

City of Fitchburg: Health Equity-related Initiatives Zoning and Regulatory Analysis Report

Fun 'n FITchburg



Prepared for the City of Fitchburg, Montachusett Opportunity Council, Inc.
and the Fun 'n FITchburg Partnership

July 2013

Prepared by:
Montachusett Regional Planning Commission (MRPC)

Photo Sources, clockwise from top left: Pedestrian walkway at Riverside Commons (MRPC), Community Garden at Green Acres (MOC), *Green Fitchburg* Report, Chicane example (Google Images)

Fun 'n Fitchburg, a program of the Montachusett Opportunity Council, Inc., is funded by a Mass in Motion initiative sponsored by the Massachusetts Department of Public Health and the Robert Wood Johnson Foundations Healthy Kids, Healthy Communities

The City of Fitchburg Health Equity-related Initiatives Zoning and Regulatory Analysis Study

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City of Fitchburg Health Equity-related Initiatives Zoning and Regulatory Analysis Study

Executive Summary

The Montachusett Regional Planning Commission (MRPC) has prepared this *Health Equity-related Initiatives Zoning and Regulatory Analysis Report* for the City of Fitchburg, Montachusett Opportunity Council, Inc. and the Fun 'n FITchburg Partnership. The Health Equity Zoning and Regulatory Analysis Report answer these questions: Do the City's zoning regulations help or hinder active living and healthy eating? Have all health-equity measures as recommended in the City's various planning documents been implemented? The Report provided a review of best practices from other communities in and outside the Commonwealth of Massachusetts along with recommendations for implementation in Fitchburg to promote health!

Among the key findings:

- The City lacks adequate zoning to promote urban agriculture.
- Conditional approval of fast food restaurants does provide the opportunity for City Officials to condition any new such restaurants to include healthy eating considerations and even active living by providing pedestrian friendly access.
- The City's Zoning Ordinance provides limited opportunities for "commercial recreation".
- The City's Zoning for Main Street in Downtown was amended in 2001 to allow residential uses by-right in upper stories. This provision encourages Walkable Neighborhoods, which can foster Active Living.
- The City has Flexible Residential Zoning tools that have opportunity to foster active living. However the tools, especially the Planned Unit Development (PUD) Zoning, have not been implemented to their fullest potential. A further consideration is that they are also designed for new developments and neighborhoods only.
- The City has a series of Special District Provisions that can be used to create mixed use neighborhoods, which can foster walkability, an aspect for active living. Similar to the Flexible Residential Zoning tools in that they are usually utilized for new developments only. However, some of these Provisions have been designed with redevelopment opportunities in mind, so there are greater opportunities to improve existing neighborhoods with these zoning tools. In fact, the City has two successful projects developed under these tools: conversion of the former Anwelt Shoe Factory into the MassInnovation Center and Senior Apartments and more recently the former Premier Box manufacturing site that is being redeveloped as Riverside Commons, that will provide 177 residential units, includes pedestrian amenities (located across the North Nashua River from the newly developed Gateway Park) and even some commercial opportunities.
- The City's Subdivision Regulations, which are for new neighborhoods, encourage too wide streets, are limited in the ability to connect such new neighborhoods to the City's existing commercial and recreations areas in a pedestrian-friendly manner and currently due to State Land Use Statutes are limited in the ability to provide open space and recreation facilities.
- The City's previous planning documents, such as the Vision 2020 Master Plan, North Nashua River Master Plan and the Green Fitchburg Report, each have provided health-equity related recommendations. There have been some success stories, such as the opening of Riverfront Park, Gateway Park and the ½-mile long Steamline Trail. However, implementation of the Twin Cities Rail Trail has still not yet occurred and the Steamline Trail faces challenges both in preservation of the existing segment and also its further extension to connect the Lower Cleghorn Neighborhood and the new Wachusett Train Station.

The *Health Equity-related Initiatives Zoning and Regulatory Analysis Study* provides a series of recommendations that will hopefully lead to improved health of the City's residents. The recommendations are provided within the following categories: Zoning Ordinances Changes to Promote Active Living, Zoning Ordinances Changes to Promote Healthy Eating, Subdivision Regulations changes to Promote Active Living, Planning and Policy Needs and Opportunities to Promote Active Living, Planning and Policy Needs and Opportunities to Promote Healthy Eating and Overall Planning and Policy Needs and Opportunities.

Zoning Ordinances Changes to Promote Active Living

- The City of Fitchburg should amend the "Flexible Development" Zoning Provisions so they are allowed "by-right".
- Amend the Common Parking requirement to have the measurement for parking requirement equal 800 feet from premises.
- Allow Commercial Recreation in at least some of Fitchburg's Residential Zoning Districts and change the Special Permit Granting Authority to the Planning Board
- Change the Assisted and Independent Living Facilities (ALF/ILF) zoning provision's buffer requirement to allow recreational trails and sidewalks to also be exempt from the buffer provision (in addition to driveways).
- PUDs need to go through a Subdivision-type of Design Standard Review. The Planning Board should adopt a set of PUD Rules and Regulations that include provisions of similar Design Standards that are incorporated within newly built subdivisions under Subdivision Control Law.
- For submittal information on Site Plans add the requirement for the following information: Location, names, and present widths of streets bounding, approaching, and within 1,200 feet (quarter mile) of the development.
- Adopt Design Guidelines, within the Planning Board's Site Plan Review Regulations, for John Fitch Highway, per the ULI Report's Recommendations.
- Change zoning for parking within John Fitch Highway and other identified commercial areas to have parking allowed in the rear (possibly the side) of the building.

Zoning Ordinances Changes to Promote Healthy Eating

- MRPC notes that there are a number of issues to consider in adopting a set of urban agriculture standards, based on our Best Practices review. Therefore our first recommendation is for the City to create Urban Agriculture Task Force.
- One set of specific of recommendations at this time is to add Farmers' Markets and Community Gardens as a distinct "use" category allowed by-right in most Zoning Districts.

Subdivision Regulations changes to Promote Active Living

- Revise the Fitchburg's Planning Board's Subdivision Rules and Regulations so that it is clear there is one set of sidewalk provisions.
- Explore use of any monies collected by the Fitchburg Planning Board from developers to put sidewalks on at least one side of the street in areas such as Rollstone Road, Franklin Road and Ashby State Road.
- For the Development Impact Statement provision change the "may" to "shall" for subdivisions above a certain size (MRPC suggests such as subdivisions of 5 lots or greater).
- For submittal information on Definitive Plans, MRPC recommends an increase to 1,200 feet (approx. quarter mile) from 300 feet for the following information: Location, names, and present widths of streets bounding, approaching, and within One Thousand Two Hundred (1200) feet of the subdivision.
- Change the Industrial Subdivision provisions to require installation of street lights, sidewalks and street trees as the default standard.

- Reduce the Street Width Standards to a more appropriate width, perhaps 24 feet (two 12' travel lanes). However, the actual width standards to decide upon should be given further consideration, based on anticipated traffic and also inclusion of "Complete Street" design elements.

Planning and Policy Needs and Opportunities to Promote Active Living

- Reduce the Street Width Standards to a more appropriate width, perhaps 24 feet (two 12' travel lanes). However, the actual width standards to decide upon should be given further consideration, based on anticipated traffic and also inclusion of "Complete Street" design elements.
- The City of Fitchburg should continue to take a leadership role in moving the Twin Cities Rail Trail project forward in order to have a pedestrian-friendly corridor parallel to Water Street (Route 12) from Downtown Fitchburg to Downtown Leominster (North Main Street).
- Adopt a Policy to include public river access with a trail easement as part of any future redevelopment project for properties that have access / frontage on or along the Nashua River (or one its tributaries), including any redevelopment of the Munksjo Mill or Central Steam Plant sites).
- The City of Fitchburg should pursue development of a Downtown Park on a vacant lot on Main Street per the Fairhaven Village Green and Providence's Grant's Block Lot examples.
- The City of Fitchburg should explore additional funding sources that can be targeted for park maintenance, including adoption of the Community Preservation Act.
- The City should adopt a Complete Streets Policy.
- The Pedestrian Generator Checklist developed by Fun 'n FITchburg should be incorporated into development reviews conducted by Neighborhood Improvement Code Enforcement
- The City should work on preserving the existing .6 mile section, and seeking funding for expanding, of the Steamline Trail, with goal of getting pedestrian link to from Downtown Fitchburg, Lower Cleghorn neighborhood onto the Wachusett Train Station.
- The continuous "Street Trail" to facilitate the North Nashua River Downtown Fitchburg trail should be explored for implementation.

Planning and Policy Needs and Opportunities to Promote Healthy Eating

- In addition to the Urban Agriculture Task Force recommended for the urban agricultural zoning bylaw provisions, the City of Fitchburg should establish a Food Council.
- Develop a Food Systems Plan.
- Fitchburg should develop a Corner Store Program.
- The City should pursue siting of an additional grocery store within the Lower Cleghorn/West Fitchburg neighborhood.

Overall Planning and Policy Needs and Opportunities

- The City of Fitchburg should include a section on Health as part of a future update to the 1998 Vision 2020 Master Plan.
- For development of vacant lots include green infrastructure elements.
- The Fun 'n FITchburg Partnership should prioritize each recommendation for further refinement and prioritization. In order to help with that process, the Fun 'n FITchburg Partnership should review the "Health Action Steps Matrix" example provided in Appendix F of this *Study*.

Fun 'n FITchburg is a program of the Montachusett Opportunity Council, Inc. The program is funded by a Mass in Motion initiative sponsored by the Massachusetts Department of Public Health and Healthy Kids, Healthy Communities funded through the Robert Wood Johnson Foundation.

www.ci.fitchburg.ma.us/residents/fun-n-Fitchburg

The City of Fitchburg Health Equity-related Initiatives Zoning and Regulatory Analysis Study

Introduction

The Montachusett Regional Planning Commission (MRPC) has prepared this *Health Equity-related Initiatives Zoning and Regulatory Analysis Study* for the City of Fitchburg as part of the Fun 'n FITchburg program. For purposes of this *Study* such health equity-related initiatives that have been assessed include, but are not limited to: transit access, walk-ability, bike-ability, neighborhood safety, recreation (both passive and active) access, school siting, land access for public gardens, vacant lots, grocery store and corner store access.

