

January 2017

Downtown Fitchburg Walk Assessment Report

Background

As part of its efforts to improve traffic safety and revitalize its economy, the Gateway City of Fitchburg, Massachusetts (population 40,000) is pursuing Complete Streets as a framework to address the needs of all road users (people walking, biking, driving and taking transit). Through this initiative as well as others, the City aims to generate more activity in its post-industrial downtown and surrounding areas. Fitchburg started implementing Complete Streets in September 2016 by replacing one of the two travel lanes along Main Street downtown with a bike lane and wooden and concrete planter boxes. These changes, which will be piloted for a year, have reduced traffic speeds on Main Street and beautified the neighborhood, creating a safer, more attractive and more comfortable environment for residents and visitors alike.



Fitchburg walk assessment participants approach the downtown along Main Street on October 25, 2016.

The City of Fitchburg is now developing a broader Complete Streets prioritization plan. To help guide this effort the non-profit Montachusett Opportunity Council (MOC), which administers a local Mass in Motion program to promote active transportation options, invited WalkBoston to conduct a walk assessment of the Main Street area. The walk assessment, which took place on October 25, 2016, was designed to further examine local pedestrian infrastructure conditions and to recommend potential improvements. Participants included a Fitchburg City Councilor, representatives from the City's planning and police departments, and faculty and students from Fitchburg State University, as well as MOC and WalkBoston (see Appendix A for full list of participants).

While the reconfigured Main Street provides a potential model for additional Complete Streets initiatives in Fitchburg, there are still areas along and around Main Street downtown where high traffic speeds and deficient crosswalks, signals and curb ramps create unsafe conditions. The report sections that follow detail key walk assessment findings and recommendations to address these issues and help the City advance its Complete Streets goals. The recommendations are in three categories: "Do It Now" can be done during cold, damp weather and will substantially contribute to the viability of the Main Street area. Improvements that need to be done in warm weather are classified as "Next Spring/Summer (2017)" and more capital intensive projects are in "Next Two Years (2017-2018)." These recommendations are also included in Appendix B.

Area-wide recommendations

Do It Now

- Add wayfinding signage to create a sense of connectivity between key destinations downtown and elsewhere
- Provide regular bus or shuttle service between downtown and the Fitchburg State University campus

Next Spring/Summer (2017)

- Upgrade crosswalks to include ladder design, high-visibility signage and accessible curb ramps
- Add bumpouts/curb extensions at key crossings and intersections to reduce crossing distances, slow turning traffic and enhance visibility between people walking and driving

Next Two Years (2017-2018)

- Provide additional bike lanes beyond the short section of Main Street where they have been painted

Main Street commercial core recommendations

Do It Now

- Retain the single lane layout beyond the one-year pilot and use additional roadway space for bike lanes and/or parklets (sidewalk extensions that provide more space and amenities for people using the street)

Next Two Years (2017-2018)

- Explore opportunities to remove on-street parking and reclaim more roadway space for pedestrian/bike uses and public realm improvements (e.g. parklets)

Boulder Drive recommendations

Next Spring/Summer (2017)

- Reduce the number of eastbound travel lanes to calm traffic
 - Paint fog lines on the road to narrow travel lanes as a near-term traffic calming measure (before reducing the overall number of travel lanes)
- Add bike lanes on Boulder Drive as part of roadway reconfiguration
- Enhance pedestrian connections between Boulder Drive and Fitchburg Riverfront Park

Main Street/Cushing Street/Blossom Street intersection recommendations

Next Spring/Summer (2017)

- Add plastic flex posts to the yellow painted median on Main Street to prevent wide left turns at high speeds

Next Two Years (2017-2018)

- Consider adding a flashing beacon or traffic signal to calm traffic

Main Street/North Street intersection recommendations

Next Spring/Summer (2017)

- Add protected pedestrian refuge islands in the crosswalks to the Intermodal Transit Center using paint and plastic flex posts

