

Route 9/East Street Walk Audit Goshen, MA

May 16, 2017

MAKING MASSACHUSETTS MORE WALKABLE

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Purpose of the Walk Audit

The Hilltown Community Development Corporation (CDC) is in the process of building 10 units of senior housing (for people 60 years of age or older) adjacent to the Goshen Congregational Church and across Route 9 from the Goshen Town Hall, town offices and police department. The construction of the new residences and a generally held desire to connect the town's assets with a safe walking route prompted the Hilltown CDC to respond to a Healthy Hampshire Request for Proposals to fund design projects to create more walkable town centers. Healthy Hampshire reached out to WalkBoston to lead a walk audit with the town's volunteer staff and residents.

The focus of the walk audit was to discuss strategies to:

- Slow traffic along Route 9 between Ball Road and West Street
- Improve the safety of existing crosswalk on Route 9 near Town Hall
- Use streetscape elements (trees, benches, signs – both for wayfinding and identification) to delineate a “village/town center”
- Connect Goshen place-making efforts to larger regional plans (e.g., Highlands Foot Path)
- Establish safe walking routes (combination of sidewalks, paths, and lane markings) between regional open space assets to promote recreational walking in Goshen

In addition to identifying action items to be taken to improve pedestrian safety, a walk audit is a community engagement tool that builds technical capacity. It brings people with different perspectives together to discuss the common goal of improving the safety and quality of the walking environment. The experience of walking and observing travel patterns and people's behavior can be a tipping point for communities to commit to making needed changes to the built environment.