To begin this report, MRPC would like to provide an introduction to Fun 'n FITchburg, which is a program of the Montachusett Opportunity Council, Inc., is funded by a Mass in Motion initiative sponsored by the Massachusetts Department of Public Health and the Robert Wood Johnson Foundation's Healthy Kids, Healthy Communities initiative.

Fun 'n FITchburg is a partnership of over 75 individuals taking a different approach to obesity. The Partnership consists of youth and residents, the Mayor, the Board of Health, the Parks and Recreation Department, City Police, the Community Health Center, Fitchburg Public Schools, the Montachusett Opportunity Council, businesses, environmental groups, and many others. Fun 'n FITchburg is focusing on our local policies, systems and environmental changes that will make it easy for Fitchburg residents to eat healthy and be physically active.

The Obesity and Health Connection: In 2009, Fitchburg youth had the 2nd highest body mass index (BMI) in Massachusetts. In addition, In Fitchburg, only 38 out of every 100 people were at a healthy weight. If the obesity epidemic is not reversed, this generation of children could be the first to live sicker and die younger than their parents' generation. Obesity can be directly linked to the US top three causes of death: stroke, cancer and heart disease. Healthy eating and physical activity reduce the risk for obesity and chronic diseases.

The Community is Getting Healthier: Fitchburg, MA is making some very positive changes for your health: where sidewalks connect to parks and schools, fresh fruits and vegetables are more available in neighborhoods, and recreational areas are safe and clean! It is hoped that *this Fitchburg Health Equity-related Initiatives Zoning and Regulatory Analysis Study*, which includes recommendations to further the health improvements, can lead to longer term positive health changes.

MRPC Principal Planner, Eric R. Smith, was the Project Manager for this Project. Mr. Smith prepared a draft Scope of Services document for City review, which was subsequently signed by the City of Fitchburg on July 18, 2012. MRPC would like to thank the following individuals for their input and support during the preparation of this Report: Michael O'Hara, Larry Casassa and Steve Curry from the City of Fitchburg as well as Mary Giannetti, Ayn Yeagle and Donna Wysokenski of the Montachusett Opportunity Council. Based on the approved Scope of Services for this *Health Equity related Initiatives Zoning and Regulatory Analysis Study*, MRPC gathered information accordingly.

An outline of all the Tasks associated with the completion of the *Fitchburg Health Equity related Initiatives Zoning and Regulatory Analysis Study* follows below:

1. Review the City of Fitchburg's current Zoning Bylaws and Subdivision Regulations for an inventory and assessment of health equity-related initiatives and measures already implemented. This review also includes a critique of zoning and subdivision requirements that act as barriers to the health equity-related initiatives, healthy eating and active living.
2. Review existing City of Fitchburg planning documents, such as Fitchburg's Vision 2020 Master Plan; Green Fitchburg: Opportunities, Strategies & Visions for the Future; and the North Nashua River Master Plan, for recommended health equity-related initiatives that have not been implemented within Fitchburg's Zoning Bylaw and other appropriate-related regulatory tools.
3. Conduct a review of the proposed CLURPA (Comprehensive Land Use Reform and Partnership Act) Legislation and how the development and implementation of health equity-related zoning initiatives relate to this proposed Legislation.
4. Conduct a review of best practices related to health equity-related planning initiatives both within and outside the Commonwealth of Massachusetts. Part of this review will involve reviewing other Robert Wood Johnson Foundation's Healthy Kids Healthy Communities grant recipients for their efforts to develop and implement healthy zoning bylaws and regulations.
5. Based on the results of the review and analysis in Tasks #1-4, provide recommended changes to Zoning and Subdivision Rules to improve the health of the City's residents. In addition, provide recommended next steps and processes required to assist in overseeing implementation.

Public Input on the Draft Study was provided via at a total of four (4) Public Meetings. A full Presentation of the Draft Report was provided at a Fun in Fitchburg Partnership meeting held on April 24th at the Fitchburg Public Library. MRPC's Eric R. Smith also provided a summary presentation of the Draft Report to the Fitchburg Zoning Board of Appeals (May 14th), Fitchburg Planning Board (May 21st) and Fitchburg City Council (July 2nd). One interesting observation from the Zoning Board of Appeals meeting is that members felt there should be more enforcement of people who are parking their cars on the sidewalks, as the members observed this happening, in particular by the South Street Elementary School. They felt this parking behavior inhibits physical activity and walkability of their City. With input received MRPC delivers the Final *Health Equity-related Initiatives Zoning and Regulatory Analysis Study* to the City of Fitchburg and the Fun 'n FITchburg Partnership.

1. Review the City of Fitchburg's current Zoning Bylaws and Subdivision Regulations for an inventory and assessment of health equity-related initiatives and measures already implemented. This review also includes a critique of zoning and subdivision requirements that act as barriers to healthy eating and active living.

MRPC notes that our review and assessment was more comprehensive than the initial Scope of Services identified for this Project. MRPC believed it was important that the Study include the identification of areas within the City of Fitchburg's Zoning Ordinance and Subdivision requirements that actually act as barriers to the various healthy eating and active living considerations.

A. Zoning Bylaws

Fitchburg Zoning Ordinance Assessment: The issue of health is actually front and center in most zoning ordinances, including the City of Fitchburg, even up front within the Zoning Bylaw's purpose section:

"This Zoning Ordinance is enacted for the purpose of promoting the **health**, safety, convenience and general welfare of the present and future inhabitants of the City of Fitchburg and to:

1. Lessen congestion in the streets.
2. Secure safety from fire, flood, panic and other dangers.
3. Provide adequate light and air.
4. Prevent overcrowding of land.
5. Avoid undue concentration of population.
6. Encourage housing for persons of all income levels.
7. Facilitate the adequate provision of transportation, water, water supply, drainage, sewerage, schools, parks, open space and other public requirements.
8. Conserve the value of land and buildings, including the conservation of natural resources and the prevention of blight and pollution of the environment.
9. Encourage the most appropriate use of land throughout the city.
10. Preserve and increase amenities by the promulgation of regulations to fulfill said objectives.
11. Facilitate the safe, convenient and meaningful provision of adequate vehicular and utility access to all lots intended for building purposes in the City."

The City of Fitchburg is divided into 12 zoning districts, each of which regulate the use and intensity of various land uses in each respective zoning district (A copy of the Fitchburg Zoning Map showing the location of these Zoning Districts is included in Appendix A):

There are five (5) Residential Zoning Districts:

- 1) Rural Residential (RR)
- 2) Residential A-1 (RA-1)
- 3) Residential A-2 (RA-2)
- 4) Residential B (RB)
- 5) Residential C (RC)

There are three (3) Business Zoning Districts:

- 1) Central Business (CBD)
- 2) Neighborhood Business (NBD)
- 3) Commercial & Automotive (C&A)

There are two (2) Industrial Zoning Districts:

- 1) Industrial (I)
- 2) Limited Industrial (LI)

Finally, there two (2) Institutional Districts:

- 1) Medical Services (MS) which is located around the Burbank Medical Center / Community Health Center area
- 2) College District (FSC) which is located around Fitchburg State University

In addition, there is a series over six (6) zoning overlay districts. Before the specific overlay districts are introduced, an introduction to explain and define overlay districts is provided for below:

“Overlay Districts provide a means to incorporate various development regulations across a specified area. These districts are special zones that lie on top of existing zoning categories to supplement or supersede existing regulations. They usually provide a higher level of regulation than that required by the existing zoning classification, but they can also permit exceptions or require a less-restrictive guideline. In cases where conflicting standards are given by an overlay district and the underlying zoning category, those of the overlay district take priority. The boundaries of an overlay district may or may not coincide with the boundaries of the underlying zone, and an overlay district may contain parts of more than one existing zone.

Overlay districts are used to accomplish a variety of development, transportation, and land use goals such as access management, protection of historic or natural resources, safety, standardization of a historic district, implementation of development guidelines, protection of the quality of surface water, and even special taxing or financing for an area.”¹

The six (6) Overlay Districts within the City of Fitchburg are:

- Floodplain Protection Overlay (FP)
- Watershed Resource Protection (WP)
- Mill Conversion Overlay (MCO)
- Municipal Parking Overlay (MPO)
- Smart Growth Overlay (SG) (Added 3-17-10)
- Student Housing Overlay (SHOD) (Added 4-6-11)

A detailed discussion on the Zoning Health Overlay Districts that help promote health equity-related initiatives is found on Page 9.

Zoning and Healthy Eating

Barrier: MRPC’s assessment indicates that Fitchburg’s Zoning Ordinance hinders an opportunity to healthy eating, particularly in the area of urban agriculture. Based on review of Section 181.313(C)(1) “All Non-Exempt Agricultural Use(s) and (2) Nonexempt Farm Stand(s) for Wholesale or Retail Sale of

¹ http://subregional.h-gac.com/toolbox/Implementation_Resources/Overlay_District_Ordinances_Final.html

Products requires a Special Permit from Board of Appeals”. Such zoning can potentially hinder urban agricultural uses. Although Community Gardens have been able to be installed in neighborhoods (MRPC is aware of community gardens in the Cleghorn, Elm Street / Prichard and Green Acres neighborhoods, along within the new Gateway Park) such uses could be challenged or open to different interpretation by the Building Inspector, who acts as the City’s Zoning Enforcement Officer.

MRPC discusses the various approaches a number of communities have taken in allowing Urban Agriculture within in the Best Practices section (Section 4) of this Report. Based on our research, specific recommendations are provided in Section 5.

A **positive** to address healthy eating considerations is that under Fitchburg Zoning all Fast-Food Restaurants have to obtain a Planning Board Special Permit. This provides the potential to add conditions related to healthy eating when new fast food restaurants are going through the permitting process. With Fitchburg’s Site Plan Review provisions included (see Page 17 for discussion of the Site Plan Review requirements), even active living considerations could be reviewed with pedestrian access and bike racks, for example. During MRPC’s work on this Project, there was discussion of McDonald’s interested in moving from their River Street location to the now closed Pelletier’s Building Supply site on Water Street (across from Market Basket). The aforementioned healthy eating considerations could be incorporated in the Planning Board’s permitting process, if indeed McDonald’s applies for the Special Permit at the Pelletier’s site.

