

South End Neighborhood Walk Audit New Bedford, MA

October 19, 2016

MAKING MASSACHUSETTS MORE WALKABLE

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Purpose of the Assessment

South End Engaged, an initiative coordinated by the United Way of Greater New Bedford, hosted a walk assessment to further the group's vision for the South End: *All residents of the South End of New Bedford are safe, healthy, and have the knowledge and skills to thrive.*

The walk assessment addresses many of the goals in each of the initiative's 4 working groups:

- Economic revitalization
- Family and school engagement
- Health and safety
- Resident organizing

With South End Engaged initiative members and other neighborhood stakeholders, WalkBoston conducted the walk assessment on October 19, 2016, funded by the Massachusetts Department of Public Health Mass in Motion program.

The assessment began with a discussion of the characteristics of walkable communities and a summary of pedestrian infrastructure improvements that increase safety and improve the quality of the walking environment. After discussing walkability, WalkBoston staff led the group on a walk assessment of the South End neighborhood. This report is a summary of the group's observations and preliminary recommendations for improvements to the neighborhood's pedestrian infrastructure.



Recent intersection improvements at S 6th Street, Grinnell and County Streets

Neighborhood Context

The New Bedford South End neighborhood has several of the elements that define a walkable community. It has destinations: parks, a library, the beach, and neighborhood retail shops. There are four grocery stores within walking distance. The neighborhood's grid layout provides a connected road network with sidewalks that link many of the neighborhood destinations. Route 18 disrupts the neighborhood's connection to the water, but the planned reconstruction of Route 18 will remedy some of this disconnect.

The neighborhood wrestles with the other two components of walkability: safety and comfort. Sidewalks are present, but many are deteriorating, narrowed by the roots and branches of large trees. Crosswalks are missing or faded at many intersections. Pedestrian traffic signals are absent. People with mobility issues or pushing strollers encounter multiple obstacles including missing curb ramps and detectable warning panels. Traffic speeds along South 2nd Street and County Street regularly exceed posted speed limits. Furthermore, the overall lack of maintenance – both of the sidewalks and roadways, and many buildings along the walking route – suggests that the neighborhood does not take pride in its overall health and well being. As devoted as many South End residents are to their community, the quality of the built environment does not always reflect this dedication.

