



## Walk Audit Weymouth, MA

July 9, 2014

Massachusetts Council on Aging Grant  
Massachusetts Department of Public Health

### **MAKING MASSACHUSETTS MORE WALKABLE**

Old City Hall | 45 School Street | Boston MA 02108 | T: 617.367.9255 | F: 617.367.9285 | [info@walkboston.org](mailto:info@walkboston.org) | [www.walkboston.org](http://www.walkboston.org)

## The community context

Weymouth has many of the attributes of a walkable community including a street system that has interconnected blocks of moderate size, a mix of land uses within reasonable proximity of many residents, a number of commercial areas that include a variety of civic uses, a mix of housing types including multi-family buildings and a wide mix of single family housing types, parks that are interspersed into many neighborhoods and a varied topography and landscape including both ponds and sea shore. In addition, Weymouth has a mix of transit services including both commuter rail and bus. This too provides an important backbone for a walkable place.

However, over the last 50 – 70 years the Town's transportation investments seem to have focused almost exclusively on vehicular travel, and to have given great preference to vehicle speed and flow over walking (or bicycling). Because of this focus, many of Weymouth's streets do not presently provide an attractive and safe walking environment.

The community now seems ready to improve the walking environment. The enthusiasm and interest of municipal staff, seniors who both participated in a walking focus group and joined in the walking audits, and several local businesspeople who joined the audits all speak to a high level of interest.

The report is organized below in three parts:

- An introduction that describes what is included in a walk audit and a discussion of terminology that will provide readers with the basic background needed to understand the recommendations.
- A summary section that includes several recommendations for immediate action and set of broad observations about the Weymouth walking environment.
- Detailed observations about each of the four walk audit areas.

## Introduction

Under a Healthy Aging grant program administered in partnership by the MA Council on Aging and Department of Public Health, WalkBoston worked with a number of Weymouth municipal staff, local residents and businesspeople to carry out walk audits of four of

Weymouth's commercial districts. Each of these areas has seen senior pedestrian fatalities and/or accidents, and each was identified as problematic for senior walking safety during a focus group held in June 2014.

The four areas are:

- Broad/Washington Streets
- Columbian Square
- Jackson Square
- Bridge/Green Streets

A walk audit is a tool commonly used to identify problems with the pedestrian infrastructure. The assessments are often targeted to areas that have been identified as having existing safety problems and/or as areas that serve vulnerable populations such as seniors, children or transit users. These problems often include discontinuous sidewalk networks, unsafe street crossings, high speed traffic, damaged sidewalks and paths, unreliable pedestrian signals, accessibility (ADA) issues, lack of pedestrian crossing signage, and maintenance issues, such as crosswalks that need repainting or vegetation that has encroached on the pedestrian right-of-way.

Once identified, infrastructure improvements are categorized as short-term or longer-term priorities, and recommendations are made about carrying out improvements and repairs incrementally as funding becomes available. A safe and enjoyable walking environment is crucial to encouraging more seniors to walk and be physically active, a critical ingredient of healthy aging. A walking environment that is safe, convenient and attractive for seniors is of course also an environment that will encourage all Weymouth residents to walk and will also benefit the community's retail districts (see Attachment 1, "Good Walking is Good Business").

This report summarizes the existing conditions and recommends strategies and infrastructure improvements to enhance walking safety. Many of the observations relate to vehicular speed, visibility for both pedestrians and drivers, and street crossings. Lower-cost solutions are emphasized, but longer-term, more costly investments are also suggested.

## 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](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.

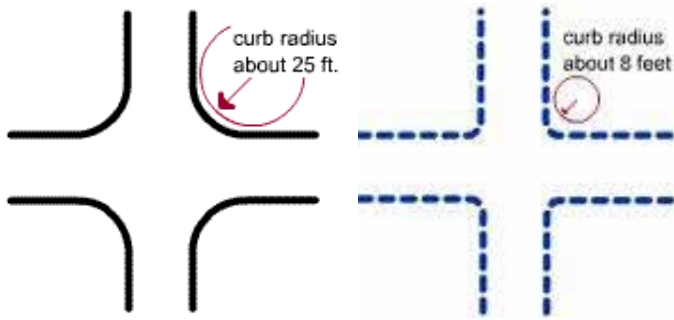


*Curb extensions are often associated with mid-block crossings*



## 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.



## Leading Pedestrian Indicator (LPI)

A leading pedestrian indicator gives pedestrians an advance walk signal before motorists get a green signal, giving the pedestrian several seconds to start walking in the crosswalk before a concurrent signal is provided to vehicles. This makes pedestrians more visible to motorists and motorists more likely to yield to them. Typical LPI settings provide 3 to 6 seconds of advance walk time.