A **positive**: Gardens are given a yard exception in Residential Districts: “181.4211. Tool sheds, patios, **gardens** and similar facilities and structures not exceeding one hundred twenty (120) square feet may be located in any portion of a rear yard, provided that they are set back three (3) feet from the side or rear lot line and, further, provided that not more than twenty five percent (25%) of the total side or rear area is covered by buildings.” This provision is a **positive** for healthy eating, since residents can make greater use of their property for gardening purposes than is possible for other uses.

Zoning and Active Living

In this Section MRPC discusses **Active Living** health-equity considerations from a zoning perspective:

- **The Common Parking Requirement – One Negative within a Positive**

MRPC assessment of the Zoning Ordinance questions why parking for individual establishments is allowed to provide for parking within 800 feet of premises, but then for Common Parking the standard for such measurement to allow parking to be provided is reduced to 500 feet. The general parking space requirement begins in Section 181.511, subsection 1 which states that “Off-street parking spaces required herein shall be provided either on the lot with the principal use or on any other associated premises within **eight hundred (800) feet**.”

It is a **positive** for active living that Fitchburg Zoning has a provision for Common (also known as Shared) Parking: “Common Parking Areas 181.515. Common parking areas may be permitted for the purpose of servicing two (2) or more principal uses on the same or separate lots, provided that: 181.5151. Evidence is submitted that parking is available **within five hundred (500) feet of the premises**, which satisfies the requirements of this ordinance and has excess capacity during all or part of the day, which excess capacity shall be demonstrated by competent parking survey conducted by a traffic engineer registered in the Commonwealth of Massachusetts.” Benefits of Shared or Common Parking are articulated further in the Best Practices section. However, MRPC notes the positive consideration for active living is that

*“shared parking reduces land devoted to parking, thereby allowing room for more context sensitive site planning and project design and providing more space for open spaces, walkways or other urban amenities.”*² One recommendation of this Study will be to allow the Common Parking provision to equal 800 feet from premises, the same as individual establishments that require parking are allowed to measure from.

- **Municipal Parking Overlay District – A Positive**

The City of Fitchburg did establish that off-street parking spaces need not be provided for any retail business or service use or any commercial or industrial use which is located within the City’s Municipal Parking Overlay District (which is located generally within the Downtown area). The MCOD is codified in Section 181.87 of the City’s Zoning Ordinance.

- **Commercial Recreation - Negative**

Under the Fitchburg Zoning Ordinance’s use provisions there appears to be limited opportunities for “Commercial recreation” (such recreation would include fitness clubs). Commercial Recreation is not allowed in ANY residential zoning district – (residential zoning districts make up the greatest percentage of Fitchburg’s acreage). In addition, the process requires City Council approval. Most Special Permits are usually handled via the Planning Board of Zoning Board of Appeals.

- **Residential Use Provision for Main Street, Downtown Fitchburg - A Positive**

The City of Fitchburg amended the City’s Zoning Ordinance in 2001. Among these revisions included a provision indicating that *“residential uses are permitted by right in the CBD-zoned portion of the Urban Renewal Area provided they are located above the first floor of the structure, as viewed from Main Street.”* This provision encourages Walkable Neighborhoods, which can foster Active Living and thus offer benefits from the health-equity perspective. This residential by-right provision is a tool being explored to help promote artists and other creative economy-related individuals to move into Downtown Fitchburg.

Fitchburg’s “Special Residential Regulations”

In addition to the various Overlay Districts, which were introduced on pages 3-4 (will be highlighted for health equity benefits and barriers on pages 9-12), the City of Fitchburg Zoning Bylaw provides a series of alternative development options for residential neighborhood/unit development. Within Section 181.7, Special Residential Regulations, there are five Special Residential Regulations in all, but two do not have as large impact on health considerations as the three (3) identified below.

- 1) Flexible Development
- 2) Planned Unit Development
- 3) Assisted and Independent Living Facilities

MRPC notes that these development approaches all offer opportunities for health benefits – more walking/pedestrian opportunities, for example. One drawback is that they are usually utilized for new developments only, not improving existing neighborhoods.

- 1) **Flexible Development.** Fitchburg’s Flexible Development provision can be a tool to address **Active Living and Healthy Eating**, as its first purpose indicates, for Health-Equity Considerations:

² Taken from the *“Fact Sheet: Shared Parking”* prepared as part the Santa Fe Depot (CA) Specific Plan Update.

“to encourage the preservation of open land for its scenic beauty and to enhance **agricultural**, open space, forestry, and **recreational** use.”

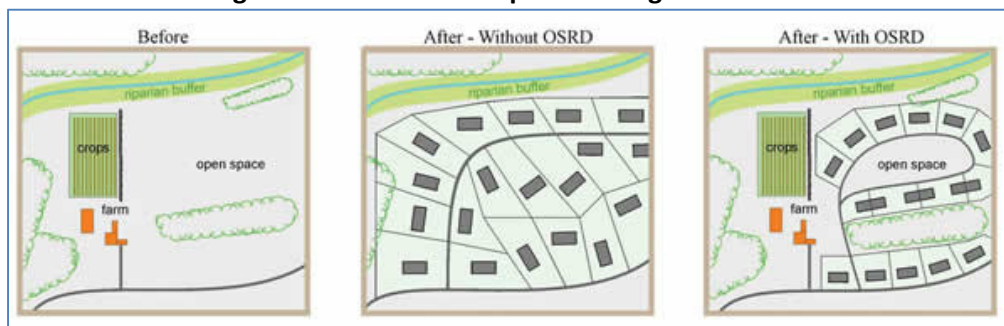
The Flexible Development provision is also known as Cluster Subdivision, Open Space Residential Development (OSRD), or Conservation Subdivision Design in other communities. Randall Arendt is one of the key individuals to promote this style of development and he began his work at the Center for Rural Massachusetts out of University of Massachusetts, Amherst in the 1980s. Flexible Development may be authorized upon the issuance of a Special Permit by the Planning Board.

A review of Fitchburg’s Flexible Development Ordinance indicates it has the key Design Principles of this alternative development pattern versus conventional cookie-cutter conventional subdivision design. These Principles are:

- Understanding the Site
- Evaluating Site Context
- Designating the Contiguous Open Space
- Location of Development Areas
- Establishment of Lot Lines

Figure 1 on page 7 provides an illustrative example of the Flexible Development Design Principles.

Figure 1: Flexible Development Design Guidelines



MRPC notes that the new State OSRD bylaw model is to allow Flexible Development Design provisions to be approved on a by-right basis with versus requiring such development having to go through the Special Permit approval process, as currently is the case in the City of Fitchburg. MRPC also notes that a number of communities across the Commonwealth have amended their OSRD-related provisions to have such developments by allowed by-right (usually with a set of design standards, similar to a Site Plan Review process). One recommendation provided in this Study is for the City to move to change the Flexible Development Provisions to allow to be permitted by-right.

2) Planned Unit Development (PUD)

The second special residential provision is the Planned Unit Development (PUD) provision. A review of the PUD purpose suggested it can be tool to address Active Living Health-Equity Considerations: *“(PUDs are)...designed to provide various types of land uses which can be combined in a compatible relationship with each other as part of a totally planned development.”*

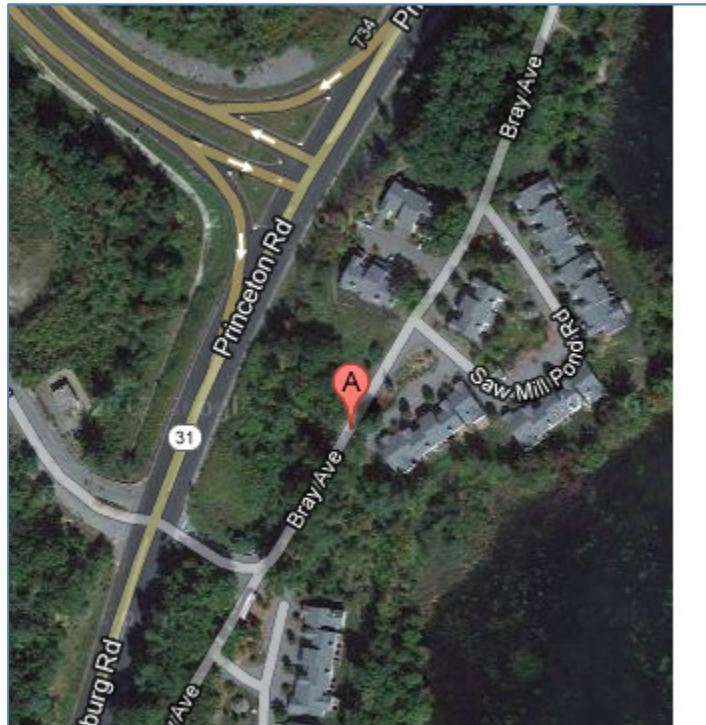
There are two objectives that can be noted to having a positive benefit for health equity as well:

- Encourage a less sprawling form of community development which makes more efficient use of land, requires shorter networks of streets and utilities and which fosters more economical development and less consumption of developable land.
- Permanently preserve existing natural topography and wooded areas within developed areas and to provide usable open space and recreation facilities in close proximity to homes.

MRPC notes that the allowing of mixed uses is a way to reduce auto trips and creating opportunities for people to walk or bike to get some basic requirements, such as milk, or access to a café. PUDs are allowed by a Planning Board Special Permit. Fitchburg's Michael O'Hara provided MRPC with a list of PUD projects showing that approximately 20 projects in Fitchburg have been reviewed under this Provision, although some are unbuilt.

MRPC's assessment of those PUD projects that have been built indicate that **NONE** have been built with a true mix of residential and commercial uses as part of the development. The Sawmills Condominium development built near the intersection of Routes 2 and 31 (See Figure 2) has a small unbuilt commercial area reserved at entrance to the Condo Development off of Route 31 that was incorporated into its development plans approved by the Fitchburg Planning Board.