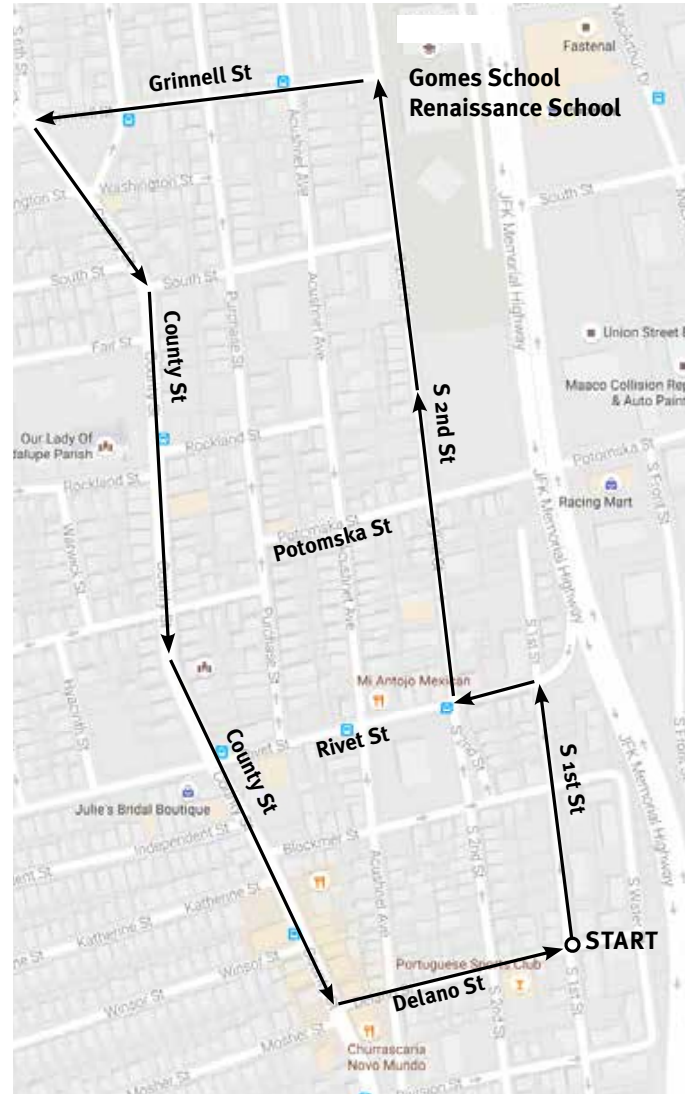


Walk assessment participants discuss infrastructure conditions in the South End

Study Area/Walk Route

The walking route incorporated many of the South End community landmarks including: Gomes and Renaissance Schools, neighborhood retail district along County Street, Ben Rose Community Center, neighborhood parks on South 2nd Street and corner of Grinnell and County Streets, and housing complexes. Participants began at the Ben Rose Community Center; continued down South 1st Street jogging west and then north down South 2nd Street. After assessing the quality of the pedestrian connections to the Gomes School from the neighborhood, participants walked west on Grinnell Street to the recently reconstructed intersection at County Street and Grinnell Street. The group walked south down County Street before turning east down Delano Street to return to the Ben Rose Community Center.

The route illustrated successful examples of safe pedestrian infrastructure as well as examples of crossings and sidewalks in need of improvement. The group stopped throughout the walk to discuss observations and record infrastructure deficiencies in the neighborhood.



Map of the South End neighborhood walking route



Audit participants walk along South 2nd Street



Audit participants discuss the potential of a parking area on Grinnell Street

Participants

WalkBoston staff member, Stacey Beuttell, along with Allie Yates-Berg and Irondina Abreu from the United Way of Greater New Bedford and Kim Ferreira of Mass in Motion New Bedford, led the walk assessment and moderated the post-walk discussion. Also in attendance representing several New Bedford municipal departments, neighborhood organizations and community stakeholders were the following people:

The walk assessment provided opportunities for all participants to share information concerning neighborhood initiatives and learn more about infrastructure projects planned for the area in the coming months.

Irondina	Abreu	Community Connections Coalition, United Way of Greater New Bedford
Esperanza	Alejandro-Benube	New Bedford Housing Authority
Eddie	Bates	New Bedford Housing and Community Development
Nirael	Luz	Resident
Nicole	Luz	Resident
Stephanie	Dupras	New Bedford Dept. of Public Infrastructure
Kim	Ferreira	Mass in Motion New Bedford
Michael	Galasso	TRI
Jennifer	Gonet	New Bedford Planning Department
Angela	Johnston	New Bedford Economic Development Council
Jack	Livramento	New Bedford School Committee, Resident
Kerry	Mello	Southcoast Health
Carl	Nagy-Koechlin	Housing Solutions in Southeast Massachusetts
Dana	Rebeiro	New Bedford City Council
Allie	Yates-Berg	United Way of Greater New Bedford

Summary of Planned Road Construction Projects

Walk audit participants learned of several planned improvements to the road network in the South End neighborhood. The Route 18 reconstruction project includes two east/west connections across Route 18: (1) Rivet Street will connect to South Front Street and (2) Griffin Court will connect to McArthur Drive. Both of these connections will improve pedestrian connectivity and safety as people cross Route 18 to reach the grocery store, recreational facilities and the working waterfront. Phase II of the reconstruction of Route 18 (JFK Highway) from Cove Street to Griffin Court is scheduled to begin construction in Spring 2017.

County Street from Nelson Street to Union Street is currently in the design phase. Work on the project will include sidewalk reconstruction and bicycle accommodation; upgraded traffic signals with pedestrian activation (push buttons); improvements to curbing, ramps and crosswalks; new street lighting; and drainage improvements. The project is in the preliminary design phase, so there is time to ensure that the design solution fosters a walkable environment.

Key Issues and Recommendations

Sidewalks along the route do not provide a smooth, suitable walking surface for everyone walking in the South End.

The South End has a continuous network of sidewalks throughout the neighborhood. Some of the sidewalks are wide (e.g., along the east side of South 2nd Street near the park and Gomes and Renaissance Schools) and provide enough space for people to walk side by side and for people in wheelchairs or pushing strollers. Most, however, suffer from the following problems:

- Cracked or heaving panels due to tree roots or freeze/thaw cycles
- Narrowing due to overgrown trees or proximity to fences and building edges
- Lack of maintenance – trash, litter-filled; overgrown vegetation

The majority of the sidewalks along the route are concrete. However, the section of sidewalk on South 2nd Street between Rivet Street and Potomska Street is asphalt. Asphalt is also occasionally used to patch the concrete sidewalks throughout the neighborhood. While smooth asphalt is better than broken concrete, asphalt is not as high quality material and can convey a lower investment in the neighborhood.

