



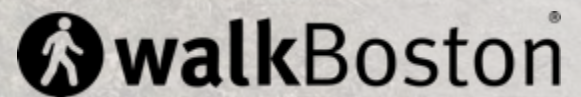
Williamsburg, MA



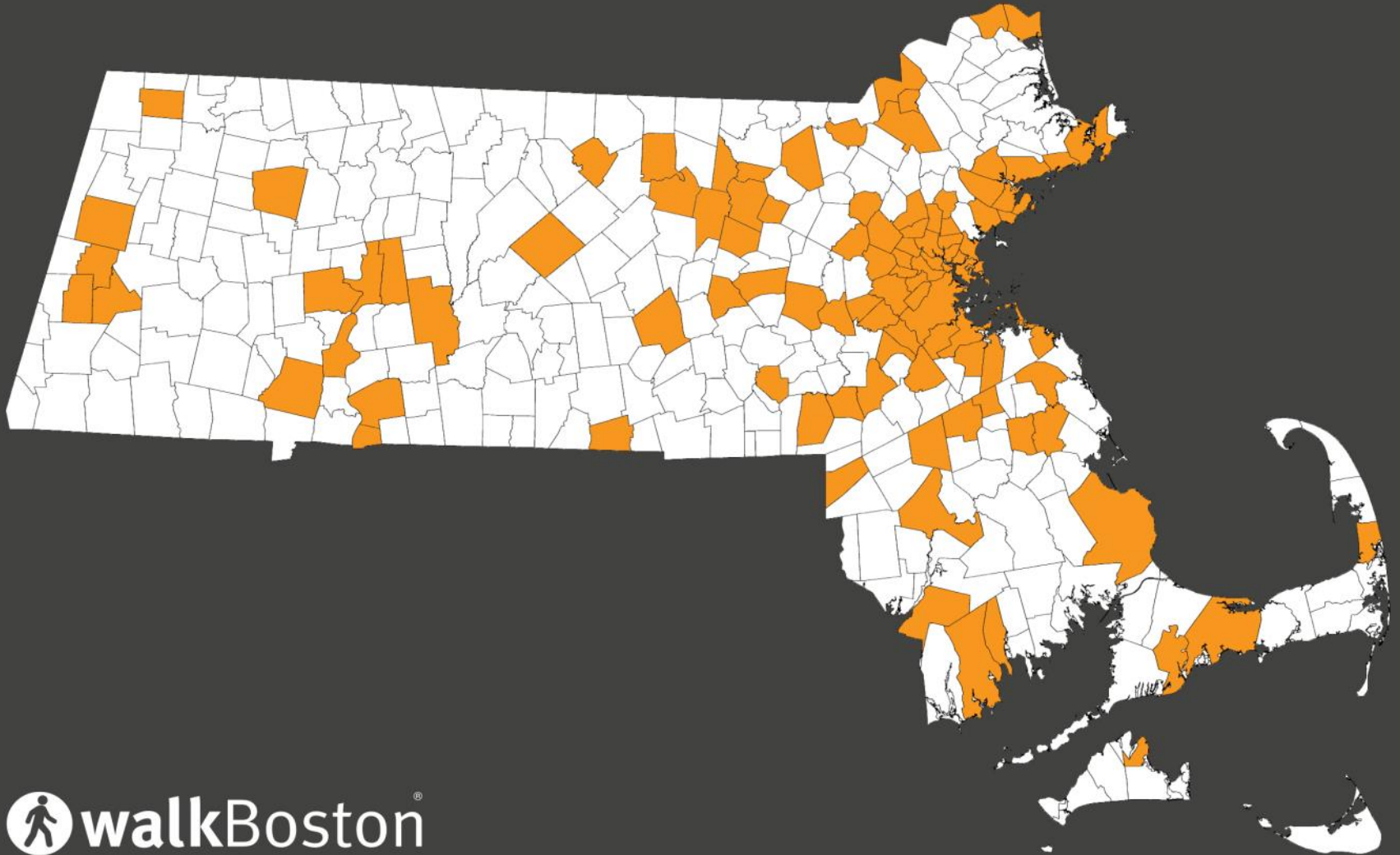
Belchertown, MA

Age-Friendly Walking in Small and Rural Towns

April 18, 2018



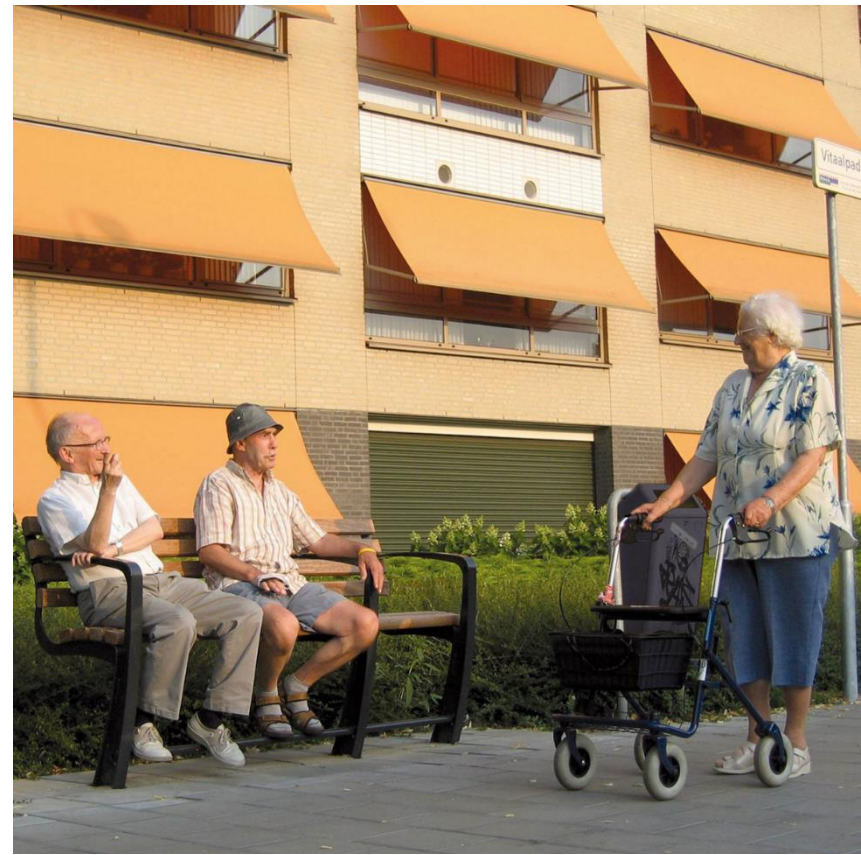
WalkBoston works with communities across the Commonwealth