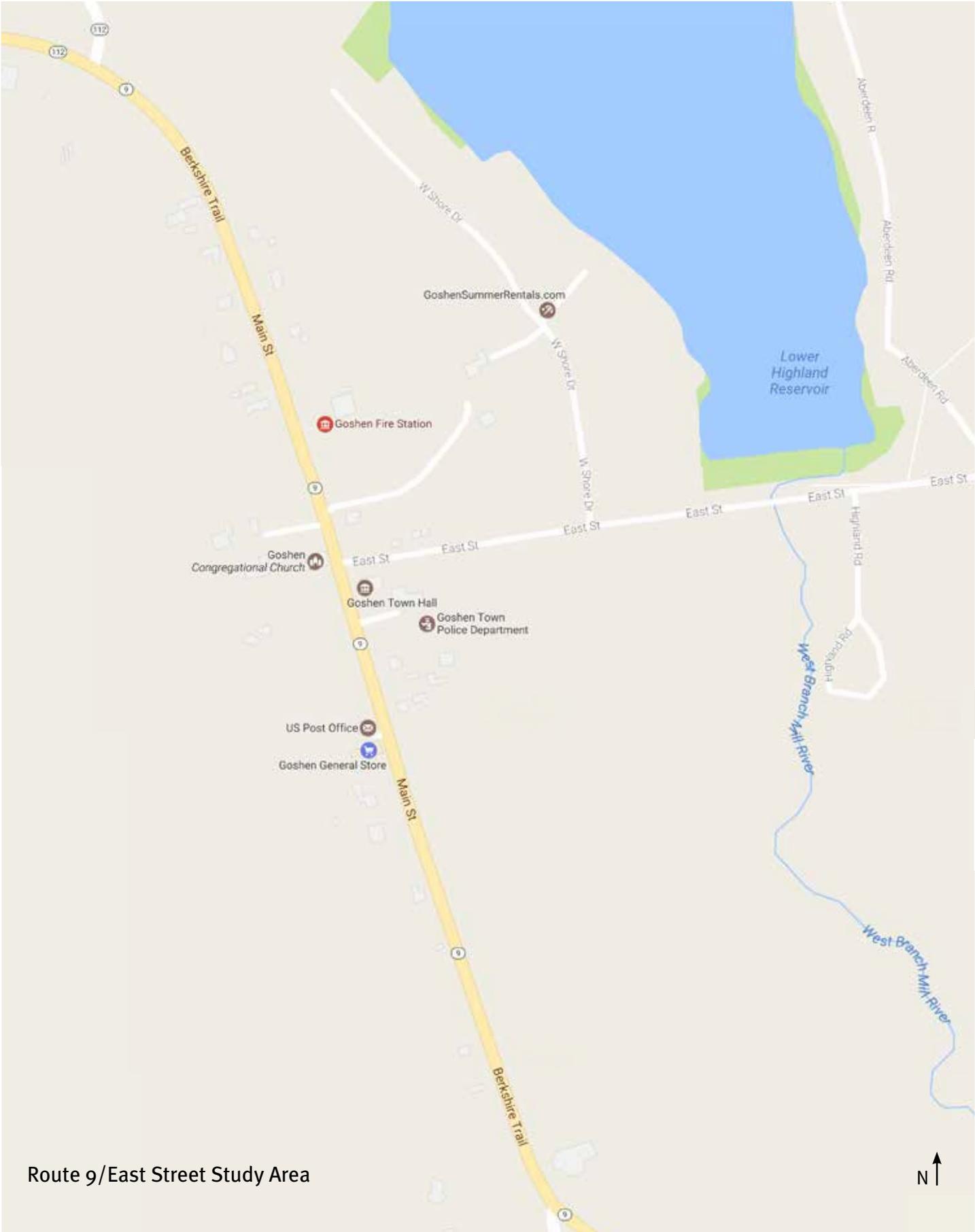
Study Area/Walk Audit

The walk audit was held on May 16, 2017, from 5:30 pm to 7:30 pm. It began with a presentation on walkability in rural communities and a review of pedestrian infrastructure elements that contribute to a safe, high-quality walking environment. WalkBoston relied heavily on the graphics contained in the *The Urban, Rural and Suburban Complete Streets Design Manual for the City of Northampton and Communities in Hampshire County* to describe walkable road design in rural communities.

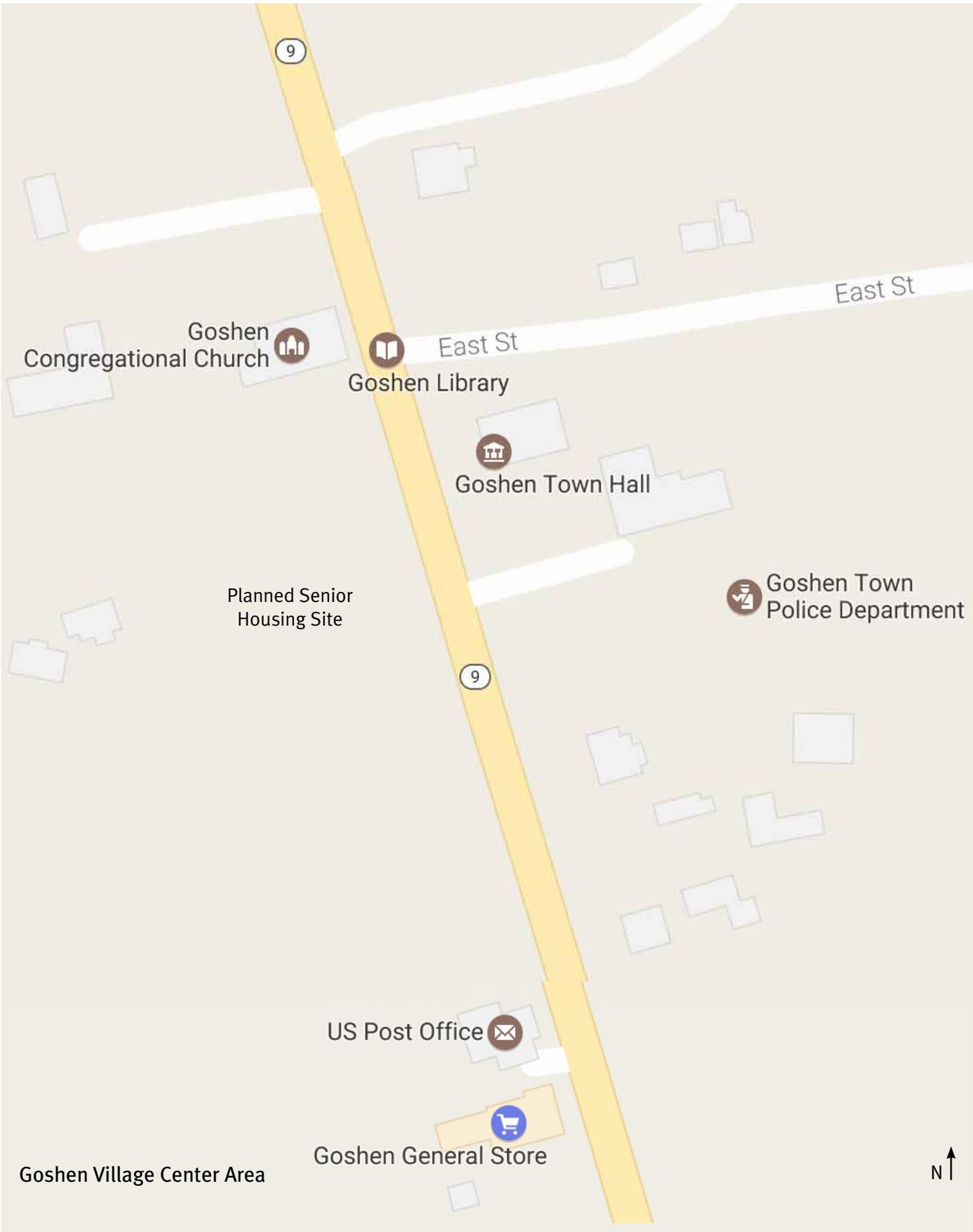
After the presentation, the group (totaling 23 people) broke into two groups – one group walked along Route 9 from the town offices to the Goshen Historical Museum, and the other group walked down East Street toward Tilton Farm. After the walk, both groups met together to discuss their observations and develop preliminary recommendations.