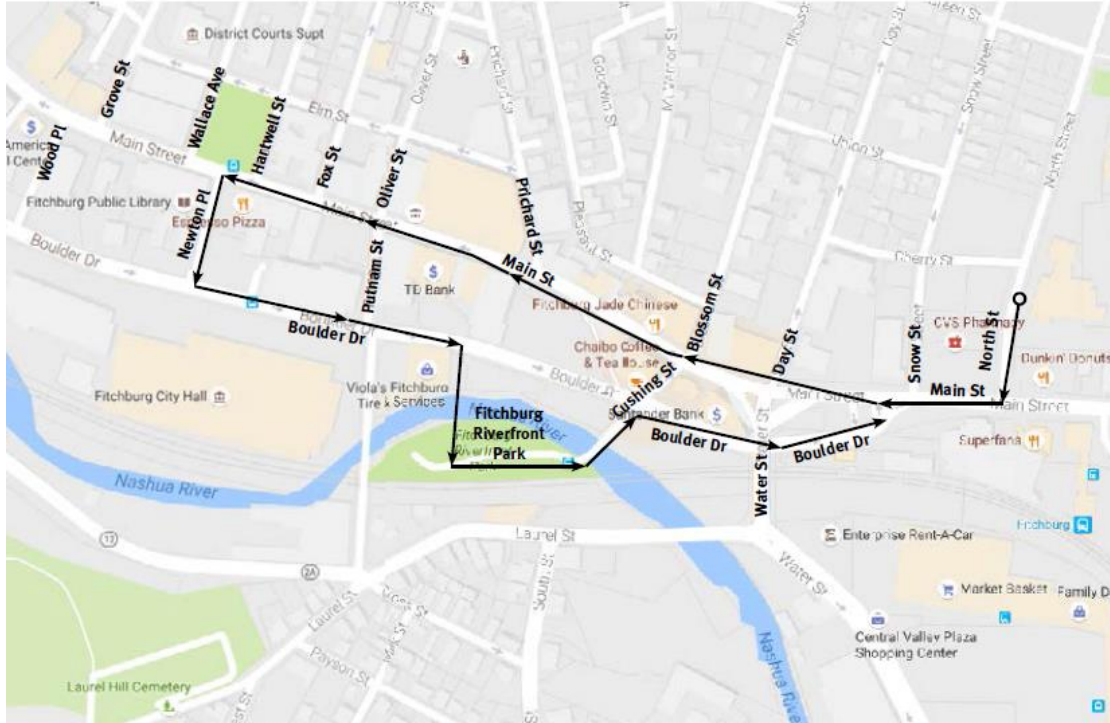
Next Two Years (2017-2018)

- Upgrade WALK signals to be automatic, concurrent with traffic, provide pedestrian head starts, and allow sufficient time for people to cross the street.

Walking Route

Walk assessment participants gathered at the fire station on North Street, then walked west on Main Street through the downtown area. Participants then walked south on Newton Place, then east on Boulder Drive, before finally returning to Main Street and then the fire station again for further discussion. A map of this walking route is shown below.

Downtown Fitchburg Walk Assessment Map October 25, 2016



The walking route for the downtown Fitchburg walk assessment on October 25, 2016.

Main Street commercial core

Main Street runs through the heart of Fitchburg's downtown. While there are a number of vacant storefronts along the main commercial corridor between Blossom Street and Academy Street, well-maintained building facades, wide and clean sidewalks, and attractive sidewalk landscaping and street trees all help create a pleasant pedestrian environment. Efforts to attract new businesses to Fitchburg and revitalize the downtown should capitalize on these existing foundations of a walkable community.

Until September 2016, the Main Street commercial corridor had two travel lanes of one-way westbound traffic, with parking on the north side of the street. People would drive along this stretch of roadway at high speeds, creating unsafe conditions and thus undermining the positive elements of walkability mentioned above. As mentioned at the beginning of this report, the travel lane on the south side of the street has now been replaced with a westbound bike lane and planters for the next year as a Complete Streets pilot. This has already substantially calmed traffic and thus enhanced pedestrian safety. In addition, the freed-up street space creates the potential for parklets to further enhance the public realm, and the new bike lane presents additional opportunities for active transportation downtown.



