

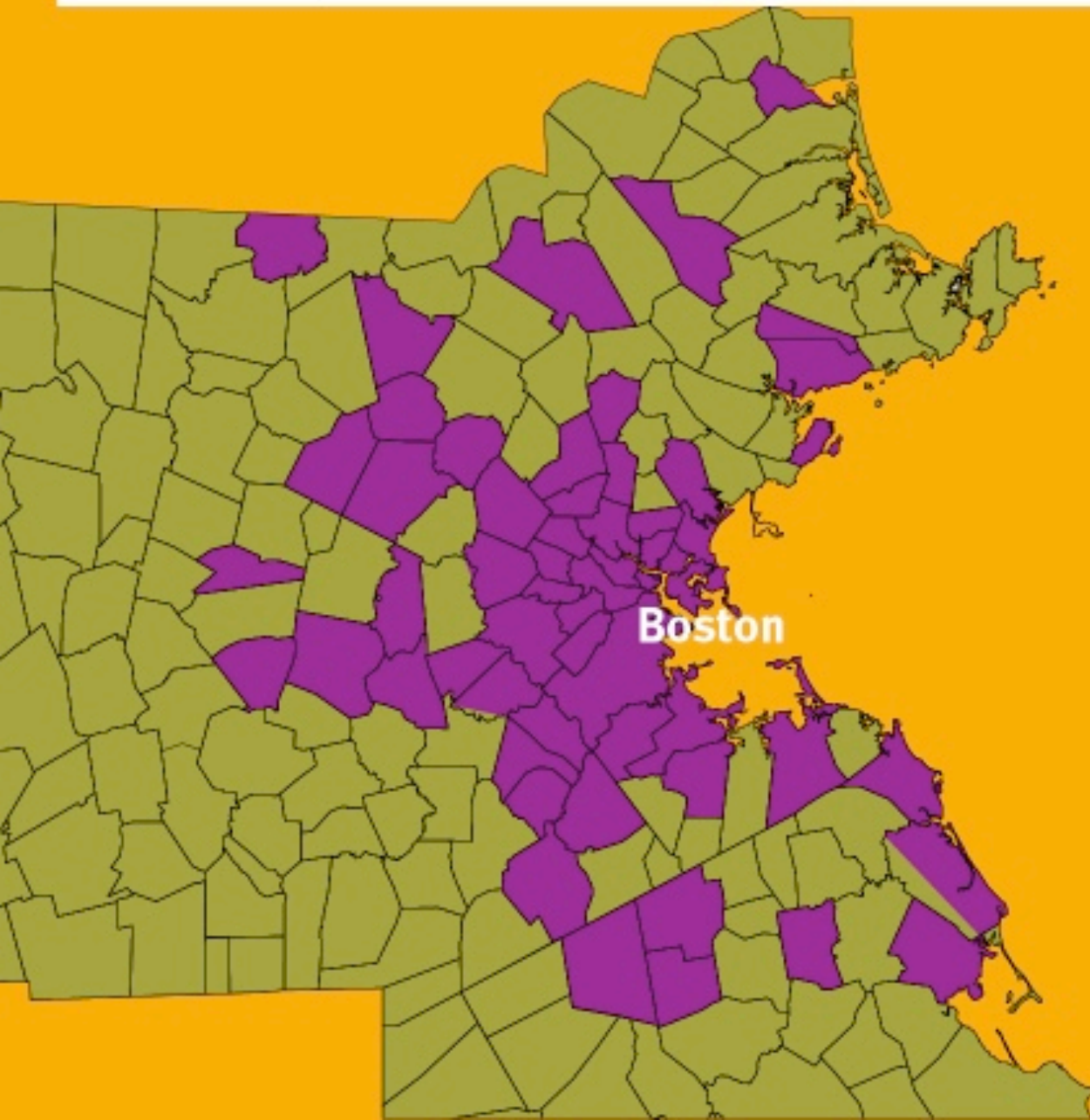
| ped advocacy 201

DURING THE NEXT 20 MINUTES

1. who we are and what we do
2. what makes a neighborhood walkable
3. how you can make a difference

