



Downtown Gardner Walk Audit Workshop **Gardner, MA**

December 2013

MAKING MASSACHUSETTS MORE WALKABLE

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Purpose of the Workshop

WalkBoston held a walk audit workshop for communities in the Montachusett Region working with the Montachusett Public Health Network on the Healthy Weight Initiative. During the workshop, we:

1. Reviewed the basic elements of the pedestrian environment
2. Conducted an on-street walk audit observing and recording the quality of the walking experience in Gardner
3. Discussed findings and addressed questions about the walk audit process.

An intended outcome of this workshop was for participants to use the skills learned to conduct similar workshops in their own communities.

Downtown Gardner was chosen as the study area in which workshop participants practiced their observation and analysis skills. This walk audit report serves as an example of the content, detail and recommendations contained in a typical walkability assessment.

Overall Recommendations

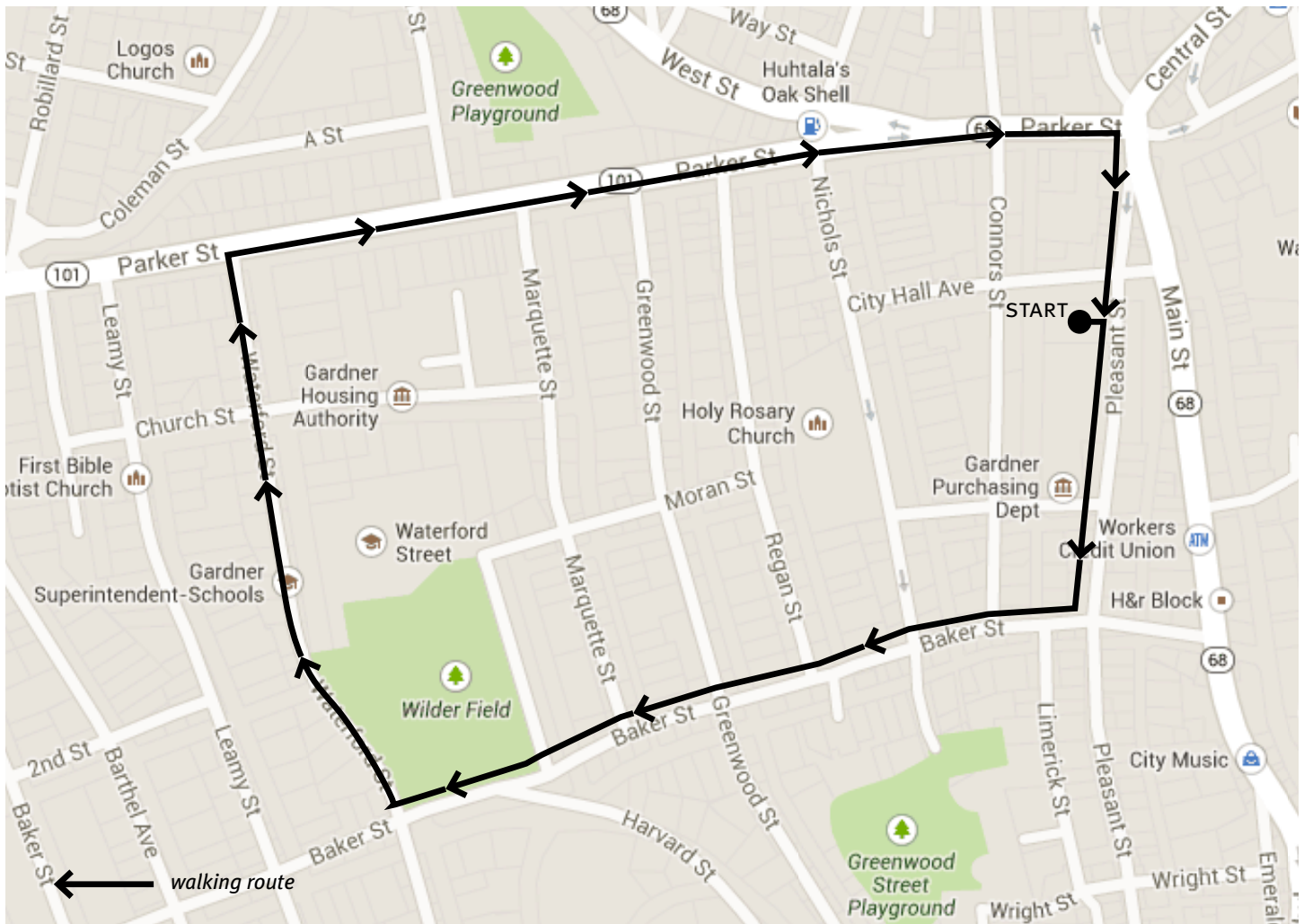
Our key recommendations include:

- Improve sidewalk conditions in some residential areas
- Use pavement markings to delineate travel lanes and parking spaces
- Install additional pedestrian crossing signs at mid-block crossings to enhance pedestrian safety
- Narrow driveway widths and tighten curb radii at the street edge

More detailed recommendations for each street can be found in the Specific Findings section of this report.