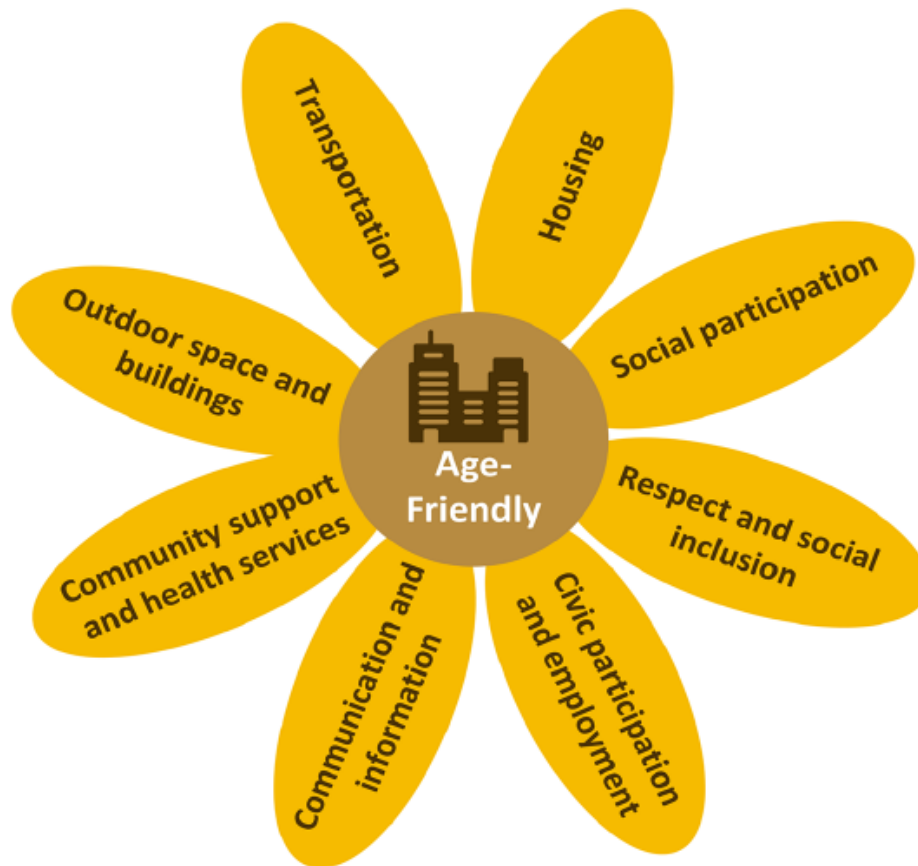
What is Age-Friendly Walking?

What is Age-Friendly Walking?

- Sidewalk conditions/maintenance
- ADA compliance
- Benches
- Lighting
- Shade
- Public restrooms
- Signals
- Crosswalks
- Traffic calming
- ...and more!



Improving Boston's Walkability a Priority for Seniors



Source: Adapted from WHO by S. Harris (Design for Aging Committee, BSA)

- Nearly 50% of all listening session recommendations centered on **improving Boston's walkability**
- **Conditions of sidewalks** and **timing and location of crosswalks** are a primary challenge
- **Trash** and **graffiti** make walking unpleasant in some areas
- **Safety** and **availability of parks** are strengths

Age-Friendly Walking Principles

- Walkability is key to ensuring that seniors can age in community, maintain good physical, cognitive and mental health, access important goods and services, remain socially and civically active, and maintain physical and economic mobility
- Age-Friendly Walking presents a frame to bring new collaborators and diverse stakeholders together
- *Safe and comfortable walking for seniors means safe and comfortable walking for everyone!*

Walkability in Practice

- Connections
- Destinations
- Safety
- Comfort

Walkability can be . . .





Allows people to get where they need to go

- Streets and sidewalks balance walking, biking, transit and cars
- Paths and crosswalks are where they are needed
- Designing for all people – 8-80 philosophy



Variety

- Mix of offices, shops, restaurants and residences
- Lots of destinations that appeal to different people



Provide safe crossings and smooth walkways

- Signs and crosswalks alert drivers to potential walkers
- Walking surfaces are smooth and well-lit