1. who we are/what we do

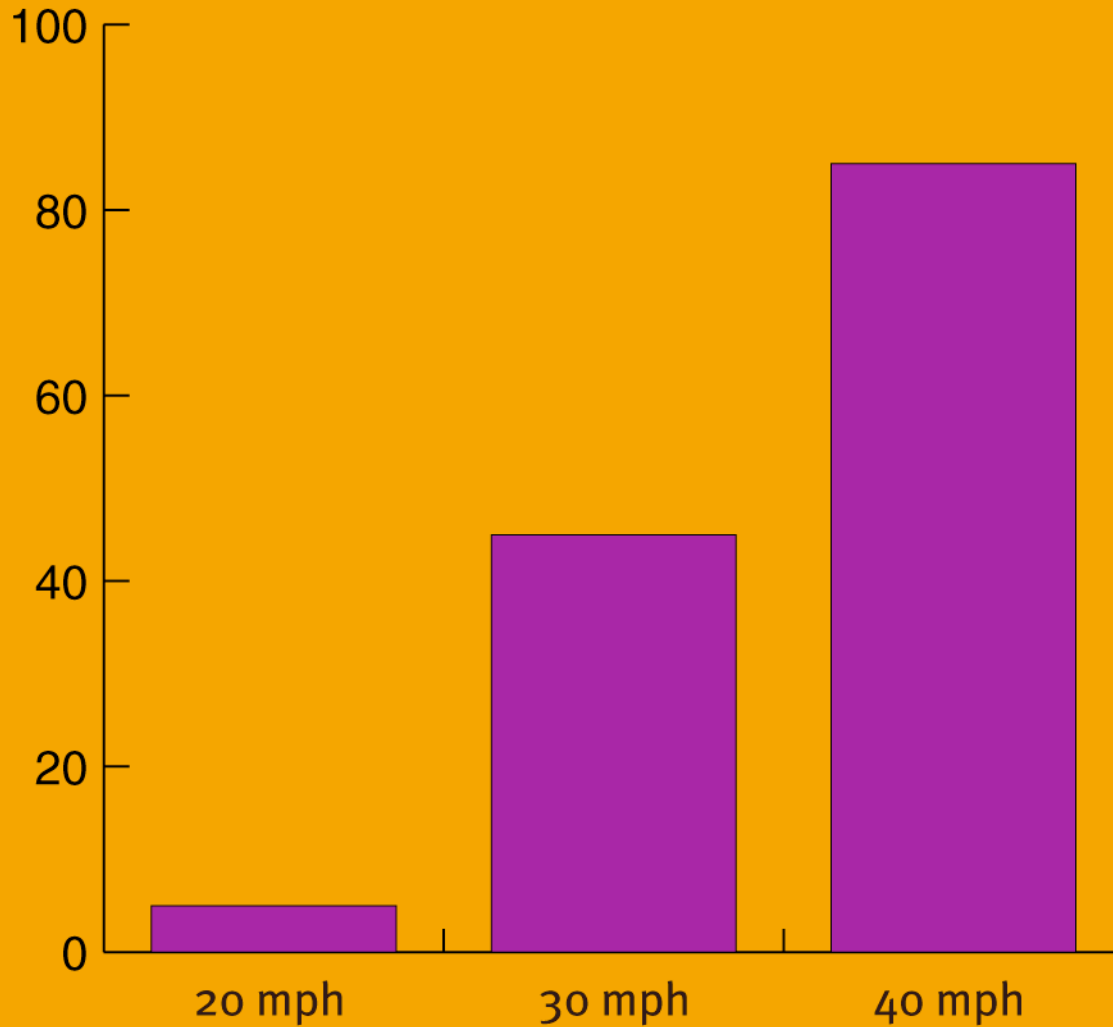
Membership distribution in Eastern Massachusetts



Making Massachusetts more walkable

WalkBoston makes walking safer and easier in Massachusetts to encourage better health, a cleaner environment and vibrant communities.

Speed kills—pedestrian probability of death



Speed
well-designed
neighborhood
streets keep
motorists at
20 or 25 mph

2. walkable neighborhoods

What makes a neighborhood walkable?

- good sidewalk design
- good street design
- safe intersections & crossings
- safe and consistent light timing
- clean streets & maintenance

sidewalks



FURNISHING ZONE

SHY ZONE

WALKING ZONE

Sidewalk zones

- Furnishing zone — attractive/useful amenities and infrastructure
- Walking zone — a clear walking path
- Shy zone — a two foot buffer since people can't walk right up against storefronts or benches



Furnishing zone

- trees, benches and cafes, mail boxes, trash cans, bike racks should be confined to this area
- buffered by a 2 ft. shy zone
- this will allow a clear walking area



Walking zone

- clear of mail boxes, trash cans, trees, benches, bus shelters, cafes, sign boards, signal/sign poles, etc.
- width is based on the number of people anticipated



Residential Area

- WalkBoston recommends a **minimum 5-foot** clear walking path
- enough to accommodate two people walking side-by-side, or passing



