2 Sidewalks

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Transit Stops

Sidewalks are essential pieces of infrastructure for the safety, convenience, and accessibility of transit riders. Sidewalks provide space for passengers to wait at bus stops, and accommodate shelters and other transit stop amenities. Transit stop amenities improve operations, ridership, and the value of transit to the community. Amenities can include shelters, benches, trash, recycling receptacles, lighting, street trees and vegetated stormwater management, bicycle racks, newspaper boxes, and public art. Personalizing transit stops gives the community a sense of ownership and pride.

Travel information for riders is also an important amenity at transit stops; at a minimum this should include route and schedule information, and ideally will include real-time arrival information where possible. Transit stops can also be locations for local area maps and wayfinding information.

All transit stops should be fully ADA accessible for passengers. Transit stops extend from the Pedestrian Zone to the curb and should provide ample room for transit riders to assemble without crowding the pedestrian clear path. Transit stops may also be located on curb extensions and floating islands where on-street parking is present.

Of the Massachusetts Bay Transit Authority’s (MBTA) 350,000 average weekday bus passengers, a majority board at stops and shelters located on Boston’s streets. The MBTA’s busiest transit routes ply through Dorchester, Roxbury, Mattapan, Jamaica Plain, Allston/Brighton, and the South End. While many stops are demarcated only by “tombstone” signs, several hundred transit shelters have also been installed through Boston’s Coordinated Street Furniture program. Where space and ridership permit, shelters should be added to bus stops to make them more comfortable and convenient.

The installation of transit stop amenities should be done in consultation with the MBTA, BTD, PWD, and PIC. The MBTA’s Bus Stop Planning and Design Guidelines serve as the primary reference for the design, spacing, and location of transit stops in Boston. These guidelines focus on transit stops on sidewalks, and do not cover the design of subway stations or light rail stops; for subway and light rail designs coordination with PWD, BTD, PIC, and the MBTA is required. As the preferred location of transit stops is typically adjacent to intersections rather than mid-block, transit stop siting and spacing is covered in Chapter 4: Intersections.
Overview

Bus stops are the most basic transit stops, and should be comfortable, safe, and accessible. They must accommodate the standard 40’ bus, or the articulated 60’ bus on select busier routes. Stops should be visible, providing a clear sightline between bus operators and users of the system. Simple stops without shelters may be appropriate where sidewalks are narrow along lower volume routes and on Neighborhood Residential and Industrial Street Types.

The area on the sidewalk where passengers load and unload at bus doors is called the landing zone (also known as the landing pad), which should be free from all obstructions including sign posts and bus stop amenities. The landing zone is a part of the existing sidewalk that is essentially an extension of the Pedestrian Zone to the curb at bus stops so that passengers may access the sidewalk directly from bus doors. Space should be provided for snow storage during winter months in order to maintain clear and accessible landing zones.

Use

- The landing zone at the all bus doors should be a clear zone, 5’ long, parallel to the curb, by 8’ deep. Newly constructed sidewalks should have an 8’ by 8’, ideally 10’ by 8’ landing zone to provide an accessible space for loading and unloading. If the sidewalk is not wide enough to support an 8’ landing zone, a curb extension should be built where on-street parking is present to accommodate the minimum width.
- Landing zones should be provided at all doors of the bus. For articulated buses, the distance between the front and rear landing zones is 18’. Different length buses have different door configurations, and landing zones should be designed in coordination with the MBTA.
- The length of the stop depends on vehicle type as well as the location of the stop, (i.e., near-side, far-side, or mid-block) and should be done in consultation with the MBTA. In general, far-side, near-side, and mid-block stops should be at minimum 60’, 90’, and 100’ in length respectively. Along routes serving articulated buses, far-side, near-side, and mid-block stops should be at minimum 80’, 100’, and 120’ respectively. For minimum and preferred bus stop lengths, see the detailed chart in Chapter 4: Intersections, Bus Stop Location.
- Trees should not be planted within landing zones of a bus stop; these may vary depending on the type of bus used. When street trees are desired near or within bus stops, the MBTA must be consulted. Trees require a minimum offset of 10’ from landing zones.