The walk audit began with a discussion of the Route 9 crossing.



Route 9/East Street Study Area



Participants

Walk audit participants were primarily Goshen residents from different parts of town with a common interest in safer walking conditions. Kate Masztal from the MassDOT District 1 office came to provide background on the recent improvements to the Route 9 pedestrian crossing.

Don Boisvert	Goshen Elder Housing Chair - Ambulance
Laura Barrus	86 Spruce Corner Road, Goshen - food pantry
Rose Clark	Council On Aging Director
Sandra Papush	Community Preservation / Conservation Chair
Christine Sass	Goshen resident – Lake St
Jon Sass	Goshen resident – Lake St
Roger Culver	Planning Board/Recreation Chair
Evelyn Culver	Goshen resident
Rosemary Bienz	82 Shaw Road
John Bienz	82 Shaw Road
Henrietta Munroe	Elder Housing Committee
Rochelle Nahmias	OT - Resident - Elder Affordable Housing Committee
Dan Trenholm	Designer - disabled MA GOV
Kate Masztal	MassDOT, District 1
Gene Tocriggowski	Goshen resident
Cindy Dawn	Hilltown CDC - contact for tenants
Stacey Beuttell	WalkBoston
Brendan Kearney	WalkBoston
Sarah Bankert	Healthy Hampshire
Dave Christopolis	Hilltown CDC
Joan Griswold	Hilltown CDC

Summary of Key Recommendations

In Goshen, people walk primarily for recreation along the country roads, within State Forests, on town lands, and along State Highway Route 9. The town hall, town offices, police department and Congregational Church are clustered at the intersection of East Street/ Route 9. New senior housing will be built on the west side of Route 9 across from the town hall. Residents and the developers of the senior housing would like to improve the walking connections among the town assets on Route 9 and provide additional recreational walking options for people on East Street. The following recommendations were suggested at the post-walk audit discussion.

Slow traffic down on Route 9 between Ball Road and West Street.

Route 9 is one of the major roadways running through the Town of Goshen. It is state-owned, which means that MassDOT controls the design and maintenance of the road. The current speed limit between Ball Road and West Street is 40 mph. Even though we did not record speeds faster than 40 mph along Route 9 with our hand-held speed monitor, the fast-moving traffic made the walk feel uncomfortable, particularly when trucks drove by.



Route 9 has a 40 mph speed limit through Goshen. Residents believe that traffic routinely travels faster than 40 mph along this long straight-away north of the crossing.

Since MassDOT owns and maintains Route 9, attempting to change the speed limit would require a speed study. Often, data collected in a speed study can result in a recommendation to increase a speed limit. If a speed study is conducted, the results must be implemented. Therefore, WalkBoston would not recommend a speed study for this section of Route 9. Other ways to address high speeds should be discussed with the MassDOT District office.

Other towns in Hampshire County have successfully implemented traffic calming measures on state highways. In some cases, the towns have adopted the roadway giving them the latitude to change its speed and design. However, the town would then be responsible for maintaining the road and the utilities beneath it. These costs may be too much of a burden on some towns.

