

Burgy Village Center Walk Audit Williamsburg, MA

April 15, 2016

MAKING MASSACHUSETTS MORE WALKABLE

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Purpose of Assessment

The Town of Williamsburg has engaged planning, transportation, and healthy community design experts in efforts to assess the vitality and safety of Burgy’s town center. Burgy’s town center is loosely defined as the Route 9 corridor between Buttonshop Road and South Street. This walk audit is part of the town’s effort to address healthy aging through healthy community design.

As the town discusses the fate of the former Helen E James School, the possible reuse or sale of other town-owned buildings, and the location of a new public safety building (police/fire), it is important to consider the implications of these land use decisions on the design, density and economic vitality of the town center. The results of these decisions will impact the area’s walkability, as will any revisions to policies around housing and parking. Policy revisions and municipal facilities decisions will be specifically addressed in a separate study conducted by the Pioneer Valley Planning Commission (PVPC).

WalkBoston conducted a walkability workshop on April 15, 2016, funded by the Massachusetts Department of Public Health Mass in Motion program. The workshop discussed the principles of walkable communities and summarized 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 Burgy town center. This report is a summary of the group’s observations and preliminary recommendations for improvements to the town center’s pedestrian infrastructure.

Participants

Moderators/Sponsors

Stacey Beuttell	WalkBoston
Adi Nochur	WalkBoston
Catherine C. Brooks	Collaborative for Educational Services
Caitlin Marquis	Healthy Hampshire, Mass in Motion Coordinator
Dillon Sussman	Pioneer Valley Planning Commission

Council on Aging/Senior Center

Krystina Cooper	Intern - Williamsburg Senior Center
Daria Darienzo	COA Board and Library staff
Fred Goodhue	COA Board Chair
Larry West	COA Board, Vice Chair
Marie Westburg	Director, Williamsburg Senior Center

Town Depts/Committees

Kim Boas	Energy Committee
David Chase	Commons Group
Nick Dines	Greenway Committee, MassDOT Project Liaison
Carole Gabranski	Resident
Jim Locke	Planning Board
Gerry Mann	Zoning Board
William Sayre	Select Board and Public Safety Complex
Lisa Tucker	Resident
Denise Wickland	Police Chief

Key Issues

1. Traffic speeds, volumes and noise levels are high on Route 9 through the village center.

The Route 9 corridor connects Williamsburg to the Hilltowns and Pittsfield to the west, and Northampton, Amherst, Holyoke, and other employment centers to the east. It is the only major east-west connection linking together this part of the Commonwealth. As a result, the corridor sees relatively high volumes of truck and vehicle traffic, particularly during commuting rush hours.

Given the topography, drivers traveling east from the Hilltowns go down hill and pick up speed before entering Burgy's town center. Other than a change in the posted speed limit, there are no other clues to drivers that they are entering the town center. Noise levels are high due to the vehicle tire noise and braking behaviors, particularly of trucks. There is a relatively high volume of heavy trucks on Route 9, especially logging and heavy construction vehicles such as dump trucks.

It is important to note that Route 9 is a state-owned road and any suggested recommendations must be approved by the Massachusetts Department of Transportation.

Recommendations to reduce speeds and therefore noise levels include:

- Introduce clues that vehicles are entering the village center such as village center signage, sculpture, or other public art
- Work with the police on periodic enforcement of village speed limits using both speed trailers and officer patrols
- Investigate the possibility of narrowing travel lanes by changing location of fog lines along Route 9. The travel lanes now measure 11' (standard width), but a design exception could be pursued.
- Enhance pedestrian road crossings with advance crosswalk signage and more robust crosswalk painting (ladder or continental design). Install yield lines prior to the crosswalks in accordance with MUTCD Section 3B.16.
- Reprogram or repair school zone flashing beacon to operate when school is in session and at peak arrival and dismissal times. Investigate the possibility of installing a second school zone pavement marking before the crosswalk.
- Study feasibility of adding Rectangular Rapid Flash Beacons (RRFBs) at locations described below.