Figure 2: Vicinity of the Sawmills Condominium Development



Some of the Bovenzi Condo developments built in the mid 2000's that were constructed under the PUD zoning provision, in addition to Sawmills, include Bridle Cross Estates, Chamberlain Hill and Oak Ridge. These developments have a nice pedestrian/walking feel to the neighborhoods, but have not utilized commercial land uses to provide a true mix of land uses (besides the small permitted area in Sawmills) and are not connected to any existing commercial or recreation areas in a pedestrian-friendly way.

Another shortfall of PUD projects is that they since they are not subdivisions, the developer does not have to meet the various prescribed Design Standards that a conventional subdivision would have to undergo. MRPC will provide a recommendation in Section 5 for the City to correct this flaw.

3) Assisted and Independent Living Facilities

Assisted and Independent Living Facilities are the third Special Residential Regulation MRPC has identified with potential health equity benefits, but also some existing barriers. Although targeted towards the senior-age population, the provision to include some potential (with one identified barrier as well) to address healthy equity consideration. Assisted and Independent Living Facilities (ALF and ILF respectively) are allowed, subject to approval of a Special Permit by the Planning Board.

- Section 181.7333. Structures and uses accessory to the ALF or ILF may also be provided (with the exception of covered parking areas) within the same building, including, but not limited to, the following: beauty and barber salons; **recreational, physical fitness** and therapy services; nondenominational chapel; library; bank automated teller machine; management offices; adult day care or adult day health facility; hospice residence; **food service**; laundry and covered parking areas; provided, however, that such accessory uses and structures shall be designed for the primary use of the residents and staff of the ALF or ILF. Such accessory uses may not be designed for or used as a general business by the general public. Such accessory uses shall be wholly within a structure containing residential units, and shall have not exterior advertising display.

MRPC notes the recreation and physical fitness uses on-site could provide active living opportunities to the senior population and the food service provision could be permitted with healthy eating considerations in mind.

- **Buffer provision. 181.7352. Buffer.** A buffer area of one hundred (100) feet shall be provided at the perimeter of the property where it abuts residentially zoned or occupied properties, **except for driveways necessary for access and egress to and from the site**. No vegetation in this buffer area will be disturbed, destroyed or removed, except for normal maintenance. The Planning Board may waive the buffer requirement: (i) where the land abutting the site is the subject of a permanent restriction for conservation or recreation so long as a buffer is established of at least fifty feet (50') in depth which may include such restricted land area within such buffer area calculation; or (ii) where the land abutting the site is held by the City for conservation or recreation purposes; or (iii) the Planning Board determines that a smaller buffer will suffice to accomplish the objectives set forth herein

MRPC notes that this existing buffer provisions can act as a barrier to active living. It potentially creates a “Pod development” where newly constructed Assisted and Independent Living Facilities are completely separated from other existing neighborhoods, commercial and/or recreational areas. For a health equity consideration, how could these residents integrate to existing neighborhoods or have chance to cut through adjacent neighborhoods to access commercial or recreational areas with these buffer provisions? MRPC has included a recommendation to amend the Assisted and Independent Living Facilities Zoning Bylaw to allow a trail or pedestrian connection to be exempt from the buffer requirement in addition to driveways.

Fitchburg's "Special District" Provisions

Section 181.8 of the Zoning Ordinance is the Special Districts section that contains the set of Overlay Districts referenced earlier. Similar to the Special Residential Regulations that they are usually utilized for new developments only. However, some of these overlays have been designed with redevelopment opportunities in mind, so there are greater opportunities to improve existing neighborhoods with these zoning tools. Of the series of "Overlay Districts" that have been adopted by the City of Fitchburg three (3) can be important tools from a health consideration:

- 1) Mill Conversion Overlay District**
- 2) Planned Development District**
- 3) Smart Growth Overlay District**

MRPC does want to make a note of a fourth (4th) Special District, the Student Overlay, which was approved by the City of Fitchburg to encourage student dormitories and other-related housing in and around Fitchburg State University, including Downtown Fitchburg. The Student Housing Overlay was added to the City's Ordinance on April 6, 2011. As stated in the Intent section: "The residential area in the vicinity of the Fitchburg State University is densely populated and there is a shortage of housing for students. The purpose of this Section is to create an overlay district...to allow for the conversion of existing buildings or the construction of new buildings as lodging houses for post-Secondary Education students in or near the Central Business District shown on the Zoning Map which are privately owned and managed. The intent of this section is to simplify the creation of student housing..."

The City now has an excellent example with the reuse of the Simonds Saw Factory off of Willow Street that has been redeveloped as Fitchburg State Student Housing (Simonds Hall), which opened in the Fall of 2012.

1) MILL CONVERSION OVERLAY DISTRICT (MCO)

The first Overlay District assessed is the Mill Conversion Overlay District, or the MCO. This provision has a couple key purposes related to health equity considerations:

- allow for conversion of Fitchburg's historic mills while preserving the character of nearby residential and commercial neighborhoods;
- to promote diversified housing opportunities and other uses such as mixed residential/commercial use, and/or a combination of such uses.

As indicated earlier, there are the walkability benefits of mixed use neighborhoods. The City of Fitchburg has seen a successful example of the conversion of the former Anwelt Shoe Factory (see Figures 3 and 4 on page 11) by Robert Ansin into the MassInnovation Center, Senior Apartments and North Central Charter School (although the North Central Charter School has recently moved to the former Norte Dame School on South Street).

Figures 3 and 4: MCOD Example of the former Anwelt Shoe Factory



MCODs are allowed subject to approval via a Planning Board Special Permit.

2) PLANNED DEVELOPMENT DISTRICT (PDD)

The second Overlay District is Fitchburg's Planned Development District, or PDD, provision. Note the mixed-use opportunity provided by this zoning overlay as indicated in the Purpose section:

- The PDD *"is encouraged in order to promote **various types of land uses** which can be combined in a compatible relationship with each other as part of a totally planned development."*

The walkability benefit of mixed use neighborhoods has been highlighted in this Report.

This Overlay was added during the City's comprehensive rezoning effort in the early 2000's. A Project submitted for approval requires City Council approval for zoning map change. There has not been a project completed under the PDD provision to date, as the PDD has only been utilized for one unbuilt project off of Pearl Hill Road. The idea behind the PDD is to provide a flexible zoning tool for developers if they propose a project supported by the City that does not fit into any existing zoning bylaws. For such future PDD Projects, there is the opportunity to address health-equity considerations as part of a specific Project Review.

3) SMART GROWTH OVERLAY DISTRICT (SG)

The third Overlay is the Smart Growth (SG) Overlay District provision, which was added to the City of Fitchburg's Zoning Ordinance as part of revisions adopted on March 17, 2010. Note a Health-Equity related Purpose: *"To encourage the preservation, reuse and renovation of Fitchburg's historic mills while preserving the character of nearby residential and commercial neighborhoods, and to promote low impact, sustainable new development that is **pedestrian friendly**."*

There are specific areas which are incorporated into the City's SG Overlay District (seven sub-districts). The City developed this Bylaw under the Mass. Chapter 40R Smart Growth Planning Tool. According to the Massachusetts Executive Office of Housing and Economic Development's website:

"The Smart Growth Zoning Overlay District Act, Chapter 149 of the Acts of 2004, codified as M.G.L. chapter 40R (the Act), encourages communities to create dense residential or mixed-use smart growth zoning districts, including a high percentage of affordable housing units, to be located near transit stations, in areas of concentrated development such as existing city and town centers, and in other highly suitable locations. Projects must be developable under the community's smart growth zoning adopted under Chapter 40R, either as-of-right or through a limited plan review process akin to site plan review. Upon state review and approval of a local overlay district, communities become eligible for payments from a Smart Growth Housing Trust Fund, as well as other financial incentives."

The City's first project under the SG Overlay District provision can be found in the former Premier Box manufacturing site at 245 River Street that is being redeveloped under this Zoning initiative. This development, now being marketed under the name Riverside Commons, will provide 177 residential units that are a mix of 1, 2- and 3 bedrooms and includes pedestrian amenities (see Figure 5 on page 12) and also located across the North Nashua River from the newly developed Gateway Park. There is even a mixed use element included the Project, with approximately 6,000 sq. ft. of non-residential, potentially a small restaurant, relocating from further down River Street.

**Figure 5: Pedestrian Walkway to the rear of the Premier Box 40R Site
(Riverside Commons)**



B. Subdivision Rules and Regulations

Subdivision regulations generally come into play when land owners and/or developers look to divide their land up into different lots (e.g. subdivide their land). According to the document *An Overview of the Subdivision Control Law* prepared by the Massachusetts Department of Housing and Community Development (DHCD) in October 2009:

"Subdivision control laws in Massachusetts originated in a concern over the effect of the subdivision of land and sale of private land on planning and the development of streets both public and private within a community."

MRPC has reviewed the latest version (effective date of September 13, 1988 with amendments through March 21, 1990) of the *"Rules and Regulations Governing the Subdivision of Land, Fitchburg, Massachusetts* (Hereinafter *"The Fitchburg Subdivision Rules and Regulations"*)" for health equity considerations. Our assessment is provided in the text that follows. Before that assessment is provided, it is important to note that Massachusetts has one unique, albeit controversial, element of the Subdivision Control Law, that allows landowners to divide lots on existing roadways (as defined in the Law) without Planning Board review, which in other states, allows the Board to condition such subdivisions on such items as sidewalks, bike paths and stormwater runoff mitigation. This provision is known as "Approval Not Required" or "ANR". Under this provision if lots meet the ANR criteria, the Planning Board has to sign off on such subdivisions without any conditions. MRPC notes one element of the proposed Land Use Reform in Massachusetts, which is discussed in Section 3, would remove the ANR provisions and replace with a Minor Subdivision review process, which what most other states have (of note is that even "Live Free or Die" New Hampshire has a Minor Subdivision review process).

MRPC does want the City of Fitchburg to be aware that there are some organizational issues associated with the current version of The Fitchburg Subdivision Rules and Regulations. MRPC has provided our full review and assessment of The Fitchburg Subdivision Rules and Regulations in Appendix B. Although not a direct health equity related recommendation, MRPC does recommend that the Planning Board initiate a comprehensive review and clean-up to address these deficiencies as part of incorporating the recommended changes to address health equity considerations.