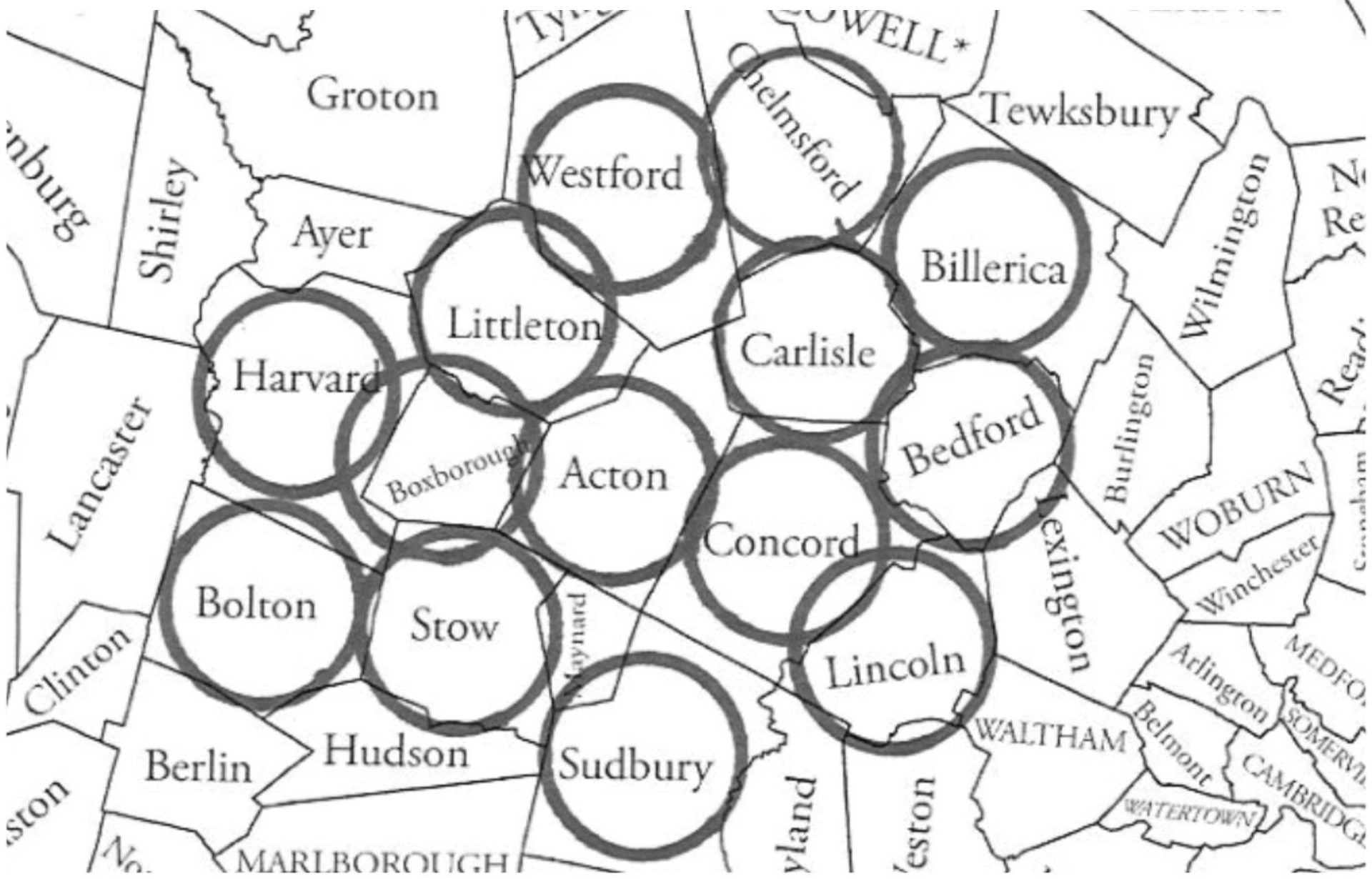
Attract people

- Banners and art contribute to civic pride
- Festive lighting encourages evening activity year-round
- Installations can activate street life

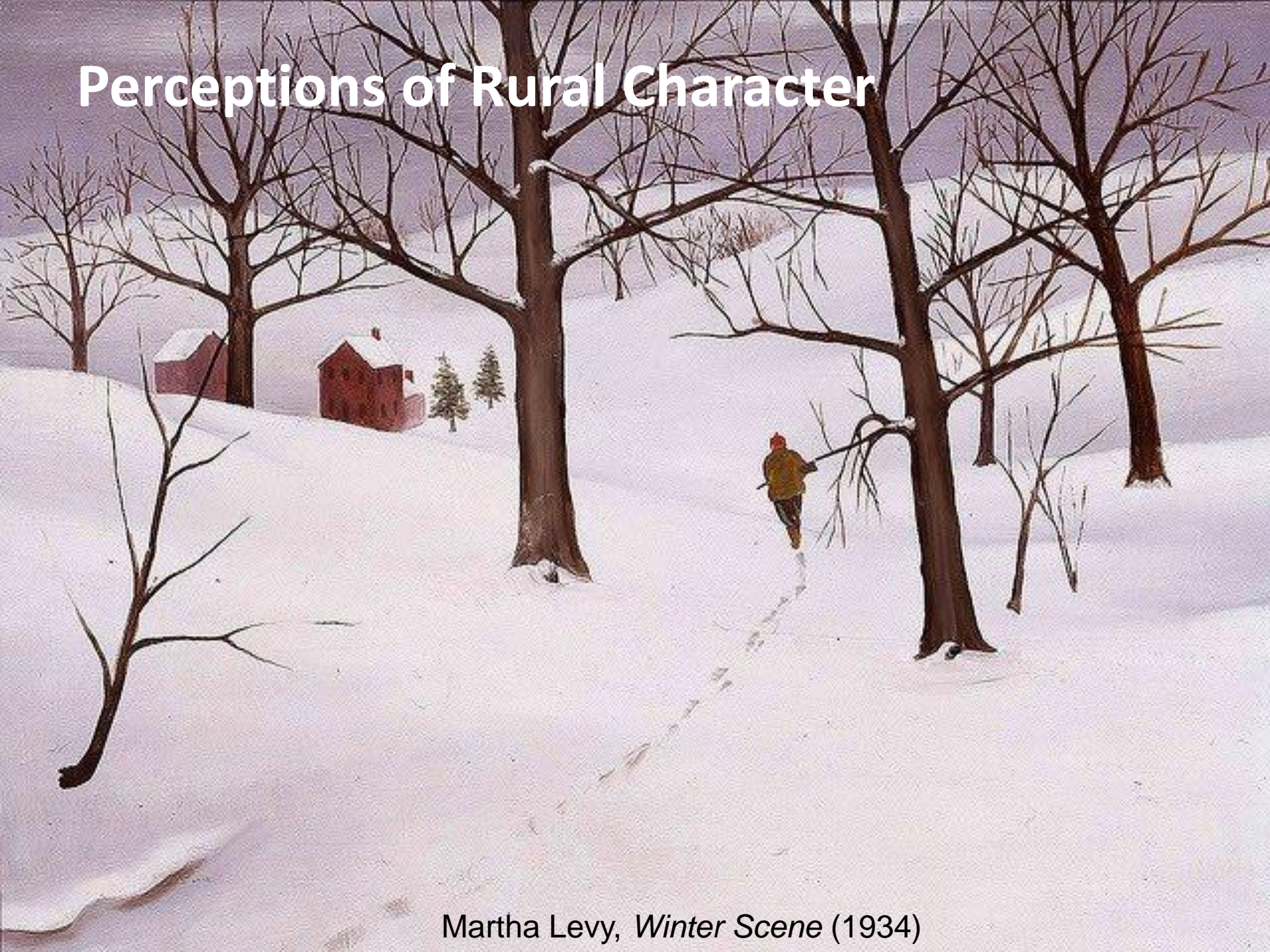
Walking and Walkability in Rural Communities

- Character, scale and language
- Rural walkway types
- Common issues around walking in rural communities

MA towns are often six miles across



Perceptions of Rural Character



Martha Levy, *Winter Scene* (1934)

Rural Walkways

- Hiking trails
- Regional multi-use trails
- Road shoulders
- Sidewalks with curbs
- Roadside path
- Meandering roadside path
- Village Center

Hiking trails

A photograph of a forest trail. In the foreground, a large tree trunk is on the left with a white marker. The trail is a rocky, moss-covered path leading through a forest of bare trees. The sky is clear blue.