Replacing a motor vehicle travel lane with a bike lane and planters has calmed traffic and enhanced beauty along Main Street in downtown Fitchburg. This reclaiming of street space for people also presents opportunities to install parklets to further enhance the public realm.

Walk assessment participants agreed that the changes to Main Street represented a significant improvement and should be kept in place beyond the one-year duration of the pilot. However, several shortcomings in crosswalks across and along Main Street need to be addressed. While abundant and conveniently located, crosswalks in the commercial core were inconsistent and deficient with respect to their actual design. Many had the bare minimum of two parallel white lines, while others had marginal amounts of largely faded red and white shading. WalkBoston recommends that all these crosswalks be upgraded to incorporate consistent ladder designs (also known as zebra striping) and signage to enhance their visibility. This is particularly important, given that many of these crosswalks are located at unsignalized locations and that walk assessment participants observed drivers failing to yield to pedestrians on several occasions.

In addition, parked cars adjacent to crosswalks block sight lines between people walking and driving, both at midblock locations as well as cross streets such as Pritchard Street and Fox Street. These crosswalks should be “daylighted” to enhance pedestrian visibility through the addition of curb extensions/bump-outs (which can be done cheaply and quickly using paint and plastic flex posts) and/or the removal of parking spaces. There is an abundance of underutilized on-street parking in downtown Fitchburg and walk assessment participants noted that the nearby parking garages are underutilized as well. Removing some on-street parking spots, in conjunction with encouraging more use of the nearby garages and enhancing pedestrian connections between the garages and downtown, presents additional opportunities to reclaim street space for pedestrian, bike and public realm improvements.



Crosswalks along and across Main Street fail to incorporate a highly visible ladder/zebra striping design. Several crosswalks (like the one depicted above) included a strange mix of red paint and diagonal white stripes that was largely faded and did not extend across the entire street; the rest only had the bare minimum of two parallel lines.

To increase the number of people walking in and around downtown Fitchburg, broader bike, transit and wayfinding connections should be considered as well. There are no bike facilities on Main Street outside the commercial core (east of Blossom Street and west of Academy Street) and no eastbound bike lanes through downtown. Some walk assessment participants noted that there is no bus service between the Fitchburg State campus and downtown (a distance of less than a mile), and some of the students stated that the walk assessment was the first time they had walked downtown. Getting more people walking and creating a sense of downtown Fitchburg and nearby locations as safe, walkable and accessible destinations go hand in hand. To this end, the City should consider installing wayfinding signage that informs people how long it takes to walk to key destinations.

Boulder Drive

Located immediately south of Main Street, Boulder Drive is a one-way thoroughfare with two lanes of eastbound traffic along the edge of downtown Fitchburg. Parking is on the south side of the street and Fitchburg City Hall, several social service providers, and a pedestrian bridge across the Nashua River to Fitchburg Riverfront Park are all located along this corridor. In stark contrast to Main Street, Boulder Drive has very little street-level or commercial activity and a high prevalence of surface parking lots and garages. In addition traffic moves at very high speeds down the wide roadway, sidewalks are often narrow and uneven and lack accessible curb ramps, crosswalks lack the highly visible ladder design and are sometimes poorly located, attractive landscaping elements are non-existent, and there are no bike lanes. In sum, Boulder Drive presents a number of safety hazards for pedestrians and does not have a pleasant or comfortable walking environment.



The wide roadway on Boulder Drive leads to high traffic speeds, creating safety hazards for pedestrians. At the corner of Boulder Drive and Putnam Street (above), a faded old crosswalk is still visible next to a newer crosswalk. Crosswalks along Boulder Drive lack the highly visible ladder design, which creates additional safety hazards for people crossing the street.