Short-term recommendations:

- Discuss traffic calming strategies permissible on MassDOT roads with MassDOT District 1 staff.
- Reach out to other towns in Hampshire County, such as Williamsburg, Lee and Northampton, to learn more about their experiences implementing traffic calming measures on state-owned roads.

Long-term recommendations:

- Consider adopting a section of Route 9 roadway to give the town the decision-making authority to change the speed limit and employ traffic calming measures.

Improve the safety of the Route 9 crossing with enhanced pavement markings and additional signage.

The Route 9 pedestrian crossing was recently moved and upgraded to include accessible ramps, roadside crosswalk signage, and sidewalk connections to the town hall, church and general store. The improvements make the crossing accessible, but vehicular traffic still does not regularly yield to pedestrians waiting to cross. The new senior housing planned on the west side of the crossing is a further justification to enhance the safety of the crossing.

Short-term recommendations:

- Purchase an in-street pedestrian crossing sign and place in crosswalk.
- Request advance crosswalk signage along Route 9 on the north side of the crosswalk. Signage is in place on the south side of the crosswalk.

Long-term recommendations:

- Discuss enhanced pavement markings with MassDOT. Ladder crosswalk design is recommended similar to that found across Route 9 in Williamsburg.



Walk audit participants walk on the grass along Route 9 near the Goshen Historical Museum.



The newly painted crosswalk on Route 9 is already showing signs of wear.

Formalize a Goshen village center along Route 9 with new street trees, signage, and other pedestrian elements.

The grouping of the Congregational Church, town hall and town offices, police station, and general store form a development node along Route 9. The planned housing on the west side of Route 9 will add to this density. The proximity of the recycling center and Tilton Farm on East Street suggest a concentration of activity at the East Street and Route 9 intersection. Safe, high quality walking paths could connect these destinations and begin to create an identifiable village center. Street trees, village center signage and sidewalks would further the establishment of a more formal center in Goshen. There may also be opportunities to incorporate wayfinding signage showing information about walking loops connecting the village center and natural assets in the area.

Short-term recommendations:

- Consider incorporating benches, trees, and public spaces in new housing development site design.
- Evaluate the opportunity to rethink or redesign parking lot, tennis court, and existing park space to better serve the active and passive recreation needs of Goshen residents.

Long-term recommendations:

- Ensure that zoning and planning decisions concentrate density in the village center zone to promote walkability.

Extend sidewalk along Route 9 between the new senior housing to the West Street intersection.

The recent sidewalk connection between the Congregational Church and general store along Route 9 begins to connect the destinations along Route 9. People are more likely to walk to the store now that there is a paved walking connection. Extending the sidewalk along the east side of the road to West Street would link up with the Goshen Historical Museum and other natural assets on a longer walking loop. The utility pole locations along Route 9 indicate that there may be enough room within the road right-of-way to build a sidewalk without needing to acquire private property. Ideally, the sidewalk would have a verge (5' to 7' of green space) between the curb and the sidewalk edge. This may not be possible depending on the right-of-way width.

Short-term recommendations:

- Evaluate the feasibility of the sidewalk connection given current Route 9 right-of-way widths.
- Determine if the sidewalk extension is a critical link to walking loops connecting the village center with natural assets in the area, and other long-range planning goals (e.g., Highlands Footpath).
- Estimate cost of sidewalk construction and weigh against other town infrastructure priorities.

Long-term recommendations:

- Work with MassDOT District office on design and construction of sidewalk.



Concentration of town services at the intersection of East Street and Route 9



Potential location of sidewalk extension along Route 9.

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 lanes as described in the Urban, Rural and Suburban Complete Streets Design Manual for the City of Northampton and Communities in Hampshire County - January 2017



*Examples of pedestrian awareness signs
<http://www.safetysign.com>*

Consider pedestrian lane markings or sidewalks along East Street to improve safety of residents walking to Tilton Farm and Goshen Recycling Center.

Many people walk along East Street to get to Tilton Farm and the Recycling Center, particularly on weekends. Local drivers know to look for people on the roadway, but walk audit participants felt it was dangerous. Families walk with strollers and pets, and the road is relatively narrow. The road accommodates one lane of traffic in each direction with a narrow shoulder. There are no lane markings or fog lanes painted on this rural road.