Health in general, and also for active living considerations, can be seen in the Purpose section:

*"The Subdivision Control Law has been enacted for the purpose of protecting the **safety, convenience and welfare** of the inhabitants of the Town by regulating the laying out and construction of ways in subdivisions providing access to the lots therein, and ensuring sanitary conditions in subdivisions and in proper cases **parks and open areas.**"*

As part of the subdivision approval process, The Fitchburg's Subdivision Rules and Regulation provide for a Development Impact Statement, as indicated in Section 2.5: "The Planning Board **may** require a developer of a subdivision or of more than one building on a lot to submit a Development Impact Statement (DIS) on the effects the proposed action has or will have on:

1. the immediate neighborhood or land area
2. surrounding neighborhoods or land areas
3. the community at large."

One recommendation by MRPC is suggested to this section: to change "May" to "Shall" for subdivisions of certain size, say 5 lots or greater, so that the Development Impact Statement (DIS) is a required element of the subdivision approval process.

When required, "the DIS shall include a detailed assessment of the probable impacts of the proposed action on a wide variety of environmental, fiscal, and socioeconomic elements and factors. Fiscal and socioeconomic impacts shall include traffic circulation and safety, neighborhood character, school enrollment, public facilities, associated fiscal expenditures and revenues, and effect on housing and other development activity." MRPC notes that the DIS can be tool that can be used to address health-

equity considerations for future subdivisions. Perhaps the Planning Board could **look to integrate** “Health Impact Assessment” considerations within their Development Impact Section (MRPC notes that the Special Permit section within the Zoning Bylaw does contain a similar Development Impact analysis). A Health Impact Assessment (HIA) is a tool that is *“a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, program or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects.”*³ MRPC notes that such an Assessment is being conducted in 2013 for policy considerations related to addressing the City’s vacant lots.

Active Living Consideration: Currently when a developer submits a Definitive Subdivision Plan for approval, the submittal provides limited opportunity to review pedestrian connections:

- Current: Location, names, and present widths of streets bounding, approaching, and within three hundred (300) feet of the subdivision.
- MRPC Recommendation: Increase to 1,200 feet (which is about a quarter mile)

Section 4 of The Fitchburg Subdivision Rules and Regulations provides the series of “Required Improvements And Design Standards” which is among **the most important sections to address health-equity considerations when new subdivisions are developed**. MRPC provides an assessment of the following elements within the Required Improvements and Design Standards section:

- Streets Widths
- Location of Streets
- Sidewalks / Bike paths / “Green Strips”
- Street Trees
- Open Spaces

Street Width Standards are provided for the Travelled Way portion of the new roadways. The current standards are as follows:

- Minor Streets = **28 feet**
- Collector Streets = **34 feet**

MRPC’s assessment, which was echoed during Mark Fenton’s visit and presentation to the City of Fitchburg in September 2012, is that these current street width requirements are excessive, encourages speed and produce roads wider than existing streets that feed the neighborhoods. Mark Fenton noted 12-foot travel lanes are as wide as streets need to be (for a 24-foot wide travel way). One example of too wide streets within the City of Fitchburg is provided within the Meadowbrook Village apartment complex, which has roads wider than Wanoosnoc Road which serves the development (see Figure 6 below). To address speeding vehicles, speed bumps had to be installed in Meadowbrook Village. A recommendation for the City of Fitchburg to reduce the subdivision street width standards is included in Section 5.

³ A Health Impact Assessment Toolkit: A Handbook to Conducting HIA, 3rd Edition; Prepared by the Human Impact Partners.

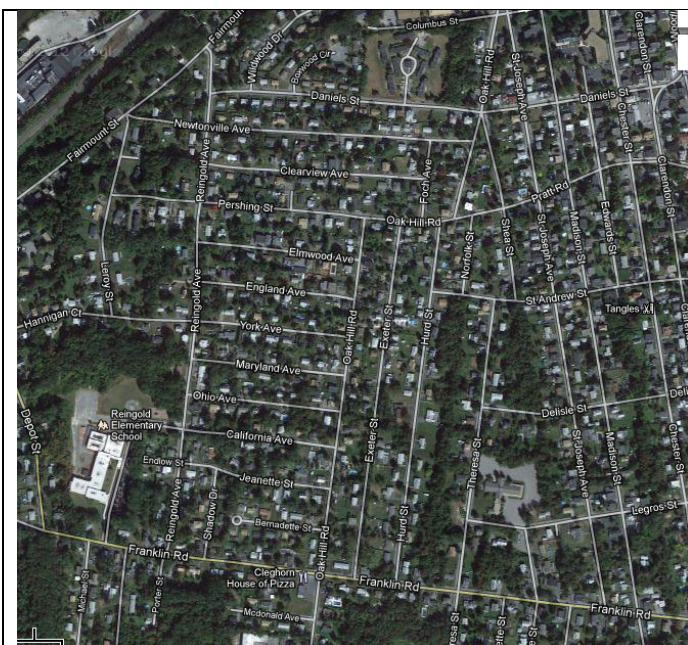
Figure 6: Street Width Image with Meadowbrook Lane and Wanoosnoc Road



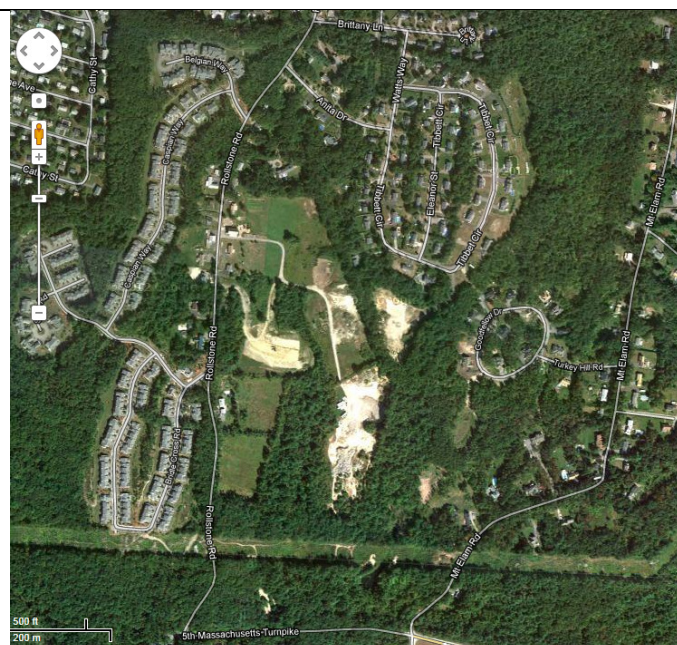
According to The Fitchburg Subdivision Rules and Regulations the Location of Streets are to designed with the following objectives in mind:

- to be continuous and in alignment with existing streets;
- to coordinate the streets in the subdivision with each other and with the existing street system of the Town, and the streets in neighboring subdivisions
- Provision satisfactory to the Board shall be made for the proper projection of streets, or for access to adjoining property that is not yet subdivided.

MRPC has taken two images from Bing Maps (www.bing.com/maps) to show two different street patterns within the City of Fitchburg. The first is taken of the Upper Cleghorn Neighborhood (see Figure 7). Upper Cleghorn was developed such that it meets the principals of the location of streets guidelines and “traditional neighborhood development” patterns that make use of a connected street grid system. The second image (Figure 8) shows the newer development patterns in the area of Rollstone and Mt. Elam Roads, north of Route 2. These subdivisions (and the Bridle Cross Estates PUD Development) clearly do not meet the objectives of the location of street design requirement and provide disconnected neighborhoods. During the October 15, 2012 Public Forum, in which MRPC presented these findings, those in attendance noted the attractiveness of trees and open space offered by the contemporary developments. MRPC notes that the Open Space Residential Development (OSRD) Subdivision design approach can be used as tool to provide both continuous streets but also preserve open space and trees.



**Figure 7: Connected Street Network:
“Traditional Neighborhood Development”**



**Figure 8: Disconnected Street Network:
“Contemporary Subdivisions/PUD Development”**

MRPC notes a recent illustration of the extreme dis-connectivity caused by disconnected street patterns was provided by the *Streetsblog* in a piece called “Sprawl Madness”. They used Google Maps to show from two houses with adjoining backyards in Suburban Orlando that “if you want to travel the streets from point A on Anna Catherine Drive to point B on Summer Rain Drive, which are only 50 feet apart, you’ll have to go a *minimum* of seven miles. The trip would take almost twenty minutes by car.”

There are a series of design standards related to **sidewalks**. However, MRPC notes that within the existing Fitchburg Subdivision Rules and Regulations there are two separate, existing Sidewalk design standards sections, which make it difficult to tell which set of standards are the ones in full effect and if there are conflicts between each section. On Page 31 there is a Sidewalks section, 4.5 that has subsections 4-5.1 through 4-5.6 and then on Page 46, there is another Sidewalk section 4.2, with subsections from 4.2.0 through 4.2.6.

The basic provision is that Sidewalks under Section 4.5.1 indicates that *“Unless the Board determines that pedestrian movement is otherwise provided for, **sidewalks shall be installed on both sides of subdivision streets**. Where sidewalks are not required, the Board may require that the grading of the right of way be so executed as to make possible later additions of sidewalks without major regrading.”* The Sidewalk Length provision, Section 4-5.5, states that: *“Sidewalks shall extend the full length of each side of the street. There is a sidewalk waiver provision (Section 4-5.1) that provides that “The Planning Board may grant a waiver of one side walk - deposit amount of cost of cost savings in a sidewalk account.”*

MRPC’s has included a recommendation for health equity, especially active living, considerations for the City of Fitchburg to explore use of any monies collected in any sidewalk account(s) to be used towards off-site sidewalk improvements in such areas as Rollstone Road, Franklin Road and Ashby State Road

(Route 31) for example. These are areas that have seen recent subdivision and condominium developments that are not connected to existing commercial or recreational areas (plus the High School in the case of Ashby State Road) with pedestrian accessibility.

