



## **Park Square Walk Assessment Chelsea, MA**

September 7, 2017

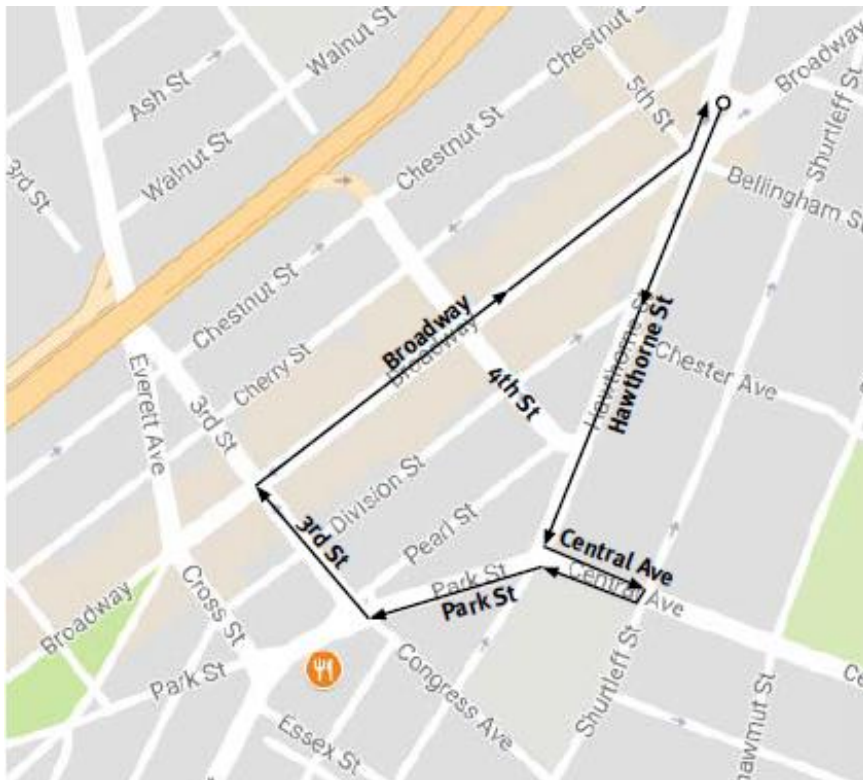
*Sponsored by the Massachusetts Executive Office of Public Safety and Security*

## Walk Assessment Overview

On September 7, 2017, WalkBoston conducted a walk assessment in the Park Square area of downtown Chelsea, with support from the Massachusetts Executive Office of Public Safety and Security (EOPSS). The goal of the walk assessment was to recommend improvements to the local built environment that improve pedestrian safety. The following individuals participated in the walk assessment:

- Fidel Maltez, Chelsea Department of Public Works
- Karl Allen, Chelsea Planning and Development Department
- John DePriest, Chelsea Planning and Development Department
- Alex Train, Chelsea Planning and Development Department
- Joanne O'Brien, Chelsea Police Department
- Kim Geraci, Chelsea Public Schools
- Gerry McCue, Chelsea Public Schools
- Wendy Landman, WalkBoston
- Adi Nochur, WalkBoston

Park Square, which is formed by the convergence of Park and Pearl Streets at Cross Street and Congress Avenue, serves as an important and often congested commuter corridor near downtown Chelsea. The area also has a high prevalence of people walking, so creating safer conditions for all travel modes is critical to the City's broader urban revitalization efforts. To that end, the recommendations in this report will inform Chelsea's Re-imagining Broadway initiative "to develop strategies to improve access and mobility for all users to downtown" (see <https://www.reimaginingbroadway.net> for details).



*The walking route for the Park Square walk assessment, which started and ended at Chelsea City Hall.*

The Chelsea Police Department had previously worked with EOPSS to determine several priority locations for traffic enforcement, including the intersection of Hawthorne, Pearl and 4<sup>th</sup> Streets just past Park Square. The walk assessment examined this location, as well as the nearby segment of Central Avenue just outside the John Silber Early Learning Center. Since several other EOPSS enforcement locations are along Broadway and will be redesigned as part of the Re-imagining Broadway project, WalkBoston and City staff decided to prioritize the aforementioned areas along Park Square, Central Avenue and Hawthorne Street for the walk assessment.