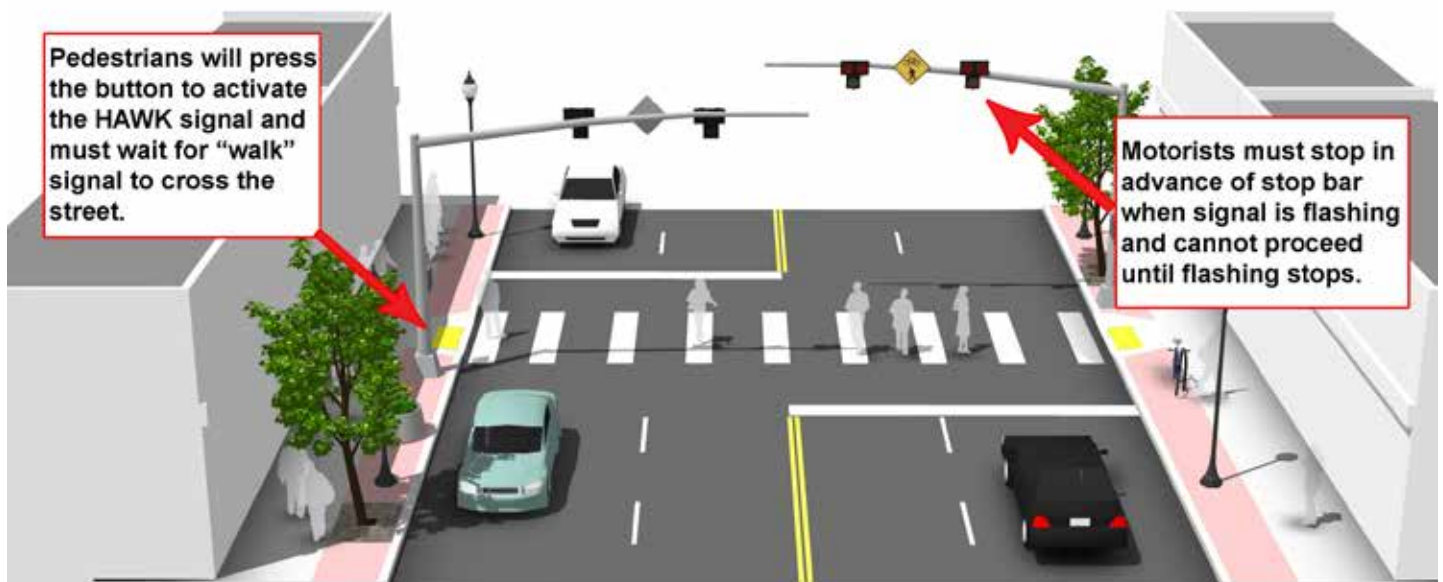
Source: [http://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/ped\\_scdproj/sys\\_impact\\_rpt/images/fig34.jpg](http://safety.fhwa.dot.gov/ped_bike/tools_solve/ped_scdproj/sys_impact_rpt/images/fig34.jpg)

## High-Intensity Activated crossWalk (HAWK)

A HAWK beacon (High-Intensity Activated crossWalk beacon) is a traffic signal used to stop road traffic and allow pedestrians to cross safely. It is officially known as a Pedestrian Hybrid Beacon (PHB). The purpose of a HAWK beacon is to allow protected pedestrian crossings, stopping road traffic only as needed. Where standard traffic signal 'warrants' prevent the installation of standard three-color traffic signals, the HAWK beacon provides an alternative.



Source: <http://www.achdidaho.org/Projects/Images/NewHawkSignal092209%20014.jpg>



Source: <http://bloomington.in.gov/media/media/image/jpeg/13144.jpg>



## Summary of Findings

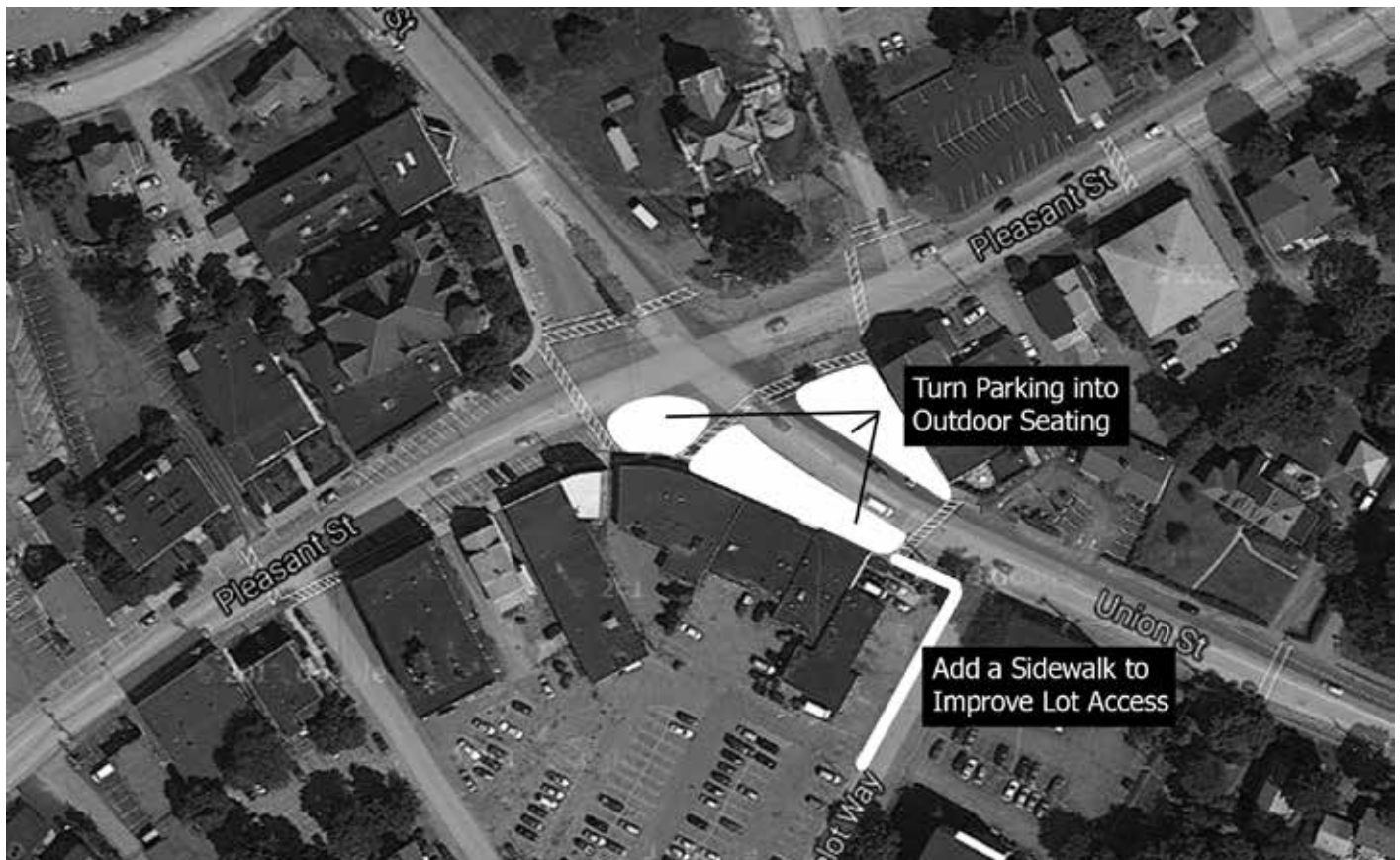
Immediate action recommendations - The four walk audits revealed two areas where WalkBoston recommends that Weymouth undertake immediate action:

- Implement a set of relatively low cost improvements to create a dramatically improved walk-friendly place at Columbian Square. This will both provide an immediate and tangible benefit for Weymouth's residents and help create community support for tackling more pedestrian improvements. There seemed to be great interest among the walk audit participants for re-claiming a pedestrian place at Columbian Square. The concept diagram below is intended to illustrate some of the low cost place-making strategies that Weymouth could explore. WalkBoston would recommend that the Town work with landscape designers and planners to develop a more detailed plan before proceeding.
- Address the safety issues facing seniors in the Broad/Washington area by adding better-marked

and regulated pedestrian crossings in several locations. Based on the multiple accidents in the area (including fatalities), the high number of seniors and the speed and visibility issues identified during the audit we recommend that Weymouth implement some immediate safety measures and also undertake a traffic engineering review to identify longer term improvements. See sections 6 and 7 of the Broad/Washington discussion below.

Broad observations – Based on the information gathered during the four walk audits WalkBoston has developed a short list of overall observations that we believe the Town should keep in mind as it begins to undertake walking improvements.

1. Weymouth's wide streets and many intersections with wide turning radii (at both small and large roadways) encourage traffic to move at relatively high speeds and make many of the community's streets and intersections difficult for seniors (and others) to cross. As Weymouth maintains and re-constructs the town's roadways it should begin to shorten pedestrian crossing distances, reduce vehicle turning speeds, reduce vehicle travel



speeds, and provide space for wider sidewalks and bicycle accommodations. Here are two ways to alter streets to favor pedestrians

- Narrow lane widths - low cost options include painting fog lines, adding bike lanes and adding on-street parking; over the long term and at higher cost the town should consider shifting curb lines to make sidewalks wider, especially on streets where pedestrians are present; and
- Tighten turning radii - options include paint, temporary bollards, asphalt curbs, and relocated granite curbing.

2. Many of Weymouth's crosswalks and intersections need pedestrian safety improvements such as:

- Re-painting crosswalks with reflective ladder or zebra style striping (and maintaining the paint),
- Adjusting signal timing to provide appropriate WALK times and reduce wait times for pedestrians to get a WALK signal (which may also reduce vehicle wait times as well).
- Adding in-street pedestrian crossing signs,
- Adding curb extensions to narrow crossing distances (starting with paint and bollards, eventually adding curbs and full re-construction),
- Prohibiting parking within 20 – 30' of crosswalks to improve visibility of and for pedestrians, and
- Adding flashing "HAWK" signals or pedestrian activated signals in critical locations.

3. A sustained program of sidewalk upgrading and maintenance is needed to fix the many uneven, missing and poorly maintained sidewalks that were observed during the walk audits.

4. Provide ADA compliant curb ramps. As the town undertakes street and sidewalk maintenance curb ramps need to be added and/or fixed, and in some locations this will require accompanying sidewalk widening and re-grading.

5. Review crosswalk provision at all bus stops. Several of the bus stops observed during the walk audit did not have very proximate crosswalks, which results in pedestrians crossing at unprotected locations.

6. Review existing signal timing at intersections where it stops all traffic on all legs of the intersection. Assure that the timing and geometry

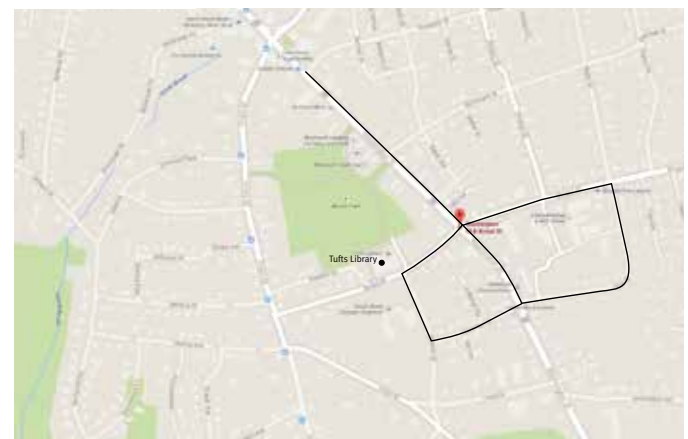
allows pedestrians to cross the whole intersection. Walk Audits.