Despite these challenges, Boulder Drive presents a number of opportunities for Complete Streets improvements, and Main Street can provide a potential model here. The roadway is wide enough on Boulder Drive that one travel lane can be removed and an eastbound bike lane (or potentially even a two-way cycletrack) can be added in its place, just like the changes implemented on Main Street. Another option here could be to convert Boulder Drive into a two-way street with one travel lane in each direction. Both of these options would substantially calm traffic on Boulder Drive, just as the improvements on Main Street have, and the addition of an eastbound bike lane would help create a more complete east-west bike network through downtown Fitchburg. Overall, walk assessment participants broadly agreed that the number of eastbound travel lanes on Boulder Drive should be reduced from two to one.

While options for reconfiguring Boulder Drive are considered, painting fog lines on the street to visually narrow the travel lanes, installing flashing beacons, and upgrading all crosswalks to incorporate high-visibility ladder design and signage should all be pursued in the near term to calm traffic and improve pedestrian safety. In addition, the WALK signal at Boulder Drive and Putnam Street should be upgraded so that it is concurrent with traffic and provides a head start for pedestrians in advance of traffic, as well as an automatic WALK cycle so that pedestrians do not need to push a button. Crosswalks and curb ramps along Boulder Drive at Putnam Street and Cushing Street should be reconfigured to ensure that they are accessible for all, and sidewalks should be upgraded so that they are level and free of tripping hazards.

Connections to the Fitchburg Riverfront Park should also be enhanced via better pedestrian infrastructure and wayfinding, as the current crosswalk near the aforementioned pedestrian bridge ends at an unattractive parking lot. Finally, similar to Main Street, parking on Boulder Drive is underutilized as well, which again presents opportunities to remove parking spaces and reclaim roadway space for additional pedestrian, bike and public realm improvements.



Crosswalks along Boulder Street at Putnam Street (left) and Cushing Street (right) are misplaced relative to curb ramps or do not provide curb ramps in the appropriate locations at all, presenting accessibility challenges to people walking, especially seniors and people with disabilities.



Access from Boulder Drive to the pedestrian bridge across the Nashua River to Fitchburg Riverfront Park is unattractive at best and unsafe at worst, as the crosswalk near this location ends at a wide curb cut at the edge of an uninviting parking lot. Upgrading the crosswalk to ladder design, adding pavement markings to delineate a pedestrian path across the parking lot to the bridge, and adding wayfinding signage and other visual cues to draw attention to the park will all help enhance safe and comfortable access to this attractive community asset.

Main Street/Cushing Street/Blossom Street intersection

The intersection of Main Street with Cushing Street and Blossom Street marks the eastern edge of Fitchburg's downtown commercial core. Just east of this intersection, a number of streetscape and landscaping improvements have been made at Main Street and Water Street, including the overhaul of several crosswalks to incorporate a visible and attractive red brick design. The crosswalks along Main Street across Cushing and Blossom Streets incorporate this design as well, but the crosswalk across Main Street at this location only has two parallel lines. This crosswalk should be upgraded to incorporate the more visible ladder design.

In addition, bumpouts/curb extensions should be added at all corners of this intersection to narrow curb radii, slow turning traffic and reduce long crossing distances for pedestrians, especially for people crossing Blossom Street. This can be done cheaply and quickly using paint and plastic flex posts. Plastic flex posts should also be added to the yellow painted median on Main Street to prevent traffic turning left onto Main Street from Blossom Street from making wide and sweeping turns at high speeds. Finally, adding a flashing beacon or traffic signal should be considered here as an additional traffic calming measure, given the confusing traffic pattern here with motor vehicles cutting from Cushing Street up to Blossom Street across Main Street.



Long crossing distances, wide turning radii and confusing traffic patterns at Main Street and Blossom/Cushing Streets should be addressed using bumpouts/curb extensions, flex posts in the Main Street median, and potentially a flashing beacon or traffic signal.