Metacomet-Monadnock Trail

Regional multi-use trails

A paved multi-use trail, likely for hiking and biking, stretches into the distance, flanked by dense green trees and foliage. The path is marked with a dashed yellow line down the center. The scene is captured from a low angle, looking down the length of the trail.

Minuteman Regional Trail

Road shoulder



Taneytown Road – Gettysburg National Military Park

Sidewalk with curb



Gardner, MA



Belchertown, MA

Roadside path



Lincoln, MA

Meandering roadside path



Common issues around walking in rural towns and villages

- Crossings
- Connections to village centers
- Narrow Right-of-Way (ROW)
- Traffic speed



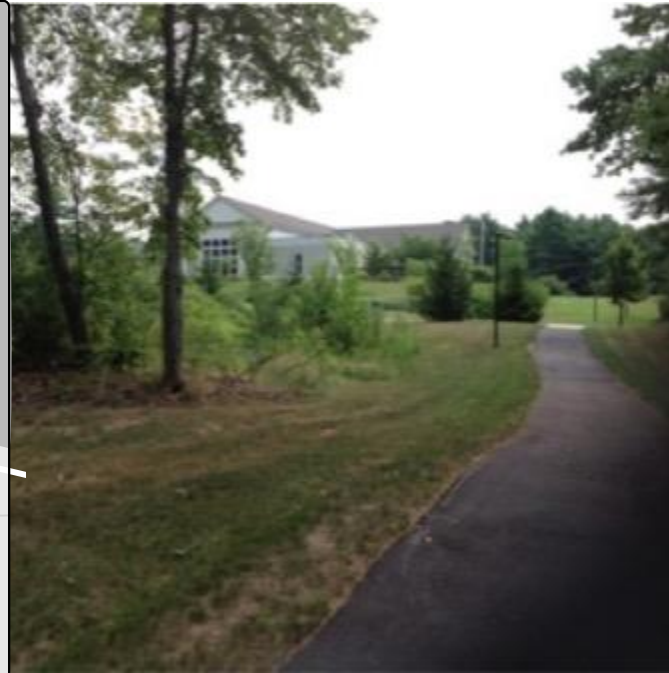
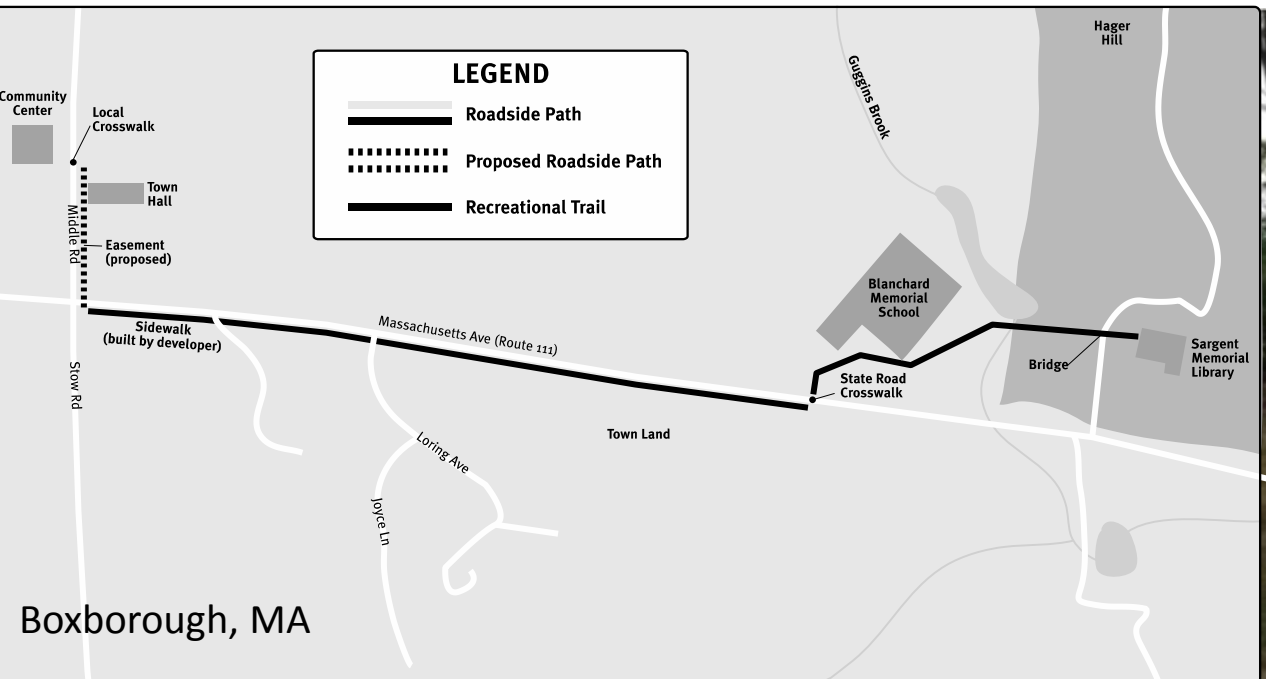
Williamsburg, MA



Williamsburg, MA

Focus areas in rural communities

- Village Centers
- Schools
- Areas with higher densities
- Areas of concern – high crash locations



Recent work in Rural Communities

Belchertown (pop'n 14,649)

Lenox (pop'n 5,025)

Turners Falls (pop'n 4,470)

Northfield (pop'n 3,032)

Williamsburg (pop'n 2,480)

Huntington (pop'n 2,180)

Goshen (pop'n 1,054)

Urban, Rural and Suburban Complete Streets Design Manual

FOR THE CITY OF NORTHAMPTON AND COMMUNITIES IN
HAMPSHIRE COUNTY

January 2017



Prepared by:
Alta Planning + Design

722 Cambridge Street
Cambridge, MA 02141



Road design affects **walkability**



Traffic speed and pedestrian survival

HIT BY A VEHICLE
TRAVELING AT:

20
MPH



9 out of 10 pedestrians survive

HIT BY A VEHICLE
TRAVELING AT:

30
MPH



5 out of 10 pedestrians survive

HIT BY A VEHICLE
TRAVELING AT:

40
MPH

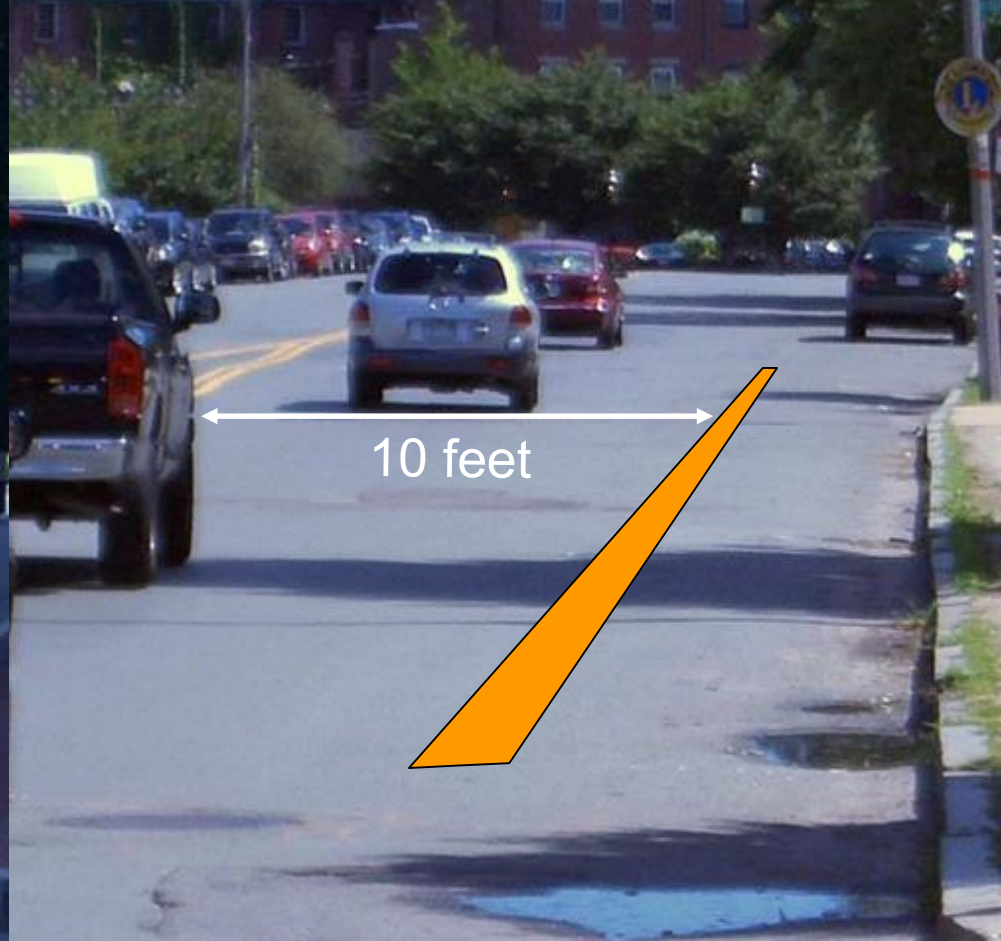


Only 1 out of 10 pedestrians survives

<http://t4america.org>

Road design elements to slow traffic

- Narrow lane widths
- Curb extensions
- Raised crosswalks
- Pavement markings



Lane widths

- Lanes should be no wider than 10 feet on main streets
- Narrowing a travel lane from 11 feet to 10 feet reduces speed by 7 mph
- Striping can cut a 16-foot lane down to an 10-foot lane



Curb extensions

- Shorten crossing distance
- Make walkers more visible
- Provide larger waiting areas (and space to store snow, away from walking zone)
- Can provide informal public spaces



Crosswalks

- Two parallel lines is standard
- Ladder is much more visible and widely recognized: worth the extra cost
- Should be repainted regularly: visibility is key to effectiveness



Safer crossings

- Raised crosswalks (aka speed tables) are visual, acoustical and physical reminders to slow down
- In-street pedestrian signs warn drivers of mid-block crossings

PEDESTRIAN FACILITIES

RAISED CROSSWALK

A raised crosswalk can eliminate grade changes along the sidewalk and give pedestrians greater prominence as they cross the street. Raised crosswalks should be used where there is moderate to high pedestrian volumes and / or safety concerns.

***Raised Crosswalks***

Raised crossings can act as speed humps, slow motor vehicles in advance of sidewalk and trail crossings.

Pedestrian elements to improve safety and comfort:

- Wide, continuous, smooth sidewalks
- Separation from curb (verge)
- Few curb cuts; tight curb radii
- Street furnishings (trees and benches)
- Wayfinding signs



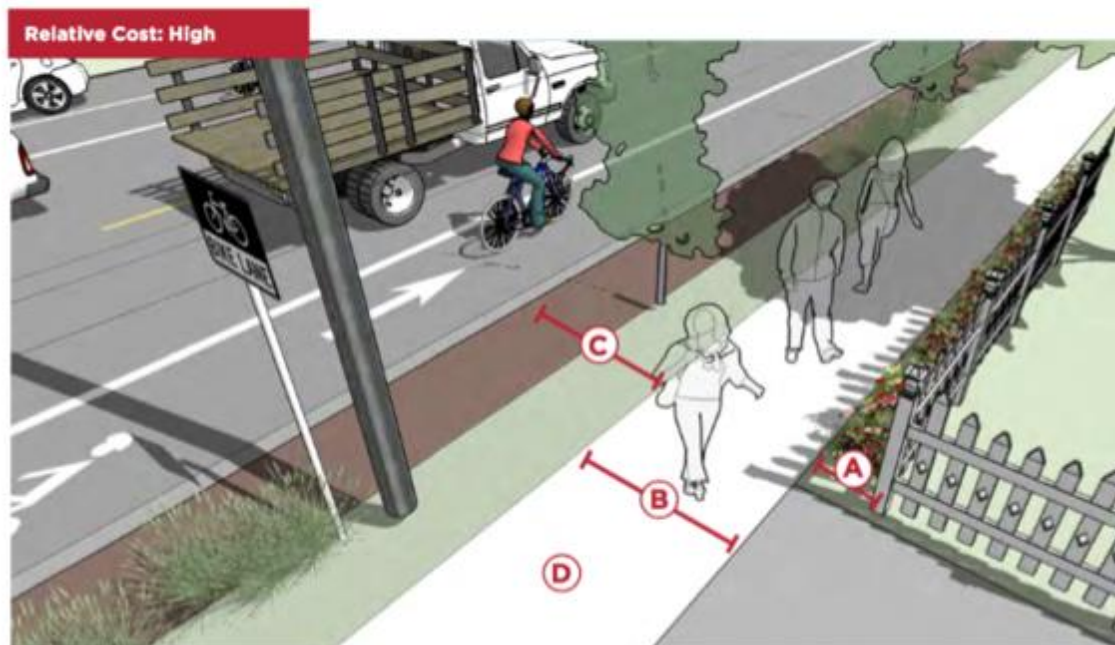
Passable sidewalks

- Sidewalks should be continuous, unobstructed and clear
- Hedges and trees should be trimmed