Route 9 corridor looking east toward Burgy Village Center



Rectangular Rapid Flash Beacon (RRFB) in West Springfield

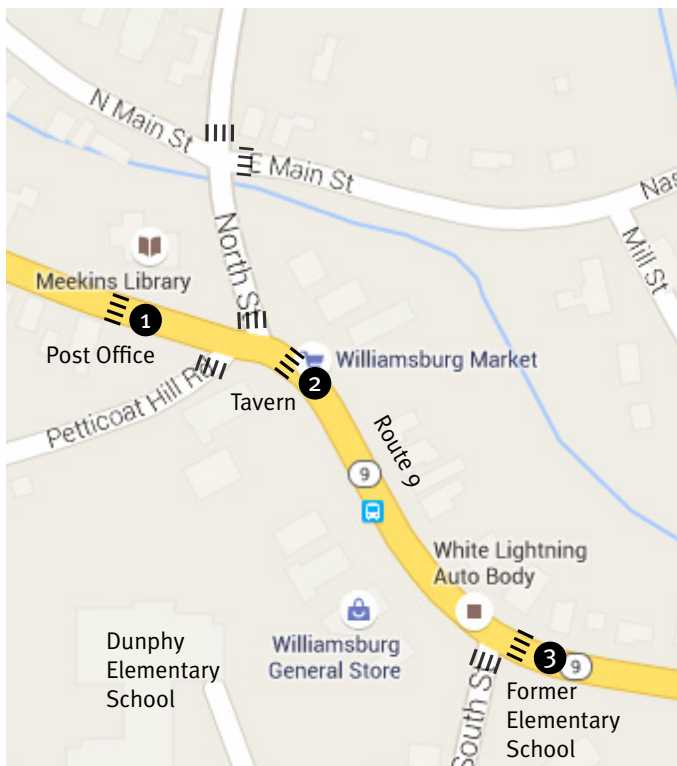
2. Crossing Route 9 feels unsafe even on marked crosswalks.

Traffic speed and drivers' failure to yield to people in the crosswalk are the major complaints of those crossing Route 9 at three locations:

1. Between Meekins Library and the Post Office
2. Between the Williamsburg Market and the BrewMaster Tavern
3. At South Street and the former Helen E. James Elementary School.

The town requested traffic studies to determine whether a traffic signal is warranted at the intersection of North Street, Petticoat Drive and Route 9. Both MassDOT and the Pioneer Valley Planning Commission (PVPC) studies found that traffic volumes do not warrant a traffic signal at this location.

The Williamsburg police engage in pedestrian safety operations periodically where they stop drivers and pedestrians to both enforce laws that protect pedestrians and bring awareness to the importance of safe pedestrian behavior. While it is important to continue this enforcement program, the design of the crossings can also have an effect on driver speed and compliance with the yield to pedestrian laws.



Location of Route 9 pedestrian crossings

Meekins Library/Post Office Crossing

The Meekins Library crossing is a mid-block crosswalk currently marked with the minimum two parallel lines. Yield to pedestrian signs and crosswalk signs are posted on the side of the crosswalk facing oncoming traffic in both directions. Advance crosswalk signs are also posted on the oncoming traffic side of the road for those driving east toward the village center. There is no advance crosswalk sign for traffic driving west out of the village center.

Recommendations to improve the visibility of the Meekins Library/Post Office Crossing include:

- Enhance the crosswalk pavement markings from the two parallel lines to a ladder or continental crosswalk pattern. Install yield lines prior to the crosswalks in accordance with MUTCD Section 3B.16.
- Place an in-street pedestrian sign in the crossing permanently. These signs have been proven to reduce speeds due to a perceived narrowing of travel lanes. Given the volumes of truck traffic, these signs can sustain some damage. However, they are a low cost solution to slowing traffic and protecting people crossing. (See Appendix for example of in-street pedestrian sign).



Views of the Meekins Library/Post Office crossing

Williamsburg Market/BrewMaster Pub crossing

This Route 9 pedestrian crossing is located on the curve just east of the intersection of North Street, Petticoat Hill Road and Route 9. People use this crossing regularly to reach the village center restaurants, shops, and services. School children also use this crosswalk to walk to and from the Anne T Dunphy Elementary School located behind the BrewMaster Tavern. A crossing guard helps kids cross the street at arrival and dismissal times.

The crosswalk is marked with the minimum two parallel lines. Pedestrian crossing and yield to pedestrian signs are posted facing oncoming traffic in each direction. Flashing yellow beacons are also located on either side of the crosswalk facing oncoming traffic in each direction. These beacons flash all the time and walk audit participants noted that they do not notice them.

This crossing is further complicated with the offset Petticoat Hill Road and North Street intersection, and Route 9. Drivers attempting to turn right from Petticoat Hill Road may wait for a break in traffic and accelerate into the crosswalk without looking for people crossing. Similarly, drivers attempting to turn left out of North Street may fail to see and yield to people crossing after navigating Route 9 traffic.