- Bus stops should be setback a minimum of 5’ from crosswalks. Where feasible, a 10’ setback is preferred.
- Where possible, trash and recycling receptacles should be placed near the front of the bus stop, at a minimum of 18” to the left of landing zones, minimum 3’ away from benches, and in the shade where possible. They should also be anchored to the pavement to deter theft.
Considerations

Curb extensions at bus stops, also called bus bulbs, can provide additional pedestrian space and improve bus travel time by reducing the time needed for loading and unloading. The depth of the curb extension is typically 6’, and the minimum length should allow passengers to board and exit at all bus doors.

- Extensions are generally utilized at near-side bus stops; however they are not compatible with intersections that have high right-hand turn volumes.
- Curb extensions must consider bicycle lane placement.
- Bollards may be placed at the beginning of curb extensions to protect the pedestrian space.

Bus bays are a protected bus stop area with curb extensions at the beginning and end of the bus stop. Bus bays are generally not favored because they tend to procure further delay when re-entering into traffic, and are better suited for slower speed environments. On higher speed roadways, bus bays do provide more separation for pedestrians boarding and exiting the bus, but will require more space for deceleration and acceleration.

- Extensions are good locations for amenities such as bicycle parking, street trees, and trash and recycling receptacles, so long as the requirements for waiting area, clear path, and the landing zone are met.
- During the winter, curb extensions also provide valuable space for snow storage at bus stops.
- For more information on curb extensions at bus stops, see Chapter 4: Intersections, Bus Bulbs.
Overview

Well-designed transit stops can help make transit more comfortable and convenient. Bus shelters should be provided on all Key Bus Routes, the 15 busiest bus routes designated by the MBTA, if sidewalk space allows. When providing a bus shelter, an ADA compliant, 5’ long (parallel to the curb) by 8’ deep landing zone should be provided at all bus doors. Space should be provided for snow storage during winter months in order to maintain clear and accessible landing zones.

Shelter placement must allow for unobstructed loading and unloading. Shelters must provide at a minimum the stop ID, route information, name of shelter’s owner, telephone number for maintenance, protection from the weather, seating or leaning bars. Bus shelters should have a name that incorporates a local landmark displayed on the panel facing the street.

All bus shelter installation must be approved by the City of Boston’s Coordinated Street Furniture Program.

Use

The City of Boston provides two types of shelters: standard and ship-shaped. The standard shelter has three sides and is 5’ wide, but can be modified to be two-sided. The ship-shaped shelter is 4’ wide and is one continuous oval shaped piece.

The siting of shelters is determined on a site-by-site basis. The MBTA’s Bus Stop Planning and Design Guidelines provide criteria to help determine which stops are eligible for shelters. Factors for shelter installation include the amount of weekday daily boardings, Key Bus Route designation; senior, disabled, medical or social services; key municipal facilities close to the stop; community recommendations; bus route transfer points; infrequent service; poor side conditions; or if the shelter promotes adjacent development/increased ridership. After eligibility is determined, a site suitability test must be conducted.
The following requirements must be met before a shelter can be considered:

- Property ownership
- Abutter approval
- Compliance with accessibility requirements
- Adequate physical space and clear widths
- Close proximity to an existing bus stop
- Approval and maintenance agreements by the City of Boston

The following minimum clear widths for shelter placement must be maintained:

- 1’ from a blank building face (shelters should not block active store windows)
- 4’ from the back of curb
- 15’ from crosswalks for visibility at near-side bus stops
- 1’ from any ground obstruction (i.e., manhole, tree pit, sign post, etc.)
- 10’ from fire hydrants
- 3’ to the right of the landing zone (maximum 25’ to the right of the landing zone)

Considerations

The location of transit shelters should minimize obstructions of sight lines. Curb extensions can be combined with transit shelters to alleviate sight obstructions. Shelters should be located between store entrances or shop windows wherever possible. Transparent materials such as glass help eliminate sight obstructions and improve security.

Shelters can be placed 6’ from the building face where sidewalks are 15’ wide or greater in order to provide an accessible path behind the shelter.

Shelters can provide more than just protection from inclement weather and a place to rest:

- Smart shelters can provide real-time travel information or other news.
- Shelters are a good location to incorporate art displays or historic information.
- Designs may also consider solar power to support lighting and heating elements to increase the comfort of waiting passengers.