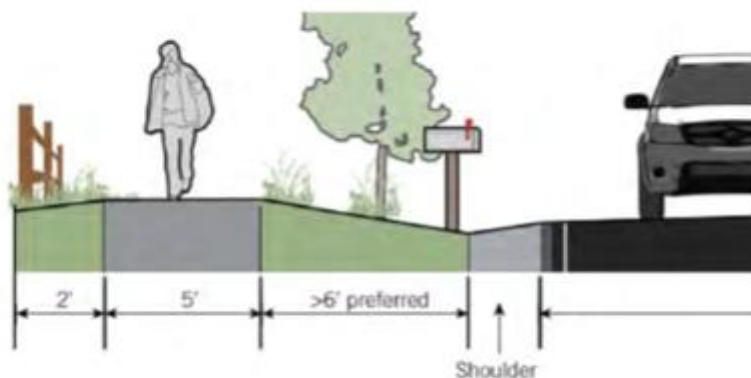
PEDESTRIAN FACILITIES

SIDEWALKS

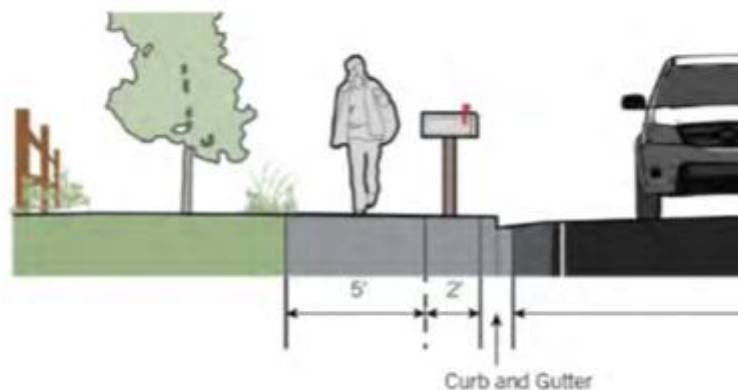
Sidewalks provide a dedicated space intended for use by pedestrians that is safe, comfortable, and accessible to all. Sidewalks are physically separated from the roadway by a curb or unpaved buffer space.



Urban, Rural and Suburban Complete Streets Design Manual

Sidewalk with Buffer Separation

Sidewalks with buffer separation are preferred for user comfort and allow for easier implementation of accessible curb ramp and driveway design.

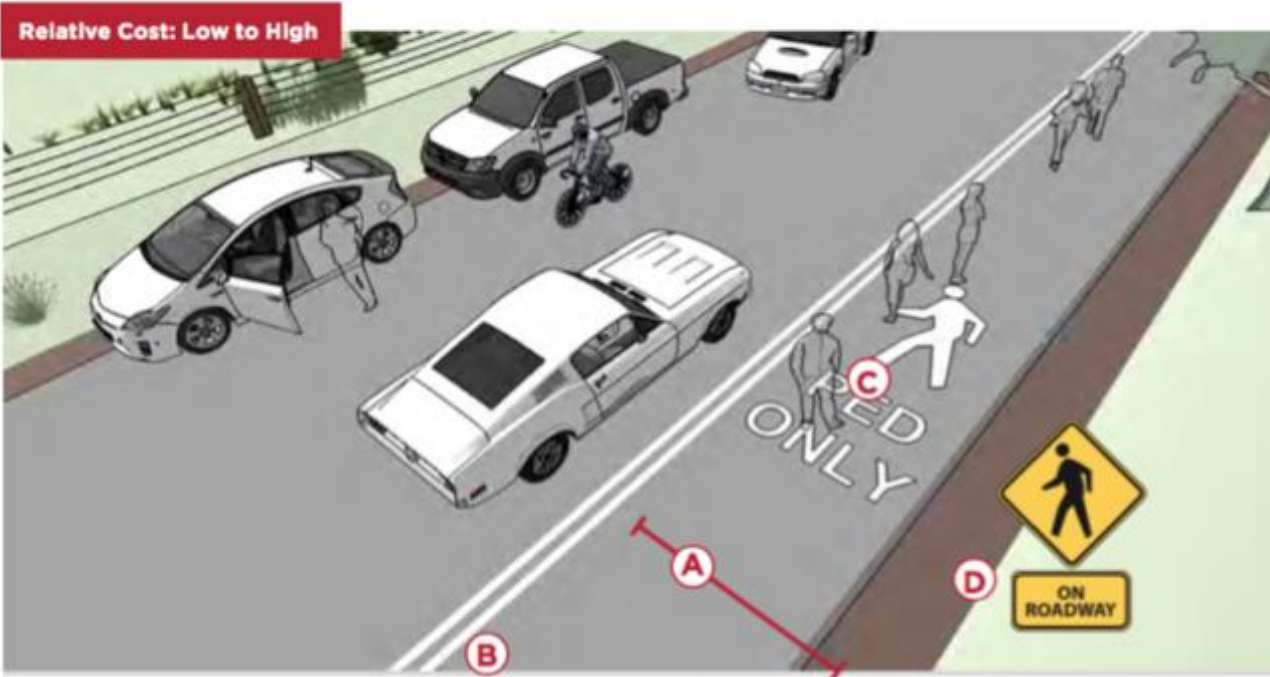
Sidewalk with Curb Separation

Sidewalks without buffer separation may be constructed adjacent to a curb or curb and gutter combination. An additional 2 feet of paved sidewalk width should be provided so that furnishings do not encroach upon the sidewalk width.

PEDESTRIAN FACILITIES

PEDESTRIAN LANE

A pedestrian lane is a low-cost alternative to a separated path or sidewalk and is appropriate on roads with moderate speeds and volumes. Though less effective than a sidewalk, the lane provides a space for pedestrians to walk and separated from motor vehicle traffic by roadway striping.



Pedestrian Lane



A painted pedestrian lane provides designated space for walking when there is no sidewalk available. In this photo, the bike lane enhances the pedestrian lane as a type of buffer separation.



Thick lane line markings discourage encroachment into the pedestrian lane space.