MRPC notes that within the second set of sidewalk provisions, Section 4.2.6, provision of off-site pedestrian opportunities are explicitly laid out: *“In addition, public off-street walkways, bikeways, or bridle paths may be required by the Board to provide circulation or access to schools, playgrounds, parks, shopping, transportation, open space, or community facilities, or to break up long blocks, or for such other reason as the Board may determine. Such ways may or may not be part of normal sidewalk provisions, but they shall not be a part of any lot in the subdivision.”*

MRPC has reviewed the *Vision 2020 Master Plan* in Section 2 of this Report. The City’s *Vision 2020 Master Plan*, prepared in 1998, had specific Transportation-related Recommendations that included revisions to the sidewalk requirement in the city’s subdivision regulations. MRPC notes that the most recent amendments of the Subdivision Rules and Regulations date from March 21, 1990.

Green Strips are areas between the traveled roadway and sidewalks and/or bike paths. The Fitchburg Subdivision Rules and Regulations require that Green Strips shall be provided as follows:

- Sidewalks and/or bicycle paths shall be separated from the roadway by a strip of land:
 - > Collector Street: 5 feet w/ Sidewalks; 8 feet if none
 - > Minor Street: 5 feet w/ Sidewalks; 10 feet if none

Green Strips were discussed during the Mark Fenton walkability audit tour of the Green Acres neighborhood area. The Fitchburg DPW was a proponent of having green strips installed. It was noted that traffic volume should be considered in their design. It was noted that some developments have sidewalks right by the street in some places, for example in Bridle Cross Estates, however traffic volumes are not high enough in this development to warrant concern with such design.

Open Space. The Open Space Design Standard provides the Planning Board with the opportunity to include open space in a new subdivision:

- *“The Board **may** also in proper cases, require the plan to show a park or parks suitably located for playground or recreation purposes.*
- *The Board **may** require that no building be erected upon such park or parks for a period of not more than three (3) years.*
- *These parks shall be offered for just compensation to the Town...with the Town having the option of accepting or releasing these areas within the three (3) year period”*

These Open Space Design Standards conform to the existing State Subdivision Control Law. The proposed Land Use Reforms introduced at the State Legislature for the 2013 Session would remove this 3-year restriction and allow up to 5% of the subdivision land area to be used for park or playground use by the residents. See Section 3 of this Report for more detailed discussion of the State-wide Land Use Reform efforts.

The Fitchburg Subdivision Rules and Regulations include a section on design standards specific for industrial-related subdivisions. These **“Industrial Subdivision Provisions”** are included within Section 4.15. MRPC’s assessment of these standards indicate that three (3) of them hinder the promotion of active living considerations, as highlighted below:

- **Street lights shall not be required** unless, in the opinion of the Board, such street lighting is necessary for safe travel within the subdivision.
- **Sidewalks shall not be required**, unless, in the opinion of the Board, such sidewalks are necessary for safe pedestrian access within the subdivision.
- **Street trees shall not be required** unless, in the opinion of the Board, such street trees are necessary for public amenity within the subdivision.

During MRPC's work on the Wachusett Smart Growth Corridor Planning Study, feedback has been received of the lack of sidewalks on Authority Drive, which is where the new Wachusett MBTA Train Station is being constructed (see Figure 9 below). Given the existing language on Industrial Subdivision Provisions within the Fitchburg Subdivision Rules and Regulations, the developer likely used this language to not have to install sidewalks along Authority Drive. MRPC includes a recommendation to change this provision to require street lights, sidewalks and street trees within industrial subdivisions.

C. The Fitchburg Planning Board's Rules & Regulations for Special Permits and Site Plan Review

The authority granted to the Planning Board for review of certain Special Permits is authorized in Section 181.937 of the Fitchburg Zoning Bylaw. The authority also provides an opportunity for the Planning Board to adopt Rules and Regulations. MRPC notes that the Fitchburg Planning Board has indeed adopted a set of Fitchburg Planning Board Rules & Regulations for Special Permits and Site Plan Review. These Rules and Regulations were originally adopted on April 2, 2002 with most recent revisions made on June 12, 2012. The plan requirements (which is for both Special Permits and Site Plan Review applications) section on Page 2, could be expanded to include pedestrian accessibility for example, by having all Special Permits applications to include existing sidewalks or other pedestrian pathways shown on all plan submittals. This would be similar as to what has to be provided for in Definitive Subdivision plan submittals (with caveat that MRPC is recommending an increase to 1,200 feet from the current 300 feet).

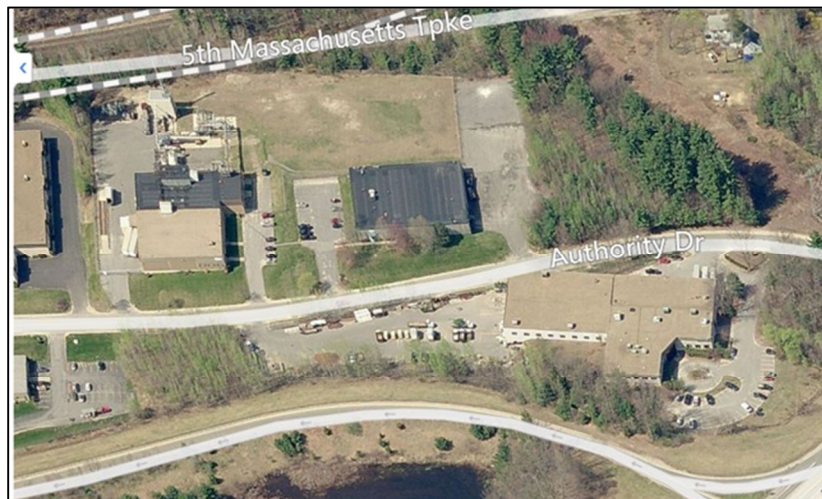


Figure 9: Authority Drive in vicinity of new Wachusett Train Station

Section III of these Rules and Regulations focuses on the Site Plan Review regulations. Here there is the opportunity for active living (including traffic calming) considerations during Planning Board review of Projects, based on the Objective below, which is a reference to Section 181.945 of Zoning Ordinance:

- **Maximize pedestrian and vehicular safety both on the site and egressing from it.**

2. Review existing City of Fitchburg planning documents, such as Fitchburg's Vision 2020 Master Plan; Green Fitchburg: Opportunities, Strategies & Visions for the Future; and the North Nashua River Master Plan, for recommended health equity-related initiatives that have not been implemented within Fitchburg's Zoning Bylaw and other appropriate-related regulatory tools.

A. Vision 2020 Master Plan

The *Vision 2020* Master Plan, prepared by the City in 1998, included the following various elements: Introduction and Demographic Analysis; Land Use; Housing, Economic Development; Natural, Cultural, and Historic Resources; Transportation and Circulation, Capital Facilities, and Open Space and Recreation. MRPC includes provisions from each of the elements here which are relevant from the health equity perspective with focus on initiatives not yet implemented. We have also tried to capture those goals and objectives that were designed to improve various health equity considerations.

Health considerations can be seen in the Master Plan Vision for the City:

"It sees a city in which the existing historic character must be maintained while building opportunities **to enhance the quality of life** through sensitively designed new development."

The Master Plan Land Use goals echo the Vision:

- Promote land uses which maintain and enhance the essential historic and neighborhood character of the city of Fitchburg, particularly the strong downtown and neighborhood centers, stable residential neighborhoods, watershed lands, woodlots and other important open spaces.
- This includes new construction and historic preservation and adaptive reuse of buildings and sites that complements Fitchburg's historic patterns and natural landscape and creation of new economic opportunities that "fit" Fitchburg.

MRPC's review of the Land Use Objectives note the following three for Health-Equity Considerations:

- Strengthen the economic vitality of potential neighborhood service centers. Include provisions for neighborhood gatherings which foster a sense of place.
- Identify infill opportunities in the city to improve commercial/neighborhood corridors.
- Provide options for land resource management including mixed-use developments and open space preservation.

MRPC notes for the last goal, the City has developed a number of zoning tools to encourage mixed use developments and open space preservation. This Report includes recommendations related to improving the use of these tools based on our zoning assessment.

MRPC notes that the City of Fitchburg did adopt one of the Land Use Recommendations:

- Adopt a reasonable **site plan review** provision to ensure that new development is designed in a manner which is safe, visually appealing, and environmentally sound.

The second Master Plan element is **Housing**. This element includes demographic and housing inventory related to age of the housing stock, high percentage of rental housing and recent development trends. There were discussions related to housing challenges facing the inner city, limited access to rehabilitation financing, lead paint and increases in vacancy and transiency rates. The state of ownership and housing affordability (recall the Master Plan was written in 1998 before the 2000's housing boom) was also discussed.

MRPC assessed the Future Housing Demand and Development section as it offers opportunities to address all the health-equity initiatives being considered under our Report. Two trends were noted; the first was *"the aging of the baby boom generation"* which it was noted *"will produce a growing demand for elderly housing"* (recall the City's Assisted and Independent Living Facilities Zoning Provision). The *Vision 2020 Master Plan* noted that *"Increasingly, retirement age couples are returning to cities which they left when they had children. Cities still provide greater convenience, especially for those who do not drive, and a sense of community which is difficult to achieve in an automobile-centered suburb."* MRPC notes that along with the aging baby boomers there is a newer trend for the "Millennials" (those individuals roughly between 18 and 34, and include recent Fitchburg State graduates) wanting to stay in the City and live Downtown.

The above housing demographics are even more pronounced now after the housing boom. An October online article from *Better Cities and Towns* entitled *"Downtowns gain strength in Update NY"* noted that the upstate New York *"downtown housing market had gained strength in recent years."* For example realtor from Syracuse said *"the downtown market is focused on younger singles and couples and empty nesters."* The issue of Millennials and Downtown revitalization has been written up most prominently by Richard Florida (author of *Rise of the Creative Class*, whose work is especially relevant to the various Arts and Cultural initiatives underway in the City of Fitchburg, especially in the Downtown area). The demographic trends and housing opportunities for downtown revitalization is the subject of Mr. Florida's recent book *The Great Reset*. The second trend noted in the Master Plan was the "westward migration of the state's employment centers."

