commission

Jorge O. Elorza, Mayor

drivers can turn on to Atwells due to being further from the curb, and further straightening out the intersection as recommended by staff would further reduce turning speeds.

Impacts to pedestrian safety from this project would be negligible, unless staff recommendations to decrease the crossing distance across Atwells Ave are incorporated, in which case there would be a positive impact on pedestrian safety.

Traffic Impacts

This project will improve pavement quality within the project boundaries, and narrow vehicular travel lanes between Atwells Ave and Empire St. If staff recommendations to tighten the turning radius from Broadway westbound onto Atwells Ave are incorporated, turning speeds onto Atwells Ave may be reduced.

In general, dedicated bike lanes (especially protected lanes) improve traffic flow by reducing potential for drivers to be stuck behind a bicyclist in their lane or enter the opposing lane to pass a bicyclist.

Parking Impacts

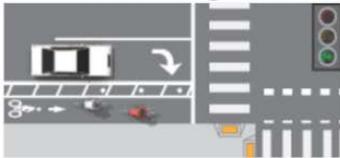
This project will add 1-2 parking spaces that are restricted to 15 minute parking and valet parking.

NACTO Guidance

Best practice for urban street design would suggest making the intersection a right angle and reducing the curb radius to reduce turning speeds, narrowing travel lanes to reduce speeds and provide more room for space to bike and walk, and the protection of bicycle traffic across the Atwells Ave intersection.

Offset in time

Bike Signal



Offset in space

Mixing Zone



Bump In



Bike Box



Protected Intersection





Providence Bicycle and Pedestrian Advisory Commission

Jorge O. Elorza, Mayor

Staff Recommendations

- Flip the westbound bike lane and the parking lane to make bicyclists more visible to left-turning traffic from Broadway onto Atwells.
- Use paint to decrease the curb radius on the east side of the Broadway/Atwells intersection (in front of the Hilton) to encourage slower speeds.
- Add a bike lane extension (“green ladder” or “green dashed lane”) on Broadway across the Atwells intersection to increase bicyclist visibility.
- Consider for future iterations of this area:
 - Move one or both directions of bicycle traffic above the curb on the south side of Broadway. This method should be used to protect eastbound bike traffic turning onto Empire, and if a left-side Sabin Street bike lane is implemented, westbound bike traffic should also be moved to the south side of the street above the curb.
 - Realign and narrow the Atwells Avenue approach to/from Broadway to make it more of a right angle and slow turning movements.
 - Consider bumping out the curb on the east side of the Broadway/Atwells intersection (in front of the Hilton) to reduce the curb radius and further decrease turning speeds.
 - Consider integrating a bicycle-specific traffic signal phase into the signal timing for the Atwells Ave/Broadway/Greene St intersection.

Respectfully submitted by Alex Ellis.