



MEMO

TO: BEACON STREET RESIDENTS
SUBJECT: BEACON STREET: FINALIZED DESIGN AND RESPONSE TO COMMUNITY COMMENTS
DATE: SEPTEMBER 2024
CC: CITY COUNCILOR SHARON DURKAN
STATE REPRESENTATIVE JAY LIVINGSTONE

We are providing an update on upcoming design changes for Beacon Street between Arlington Street and Berkeley Street. We appreciate the community’s continued interest in this project and valuable feedback throughout the design process. Based on this feedback, we have finalized the design for Beacon Street. This revised design addresses many of the concerns raised by stakeholders while also advancing citywide safety and mobility goals.

HOW WE’VE INCORPORATED COMMUNITY FEEDBACK

We are pleased to present the final design for Beacon Street, which incorporates many of the suggestions and concerns raised by stakeholders during the community engagement process. This revised design reflects our shared commitment to creating a safer, more accessible street for all users.

Safer, more predictable driver behavior at the Beacon/Berkeley intersection

During the community engagement process, residents expressed concerns about unsafe driver behavior at the Beacon/Berkeley intersection, particularly by drivers turning right from Beacon Street westbound onto Storrow Drive.

- The right lane on Beacon Street will become a shared through/right turn lane, discouraging illegal right turns on red, as drivers turning right will be mixed with drivers going straight.
- The separate “right turn only” phase will be removed from the signal cycle, a phase which saw poor compliance from drivers. Instead, all traffic on Beacon Street—through and right

turns—will have a green light at the same time. During the Beacon Street green phase, pedestrians will not have a concurrent walk signal to cross the northern leg of Berkeley Street.

- We will introduce an “exclusive pedestrian phase” during which all pedestrians will have the sole right-of-way to cross the street, including the northern leg of Berkeley Street. No other traffic in the intersection will be moving during this phase.

State-of-good repair

We understand the concerns regarding the condition of the asphalt road surface on Beacon Street. Beacon Street will be repaved with a new, smooth pavement surface from Arlington Street to Massachusetts Avenue. This work is funded for 2024, as discussed during our virtual community meeting in May. Following repaving, all existing pavement markings west of Berkeley Street will be restored to their current locations. We’ll share a construction start date and detailed work plan 1 - 2 weeks in advance of work starting. Once work begins, we expect repaving to take 1 - 2 weeks to complete, followed by the installation of thermoplastic pavement markings and flexible plastic bollards.

In addition to the repaving, we will also be upgrading curb ramps that do not meet accessibility standards. New detectable warning panels will be installed in red cast iron, and existing brick sidewalks around the ramps will be preserved. Residents should expect curb ramp work to begin within the coming weeks.

Preserved parking

On-street parking will be maintained on both sides of Beacon Street between Arlington and Berkeley, and on the east side of Berkeley Street from Commonwealth Avenue to Beacon Street. On the north side of Beacon Street, we will keep metered parking as it is today. This addresses the desire of residents and institutions to maintain on-street parking. We will also explore the possibility of short-term parking on the block of Beacon Street between Arlington Street and Berkeley Street to alleviate concerns about double parking.

Changes to bicycle network routing

We heard feedback that the position of the bike lane at the Beacon/Berkeley intersection in our initial proposal could cause safety issues for bicyclists.

- Our revised design includes a one-way westbound separated bike lane on the south side of Beacon Street rather than a two-way separated bike lane on the north side as originally proposed. Bicyclists traveling westbound will not come into conflict with drivers turning right onto Storrow Drive as they will be on opposite sides of the street. Bicyclists will cross to the existing separated bike lane on the north side of Beacon Street just west of the Berkeley Street intersection during a non-conflicting signal phase.
- The Berkeley Street separated bike lane, scheduled for installation this fall, will now end at Commonwealth Avenue. This change, made in response to resident feedback, preserves parking on Berkeley and Beacon Streets. To address the resulting gap for northbound cyclists, we are designing two-way separated bike lanes on Dartmouth Street and Arlington Street along the Public Garden.