An important issue identified in the Housing element has implications for future initiatives on a number of health equity initiatives, especially healthy eating and active living: *"demolition as a component of municipal housing strategy."* The Master Plan noted that while *"demolition...reduced density in the city's densest areas, removed health and safety hazards, improved the areas' appearance, and increased neighborhood stability..."* **However, the issue of what happens to these lots after demolition remains unresolved** (bold emphasis added as the Master Plan then identifies vacant lots as an issue). **While vacant lots represent an improvement over abandoned buildings, overgrown and litter strewn lots still contribute to urban blight.** *A number of future possible uses for demolition lots have been suggested. Neighborhood organizations have proposed the development of playgrounds and community gardens. Others have proposed new single family housing and/or use by abutting rental properties to create off street parking for tenants."*

The Master Plan identified a number of obstacles that prevented their (above ideas) realization. Below MRPC provides these Obstacles, along with our assessment of the current status of each obstacle.

- *“The cost of constructing and maintaining new playgrounds appears unrealistic at a time when the city is fiscally challenged to properly care for existing playgrounds. In addition, the majority of lots in question are too small for playground use.”* Still an Issue/Obstacle. MRPC has researched some Best Practices and provided recommendations for the City to consider in order to overcome this obstacle (see Sections 4 and 5 respectively).
- *“As referenced in the section on Housing Challenges Facing The City, virtually all demolition lots fail to conform to current zoning requirements for new housing construction. This factor, combined with low market values has virtually precluded any new housing development in these neighborhoods.”* Michael O'Hara, Principal Planner, of the Fitchburg Community Development Department indicated to MRPC this issue has been corrected. Since the 1998 Master Plan, the City adopted zoning provisions to allow infill housing on lots greater than 10,000 square feet by right. The City also adopted Section 181.425, which, within the RB, RC and College Districts, allows by Special Permit from the Planning Board, a lot with at least 5,000 square feet to serve as the location for a single-family dwelling
- *“The majority of demolition lots remain in private ownership and are thus not available for these proposed re-uses. While most are in the process of being taken by the City for non-payment of taxes, this process often takes several years to complete.”* This situation is still an issue, as MRPC has learned that only in cases of “low-value”, which is defined by the Massachusetts Department of Revenue, can the taking process be expedited.

Within the *Vision 2020 Master Plan*, Housing Recommendations section, there was a series of recommendations related to the vacant lots:

- “Promote the reuse of lots made vacant by demolitions to provide for the following uses where appropriate:
 1. The development of new single family homes.
 2. The development of adequate off-street parking for abutting structures.
 3. The development of appropriate recreational or open space uses, in the event continuous maintenance of these uses can be provided.”

MRPC has assessed Best Practices examples for maintenance of recreation and open spaces, which is included within Section 4 and includes use of Natural Play Areas.

The **Economic Development** element provides an inventory of economic trends, a section on the state of Industrial Development, demographics of Fitchburg’s Labor Force, an inventory and analysis of Fitchburg’s Utilities and Services (especially the high utilities costs for the City of Fitchburg), Tourism and a section on the state of Commercial Development.

The Commercial Development section makes note of the Main Street area (called Intown in the Master Plan, more commonly referred to today as Downtown Fitchburg), as well as the Water Street and Lower Cleghorn neighborhoods, as *“older districts (which) were developed prior to widespread automobile ownership, and have a pedestrian focus; buildings are built right up to the street, signage is designed to be read by those walking past, and little on-site parking is provided.* (The Master Plan then noted how later developments centered around the automobile).

The following concerns associated to health equity considerations were identified:

- *“...As the entrances to city are developed for automobile-oriented commercial uses, the large number of curb cuts and signs produce traffic, safety and aesthetic problems. This situation further harms the city’s older commercial districts by limited access and producing a negative first impression for visitors.”* More discussion on these issues is found within the Transportation Master Plan element
- Page 64-65 provides significant discussion related to downtown Fitchburg. On Page 65 there is an **Access to local, healthy food consideration** identified: *“As many residents of the inner city neighborhoods do not own cars, it is common for Fitchburg residents to walk across the railroad tracks behind the Intermodal Center to reach the (Market Basket) grocery store. The close proximity of rural, agricultural areas to Intown may provide an opportunity to sell fresh local produce in a busy urban area.”*

MRPC notes that the above issue offer an “urban agriculture” opportunity as well. Locally, fresh grown food can be an important economic development tool in addition to addressing health (and even open space and a way to address the issue of vacant lots). Urban agriculture is discussed under the Best Practices section with a number of Best Practices examples (Section 4). In addition, the Fun ‘n FITchburg Partnership is looking to work with Market Basket directly over the next couple years to address the provision of healthy food considerations.

- MRPC notes discussion within the “Other Commercial Areas” section that indicated *“these areas have the advantage of being within walking distance to many customers, and are often able to finely tailor their offerings to that customer base.”* This assessment is then contrasted with the fact that *“many of the businesses in the city’s newer commercial districts, such as Parkhill and the John Fitch Highway⁴, were constructed to meet the guidelines of the City of Fitchburg’s Zoning Ordinance, including its parking requirements. Nationally, there has been a growing disenchantment with traditional parking strategies. The standard policy of requiring enough parking to meet the demand on the busiest day of the year has produced ‘sea of asphalt’ directly adjacent to the street. These lots are mostly empty virtually every day of the year. This situation raises environmental, safety and aesthetic concerns.”*

MRPC previously identified the shared parking calculation requirement issue compared to how parking for individual establishments are allow to calculated their parking (only 500 feet from locations utilizing shared parking but up to 800 feet from individual establishment). Since the 1998 *Vision 2020 Master Plan*, this “over-parking” issue has received additional significant support and research. *The High Cost of Free Parking* book by Donald Shoup has become one of the most widely read and praised planning book since its release in hardcover in 2005. (MRPC has a 2011 updated paperback version in our Planning Library).

MRPC’s review of the Economic Development Goals and Objectives note the following objectives related to active living:

- (Under the goal of “Re-establish Intown Fitchburg as a successful, vibrant reflection of the community) “Establish and capitalize on visual and physical links between the Downtown and the Nashua River...”

⁴ MRPC notes that the City of Fitchburg had an Urban Land Institute (ULI) Technical Panel Report prepared for the John Fitch Highway commercial corridor in November 2011. This Report is assessed at the end of Section 2.

- (Under the goal of “Utilize Fitchburg’s natural, cultural and historic resources as catalysts for economic development): “Develop the Nashua River as a destination for visitors and an amenity for residents and businesspeople”.

Among the Economic Development Recommendations with health equity considerations:

- *“Work with the city of Leominster to produce a plan for a greenway along the Nashua River. This greenway should have strong terminuses at either end, access points in the Intown area and other adjacent neighborhoods, and provide a recreational and commuter link between Fitchburg and Leominster”.* MRPC notes that the concept of the greenway is also discussed in the *North Nashua River Master Plan* and the *Green Fitchburg* report (both are assessed within this Section). The Rail Trail comes up for discussion in the Transportation Master Plan element as well as in the *North Nashua River Master Plan* and the *Green Fitchburg* Report. Planning to implement the idea of the Twin Cities Rail Trail has been underway over the past ten years, but over the past few years has seem to stalled out due to difficulties with negotiations between the two cities and CSX and erosion caused by a failed culvert near the Longhorn Steakhouse in Leominster (a brief chronology of efforts to create The Twin Cities Rail Trail, prepared by Larry Cassasa, Business Manager of the Fitchburg Department of Public Works, has been included within Appendix C). MRPC notes the importance of this rail trail concept to provide a pedestrian (both commuting and recreational) connection from Downtown Fitchburg to Leominster) and MRPC includes a recommendation related to moving the project forward in Section 5. Although hopefully there can be new momentum to move the Project forward in 2013 given the Project is identified in Gov. Patrick’s Transportation Bond Bill and the Leominster lawsuit with CSX has been resolved over the failed culvert.
- *“Establish a Mill Revitalization District to remove zoning impediments for the revitalization of mill sites. This ordinance should: a) allow for appropriate mixed uses, b) encourage activities and improvements which are compatible with the goals of Vision2020, c) Allow for flexibility in use and design while protecting the interests of surrounding neighborhoods, d) Preserve structures and features of cultural, architectural, and historical significance.”* As indicated in the Zoning Review section, the City adopted a Mill Conversion Overlay District with one successful implementation with the redevelopment of the former Anwelt Shoe Factory.
- *“Develop a streetscape plan which shows the road layout, street trees, sidewalks and other proposed physical improvements.”* MRPC is not aware of any overall streetscape planning effort. This plan actually sounds similar to development of a Complete Streets Policy/Ordinance, given it takes into account not just a roadway for streets. More discussion of Complete Streets is found within Best Practices and the Recommendations section. MRPC is aware that the City is considering streetscape improvements to Water Street and a portion of Main Street in the Downtown area.
- *“Investigate improvements that can be made to internal circulation in areas such as Parkhill and the John Fitch Highway.”* John Fitch Highway was the subject of a November 2011 Urban Land Institute Technical Assistance Report, which provided specific recommendations. MRPC assesses this Report at the end of this Section 2.
- *“Control design compatibility through site plan review. Areas of concern include;*
 - a. internal landscaping of parking lots*
 - b. vehicular and pedestrian connections with adjacent properties*
 - c. visual standards for facades”*

The City of Fitchburg has some authority to address a. and b. within the Site Plan Review (which are most relevant to health equity of the three identified areas of concern).

- *“Pursue the development of additional athletic fields to attract tournaments and events to Fitchburg.”* MRPC notes a health equity opportunity here related to active living if such athletic fields are open to the general public. For example, Fitchburg State University offers use of its track to the general public during non-University use.

The **Natural, Cultural and Historic Resources** element provides a Natural Resources Inventory on the City’s Water Resources (clean water is an obvious public health need), wetlands, geology and soils, and farmland. There is also an inventory of the City’s Cultural and Historic resources.

MRPC notes that the section on Farmland is important from a healthy food consideration, noting as follows that *“...Farmland is a valuable natural resource that is virtually irreplaceable. The city must consider all potential means for protecting its remaining 1500 acres of farmland. The city must develop special regulations in its zoning ordinance to address the protection of farmland. Nonetheless, additional protection measures may be necessary to ensure that these valuable resources do not disappear.”* MRPC has updated land use data as of 2005 showing a further decrease in agricultural land use to 929 acres. The Fitchburg Greenways Committee (FGC) is actively working to preserve some of the remaining Apple Orchard lands in the northern part of Fitchburg.