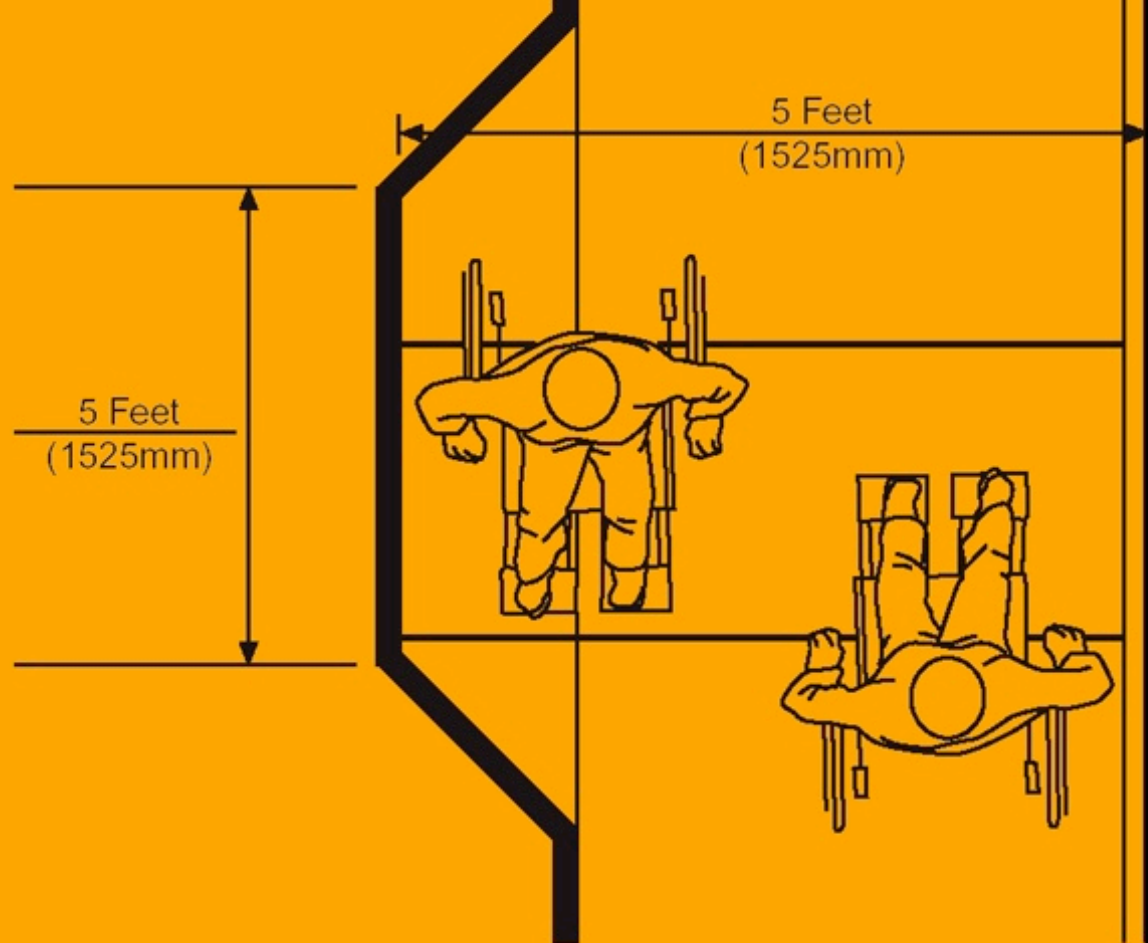
Commercial Areas

- WalkBoston recommends a **minimum 8-foot** clear walking path
- width is based on the number of people anticipated
- plus a “shy zone” and a “furnishing zone”



Use your feet to measure

- it's an easy way to estimate on the fly



Minimum width

- the Americans with Disabilities Act [ADA] requires a **minimum 3 feet** of unobstructed sidewalk passageway
- public sidewalks less than 5 feet wide are required to include a 5-by-5 foot passing space every 200 feet



Tree grates

- provide tree grates if tree pits extend into the walking zone



Curb cuts

- driveways/entryways should be narrow with flat, continuous sidewalks
- limit the frequency



Walking surfaces

- flat and smooth concrete or asphalt are best
- uneven surfaces trip walkers and cause vibrations for wheelchair users



Surfaces of bricks and pavers

- can trip walkers and cause vibrations for wheelchair users
- are slippery when wet and hard to shovel in snow
- require frequent and expensive maintenance