Safety could be improved with the reconstruction of the North Street and Petticoat Hill Road approaches so that they align with each other across Route 9, and intersect Route 9 at a perpendicular angle. However, this would forfeit the green space in front of Meekins Library and may not be worth the high price tag of intersection reconstruction. A pedestrian-activated Rectangular Rapid Flashing Beacon may prove to be a better, more cost effective alternative.

Recommendations to improve the visibility and safety of the Williamsburg Market and BrewMaster Tavern crossing include:

- Enhance the crosswalk pavement markings from the two parallel lines to a ladder or continental crosswalk pattern. Install yield lines prior to the crosswalks in accordance with MUTCD Section 3B.16.
- Place an in-street pedestrian sign in the crossing permanently.



View of Williamsburg Market/BrewMaster Tavern crossing

- Install Rectangular Rapid Flashing Beacons at the existing crosswalk location on Route 9. The Federal Highway Administration (FHWA) allows for the use of RRFBs “. . .to supplement standard pedestrian crossing warning signs and markings at either a pedestrian or school crossing; where the crosswalk approach is not controlled by a yield sign, stop sign, or traffic-control signal . . .” (source:http://mutcd.fhwa.dot.gov/resources/interim_approval/ia11/fhwamemo.htm)

The cost of an RRFB is approximately \$10,000 to \$15,000 for purchase and installation of two units (one on either side of a street). This includes solar panels for powering the units, pad lighting, indication units (for both sides of street) with RRFBs in the back and front of each unit, signage on both approaches, all posts, and either passive infrared detection or push buttons with audio instructions. (source:http://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/)

South Street and Route 9 crossing

The South Street crossing is a marked crosswalk with the minimum two parallel lines. Yield to pedestrian signs and crosswalk signs are posted on the side of the crosswalk facing oncoming traffic in both directions. Advance crosswalk signs are also posted on the oncoming traffic side of the road in both directions. School zone pavement markings remain as does a flashing school zone beacon despite the fact that the school has moved from this location. (Note: the flashing beacon does flash whereas the one near the existing school does not flash).

Recommendations to improve the visibility of the South Street/Route 9 Crossing include:

- Enhance the crosswalk pavement markings from the two parallel lines to a ladder or continental crosswalk pattern. Install yield lines prior to the crosswalks in accordance with MUTCD Section 3B.16.
- Place an in-street pedestrian sign in the crossing permanently. These signs have been proven to reduce speeds due to a perceived narrowing of travel lanes. Given the volumes of truck traffic, these signs can sustain some damage. However, they are a low cost solution to slowing traffic and protecting people crossing.
- Consider shortening the curb radius on both sides of the South Street/Route 9 intersection to reduce the crossing distance and calm turning traffic.

3. Quality of walking environment along Route 9 needs enhancement.

The sidewalk on the south side of Route 9 between Petticoat Hill Road and South Street is an excellent example of a high quality pedestrian environment. There is a green space (verge) filled with plantings that separate the sidewalk from the street and benches that provide places to rest and gather with only a few curb cuts that interrupt the walking zone. Parallel parking provides a barrier between moving traffic and the sidewalk. Occupied storefronts line the sidewalk providing vitality and sense of the community.

The sidewalk on the north side of Route 9 in the same area is chopped up with multiple curb cuts and large expanses of pavement used for parking and vehicular access to buildings. Where present, the sidewalk is separated from the street with a narrow verge. Parallel parking does provide some buffer between walkers and moving traffic.



Sidewalk on south side of Route 9



Crossing at South Street and the former elementary school



Sidewalk on north side of Route 9

As walkers move along Route 9 east of South Street to reach the pharmacy, convenience store, and other commercial businesses, the walking experience further deteriorates. There is no sidewalk on the south side of Route 9 beyond the former James School. On the north side of Route 9, the sidewalk has multiple, long curb cuts and no verge separating the sidewalk from the road. The sidewalk continues in this condition until Hillenbrand Road.

The sidewalks west of the North Street/Petticoat Hill Road intersection continue on the south side of Route 9 until the Post Office, while the sidewalk on the north side continues to Buttonshop Road. The sidewalk on the north side has a narrow verge for a short stretch of the road before it ends. The Route 9 right of way seems to provide minimal space for widening sidewalks.

Recommendations to improve the quality of the walking environment along Route 9:

- Inspect and repair sidewalks along the entire corridor
- Review the Town of Williamsburg curb cut permitting rules and revise to minimize the frequency and the width of curb cuts
- Work with property owners along the Route 9 study area to reduce the width of curb cuts, where practicable.
- Identify areas where plantings, trees and benches could be added along the corridor to replicate the street treatment on the south side of Route 9 in front of historic properties and general store.