Some of these issues can be fixed with low cost, short-term solutions. Others require more time and resources.



Asphalt sidewalk on along S 2nd Street between Rivet and Potomska Street

Recommendations

Short term

- Replace sidewalk panels disrupted due to tree roots. New Bedford Department of Public Infrastructure (DPI) has a short-term fix that preserves the tree and provides a smoother sidewalk
- Replace asphalt sidewalk between Rivet Street and Potomska Street with an concrete sidewalk
- Motivate residents and property owners to trim vegetation and pick up litter/trash on sidewalks near their property. Neighborhood organizations, faith-based institutions, schools or social service organizations can be good partners in these efforts
- Activate sidewalks with activity along high volume pedestrian corridors – could include temporary installations or pop-up parks; consider installation of parklets – temporary seating areas placed in parking spaces in front of businesses to provide outdoor gathering spaces

Long term

- Participate in the planning and design of South End road reconstruction projects to ensure adequate sidewalk width and connectivity



Trees overtaking the sidewalk along County Street

Crossings within the South End neighborhood lack pavement markings, and are not accessible due to missing curb ramps and detectable warning panels.

Crosswalks are missing or faded across many of the intersections in the South End. While all intersections may not warrant a marked crosswalk, those crossings along ‘walk to school’ routes and in areas with high volumes of pedestrians need high visibility pavement markings and signage.

The map below indicates locations where crosswalks are painted. Of the 37 intersections in the study area, only 3 intersections have marked crosswalks on all four approaches. Only 14 of the 37 intersections have a marked crossing across one or more approaches, excluding the 3 complete intersections. Furthermore,



There are no marked crosswalks at the intersection of Grinnell Street and Acushnet Avenue despite the presence of a convenience store on the corner. Curb ramps and detectable warning panels are also missing.



Map of existing marked crosswalks in the study area

the pattern of marked crossings does not appear to relate to walking corridors or street hierarchies. This seemingly random approach to installing marked crosswalks is not advisable given the dense, residential neighborhood with two elementary schools, senior housing, neighborhood parks and retail districts, churches, and other community assets within short walking distances.

Curb ramps at most intersections are either missing or do not meet current design standards for accessibility, including missing detectable warning panels. Anyone with mobility issues or pushing a stroller would have trouble negotiating their way through the neighborhood.



This high visibility crosswalk near the Gomes School has no curb ramps or detectable warning panels.

Gomes and Renaissance Schools

The crosswalks at priority locations near the Gomes and Renaissance Schools – primarily across South 2nd Street – use high visibility pavement markings. However, curb ramps are missing from the majority of the crossings and no detectable warning panels are present. Furthermore, parking restrictions, which limit parking within 20 feet of a crosswalk, are not enforced. Children trying to cross the street cannot see beyond parked cars, and drivers traveling down South 2nd Street cannot see children waiting to cross. Diagonal lines painted in a hatched pattern next to crosswalks can discourage parking adjacent to them.

In addition to the deficient crossings, Gomes and Renaissance Schools would benefit from more school zone signage. Flashing beacons will be replaced as a result of New Bedford’s participation in the MassDOT Bicycle/Pedestrian Safety Enforcement and Awareness Program. Additional pavement markings and speed zone signs could also be added.



Parking area at the intersection of Grinnell and S 2nd Street could be transformed into a gateway between the neighborhood and the school buildings



Cars parked directly adjacent to crosswalks block the view of oncoming traffic for people crossing

Several participants identified the intersection of Grinnell and South 2nd Street as an opportunity area to rethink the neighborhood connection to the elementary schools. Currently, the intersection terminates in a parking lot for the housing complex, which lies between the schools and the neighborhood. There are continuous sidewalks that lead to South 2nd Street along Grinnell, but they do not follow pedestrian desire lines. The space is large enough to provide more green space, direct pedestrian connections and maintain vehicle access if it were redesigned as a welcoming gateway to the neighborhood.