Accent paving

- visually appealing
- walking surface is smooth



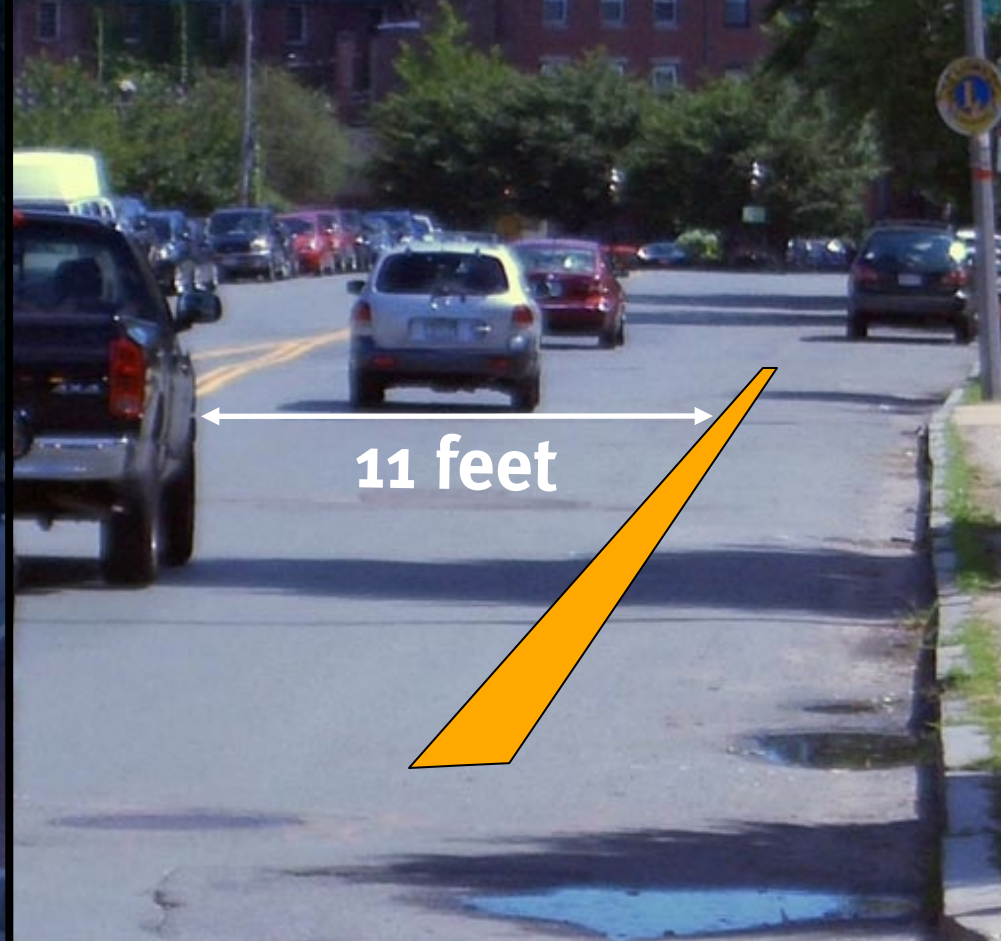
Suitable options

- minimize trip hazards
- smooth for wheelchairs
- easy to use and maintain in winter

street design

Elements that keep pedestrians safe

- slowing traffic speeds
- narrow lane widths
- parking buffers
- vertical elements
- raised crosswalks



Lane widths

- lanes should be no wider than 11 feet on main streets
- narrowing a travel lane from 11 feet to 10 feet reduces speed by 7 mph



Parking

- buffers walkers from traffic
- slows down traffic



Vertical elements

- trees, streetlights, etc. along the roadway narrow its perceived width and naturally slow drivers

crossings & intersections

Fact:

54% of pedestrian/vehicle crashes occur at intersections. Repainting, reshaping, retiming make a big improvement.



Crosswalks

- two parallel lines is standard
- ladder is better and worth the extra cost
- repainted regularly to maintain safety and effectiveness



Innovative crosswalk treatments

- sunken lights
- ground in design
- heavy painted



Safer crossings

- raised crosswalks are visual, acoustical and physical reminders to slow down



Curb extensions

- shorten crossing distance



Slowing traffic speeds

- break up long straight aways with mid-block crossings
- install curb extensions, alternate-side parking, rumble strips, etc.