### **Key Observations and Recommendations**

Throughout the walk assessment route, participants observed uneven sidewalks and unfilled tree pits, as well as popped and missing tree grates. These conditions create tripping hazards for people walking and should be addressed with a comprehensive sidewalk repair and maintenance strategy. Wide driveways throughout the walking route should also be narrowed wherever possible to reduce pedestrian exposure to turning traffic.

In addition to these general observations, walk assessment participants prioritized several location-specific recommendations, which are further detailed in the report sections that follow:

- Calm traffic and improve pedestrian crossings at the intersection of Hawthorne Street, Pearl Street and 4<sup>th</sup> Street
- Narrow the intersection of Park Street, Hawthorne Street and Central Avenue by relocating crosswalks and extending curbs
- Calm traffic and improve pedestrian crossings at Park Square

In several instances, participants recommended creating curb extensions and pedestrian refuge islands with paint and plastic flex posts as low-cost safety measures in the near term. In the long term, permanent curb extensions and refuge islands that use concrete will have to be dimensionally confirmed to ensure that they do not inhibit the movement of fire trucks and other emergency vehicles.

## **Calm traffic and improve pedestrian crossings at the intersection of Hawthorne Street, Pearl Street and 4<sup>th</sup> Street**

In partnership with EOPSS, the Chelsea Police Department selected the intersection of Hawthorne, Pearl and 4<sup>th</sup> Streets as a priority traffic enforcement location. The wide travel lane on Hawthorne Street can result in high traffic speeds and cars often park right before the crosswalk across Hawthorne Street, blocking sightlines between people walking and people driving. There is also a lack of clear sightlines between pedestrians crossing Pearl Street and drivers making the hairpin left turn from Hawthorne Street onto Pearl Street. A triangular white painted area in the middle of the intersection approach at Pearl and 4<sup>th</sup> Streets helps to calm the movements of turning vehicles, but the long crosswalk across this approach still leaves pedestrians exposed to traffic.



*Vehicles turning left from 4<sup>th</sup> Street onto Hawthorne Street (above, left) or turning left from Hawthorne Street onto Pearl/4<sup>th</sup> Streets (above, right) create conflicts with pedestrians. The triangular white painted area (above, middle) should be widened and enhanced into a pedestrian refuge island that protects people crossing and calms traffic even further. This can be accomplished quickly and cheaply using plastic flex posts and planters.*

Walk assessment participants discussed a number of measures to enhance pedestrian safety at this location, including the following:

- Narrow the travel lane on Hawthorne Street by painting a bike lane, thus turning Hawthorne Street into a truly multimodal transportation corridor with slower vehicular traffic
- Improve visibility at the crosswalk across Hawthorne Street by adding curb extensions and physically restricting parking next to the crosswalk, using paint, plastic flex posts and “No Parking” signage
- Turn the triangular white painted area at Pearl and 4<sup>th</sup> Streets into a pedestrian refuge island with plastic flex posts and planters to protect people crossing the street, and to further calm and delineate the movements of turning vehicles
- Add signage telling drivers turning left from Hawthorne Street onto Pearl/4<sup>th</sup> Streets to yield to pedestrians, and informing pedestrians crossing Pearl Street to look out for turning traffic

## **Narrow the intersection of Park Street, Hawthorne Street and Central Avenue by relocating crosswalks and extending curbs**

The intersection of Park Street, Hawthorne Street and Central Avenue, just outside the John Silber Early Education Center, has a number of pedestrian and traffic safety challenges. The large expanse of excess pavement and the wide turning radii for motor vehicles at this location both enable high traffic speeds. In addition, the crosswalks across the Hawthorne Street and Park Street approaches to the intersection are set far back from the intersection itself, precluding oncoming drivers from clearly seeing traffic and pedestrians at other legs of the intersection, and vice versa. Walk assessment participants observed drivers rolling through the crosswalks before stopping due to the lack of clear sightlines. The crosswalk setbacks also result in drivers blocking the crosswalks, and a lack of vehicular travel lane markings and frequent double-parking further add to the confusion and congestion in this area. The City has painted a white area on the northwest side of the intersection to indicate restricted parking, but vehicles continue to park there in the absence of any physical barrier.