4. Parking spaces are limited and current parking polices discourage “park once” strategies.

Many workshop participants described the Burgy village center as having a parking problem. In teasing out the specifics of the situation, it was widely agreed upon that when special events occur, parking is difficult to find (e.g., Town Meeting, downtown events, etc.). Many others described a constant lack of parking and a territorial approach to parking by the business owners in the village. For example, many residents park at the Post Office, conduct business there, and then re-park their car at the Williamsburg Market to buy groceries – in part because the businesses state that one can only park in the lot when conducting business at that particular establishment. These policies promote driving from front door to front door, which work against efforts to promote walking in and around the village center. A perception that crossing Route 9 is unsafe was also cited as a reason why people move their car multiple times during one trip to the village center.

Parking is provided in small lots in front of and behind businesses and services, as well as along Route 9 (approximately 13 parallel parking spaces). North Street also has up to 5 parallel parking spaces. Given the proximity to the river, the businesses along the east side of Route 9 have limited ability to expand parking behind the buildings.



Sidewalk on the north side of Route 9 looking east toward Haydenville



Route 9 corridor looking west toward Buttonshop Road

The parking lots and curb cuts in front of and around Florence Bank, Williamsburg Market, and Cichy’s Garage are challenging for pedestrians and drivers alike. Many of the spaces are not delineated which allows people to park wherever they can find space. Often, the haphazard parking pattern blocks sight lines which can cause dangerous driving and walking conditions. The wide curb cuts extend crossing distances and allow multiple lanes of cars to drive in and out, which creates an unpredictable walking experience.

Given the expressed desire to improve the vitality of the village center – both with the potential redevelopment of the James School and the economic goals of the existing businesses – it is critical to better understand the true nature of the parking demand and supply situation.

Recommendations to address parking in the Burgy village center:

- Conduct a parking study to determine the existing supply and pent up demand in the Burgy village center
- Work with the business owners to better understand the parking issues they wrestle with and consider adopting a shared parking strategy for the village center
- Consider formalizing the parking space layout in and around Florence Bank, Williamsburg Market, and Cichy’s Garage. Delineate a pedestrian zone (with paint if other alternatives prove too expensive) where drivers can expect people walking across the parking lot driveways

5. Streets leading to the town center need pedestrian infrastructure improvements.

Improvements on adjacent streets and those leading to the town center could increase the number of people walking to the center. Buttonshop Road has no sidewalks. North Main Street has sidewalks, but they are relatively narrow and could be challenging for those with physical limitations or wheelchairs. The surfaces are variable (i.e., cracked and uneven in places). Falls are a major health concern for many older adults. Older adults are more likely to suffer severe injury when they fall. Uneven sidewalks are an immediate danger for older adults, and they have a secondary impact in that older adults may reduce their walking trips to avoid uneven sidewalks. Buttonshop Road and North Main Street are representative of the conditions of the other streets leading to the village.



Parking area next to Florence Bank



Parking area in front of Williamsburg Market



View of Buttonshop Road from Route 9



View of N Main St/North St/E Main St intersection

The N Main Street/ North Street/E Main Street intersection north of the bridge crossing presents some challenges for walkers and drivers. There are four approaches to the intersection, but only three of the approaches are required to stop. The 3-way stop is familiar to residents, but some workshop participants described confusion as to who has the right-of-way when moving through the intersection. Furthermore, crosswalks appear across only North Street and E Main Street. The curb radii on both sides of the E Main Street approach are wide and the crossing distance is long.

Recommendations to make targeted pedestrian infrastructure improvements:

- Identify priority walking routes
 - » Priority walking routes may include connections to schools, senior housing, residential neighborhoods with sufficient density, and parks or trailheads
 - » Walking loops could also be considered priority routes. The loops could be identified on a map or with small trailblazers marking the route. These loops could feature many of the historic and natural features that make Burgy distinctive, and help to create a better sense of place for the village center.
- Direct sidewalk maintenance and reconstruction funds to making improvements on priority routes
- Study the traffic pattern at the N Main Street/ North Street/E Main Street intersection to determine if a 4-way stop would improve safety
- Consider shortening the curb radii on both sides of E Main Street



Meekins Library backyard

- Paint crosswalks across N Main Street; study the safety implications of painting a crosswalk across North Street on the south side of the intersection where no stop sign exists currently.