Passable sidewalks

- sidewalks should be continuous, unobstructed and clear
- be sure to keep your hedges and trees trimmed



Access to crosswalks

- keep free of street furniture, light poles etc. [infrastructure]
- these things belong in the furnishing zone with other amenities



Curb ramps

- accommodate people with functional [wheelchairs, canes, walkers]



Ramp position

- should be in-line with crosswalk
- not a detour into traffic or 1/2 way down the street



Textured paving

- when street and sidewalk are the same level, texture can differentiate
- this is especially important for the visually impaired [ADA requirement]

light timing



Exclusive vs concurrent

- Exclusive — ped and vehicle movements never occur at the same time
- Concurrent — ped movements run parallel with vehicle movements



Exclusive signalization [ped/vehicle movements never occur at same time]

- no ped/vehicle conflicts
- good for elderly, school children
- causes longer wait times for peds [studies show peds wait only 30 secs.]

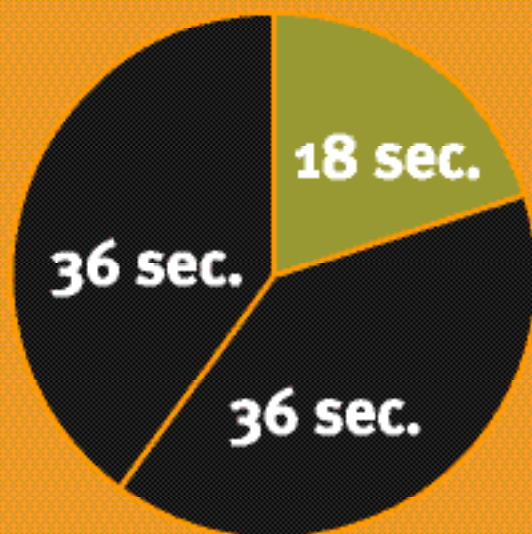


Concurrent signalization [peds move on green, parallel w/ vehicle movements]

- reduces wait for peds
- reduces jaywalking rate
- turning vehicles conflict with peds
- bad for intersections with

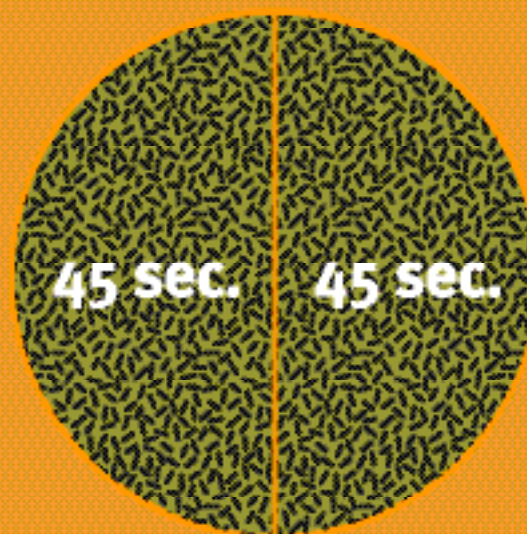
Traffic light signal cycles 90 sec. cycles shown. Studies show peds only wait 30 sec.

■ walk
■ drive
■ shared



exclusive signal

[cars, peds move separately]



concurrent signal

[cars, peds move together]

Leading pedestrian interval [LPI]

- gives the pedestrian a head start of 3–5 seconds
- turning vehicles are more likely to yield to a pedestrian already in the crosswalk
- little additional delay for vehicles

Enhancing concurrent signalization

- leading pedestrian interval [safety]
- countdowns [expectation]
- no right turn on red at busy intersections [safety]
- 90-second maximum cycle length [expectation]
- no walk buttons [expectation]



Countdown lights

- studies show that when countdown lights are installed at a high-accident intersection, pedestrian accidents drop by 50%

WalkBoston signal timing recommendations

- frequent & longer WALK times
- short pedestrian wait times
- automatic WALK / eliminate push buttons
- WALK concurrent with vehicle green
- include LPI for safety
- eliminate right turn on red at busy intersections

3. maintenance



Clean streets

- residents, merchants and municipalities can work together to keep streets and sidewalks free of debris and graffiti
- solar bins need emptying 2x's daily, traditional ones up to 15x's per day



Crosswalk repainting

- request repainting regularly to maintain visibility and safety
- this is something you can get done easily and can ask for right now



Snow clearance

- municipalities, property owners and residents are responsible for clearing snow from sidewalks & crossings

Resources

- Institute for Human Centered Design [adaptenv.org]
- walkablecommunities.org
- walkboston.org
- pedestrian transportation plan [cambridgema.gov]
- masshighway design manual [mhd.state.ma.us]
- Natl. Ctr for Bicycling & Walking [bikewalk.org]
- Federal Highway Admin. Ped & Bicycle Program [safety.fhwa.dot.gov/ped_bike/ped/index.htm]

...and support WalkBoston

| ped advocacy 201

617.367.9255 | info@walkboston.org | www.walkboston.org



MAKING MASSACHUSETTS MORE WALKABLE