## BROAD AND WASHINGTON STREETS

The Broad/Washington Street area is located on the northwestern side of Weymouth, near both Weymouth Landing and the boundaries with Braintree and Quincy. The area includes several significant senior housing developments, small retail establishments, individual residences, a public library and a private school. MBTA bus service is provided along Washington Street.

- Washington Street is State Route 53, and just south of the audit area Route 53 splits into two branches: Main Street (Route 18) which extends the full length of Weymouth into Abington; and the continuation of Washington Street (Route 53) that extends east into Hingham. North of the study area Route 53 continues into Braintree. This part of Washington Street handles traffic from two major highways serving the South Shore.
- Broad Street, east of the intersection with Washington Street, is a major east-west route across the Town and connecting into Hingham, where it connects with Route 228.
- The intersection of Broad and Washington Street is one of the most heavily traveled in the Town, with many turning movements.

The walk audit was held on Monday, July 14, 2014 between 9:30 and 11:30 am. A map of the route is shown below.



Weymouth- Broad St. and Washington St.  
Walk Audit Map

July 14, 2014

• Parking/Meeting Place



Map of walk audit route

### 1. Broad Street west of Washington Street

Weymouth's main library is located on Broad Street, one block from Washington Street, and Weston Park is located behind the library (with multiple access points from local streets). Many seniors walk to the library from the senior housing located east of Washington Street, which is one reason that the Broad/Washington intersection is so important for pedestrians. Broad Street in front of the library, while not as heavily traveled as Broad Street east of Washington, is quite busy. All vehicle access to the library and its parking areas is via Broad Street and the adjacent municipal parking lot contains about 50 parking spaces that serve both the park and the library. Additional municipal parking is provided on Franklin Street about one block west of the library.

#### Short-term recommendations

- Add in-street pedestrian crossing sign at the crosswalk from Stetson Street.
- Remove the parking space in front of the library closest to the Broad/Stetson Street crosswalk to improve visibility for pedestrians using the crosswalk.

#### Longer-term recommendations

- Relocate the Stetson Street crosswalk on Broad Street to directly align with the west sidewalk along Stetson Street (there is no sidewalk on the east side of Stetson St.).
- Add a curb ramp on the library side of the street to connect with the crosswalk.
- Add a new crosswalk across Stetson Street where existing curb ramps may be used.

### 2. Stetson Street, both sides

Stetson Street has no crosswalks, either at Broad Street or at Common Street, and where sidewalks exist they are in poor condition. Since Stetson Street does not carry much traffic, any improvements should be targeted to places where they would be most useful to local residents, nearby seniors, or South Shore Christian Academy students.

- Short-term recommendations
  - » Improve surface conditions of the sidewalk along the west side of Stetson Street
- Longer-term recommendations
  - » Consider adding a sidewalk along the east side of Stetson Street.

### 3. Common Street, both sides

There are no sidewalks on either side of Common Street, a very lightly used street.

#### Longer-term recommendations

- Consider adding a sidewalk on one side of Common Street.

### 4. Washington Street between Common/Vine and Broad Streets

Washington Street carries heavy traffic, including significant truck traffic. The posted speed is 30 mph but vehicles were moving closer to 40 mph in a number of locations. The combination of heavy, high-speed traffic and the curve in Washington Street as it approaches Common/Vine creates a significant impediment to pedestrian crossings anywhere other than at signalized crossings (which are several hundred feet away). A strip shopping development occupies the space between Vine Street and the Union Towers senior housing project. It occupies virtually half of the street frontage and has many wide curb cuts into Washington Street. Notwithstanding the poor pedestrian conditions in this area, several pedestrians were observed crossing the street.

#### Short-term recommendations

- Trim shrubbery that obstructs the sidewalk at (apparently) publicly owned land on the west side of the street.
- Remove trash from sidewalk
- Narrow curb cut and repair sidewalk in front of



*Overgrown vegetation obstructing sidewalk on Washington Street*



- business on the western side of Washington Street
- Consider adding a planter along the frontage of the strip development mall on the eastern side of Washington Street to provide a more attractive and interesting walk along the sidewalk, OR consider delineating a sidewalk by adding curbing, painting and/or paving treatments where the broad curb cuts lack sidewalks.

#### Longer-term recommendations

- Consider adding additional speed limit posting and enforcement on Broad Street for the safety of pedestrians and especially seniors. Changes in the road (such as narrower lanes) would be needed to reduce travel speeds.
- Improve lighting of the sidewalk on the western side of the street where there are some poorly lit areas



*Extended curb cut on Washington Street*



*Limited nighttime visibility on Broad Street*

#### 5. Washington Street between Broad Street and the Post Office (103 Washington Street)

Going downhill into Weymouth Landing from Broad Street, sidewalks were generally adequate and fairly well maintained, although a few narrow sections of sidewalk exist next to tree pits. Two pedestrian paths on the west side of the street connect into Weston Park. A number of large and small commercial establishments are located in this area.



