

# **Crosswalk Design**

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Well-designed crosswalks are key to Boston's status as a pedestrian friendly city. While most of Boston's intersections have marked crosswalks at each approach, other locations can be marked to emphasize unique pedestrian desire lines. Examples include a wide crosswalk across the Greenway connecting South Station to the financial district, and a diagonal crosswalk connecting the Park Plaza area to the Boston Common. In Boston's neighborhoods, crosswalks are located to provide safe access to local institutions, parks, and housing for the elderly.

Safety for all pedestrians, especially for those with disabilities, is the single most important criteria informing crosswalk design. Crosswalks serve a dual function of guiding pedestrians to locations where they should cross the street and informing drivers of pedestrian movements. Crosswalks are used in locations where pedestrians are expected, such as at intersections, as well as places where they may not be expected, such as uncontrolled crossings.

BTD, PWD, and the Commission for Persons with Disabilities are responsible for reviewing crosswalk design.

## **Standard Crosswalks**

#### **Overview**

The City of Boston has two primary crosswalk marking styles:

The continental style 1, also called a "high visibility" cross-walk, consists of 12" wide bars spaced 4' on center placed perpendicular to the path of travel, and two 12" wide transverse lines placed 10' apart (outside dimension) parallel to the path of travel.

The standard marking style 2 consists of two transverse (parallel) lines 12" wide placed 10' apart (outside dimension) to delineate the outside edges of the crosswalk, parallel to the pedestrian path of travel.

Please refer to the City of Boston's website for BTD's cross-walk specifications.

#### Use

- Crosswalks should be at least 10' wide or the width of the approaching sidewalk if it is greater. In areas of heavy pedestrian volumes, crosswalks can be up to 25' wide. Crosswalks should be aligned with the approaching sidewalk.
- Particularly at complex intersections, crosswalks should be placed at locations that reflect pedestrian desire lines while also considering the safest location to cross – where there is the least amount of exposure to conflicts with other modes. Crosswalk placement should also maximize the visibility of pedestrians to turning vehicle movements.

- ► The MUTCD provides guidance on crosswalk markings for an intersection with an exclusive pedestrian phase that permits diagonal crossings.
- ► ADA-compliant curb ramps should direct pedestrians into the crosswalk and the bottom of the ramp should lie within the area of the crosswalk (flares do not need to fall within the crosswalk).

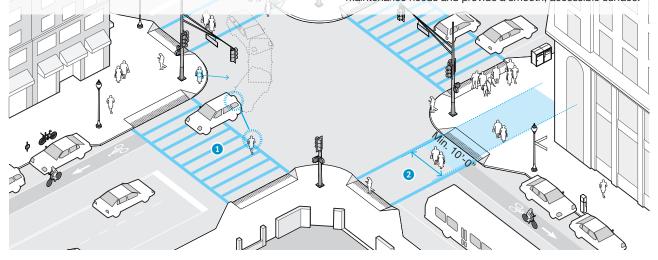
#### **Considerations**

Continental style crosswalk styles should be considered at:

- ► Midblock uncontrolled crossings
- Stop-controlled and signalized intersections on school walking routes
- Transit stops and stations
- At pedestrian-only signals on Downtown Connector,
  Downtown Mixed-Use, Neighborhood Main Street,
  Neighborhood Connector, Industrial, and Boulevard Street
  Types
- ► Locations with heavy pedestrian volumes as determined by

In all other controlled locations, transverse lines may be considered.

Crosswalk markings should consist of non-skid, thermoplastic, retro-reflective material. On new pavement, thermoplastic markings should be recessed when possible so that the surface of the marking is flush with the pavement to reduce maintenance needs and provide a smooth, accessible surface.



## **Enhanced Crosswalks**

#### **Overview**

Boston recently began using an "enhanced crosswalk" design in addition to the standard designs, particularly along Neighborhood Connectors and Neighborhood Main Streets. They typically consist of the addition of two decorative bands along the path of travel, which can be 2' to 3' wide with an unmarked center to provide a smooth surface for wheelchairs and walkers. The decorative bands can enhance crosswalk visibility and create a more aesthetically pleasing pedestrian-friendly environment, and support branding along a district or corridor. Newly reconstructed sections of Dorchester Avenue and Massachusetts Avenue have enhanced crosswalks. Also, crosswalks can be enhanced with different colored pavements.

#### Use

- ▶ All crosswalks must be consistent with the MUTCD and meet basic requirements for visibility, including 12" wide white transverse lines along the boundary of the crosswalk to maximize visibility 1.
- ► Enhanced crosswalks should only be used at intersections where they are secondary to other traffic control devices.

- See Unsignalized Intersections on the following page for other design features that increase safety.
- ► Enhanced crosswalks must provide an accessible path of travel that is **a minimum of 5' wide**, and is firm, stable and is a slip resistant surface. Specialty pavers or decorative markings should be restricted to outside the path of travel.

### **Considerations**

- ▶ Unit pavers and materials that differ from the surrounding pavement 2, such as concrete crosswalks placed on an asphalt street, may not be used at crosswalks. Pavers can be susceptible to settling and damage, and can become uncomfortable and unsafe over time.
- ▶ Durability and ease of maintenance must be a consideration in material selection. Paint applied to the surface of paving often wears off but is relatively easy to restore.
- Art work can be embedded in the pavement but should be flush to avoid deterioration from snow-plows and excessive wear.