Walk audit participants in front of City Hall



Walk audit route

Walk Audit

WalkBoston conducted a walk audit on October 29, 2013 through the streets of downtown Gardner.

The following people attended the walk audit:

- Andrea Buglione, Athol Planning Department
- Rachel Catlong, City of Gardner, GIS Coordinator
- Phil Duffy, Clinton Community & Economic Development
- Deb Karan, Athol Health Department
- Philip Leger, Templeton/Royalston/Phillipston Health Department
- Bernie Sullivan, City of Gardner, Board of Health
- Ayn Yeagle, Montachusett Opportunity Council

- Stacey Beuttell, WalkBoston
- Dorothea Hass, WalkBoston

The weather was partly sunny/cloudy with temperatures in the upper 40 degrees F. We observed traffic patterns between 3:00 pm and 4:15 pm.

The walk route included a zone of municipal buildings, a variety of residential areas, a school zone, and a commercial/retail zone. We began at City Hall on Pleasant Street. Participants walked in a clockwise loop south on Pleasant Street to the Baker Street intersection. At Baker Street, we walked roughly west, past the entrance to the Greenwood Street Playground and Wilder Field to Waterford Street. At Waterford Street, we walked north past the Waterford Street School to the Parker Street intersection. At Parker Street, we turned right and walked to the downtown district before returning to City Hall.

Terminology

Below are images and definitions of the terms used to describe the walking environment in this report.

CROSSWALK AND STOP LINE

Crosswalks can be painted in a variety of ways, some of which are more effective in warning drivers of pedestrians. Crosswalks are usually accompanied with stop lines. These lines act as the legally mandated stopping point for vehicles, and discourage drivers from stopping in the middle of the crosswalk.



Crosswalk patterns
Source: USFHA



Crosswalk and stop line
Source: http://safety.fhwa.dot.gov/ped_bike/tools_solve/ped_scdproj/sys_impact_rpt/images/fig16.jpg

CURB RAMP AND DETECTABLE WARNING STRIP

Curb ramps provide access from the sidewalk to the street for people using wheel chairs and strollers. They are most commonly found at intersections. While curb ramps have improved access for wheelchair-bound people, they are problematic for visually impaired people who use the curb as an indication of the side of the street. Detectable warning strips, a distinctive surface pattern of domes detectable by cane or underfoot, are now used to alert people with vision impairments of their approach to streets and hazardous drop-offs.



Curb ramp and detectable warning strip in Woburn, MA

CURB EXTENSION / CURB BULB-OUT

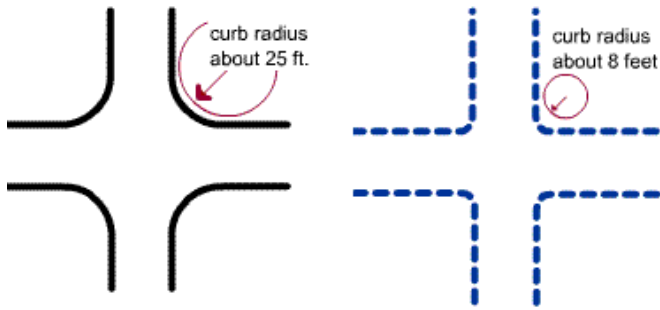
A sidewalk extension into the street (into the parking lane) shortens crossing distance, increases visibility for walkers and encourages eye contact between drivers and walkers.



Curb extensions are often associated with mid-block crossings

CURB RADIUS

A longer curb radius (on the left in figure below) allows vehicles to turn more quickly and creates longer crossing distance for pedestrians. A shorter curb radius (on the right in the figure below) slows turning speeds and provides pedestrians shorter crossing distances.



There are two excellent examples of the shortening of curb radii in Woburn, MA. The first (A) is a low-cost solution using a gravel-filled zone between the original curb line and the newly established road edge. The second is a higher-cost solution using grass and trees and extending the sidewalks to the new curb. Both work to slow traffic.

FOG LINE

A fog line is a solid white line painted along the roadside curb that defines the driving lane and narrows the driver's perspective. Fog lines are most often used in suburban and rural locations, but may be appropriate in some urban conditions.



Fog lines delineate the vehicular driving zone on wide roadways.