*Pedestrian crossing in front of Post Office on Washington Street*

#### Short-term recommendations

- Improve the pedestrian crossing in front of the Post Office
  - » Paint the crosswalk with zebra or ladder style markings
  - » Remove the parking space at east end of crosswalk to improve visibility of pedestrians waiting to cross. Several pedestrians were observed at the crossing and each of them experienced difficulties seeing traffic and being seen by drivers.
  - » Add in-street pedestrian crossing sign to alert drivers to pedestrian crossing.
  - » Remove tree wells and trees and repave openings to widen very narrow points in the sidewalk, OR extend sidewalks into tree wells to conform to ADA standards, possibly using pervious pavement to protect existing trees.
  - » Repair the sidewalks that are in poor condition.
  - » Encourage additional Washington Street abutters to add planters to brighten the walk for pedestrians, and thank the businesses who already maintain nice plantings for their contribution to the walking environment.



*Tree well on a narrow sidewalk on Washington Street*

- » Trim shrubs now encroaching on the sidewalk at the path to Weston Park.
- » Clean debris from sidewalk.
- » At Eclipse Hair Designs (155 Washington Street, between Broad and Richmond), a sidewalk leading from a driveway into the business has a sloped ramp up to the entrance, un-separated from the sidewalk. This creates a tripping hazard for pedestrians. The Town should work with the building owner to make safety improvements for the entrance.

#### Longer-term recommendations

- Further Improve the pedestrian crossing in front of the Post Office
  - » Construct a bulb-out on the east end of post office crosswalk.
  - » Add pedestrian activated traffic signal.
- Consider adding a mid-block crosswalk with bulb-outs at Richmond Street to connect with the path into Weston Park.
- Fix curb cuts to conform to ADA standards.
- Consider greater posting and enforcement of 30 mph speed limit for the safety of pedestrians and especially seniors. Changes in the road (such as narrower lanes, on-street parking) would help reduce travel speeds.



*Overgrown shrubbery near entrance to Weston Park*

#### 6. Intersection of Washington Street and Broad Street

This intersection is very busy, with many turning movements especially to and from the eastern side of the intersection. Many seniors live near the southeast corner of this intersection, with more than 450 occupants of nearby public and private senior apartments and an adjacent nursing facility. Many of the seniors living here use the library, restaurant and retail facilities on the opposite sides of Washington and Broad Streets. The group noticed that the intersection has very wide curb radii that encourage fast moving turns by vehicles in the intersection (in particular on the east side of the intersection facing the former firehouse and near the senior housing).

The southeast corner of the intersection at the edge of the high-rise senior housing structure was notable for its wide sidewalk, and generous bench placement in front of a landscaped lawn.

#### Short-term recommendations

- Add zebra or ladder striping to all crosswalks.
- Review and consider modifications to the WALK signal times and phases to facilitate safe pedestrian crossings and reduce wait times for pedestrians.
- Add pedestrian countdown signals.
- Review possibility of narrowing all turning radii with paint and temporary treatments to test the impacts on pedestrian sense of safety. photo 3
- Consider signing the safest route for seniors to use for access to the library (test which crossings are most comfortable on each leg of the intersection).

- Add signs warning drivers that many seniors cross the street at this intersection.
  - » Add trash containers at the seating area on the southeast corner.
- Longer-term recommendations
  - » Permanently narrow turning radii to slow turning vehicles and shorten pedestrian crossing distances.
  - » Fix all curb cuts to meet current ADA standards and for proper alignment.
  - » Review lane widths to determine if they could be narrowed to reduce speeds and crossing distances.



*Pedestrian crossing at Broad and Washington Streets*



*Long curb radius at Broad and Washington Streets*

## 7. Broad Street east of Washington Street

This portion of Broad Street carries heavy, fast traffic and has been the site of several fatal pedestrian accidents. Access between senior housing on the south side of the street and both Jimmy's Broad Street Diner and other destinations on the north side was noted as a particular concern. Two unprotected crosswalks exist, one serving the diner at the corner of Phillips Street, and the second at a mid-block location about halfway between Phillips and Washington Streets. The crosswalk at Phillips Street appears to not meet ADA requirements (of particular importance because of the many seniors with disabilities who use the crosswalk) because the landing on the north side of the street is sloped up toward the sidewalk (between the curb and the property line). While the locations of these two crosswalks are not ideal in terms of sight lines and traffic speeds, they seem to serve pedestrian desire lines.

### Short term recommendations

- Add an in-street pedestrian crossing sign at the Phillips Street crosswalk
- Paint the Phillips Street crosswalk with fresh zebra or ladder style striping
- Paint tighter turning radii at Phillips Street to shorten crossing distance
- Add signs warning drivers of an upcoming pedestrian crossing and of large number of seniors using the crossing



*Pedestrian crossing near senior housing on Broad Street*



- Consider adding a pedestrian activated HAWK signal at mid-block pedestrian crossings. (The High-Intensity Activated crossWalk beacon is used to stop road traffic to allow pedestrians to cross safely, stopping road traffic only as needed.)
- Consider eliminating the crosswalk closest to Washington Street (consult with residents of the senior housing beforehand, and coordinate with prior improvements to the crossing at Broad/ Washington)
- Repair sidewalks along Broad Street

#### Longer-term recommendations

- Re-build corners at Phillips Street to shorten crossing distance
- Review feasibility of adding bump outs on Broad Street to shorten crossing distance

#### 8. Vine Street between Broad and Washington Streets

Vine Street has a mix of single and multi-family housing. The street directly connects Broad and Washington Streets, and takes a right-angle turn at its midpoint. Due to this direct connection, Vine Street serves as a bypass for traffic trying to avoid delays at the Broad/ Washington intersection and thus traffic can be quite heavy on what would otherwise simply be a narrow side street. Most of Vine Street does not have sidewalks, and because of the traffic and the poor sight lines, Vine Street is not a safe place to walk. A narrow and poorly maintained sidewalk exists along part of the south half of the street, much of it overgrown with shrubbery.