PEDESTRIAN FACILITIES

LOCAL SHARED ROADWAY

A local shared roadway (AKA, yield street) is a simple road designed to serve pedestrians, bicyclists and motor vehicle traffic within the roadway. Shared roadways are only appropriate where sidewalks are not feasible, practical or desirable or where very aggressive traffic calming measures are implemented. The facility can serve local traffic volumes and maintain aesthetic preferences, and should be considered the typical form for residential local roads in a variety of urban, suburban or rural contexts.

Relative Cost: Low to High



Local Shared Roadway

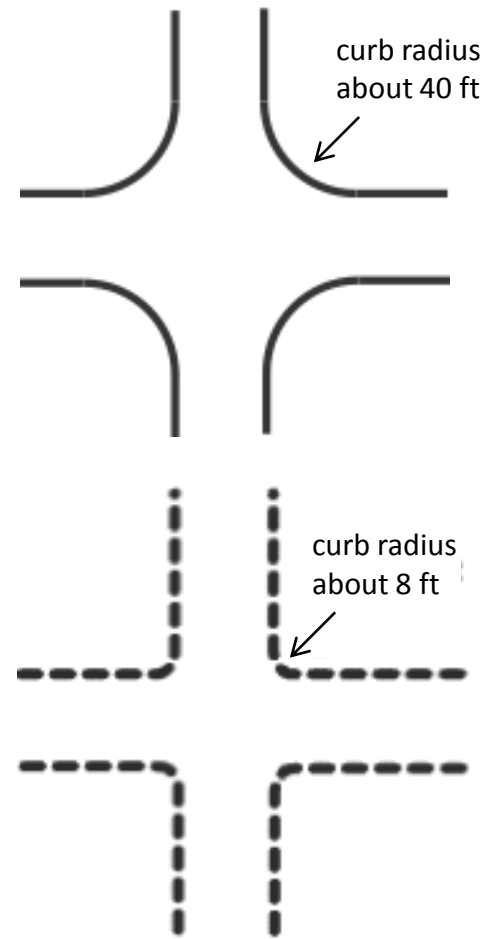


Simple unlined local roads can support pedestrian travel within the roadway. If pedestrian travel is intended, the roadway should meet accessibility requirements for surface stability, friction and cross slope.

Local Shared Roadway



This recently constructed roadway in a suburban neighborhood is designed to work for all road uses, without separation.

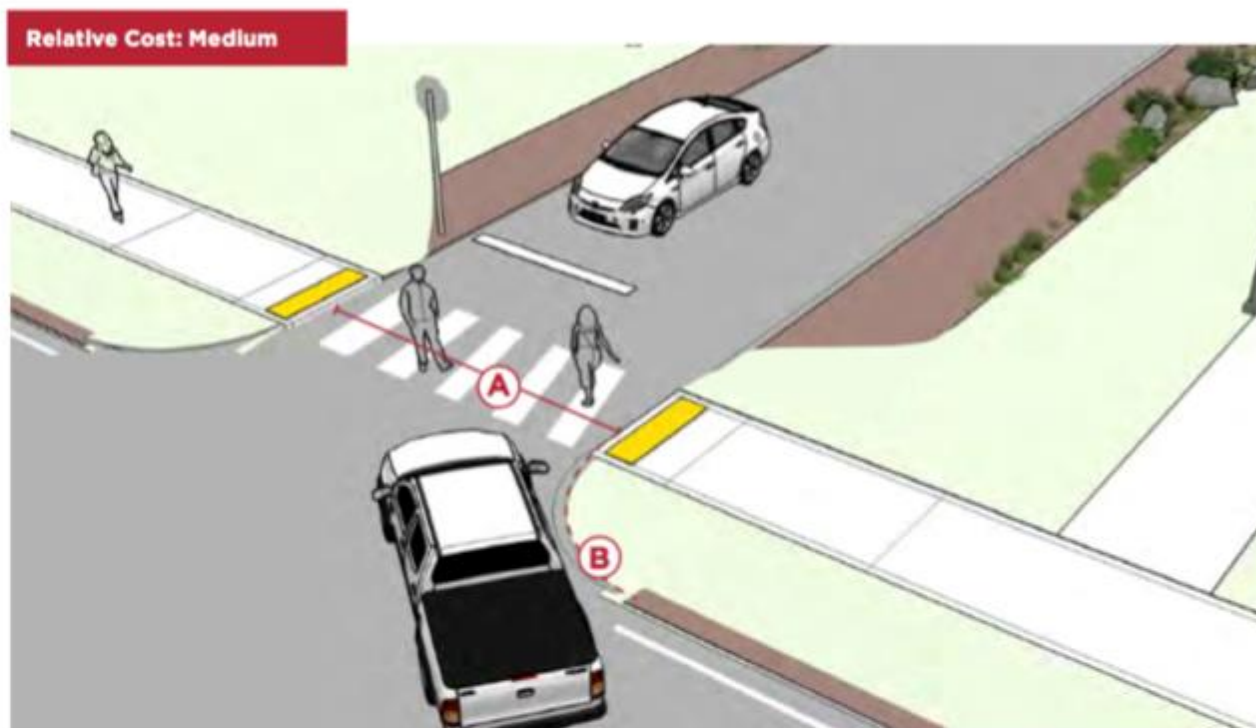


Tight curb radii (sharp corners)

- Require drivers to slow down when turning into the driveway
- Can be temporary installation or more permanent solution

LOCAL STREET ENTRANCES

The entrance to a neighborhood should signal to motorists that they are entering a slow-speed, residential district where children may be playing and pedestrians may be present.



Typical Application

- Key connections into neighborhood districts from busy streets.