Recommendations

Short-term

- Develop a crosswalk painting plan that prioritizes highly utilized pedestrian corridors and walk to school routes
- Paint new high visibility crosswalks at high priority locations; continue with lower priority locations as funding and time allows
- Repaint existing crosswalks with high visibility crosswalks
- Install school zone beacons and signage along South 2nd Street near the Gomes and Renaissance Schools
- Hold community design charrette/workshop to rethink the connection between the neighborhood and the Gomes/Renaissance Schools at Grinnell Street

Long-term

- Install ADA-compliant curb ramps and detectable warning panels on all approaches to all intersections and mid-block crossings
- Identify partnership and funding opportunities to implement new gateway concept at Grinnell Street/South 2nd Street intersection

Traffic signals in the study area do not have pedestrian signals and provide no protection for people crossing the intersection.

The traffic signal at Rivet and County Streets is the only signalized intersection within the study area. There are no pedestrian signals at this intersection. People driving north on County Street are prohibited from turning right on red which gives pedestrians crossing some protection. Traffic driving south on County or in either direction on Rivet Street have no turning restrictions.

Recommendations

Short-term

- Install No Right Turn on Red signs on all approaches at the Rivet/County Street intersection to provide some protection for pedestrians crossing without a pedestrian signal
- Engage the City in a conversation regarding the use of concurrent and exclusive signal timing. Concurrent signal timing has been shown to increase pedestrian compliance and shorten overall cycle times for all users. WalkBoston recommends concurrent signals except when signals are located within school zones or in areas with high numbers of seniors

Long-term

- Install pedestrian traffic signals at the Rivet/County Street intersection

High traffic speeds endanger people walking in the study area according to participants. Traffic calming strategies and enforcement activities can reduce speed and improve neighborhood walkability.

Participants stated that traffic speeds often exceed speed limits along South 2nd Street and County Street. The long straightaway on South 2nd Street between Potomska Street and Walnut Street encourages high speeds because it is one way and there are no stop signs on South 2nd Street for 8 city blocks. This is significant given that the Gomes and Renaissance Schools are on South 2nd Street.



Traffic signal at Rivet/County has no pedestrian signals

Short-term

- Work with New Bedford police to monitor and enforce speed limits along South 2nd Street and County Street

Long-term

- Redesign streets within the study area to reduce traffic speeds and provide a safe environment for people walking in the neighborhood
- Consider establishing a slow zone throughout the South End neighborhood. Slow zones limit traffic speeds to 20 mph much like a school zone. (See Appendix for more information).

Appendix A. 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

Curb Extension/Curb Bulb-out

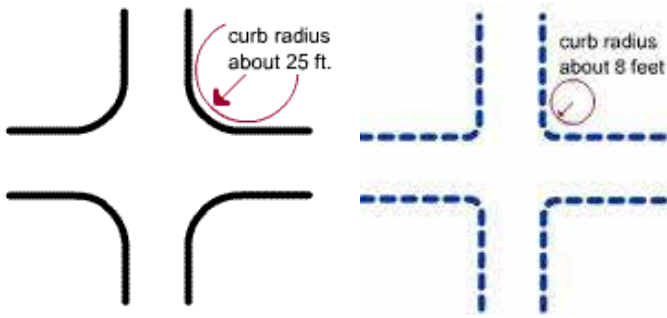
A sidewalk extension into the street (into the parking lane) shortens crossing distance, increases visibility for walkers and encourages eye contact between drivers and walkers.



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 travel lane. It narrows a driver's perspective and helps to slow traffic speeds. Fog lines are used in urban, suburban and rural locations.



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 Interval (LPI)

A leading pedestrian interval 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

Rectangular Rapid Flash Beacon (RRFB)

RRFBs are user-actuated flashing lights (amber LEDs) that supplement pedestrian warning signs at unsignalized intersections or mid-block crosswalks. They can be activated by pedestrians manually by a push button or passively by a pedestrian detection system. RRFBs use an irregular flash pattern that is similar to emergency flashers on police vehicles. RRFBs may be installed on either two-lane or multi-lane roadways.

Source: http://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/



Rectangular Rapid Flash Beacon (RRFB) in West Springfield

Safety Zone (Slow Zone)

A safety zone is an area in which the posted speed limit is 20 miles per hour. Safety zones can be established anywhere in a Massachusetts city or town with approval from the applicable departments. Safety zones were recently passed as part of the 2016 Municipal Modernization Bill - Sections 193 and 194.