RESPONDING TO REMAINING COMMUNITY CONCERNS

We recognize that some residents may have reservations about certain aspects of the final design for Beacon Street. We want to assure you that we value your input and are committed to providing clear and informative responses to your questions. Our goal is to ensure that the final design reflects the needs and priorities of the community while advancing citywide safety, accessibility, and mobility goals.

Connected bicycle network

We are committed to creating a safe and connected bike network throughout the city. It is essential to address the current gap in the bike lane on Beacon Street, which hinders westbound bicycle travel through Back Bay. The decision to end the proposed northbound bike lane on Berkeley Street at Commonwealth Avenue, based on community feedback, created a need for an alternative solution.

As a result, Beacon Street between Arlington Street and Berkeley Street is now the only option for creating the necessary feeder route to the existing bike lane west of Berkeley Street.

Although Commonwealth Avenue has bike lanes parallel to Beacon Street, they are not separated from car traffic. This means they don't provide the same level of safety and comfort as separated bike lanes.

Keeping traffic moving, safely

We acknowledge that the community feels a disproportionate impact from regional car commuter traffic using Beacon Street and Berkeley Street to access Storrow Drive. As we have discussed in previous meetings, the main cause of long peak-hour queues at the Beacon/Berkeley intersection is multiple streams of car traffic filtering into a single-lane onramp.

While we can't solve traffic issues of a regional magnitude with this project, we can make changes to meaningfully reduce *local* safety risks inherent in the current street design. In order to meet our Vision Zero policy goals, we are moving away from a traffic engineering philosophy that favors minimizing vehicle queues during peak travel times to one that prioritizes safety for all users at *all hours of the day*. Within this framework, we can still effectively process the volume of traffic at the Beacon/Berkeley intersection and retain parking with only marginal increases to queue lengths during the busiest times of the day.

We maintain confidence in the capabilities of our traffic engineers and the accuracy of our traffic engineering work. The Synchro analysis conducted for the Beacon/Berkeley intersection was performed by qualified professionals in accordance with established standards. Our modeling indicates that the proposed design changes will result in a minor increase in 95th percentile queue lengths during peak traffic times, which is considered an acceptable margin within traffic engineering standards. This trade off must be weighed against the positive impacts of the revised design on safety.

Accuracy of data

We are committed to using the most accurate and up-to-date data needed to inform our planning decisions. Our analysis is based on Turning Movement Count (TMC) data collected in Fall 2022. In order to confirm the relevance of this data source, we conducted a review of traffic volumes at nearby locations over the period of 2019-2024 using Streetlight data. Streetlight uses

anonymized smartphone data and other sources to derive insights about traffic patterns. Detailed information about our analysis can be found in the attached Final Design Report.

We collected data from four key locations along streets within or near the project area. This data included estimated daily weekday traffic volumes from Fall 2019 to Spring 2024, covering both spring and fall seasons. Our analysis shows that traffic volumes in the area have remained relatively stable since Fall 2021. In particular, we observed a slight 3% increase in traffic approaching the Beacon/Berkeley intersection between Fall 2022 and Spring 2024. Given that this difference is well within the potential for daily and seasonal fluctuations, we are confident our data source from Fall 2022 is an accurate representation to use for our traffic model.

While we acknowledge the request for additional data collection, we believe that new traffic counts at this stage would only serve to refine minor adjustments to signal timing, rather than fundamentally altering our core finding that peak hour traffic on Beacon Street can be accommodated within two lanes instead of three. Conducting new traffic counts would delay this critical state-of-good repair and safety project without providing substantial additional value.

CONCLUSION

We would like to reiterate our appreciation for the community's involvement in this project. Your feedback has been invaluable in shaping the final design, which we believe effectively balances the needs of the community while advancing citywide safety, accessibility, and mobility goals.

We plan to repave Beacon Street this fall, followed by the implementation of the design changes. These changes will enhance safety at the Beacon/Berkeley intersection, preserve parking, and connect the bike network. We will monitor the performance of the design changes following implementation and look forward to ongoing collaboration with the community. Please note that it may take up to six months for road users to adjust to the new design. We urge patience during the adjustment period. We are confident that these changes will create a safer environment for everyone who uses Beacon Street.