Design Features

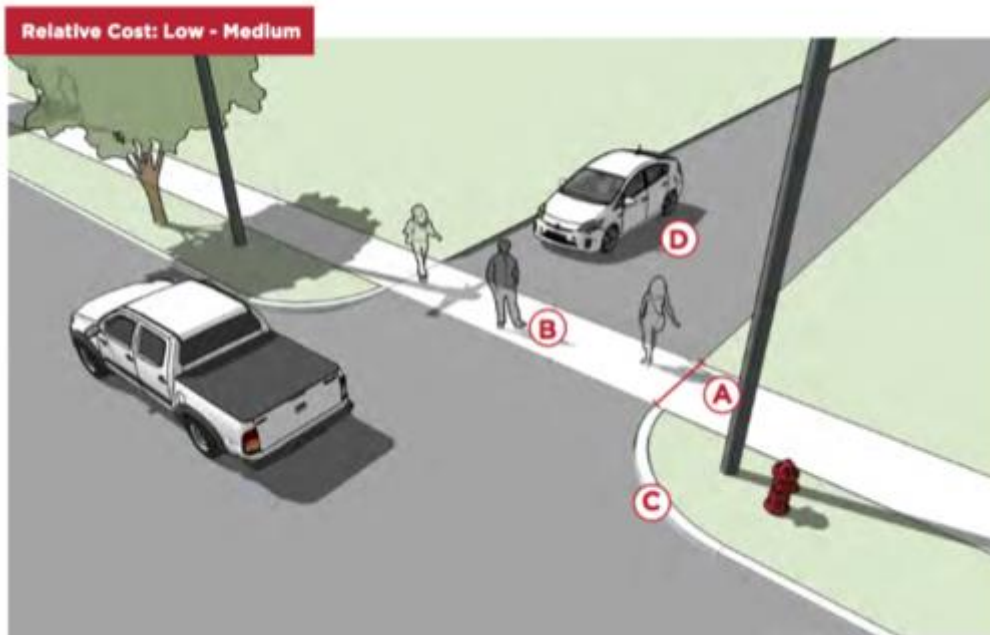
- (A)** The width of the street entrance should be reduced to 20 ft maximum from road edge to road edge.
- (B)** A small corner radius of 10 - 15 ft should be used to require slow turning speeds.
 - The crosswalk may be configured as a raised crossing, to further slow entering vehicles.

Maintenance

Landscaping and trees should be maintained to provide clear sight triangles in advance of intersections.

SIDEWALK DESIGN AT DRIVEWAYS

Driveways provide vehicle access to businesses and residences located along roadways. However, exiting and turning vehicles create conflict points with pedestrians along sidewalks. Driveway design details at sidewalk locations can help prioritize pedestrian movements, lower vehicle speeds and maximize visibility of all modes.



Sidewalk Design at Driveways



This driveway uses contrasting sidewalk appropriate construction materials to indicate to drivers that they area crossing a sidewalk area.



This driveways maintains a continuous level path with an ADA compliant sidewalk width behind the driveway apron area.



Wayfinding

- Signs with walking times reveal short distances between destinations
- Encourage walking rather than driving

Turners Falls - Montague



TURNERS FALLS
PIZZA
HOUSE





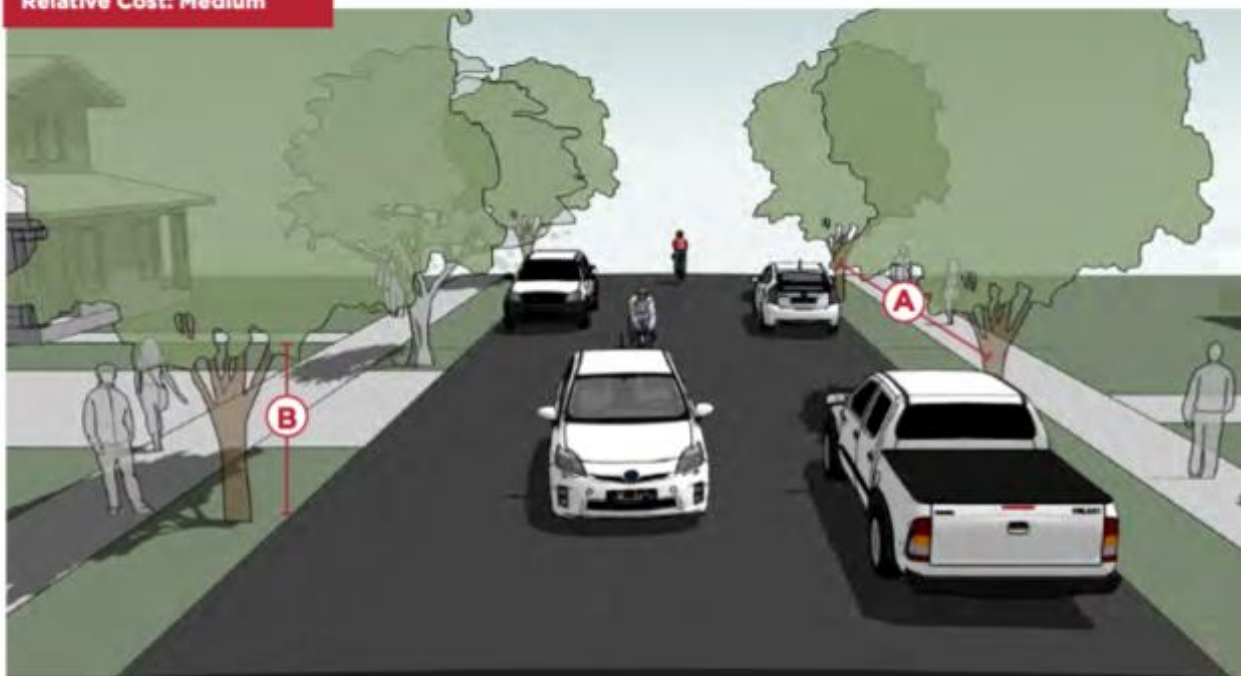
Trees, benches, trash receptacles

- Pedestrian scale elements that make people feel like they belong
- Add vibrancy to main streets and town centers

STREET TREES

Allocating roadside space to street trees and landscaping helps improve the aesthetics of the streetscape, provides a buffer between the roadway and sidewalk to improve pedestrian comfort, and can facilitate stormwater management through bioretention features such as planters and swales.

Relative Cost: Medium



Typical Application

- Street trees and landscaping typically occupies the furnishing zone of the sidewalk corridor, and is most feasible when there is sufficient space to provide an adequate width pedestrian through zone.
- Residential streets and pedestrian oriented business districts are prime candidates for street trees.

Design Features

- A** Place trees every 25-30 ft to provide a continuous canopy, enhance the pedestrian experience and help slow traffic.
- B** Consider the impact of landscaping on visibility for motorists and pedestrians at driveways and intersections. AASHTO recommends a clear vision space from 3 to 10 ft (1.0 - 3.0 m) above roadway grade to facilitate proper sight distance.

Technical Assistance from WalkBoston

- Pedestrian Advocacy 101 (“Ped 101”) community discussions
- Local walking workshops (walk audits/assessments)
- On-call strategic assistance and planning/design advice

Walk Assessment



Purpose of a walk assessment

- Foster an awareness of the elements that contribute to the walking environment
- Evaluate the safety and quality of the walking experience
- Recommend improvements

Questions?



anochur@walkboston.org

walkboston.org/age-friendly

walkboston.org/rural-walking