6. Public green spaces are hidden assets in and around Burgy village center.

The Burgy village center has several pocket parks, playgrounds and walking paths that could be more visible. The Mill River itself is hidden from view and seems inaccessible. Angel Park, the new Dunphy School playground and playfields, the former James School green space and playground, and Meekins Library plaza and backyard could form the backbone of a green/open space network that allows people to connect with Burgy’s beautiful natural setting.

Recommendations to make public green spaces more visible:

- Continue the planning of a proposed walking trail along the Mill River behind Florence Bank and Williamsburg Market
- Highlight public green spaces on walking loop maps. Maps could be made available in the library, post office and local retail establishments.
- Consider signage program to direct residents and visitors to local landmarks and parks
- Increase programming in the public open spaces to increase use and attachment to the village green spaces and center
- Consider further study of access and circulation to public green spaces.

Policy Recommendations and Potential Funding Sources

The Pioneer Valley Planning Commission(PVPC) is in the process of doing an analysis of key town plans, policies and regulations to determine if these planning tools support healthy aging through community design. The following town regulations and standards are some of the policies that could affect the village center's walkability:

- Road design standards, such as curb radii requirements, road widths, curb cut frequencies and widths, crosswalk design standards
- Building setbacks and entrance requirements
- Parking requirements, both location, number and design
- Sidewalk requirements
- Housing policies
- Density limits

WalkBoston recommends that PVPC examine these local requirements and standards with walkability as an established community goal.

Funding is the most common stumbling block for communities looking to improve the built environment. Infrastructure changes can be costly and have long timelines. WalkBoston recently published a low-cost pedestrian infrastructure guide that compiles lower cost solutions that can calm traffic and enhance safety. It can be found on our website at: <http://walkboston.org/low-cost-pedestrian-improvements-free-report-download>. Williamsburg could implement some of these strategies as temporary or permanent solutions to improve walkability.

The new MassDOT Complete Streets Funding Program could be a funding source for Williamsburg to achieve some of its walkability goals. The new Complete Streets Funding Program, authorized by the 2014 Transportation Bond Bill, offers Massachusetts municipalities incentives to adopt policies and practices that provide safe and accessible options for all travel modes – walking, biking, transit and vehicles – for people of all ages and abilities. <http://www.massdot.state.ma.us/Portals/8/docs/CompleteStreets/flyer.pdf>

Williamsburg would need to pass a complete streets policy to qualify for the program and compete for funding. PVPC will discuss this option as part of their analysis of existing town policies and codes.



View of the Mill River from Buttonshop Road

Priorities

The Town of Williamsburg and its citizens have taken the first step in seeking out expertise in healthy aging and community design as a means to improve safety and economic viability, and to increase opportunities for people to engage in an active, healthy lifestyle. WalkBoston suggests the following next steps to begin implementing the recommendations discussed in this report.

1. Establish a municipally recognized bicycle/ pedestrian committee or task force. Depending on its capacity and members' interest, the Mill River Greenway Committee could fulfill this role. Membership on this committee could include representatives from town departments, school system, chamber of commerce (or equivalent organization), first responders, council on aging, and advocates.
2. Determine if pedestrian safety is a priority issue for Williamsburg citizens. If it is a top priority, then examine the town budget and commit funds to building, re-building, and maintaining a sidewalk network in town.
3. Draft and adopt a complete streets policy to qualify for the MassDOT Complete Streets Funding program.

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 in Woburn, MA

Curb Extension/Curb Bulb-out

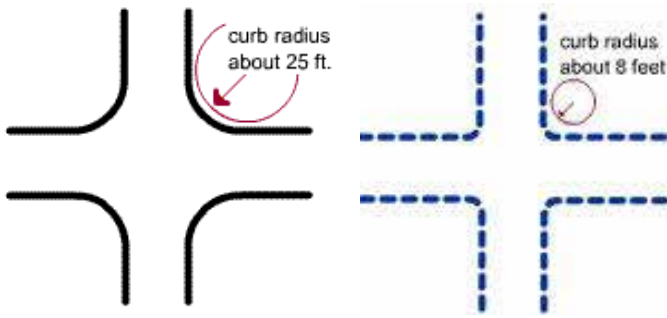
A sidewalk extension into the street (into the parking lane) shortens crossing distance, increases visibility for walkers and encourages eye contact between drivers and walkers.



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.



(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 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.

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.



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/fhwasao9009/



Rectangular Rapid Flash Beacon (RRFB) in West Springfield