(A) Gravel-filled curb extension



(B) Grass, trees and extended sidewalk in curb extension

IN-STREET PEDESTRIAN CROSSING SIGN

In-street pedestrian crossing signs are used at the road centerline within crosswalks to increase driver awareness of pedestrians in the area. These signs are a relatively low-cost, highly effective tool in slowing traffic by the narrowing travel lanes. They are popular with road maintenance departments since they can be easily moved for snow removal.



Specific Findings

Below is a summary of our observations and recommendations for each street on the walking route.

PLEASANT STREET (BETWEEN CITY HALL AVE AND BAKER STREETS)

Pleasant Street is a downtown street that hosts city government buildings and parking resources between City Hall Avenue and Knowlton Street. Wide, concrete sidewalks line both sides of the street. Angled parking spaces provide 30-minute parking for those with business at the Post Office or City Hall. Surface lots behind the buildings are available for municipal employees and the public. Traffic moves relatively slowly on this street.

Multi-family residences make up the primary land use along this section of Pleasant Street. Crosswalks are painted in a ladder pattern at all intersections and at some mid-block locations. WalkBoston recommends the installation of pedestrian crossing signs, particularly at the mid-block crossings to enhance safety.

The sidewalks are in varying conditions - all concrete, but some in need of repair. The improvements made to the sidewalks and streetscape near City Hall should be extended down Pleasant Street as funding becomes available.

Recommendations

- Install pedestrian crossing signs, particularly at mid-block crossings
- Improve sidewalks and other streetscape elements on Pleasant Street south of City Hall

BAKER STREET (BETWEEN PLEASANT AND WATERFORD STREETS)

Baker Street is a downtown, residential street with two lanes of traffic (one in each direction) and parallel parking along both sides of the street (from Nichols Street west). Extremely narrow sidewalks run the length of the street - some of them date back to the 1940s with Works Progress Administration (WPA) stamps still in the concrete. Most of the sidewalks along this stretch are crumbling and in need of repair. Several front doors empty directly into the sidewalk less than five feet from the edge of the street right-of-way (ROW).

Given the narrow ROW (particularly between Pleasant Street and Nichols Street), there are limited options for widening the sidewalks. We recommend that curbs are repaired and/or installed along this stretch and that the sidewalks are reinforced and resurfaced to provide a safer walking surface.

Beyond Nichols Street, the ROW would allow wider sidewalks if a parking lane were removed from one side of the street. This recommendation may not be popular with residents if they park their cars on the street.



Narrow, uneven sidewalks along this stretch of Baker Street present challenges for many walkers.

Baker Street has no pavement marking to indicate travel lanes or parking spaces. We recommend that both road centerlines and fog lines be painted along Baker Street to help slow traffic. Centerlines separate vehicles on opposing sides of the street and discourage fast driving down the middle. Delineated travel lanes narrow drivers' perception of lane width and motivate them to drive slower.

The crosswalks across and along Baker Street are painted with a bold, ladder pattern, but are narrower than typical crosswalks. We recommend that the crosswalks be wider to draw more attention to the presence of pedestrians.

The crosswalk painted across Baker Street at the Harvard Street intersection has faded unlike most of the other crosswalks in the study area. The safety at this crossing is compromised by difficult sight lines and grade changes. There are also no sidewalks on Harvard Street or on the south side of Baker Street at this intersection. Proximity to the Waterford Street School may have been the reason for painting this marked crossing to facilitate students walking to school. A decision should be made to either enhance this crosswalk with pedestrian crossing signs and new paint or to eliminate it.

Recommendations

- Install and/or repair curbs, reinforce and resurface sidewalks on Baker Street between Pleasant Street and Nichols Street
- Remove parking lane and widen sidewalks on Baker Street beyond Nichol Street
- Paint center lines and fog lines on Baker Street
- Widen crosswalks
- Enhance or eliminate crosswalk at Harvard Street



Road center lines, fog lines and/or parking stalls on this section of Baker Street would narrow drivers' perception of the road and help to slow traffic speed.



Crosswalks are bold, but narrow.



The crosswalk at the Baker and Harvard Street intersection needs to be either removed or repainted.

**WATERFORD STREET
(BETWEEN BAKER AND PARKER STREETS)**

Waterford Street is an enjoyable walking street with well-maintained sidewalks and trees on either side. It is a residential street with single family houses, an elementary school and parkland (Wilder Field) along it. The ROW is wide enough to have two vehicular travel lanes, one in each direction, and parking on both sides of the street (even angled parking on the school side). The road is marked with a centerline and parking stalls are delineated near the Waterford Street School. A wide crosswalk with a pedestrian crossing stanchion and flashing school zone sign alert drivers to the presence of children crossing near the school entrance.