#### Short-term recommendations

- Paint the existing and missing crossings at the Broad/Vine/Webb Streets intersection with zebra or ladder style striping.
- Consider posting “watch for pedestrian” signs at each end of the street.
- Remove vegetation that has overgrown the existing sidewalk.

#### Longer-term recommendations

- Rehabilitate the existing sidewalk along the part of Vine Street closest to Washington Street.
- Consider adding a sidewalk along the parking lot adjacent to the southwest corner of Vine and Broad Streets, with a long-term plan to add sidewalks on one side of Vine Street.

- Consider reducing curb radii, to aid in slowing traffic at both intersections.
- Consider adding more lighting because Vine Street is poorly lit which is a problem for pedestrians who would not be very visible when walking in the street at night (because there is no sidewalk) night



*Poor nighttime visibility on Vine Street*

## COLUMBIAN SQUARE

Columbian Square, busy with traffic and pedestrians, is the largest commercial district in Weymouth. It is immediately adjacent to the large South Shore Hospital and many medical office buildings. The Square is distinctive architecturally, with the stately Fogg Opera Building, the Fogg Library, and the Old South Union Church dominating the local view.

The walk audit encompassed the Square itself, as well as a portion of Pleasant Street, Main Street and Fogg Road. The walk was held on Monday, July 21, 2014 between 9:30 -11:00 AM. A map of the route is below.



Weymouth- Columbian Square  
Walk Audit Map

• Parking/Meeting Place



*Map of walk audit route*

## 1. Heart of Columbian Square – Intersection Pleasant/Union/Columbian

With its surrounding land uses of retail, restaurant, civic, residential and institutional buildings, Columbian Square has all the makings of a walkable “main street” district. The Square has been studied extensively and its streets and sidewalks are programmed for reconstruction as part of the mitigation to be provided by developers of the Weymouth Naval Air Station. However, this mitigation is dependent on the progress of the Air Station project and it is unknown when it will take place.

All four approaches to the Square are two-lane streets that widen out substantially into four- or six-lane streets to accommodate turning vehicles within the square. Due to the many turn lanes, the streets are very wide and are difficult for pedestrians trying to cross. In addition, along Union Street just west of Pleasant Street (an area with a number of restaurants) diagonal parking creates a very wide street area (approximately 120 feet) and drivers can't see pedestrians wanting to cross where diagonal parking restricts their view.



*Old opera house in Columbian Square*

- » Remove diagonal parking spaces on Union Street with installation of paint and planters to create an expanded sidewalk to be used for café tables and seating.
- » Work with businesses on both sides of Union Street to develop a use plan for the reclaimed space – whether for general purpose seating or for outdoor space directly related to individual restaurants
- » Improve the walking connection to the Camelot Way parking lot with addition of a marked “sidewalk” along Camelot Way and wayfinding signage on Union Street
- » Provide marked walkways within the parking lot connecting to both Camelot Way, Chauncy Street and the alley connection to Pleasant Street
- » Encourage businesses to open back entrances to the parking lot and add signage and lighting to enliven the parking lot
- » Improve the lighting and landscaping of the walkway leading from the municipal parking lot to Pleasant Street. Alley from parking to pleasant
- » Add a curb cut to Union Street crosswalk leading to Camelot Way and addition of In-street Pedestrian Crossing Sign in the crosswalk



*Diagonal parking on Union Street*

### Short-term recommendations

- As highlighted in the immediate actions section at the beginning of this report, WalkBoston recommends that Weymouth make use of “lighter-quicker-cheaper” tools to reclaim space along Union Street to create a pedestrian zone on both sides of the street. The elements to explore should include:



*Walkway to Camelot Way parking lot*



*Alley from parking lot to Pleasant Street*

- Pedestrian safety improvements are needed for all legs of the Columbian Square intersection. Temporary improvements to explore include:
  - » Create temporary reductions of corner radii, through bollards or barrels, to reduce the speed of turning vehicles
  - » Create temporary bulb outs (with paint and barrels) at the corners to improve visibility for and of pedestrians (this is particularly important for pedestrians crossing Pleasant Street at Torrey Street where vehicles are approaching at high speeds from the northeast)
  - » Add In-street Pedestrian Crossing Signs to crosswalks on Pleasant Street at Torrey, Union/ Columbian and Chauncy Streets



*Poor visibility across Pleasant Street*

#### Longer-term recommendations

- Provide traffic signals at Columbian Square that provide ample pedestrian WALK time, countdown signals, leading pedestrian indicators, and appropriate phasing to facilitate walking without causing severe traffic delays
- Consider adding a pedestrian refuge island on Pleasant Street at the Torrey Street crossing, as the crossing is wide and there are some visibility issues for drivers.
- Add sidewalks on Camelot Way to serve the street's residents and the municipal parking lot Camelot way
- Review the need for turning lanes on all of the streets approaching Columbian Square and reduce the pavement width wherever feasible. The new street geometry should include tight turning radii and narrow lane widths to reduce crossing distances and moderate traffic speeds in the district.