*Large expanses of pavement, wide vehicular turning radii, long crosswalk setbacks, and a lack of clear sightlines and travel lane markings all create hazards for pedestrians at the intersection of Park Street, Hawthorne Street and Central Avenue. Relocating crosswalks to be closer to the intersection, creating curb extensions using paint and plastic flex posts, and adding travel lane markings will enhance safety in this area.*

The Park Street/Hawthorne Street/Central Avenue intersection could potentially be signalized, which would affect traffic circulation in nearby Park Square. At the corner of Central Avenue and Shurtleff Street (which is also just outside the Early Learning Center), non-operational traffic and WALK signals fail to regulate vehicular and pedestrian movements. While the long term impacts of signalization at the Park Street/Hawthorne Street/Central Avenue intersection are considered, the following measures will improve pedestrian safety around the Early Learning Center in the near term:

- Relocate the crosswalks across the Park Street and Hawthorne Street approaches closer to the intersection to improve sightlines for drivers and pedestrians, and to reduce the incidence of drivers rolling through/blocking the crosswalks
- Add in-street pedestrian crossing signs at crosswalks to calm traffic
- Create curb extensions with paint and plastic flex posts to narrow vehicular turning radii, calm traffic, improve driver/pedestrian sightlines, and reduce pedestrian crossing distances
- Add travel lane markings to clearly delineate vehicular movements approaching and continuing through the Park Street/Hawthorne Street/Central Avenue intersection
- Add plastic flex posts to the existing white painted area on the northwest side of the Park Street/Hawthorne Street/Central Avenue intersection to physically restrict parking there
- Add STOP signs facing east and west on Central Avenue at Shurtleff Street to replace the non-operational signals there (these signals can potentially be relocated to other locations in Chelsea that may require signalization)

## Calm traffic and improve pedestrian crossings at Park Square

Similar to the intersection of Park Street/Hawthorne Street/Central Avenue, Park Square is characterized by wide stretches of excess pavement, a lack of travel lane markings, and poor sightlines for drivers and pedestrians. Drivers making U-turns from Park Street onto Pearl Street at the western edge of the Square, and from Pearl Street onto Park Street at the eastern edge of the Square, are unable to clearly see pedestrians crossing around the corner, and vice versa. The same is true when drivers are turning right from Cross Street onto Pearl Street at the western edge of the Square.



*Park Square faces similar challenges as the intersection of Park Street, Hawthorne Street and Central Avenue. Large areas of pavement, unpredictable vehicular movements, unclear sightlines, and long crossing distances all create inhospitable conditions for pedestrians.*

In addition, the long crosswalk across Park Square at Congress Avenue leaves pedestrians exposed to traffic. This crosswalk abuts a triangular patch of exposed cobblestone, which has the potential to serve as a protected pedestrian refuge island. A similar patch of exposed cobblestone exists on the western side of Park Square at Cross Street, but it does not have a crosswalk next to it; regardless, pedestrians still cross there without any protections.

Park Square could potentially be signalized in the long term to better regulate pedestrian and vehicular traffic. In the near term, the following measures will improve pedestrian safety:

- Create curb extensions with paint and plastic flex posts to calm traffic, improve driver/pedestrian sightlines and reduce pedestrian crossing distances
- Add travel lane markings to clearly delineate vehicular movements approaching and continuing through Park Square
- Add in-street pedestrian crossing signs at crosswalks to calm traffic
- Turn the triangular cobblestone area at Park Square and Congress Avenue into a pedestrian refuge island with plastic flex posts and planters to protect people crossing the street, and to further calm and delineate traffic movements
- Add a new crosswalk across Park Square at Cross Street, and turning the triangular cobblestone area there into another pedestrian refuge island with plastic flex posts and planters
- Add signage at the eastern and western edges of Park Square telling turning drivers to yield to pedestrians, and informing pedestrians to look out for turning traffic