Given the wide ROW, WalkBoston recommends painting a separated bike lane on both sides of Waterford Street to provide biking infrastructure and further calm traffic speeds on Waterford Street by narrowing the travel lanes. This beautiful street could be a model for the implementation of a complete streets approach to managing the road network in Gardner.

Recommendations

- Paint a bike lane on both sides of Waterford Street to provide bike facilities and calm vehicular traffic



Waterford Street is wide enough to accommodate bike lanes in addition to parking on both sides of the street.



Waterford Street is an enjoyable walking street with well-maintained sidewalks and trees on either side.

**PARKER STREET
(BETWEEN WATERFORD AND PLEASANT STREETS)**

Parker Street (also State Route 101) is a regional connector road linking East Templeton to Gardner’s downtown center, and has both residential and commercial uses along it. The road has one travel lane in each direction and parking lanes on both sides. Sidewalks run the length of both sides of the street with no separation between the road and sidewalk. Traffic volumes and speeds are higher on this street than the others in the study area. Street crossings without signalization occur at regular intervals across Parker Street. There is a flashing yellow light at the intersection with Waterford Street most likely due to the elementary school on Waterford. All other crossings are simple painted ladder crosswalks. Additional pedestrian crossing signs would better alert drivers to the possibility of people crossing and help to tame vehicle speeds.



Crosswalks occur regularly along Parker Street.

Lots become larger, the land use switches to primarily commercial/retail, and the grade gets steeper along Parker Street east of Marquette Street. Along the northern edge of Parker Street, the sidewalk is broken up with excessively long curb cuts and surface parking lots. GFA Federal Credit Union is the worst offender when it comes to curb cuts - their entrance is four lanes wide to accommodate 2 drive-through bank teller lanes and parking lot access. The Acadien Social Club and Shell gas station also have wide curb cuts and undefined parking areas. WalkBoston recommends that driveways be narrowed and curb radii be tightened to limit pedestrian crossing distances and slow traffic.



Crosswalks, curb ramps and detectable warning strips were recently upgraded along Parker Street.

The street edge is friendlier to pedestrians along the south side of Parker Street. Other than the vacant lots at Parker and Marquette and at Parker and Greenwood, single family houses and intact commercial/retail blocks line Parker Street. While there are some vacancies, the buildings themselves create an edge that defines and enhances the walking environment. The Gardner Ale House at the Parker Street/Connors Street is a great draw to downtown Gardner.



The GFA Federal —Credit Union driveway is excessively wide with four lanes of traffic proceeding across the sidewalk.



Planter boxes along the Gardner Ale House brighten and enliven the street edge along Parker Street.



Intersections in downtown Gardner are complicated forcing traffic to move slowly. Brick walkways emphasize pedestrian crossings.

The street crossings in the downtown section of Parker Street between Nichols Street and Pleasant Street switch from simple painted crosswalks to brick crosswalks. Pedestrians are given priority in this zone. The vehicular movements at the Parker Street/Main Street/Central Street/Pleasant Street intersection are so complicated that traffic moves relatively slowly creating a safer zone for pedestrians.

Recommendations

- Install pedestrian crossing signs at mid-block crossings on Parker Street
- Narrow driveway widths and tighten curb radii in downtown area of Parker Street
- Maintain brick crosswalks and pavement markings

PLEASANT STREET (BETWEEN PARKER STREET AND CITY HALL AVE)

This short block of Pleasant Street has only one lane of vehicular traffic moving from Central Street south to City Hall Avenue. Parallel parking is available on the western side of the street. A plaza on the Parker Street corner provides an opportunity to create a pedestrian gathering space in a vital section of town. The small parking lot at the Pleasant Street/City Hall Avenue intersection could also be converted to a plaza space providing a second gathering space in the downtown district.

Recommendations

- Convert the parking lot at the intersection of Parker Street and City Hall Avenue into a public plaza space



This small parking lot at the intersection of Parker Street and City Hall Avenue could be converted to a public plaza space to provide an outdoor gathering space for the downtown area.

SNOW

Gardner is one of the few towns in the Commonwealth where the municipality shovels sidewalks. Given the high annual snowfall in Gardner, the town believes it needs wide street right-of-ways for snow storage. Assuming wide rights-of-way are the norm in Gardner, WalkBoston would recommend the regular use of paint to delineate vehicular travel lanes, bike lanes and parking zones. While paint does not decrease the distance pedestrians need to walk across the street, it has been shown to reduce traffic speeds and make the overall pedestrian environment safer.

Recommendations

- Maintain wide street ROWs to accommodate snow storage, but use paint more widely to delineate vehicular travel lanes, bike lanes and parking stalls