*Camelot Way*





*Wide turning lanes near Colombian Square*



*Municipal parking lot at Camelot Way*

- If the new experimental pedestrian zone on Union Street is successful, add permanent paving, landscaping and street furniture.
- Review the angle parking on both sides of Pleasant Street to determine whether it could also be replaced with a wider, landscaped sidewalk and a more limited number of parallel parking spaces. Angle parking on pleasant
- Add trees and landscaping to the Camelot Way parking lot to make it more attractive to users. Municipal parking Camelot way
- Review need for additional lighting on the Pleasant Street crosswalk at Chauncy Street

## 2. Chauncy Street between Camelot Way and Pleasant Street

One boundary of the municipal parking lot, this street lacks sidewalks and provides an unattractive walking environment. With vehicles parked along the street and fairly frequent truck and auto traffic, the street does not feel safe for walkers. One participant mentioned that many of the parkers are employees of the South Shore Hospital, just a few blocks away. Chancy from pleasant walk to parking.

### Short-term recommendations

- Repair the street paving at the Pleasant Street end of Chauncy Street to improve the pedestrian crosswalk
- Consider adding diagonal parking on the half-block of Chauncy Street closest to Pleasant Street to add to the business area parking supply, perhaps by designating Chauncy a one-way street.



*Angle parking on Pleasant Street*



*Walk from parking lot to Chauncy Street*

#### Longer-term recommendations

- Add a sidewalks on both sides of the street
- Improve lighting and landscaping of walkways leading from the municipal parking lot to Pleasant Street.

#### 3. Pleasant Street between Chauncy and Main Streets

Sidewalks along Pleasant Street vary in width and condition, with some areas inadequate for safe and comfortable walking or to meet ADA standards. In some places where there are no curbs, parked cars occupy a portion of the sidewalk. For example, in front of Snyder Jewelers at 89 Pleasant Street, and at a nearby bicycle repair shop and lock shop the sidewalk is undistinguishable from the street pavement. Near the Main Street intersection (aka Independence Square), there is a significant driveway serving the Pleasant Shops shopping center, and there is no pedestrian walkway marked through the parking lot. At the bus stop on the north side of Pleasant Street near Main, private trash was awaiting pick up and almost completely blocked the sidewalk and bus stop.



*Bus stop with trash along Pleasant Street*

#### Short-term recommendations

- Repair and reconstruct the sidewalks to meet ADA standards. Particular problem areas are just west of Chauncy Street, at the bike and lock shops, adjacent to the Post Office, and curb cuts at Central and Wilbur Streets.



*Inadequate curb ramp on Pleasant Street*

#### Longer term recommendations

- Work with Pleasant Shops shopping center owner to improve pedestrian access, including an examination of the slope of the drive which creates a blind spot and the turning radii that encourage fast entry to the site, along with a new pedestrian path.
- Review night light levels and add lighting as needed



*Shopping center entrance on Pleasant Street*

#### 4. Intersection of Pleasant and Main Street (Independence Square)

The scale and geometry of the intersection are entirely auto oriented.

##### Short-term recommendations

- Review signal timing and WALK phases to reduce wait times for pedestrians and ensure that they have adequate crossing time on all legs of the intersection

##### Longer term recommendations

- Explore re-design of the pedestrian crossings at Independence Square, to reduce crossing distance and improve sight lines through such measures as tightening turning radii and eliminating the free right turn from Pleasant onto Main northbound.



*Intersection of Pleasant and Main Streets*

#### 5. Main Street between Pleasant Street and Fogg Road

This street is to be re-built and widened, and is to include new, ADA compliant sidewalks.

##### Short-term recommendations

- Review lighting levels in the plans to insure that adequate sidewalk lighting is provided.

#### 6. Fogg Road

Fogg Road primarily serves South Shore Hospital. Much of it is quite pleasant for walking, but there are areas of narrow and missing sidewalk on the south side of the road.



*Skinny curb ramp at Fogg and Main Streets*

##### Longer term recommendations

- Add and/or widen sidewalks along Fogg Road to meet ADA standards.

## JACKSON SQUARE

The Jackson Square area encompasses a mix of residential, commercial and institutional uses, and its three main streets carry fairly heavy, fast moving traffic. Below is a map of the walk audit route.



*Map of walk audit route*

#### 1. Pleasant Street – Broad to Water Street

Pleasant Street just south of Broad Street has several retail shops and a Post Office. This portion of the street has adequate sidewalks and reasonable walking conditions. Further south, near the library and heading down the hill toward Water Street, the sidewalk conditions worsen.