Short-term recommendations:

- Determine width of East Street right-of-way and evaluate the possibility of delineating pedestrian lane markings. Install pedestrian lane, if applicable.
- Post signage indicating that pedestrians may be in the roadway (see examples).

Long-term recommendations:

- Install sidewalk along East Street leading to Tilton Farm and the Recycling Center.

Establish walking routes that connect regional open space assets with the Goshen village center.

Goshen has many amazing open spaces such as the DAR State Forest, Tilton Farm, Highland Lakes, and Lilly Pond. Given the distances between them, most people drive to each destination. There was great interest among the walk audit participants to formalize walking connections between some of these places. For example, there is an informal walking connection that leads to Webster Brook from the planned senior housing site that may also extend to Lilly Pond. The Highlands Footpath, a regional effort to define a walking/hiking connection from October Mountain State Forest in Lee to the DAR State Forest in Goshen, is planned from Lilly Pond along Ball Road and West Street to the walk audit route on Route 9 and East Street. Any improvements made to the pedestrian network along the walk audit route would also benefit future Highlands Footpath users.

Short-term recommendations:

- Identify recreational walking loops that connect open spaces.
- Produce walking maps to promote recreational walking in Goshen.

Long-term recommendations:

- Install wayfinding signage along walking loops.

Pass a Complete Streets Policy

Complete Streets is an approach to road design that considers the needs of all road users (walkers, cyclists, and drivers) and people of all abilities (including people with disabilities, older adults, and children). The MassDOT Complete Streets Program provides funding to communities who pass a complete streets policy. The funding can include technical assistance to develop a Complete Streets Prioritization Plan and capital funding to build complete streets projects. More detailed information on the program, including those communities already participating, can be found at the MassDOT Complete Streets portal (<https://masscompletestreets.com/>).

Many rural towns in western Massachusetts have developed along MassDOT-owned rural roadways. It is important to note that complete streets funding does not apply to MassDOT-owned roads. This is due to the fact that all MassDOT-owned roads are already required to adopt a complete streets design approach during roadway design (per the Healthy Transportation Compact in the transportation reform legislation signed into law in June 2009). Municipalities are therefore dependent on the State's interpretation of a complete streets design for State roads.

WalkBoston encourages all cities and towns to pass a complete streets policy and apply to the MassDOT Complete Streets Funding Program. The municipality can secure money to plan for and build complete

streets projects. By establishing a complete streets policy, cities and towns demonstrate their commitment to a complete streets approach and may, therefore, exert more pressure on MassDOT to build or rebuild State-owned roads to meet the municipal complete street standards.

This strategy has not yet been tested. WalkBoston has been working in many rural towns in Hampshire County wrestling with similar pedestrian safety issues as Goshen. We are also working with MassDOT to find good ways to address this concern. We believe a complete streets policy is an effective tool to improve pedestrian safety and community walkability.

The Urban, Rural and Suburban Complete Streets Design Manual for the City of Northampton and Communities in Hampshire County contains excellent design guidance on how to implement complete street road designs communities like Goshen. The design standards illustrate what a complete streets approach looks like in a rural context.

Short-term recommendations:

- Consider passing a Complete Streets Policy for Huntington.

Long-term recommendations:

- Pass a Complete Streets Policy.
- Apply for technical assistance funding for a Complete Streets Prioritization Plan.



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

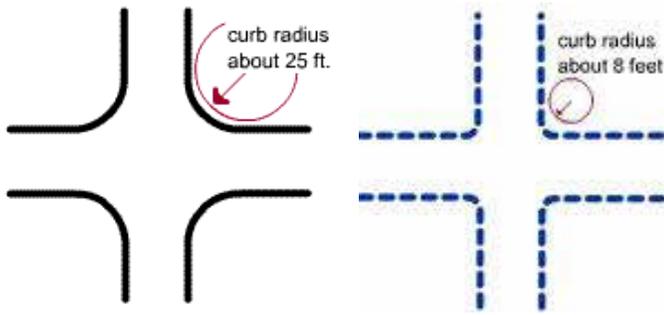
A sidewalk extension into the street (into the parking lane) shortens crossing distance, increases visibility for walkers and encourages eye contact between drivers and walkers.



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.



(A) Gravel-filled curb extension

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.



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

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.

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.