Main Street/North Street intersection

The intersection of Main Street and North Street east of downtown Fitchburg is an important link in the City's broader transit network, as the Intermodal Transportation Center with connections to MRTA buses and the MBTA commuter rail is located right there. Ensuring that pedestrians can safely access this transit station is thus critical to advancing Complete Streets goals, but wide turning radii and long crosswalks that lack ladder design and pedestrian refuges present challenges here. All crosswalks should be upgraded to the highly visible ladder design and bumpouts/curb extensions should be added using paint and plastic flex posts to reduce crossing distances and narrow turning radii. Flex posts should also be added to the yellow painted median on the east side of the intersection to create a protected pedestrian refuge in the middle of the crosswalk, and this should be replicated on the west side of the intersection as well between the crosswalk and the landscaped median. Finally, the WALK signal here should be upgraded to be automatic, concurrent with traffic, provide a pedestrian head start, and allow sufficient time for people to cross the street.



Crosswalks at the intersection of Main Street and North Street at the Intermodal Transportation Center currently lack high-visibility ladder design and have long crossing distances. A pedestrian refuge area should be created here between the crosswalk and the landscaped median using paint and plastic flex posts to protect people who might not be able to cross the street in a single WALK signal cycle. Adding flex posts here will also prevent cars from making wide and sweeping left turns at high speeds from Main Street onto North Street.

Appendix A: Fitchburg Walk Assessment Participants

Joel Kaddy, Fitchburg City Council
Amy LeBlanc, Fitchburg Community Development Department
Lt. Jeffrey Howe, Fitchburg Police Department
Debbie Benes, Fitchburg State University (faculty)
Bridget Cabal, Fitchburg State University (student)
Daphnely Diaz, Fitchburg State University (student)
Kasandra Gomet, Fitchburg State University (student)
Courtney Hertz, Fitchburg State University (student)
Jessica Lawrence, Fitchburg State University (student)
Adam Taylor, Fitchburg State University (student)
Jenna David, Montachusett Opportunity Council
Tricia Pistone, Montachusett Opportunity Council
Dorothea Hass, WalkBoston
Adi Nochur, WalkBoston

Appendix B: Walk Assessment Recommendations

The recommendations are in three categories: Do It Now can be done during cold, damp weather and will substantially contribute to the viability of the Main Street area. Improvements that need to be done in warm weather are classified as Next Spring and more capital intensive projects are in Next Two Years.

Do It Now

- Retain the single lane layout beyond the one-year pilot and use additional roadway space for bike lanes and/or parklets (sidewalk extensions that provide more space and amenities for people using the street)
- Provide regular bus or shuttle service between downtown and the Fitchburg State University campus
- Add wayfinding signage to create a sense of connectivity between key destinations downtown and elsewhere

Next Spring/Summer (2017)

Area-Wide Recommendations

- Upgrade crosswalks to include ladder design, high-visibility signage and accessible curb ramps
- Add bumpouts/curb extensions at key crossings and intersections to reduce crossing distances, slow turning traffic and enhance visibility between people walking and driving

Main/North and Main/Cushing/Blossom recommendations

- Add protected pedestrian refuge islands in the crosswalks to the Intermodal Transit Center using paint and plastic flex posts
- Add plastic flex posts to the yellow painted median at Main/Cushing/Blossom intersection to prevent wide left turns at high speeds

Boulder Drive recommendations

- Reduce the number of eastbound travel lanes to calm traffic
- Paint fog lines on the road to narrow travel lanes as a near-term traffic calming measure (before reducing the overall number of travel lanes)
- Add bike lanes on Boulder Drive as part of roadway reconfiguration
- Enhance pedestrian connections between Boulder Drive and Fitchburg Riverfront Park

Next Two Years (2017-2018)

- Provide additional bike lanes beyond the short section of Main Street where they have been painted

- Explore opportunities to remove on-street parking and reclaim more roadway space for pedestrian/bike uses and public realm improvements (e.g. parklets)
- Consider adding a flashing beacon or traffic signal to calm traffic at Main/Blossom/Cushing intersection Upgrade WALK signals to be automatic, concurrent with traffic, provide pedestrian head starts, and allow sufficient time for people to cross the street.
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