*Entrance to library*

#### Short-term recommendations

- Add an In-street Pedestrian Crossing Sign to crosswalk in front of the library, and consider making it a right angle crossing to reduce the crossing distance (sight lines are poor in this location due to the hill and the slight curves in the roadway) library crosswalk

#### Longer term recommendations

- Repair the sidewalks along both sides of Pleasant Street narrow sidewalk on pleasant
- Significantly narrow the continuous curb cut at the Teen Center parking lot
- Fix the sidewalk and curb ramps at the intersection of Pleasant and Water Streets, where the width and angles of the ramps do not meet ADA standards inadequate ramp



*Narrow sidewalk on Pleasant Street*



*Inadequate curb ramp at intersection of Pleasant and Water Streets*

## 2. Water Street – Pleasant to High

This street includes a large senior apartment block, a number of single family homes, auto repair businesses and small retail at the northern end of the street. Poor sidewalk conditions, wide curb cuts and wide turning radii contribute to the street's poor walking conditions.

#### Short-term recommendations

- Add fog lines to narrow the travel lanes and help slow traffic speeds
- Trim the overhanging vegetation near the Herring Run Brook overlooks to remove walking obstacles and open up views of the Brook
- Explore ways to improve the safety of the crosswalk to Myrtle Street including addition of an In-Street Pedestrian Sign, zebra or ladder style striping of the crosswalk, and re-alignment of the diagonal crossing Myrtle street crosswalk
- Check the lighting of Commercial Street, especially at the intersection with Water Street, to see if it should be improved for pedestrians.



*Crosswalk at Myrtle Street*



*More damaged sidewalk on Water Street*

#### Longer term recommendations

- Repair the sidewalks along both sides of Water Street water st sidewalk water st in need of work
- Explore opportunities to enhance landscaping and views of Herring Run Brook
- Narrow the wide curb cuts to businesses along the street water st curb cuts
- Tighten the turning radii at Commercial Street
- Consider narrowing the width of the street which is much wider than necessary, contributing to the speed of traffic



*Sidewalk on Water Street in need of repair*



*Wide curb cuts on Water Street*

### 3. Intersection of Broad/Commercial/High/School Streets

This intersection serves a number of businesses such as a 7-11, CVS and several restaurants that are of interest to local residents, including the seniors who live on Water Street. However, the scale of the intersection and the signal timing make it a daunting place for pedestrians.

#### Short-term recommendations

- Review and consider modifications to the WALK signal times and phases to facilitate safe pedestrian crossings and reduce wait times for

pedestrians. The existing timing is incorrect and stops all traffic on all legs, but without the timing or geometry to allow pedestrians to cross the whole intersection.

#### Longer term recommendations

- Permanently narrow turning radii to slow turning vehicles and shorten pedestrian crossing distances.
- Review lane widths to determine if they could be narrowed to reduce speeds and crossing distances.

#### 4. Broad Street – Commercial to Pleasant

This street has several restaurants and commercial uses that draw pedestrians, and some of the businesses have added flowers and landscaping that provide amenities for walkers. However, the poor condition of some of the sidewalks and the lack of a midblock crossing to meet pedestrian desire lines reduce the walkability of the area.

#### Short-term recommendations

- Repair the sidewalk tripping hazards that exist in several locations
- Explore the possibility of a midblock crossing near The Venetian restaurant
- Review the crosswalk at the Post Office for addition of an in-street pedestrian sign

#### Longer term recommendations

- Repair all of the sidewalks
- Review possibility of tightening curb radii and narrowing lanes to reduce the pavement width at the Broad/Commercial intersection

## BRIDGE STREET, SEA AND NORTH STREETS

Bridge Street is a major arterial that carries significant traffic volumes. Land uses along the street include a school, a large church, apartments, businesses and homes. A map of the walk audit route is below.



*Map of walk audit route*

#### 1. Bridge Street – Green Street to Sea Street

The walking environment is diminished by the close proximity of fast moving vehicles to pedestrians walking along the adequate, but rather narrow sidewalks without the protections of a verge or street trees. Wide open turning radii at the intersections allow cars to move very quickly.



*Wide turning radius on Bridge Street*



#### Short-term recommendations

- Build a sidewalk along Bridge Street as it approaches Lowe's Plaza. The missing sidewalk poses a hazard for pedestrians to walk to the CVS at the far end of the Plaza.
- Review the signal timing at Green and Bridge Streets to consider changing from an all-way stop to a concurrent crossing which would reduce pedestrian wait times for a WALK signal
- Review the potential for adding protected crosswalks in close proximity to bus stops. Under the existing conditions there are bus stops on both sides of the street in several locations (near Blackstone Road and Lovell Street) without nearby crosswalks. Pedestrians are thus crossing Bridge Street without the protection of a crosswalk.



*No protected crosswalk near bus stop*

#### Longer term recommendations

- If there is adequate room in the right-of-way consider the addition of street trees to enhance walking environment along Bridge Street.



*Area near bus stop on Bridge Street that could benefit from street trees*

#### 2. Bridge Street/Sea Street Intersection

This very broad intersection has many crossings for pedestrians making it difficult and uncomfortable to cross.

#### Short-term recommendations

- Review the geometry of the intersection to determine whether it is possible to narrow the turning radii and lane widths to shorten crossing distances and possibly eliminate turning lanes on Sea Street.

#### 3. Sea Street

While there are several wide curb cuts and sidewalk repairs needed, Sea Street is a very pleasant walking environment with shade, slow moving traffic and several handsome homes to look at.

#### Short-term recommendations

- Repair curb cut on Pearl Street to make it ADA compliant.



*Curb cut on Pearl Street in need of repair*

4. North Street

There is no curb protecting the sidewalk along the west side of North Street, and this should be added to protect pedestrians.



*Area on North Street in need of a curb*