The Nashua River also is highlighted in the following Natural Resource element goals and objectives:

“Goal: Identify and achieve new central roles that the Nashua River can play in Fitchburg’s future.”

Objectives:

- *Make the river’s bank and immediate surroundings more beautiful, and create places where people can see the river and its surroundings.*
- *Develop access points along the river, and ways to walk or cycle along it.*
- *Incorporate the river into plans for the reuse of the mills along its banks, and incorporate the mills into plans for the use of the river.*
- *Explore and pursue new roles the river might play in Fitchburg’s economic vitality, including generation of electrical power, site of fisheries/hatcheries, and, especially, a draw for tourism.”*

MRPC notes that two further planning efforts (*North Nashua River Master Plan* and *Green Fitchburg*) were prepared in mind to address the Nashua River and are both assessed in this Section.

Among the relevant Health-Equity related Natural Resource recommendations includes one for agricultural protection but also a broader Greenway Plan that includes a focus on the Nashua River:

- *“Develop a farm protection plan: a. Create an inventory of sites that need protection. b. Adopt the use of appropriate protection mechanism that will protect the land and the farmers.”* MRPC is not aware of a comprehensive farm protection plan, besides the efforts of the FGC to preserve the Apple Orchard lands, as noted above.
- *“Develop a Greenway plan: a. Establish connections along the Nashua River that link Fitchburg with its neighbors. b. Seek grants for the design and implementation of bike and walking paths. c. Produce a Gateway Plan for the major entrances to Fitchburg. Include a site plan review process for development along the gateways. d. Construct a river walk along the Nashua. e. Develop a program of community action to assist the city with park maintenance and improvements. f. Install attractive signage along major routes identifying defined neighborhoods, and at the entrances to the city.”* Again MRPC notes how the *North Nashua River Master Plan* and *Green Fitchburg* planning efforts have helped further these recommendations.

The Transportation element is one of the most important elements related to active living-related health-equity concerns (especially transit access, walk-ability, bike-ability, all of which foster active living). The Transportation and Circulation element consists of a Transportation and Circulation inventory (location and access), in which Route 12 and South Street are highlighted here; Local Circulation, which focused on topography, congestion, bridges, Intown circulation, and parking); Public Transportation, Air Service, Emergency Preparedness, Freight Transportation, and Alternative (transportation) Modes (to the automobile).

Under Intown Circulation, it was noted how *“in 1967, the City reconfigured the roadways in the Intown Central business District, making Main Street and Boulder Drive two-lane, one-way arteries from the Upper Common to the Depot Square area (in the arrangement we know today)...the purpose of this project was to facilitate movement through the downtown area. To this end it has been successful, but there have been considerable costs...Speeds...”* The Master Plan noted Downtown Main Street is not pedestrian-friendly because of the speed concerns: *“Besides concerns about vehicle and pedestrian safety, having two lanes of high speed traffic makes the Main Street area much less welcoming to pedestrians, thus decreasing its value as a retail zone.”*

The Master Plan had noted two-way plans for Main Street were under consideration: *“The City is currently in the process of reviewing plans to return Main Street to two-way traffic and to take steps to increase the number of parking spaces where they are needed most.”* The two-way concept was later found not to be feasible, according to Mike O’Hara. However, The City is looking to make Streetscape improvements for a portion of Main Street (North Street to the Prichard Street and Oliver Street area is the current area of focus).

Under Public Transportation, it is important to note that Plan indicated *“the percentage of Fitchburg residents without access to an automobile is significantly higher than that of the region, county, and state (based on 1990 Census Data).”*

Under freight transportation, the Twin Cities Rail Trail pedestrian concept is discussed: *“Conrail recently sold a long-unused line adjacent to the Nashua to CSX. The City of Fitchburg has expressed interest in utilizing this right-of-way as a bikeway, riverwalk, or some other recreational resource, or as part of the Downtown Connector Project. Both the renewed use of its abandoned railways and the conversion of those railways to other uses would benefit Fitchburg, as the abandonment of these lines has led to physical deterioration, unattractiveness, and safety and vandalism concerns.”*

Under alternative modes, there is mention of the “Twin Cities Rail Trail” which was previously discussed on page 22. Unfortunately 15 years after the *Vision 2020 Master Plan* was completed the Twin Cities Rail Trail remains only in the planning stages, as previously indicated. Although, as was also noted on page 22, hopefully there is new momentum to move the Rail Trail Project towards implementation in 2013

The Master Plan also stated that *“A safe and appealing pedestrian infrastructure is essential for Fitchburg’s success. The John Fitch Highway, an example of standard commercial strip development, is considered both unsafe and unpleasant for pedestrian traffic. Few sidewalks and crosswalks, stores set far back from the street behind huge parking lots, and high speeds of travel on the road discourage pedestrians (again as noted John Fitchburg Highway is subject of ULI Report, which has recommendations to address the unsafe and unpleasant pedestrian environment). New developments in*

*Fitchburg are required under the Zoning Ordinance⁵ to install sidewalks on both sides of any new streets. In the past, the city has encouraged developers to install only one sidewalk in the subdivision, and to extend it outside of the development to link with existing sidewalks. Pedestrian links between new developments and existing neighborhoods and stores benefit city residents and businesses. **As a city with a high number of residents who do not drive, Fitchburg must work to be pedestrian friendly** (emphasis added)."*

Important Transportation and Circulation Goals and Objectives from health-equity considerations:

- A Circulation Goal: *"Improve the circulation of cars, pedestrians, bicycles, and public transportation, including cross street circulation and intersections, with minimal negative impacts to residents."*
- Alternative Forms Goal: *"Encourage the use of alternative forms of transportation, including bicycle and public transit, to reduce traffic, alleviate parking demands, improve air quality, and enhance public safety."*

Relevant Objectives:

- *"Provide an alternative system of access between the downtowns of Fitchburg and Leominster (MRPC notes another Twin Cities Rail Trail-related reference)."*
- *"Encourage connections between various modes of travel. For example, establish safe routes for residents to walk or bicycle to catch the commuter train."* MRPC notes this objective is consistent with the Planning Objectives being undertaken as part of the U.S. Housing and Urban Development-funded Wachusett Corridor Smart Growth Study.
- Safety and Amenity Goal: Improve the safety and amenity of public streets for vehicular and pedestrian travel.

Relevant Objectives:

- Investigate traffic calming techniques in areas with known hazards due to inappropriately high vehicular speeds.
- Establish, maintain, and improve sidewalks in areas of pedestrian and vehicular conflict.
- Encourage pedestrian-friendly design in new developments.
- Examine the impact of current street alignment on access and internal circulation in Downtown, and implement improvements when needed.
- Investigate improvements that can be made to the existing pedestrian infrastructure, and alternative modes of pedestrian travel.

Among the goals for Parking includes *"enhance pedestrian amenities"* – that would allow parking areas to be designed for more friendly pedestrian use. MRPC notes there will further discussion on this Active Living-related Best Practice and a relevant recommendation provided in Section 5.

Among the Transportation Recommendations:

- *"Revise the sidewalk requirement in the city's subdivision regulations:*
 - a. Require the installation of sidewalks and other pedestrian amenities in new developments which connect to existing sidewalks."* MRPC notes that sidewalks are not required in Industrial Subdivision currently and a recommendation to address this issue is included in this Report.
 - "b. Allow the installation of off-site sidewalks or improvement of existing sidewalks instead of requiring sidewalks within the subdivision, at the discretion of the Planning*

⁵ MRPC notes that it is actually the Subdivision Rules and Regulations, assessed within Section 1, that are the City's regulatory tool that drives installation of sidewalks on any new street.

Board.” MRPC recommends that sidewalks should be installed in new developments, period. As one of the existing sidewalk provision provides, the Planning Board can allow on one side and use those dollars that it would cost for the second side to be use off-site.

- *“Develop a network of bike ways, including a recreational and commuter route between the downtowns of Fitchburg and Leominster.”* The latter is another Twin Cities Rail Trail-related reference. Also want to look for similar connection from Downtown Fitchburg to new Wachusett Train Station, which is one focus of the Wachusett Smart Growth Corridor Study.
- *“Investigate how to provide safe pedestrian routes to the Intermodal Center and the Central Plaza. An important first step will be improving the pedestrian way across Lower Main Street at North Street.”* MRPC notes transportation improvements have been made to the Lower Main Street and North Street area since the 1998 Vision 2020 Master Plan.
- *“Acquire the Conrail right-of-way and protect easements to provide for alternative transportation systems between the downtowns of Fitchburg and Leominster.”* MRPC notes that the former railroad right of way and associated easements are now owned by CSX. The City of Fitchburg and Leominster still need to acquire the right-of-way.

The **Open Space and Recreation** element provides an open space and recreation inventory (as of 1998) of Fitchburg’s parks, conservation parcels, and private or commercial conservation recreation lands. There are discussions on the City-owned watershed land and agricultural resources (agricultural resources had also been discussed in the Natural, Cultural and Historic Resources element). A series of goals, objectives and recommendations are included. A review of this element from health equity perspective (especially on those not implemented) follows below:

Goal: Restore and rehabilitate existing park and recreation areas.

Objectives:

- *Continue to improve the park maintenance program including funding for additional staff and equipment.* MRPC Best Practices Review in Section 4 includes examples on park maintenance
- *Develop methods to utilize staff and equipment from other city departments to help maintain city parks.*
- *Capitalize on efforts to incorporate citizen participation on a volunteer basis in the maintenance of parks.* The Fun ‘n FITchburg initiative has helped establish an Adopt a Parks Program. As of February 15, 2013, thirteen (13) of Fitchburg’s parks have been adopted.
- *Provide incentives to developers to include recreation and open space in their development plans, including provisions for maintenance. One tool for this would be to have Open Space Residential Development (Fitchburg’s Flexible Residential Development Provision) on a by-right basis versus requirement for Special Permit.*

Goal: Create additional funding sources for park maintenance and for future park and open space expansion.

Objectives:

- *Seek additional state and federal funding for renovation and purchase of park lands.* Both the Best Practices and Recommendations sections of this Report discuss additional funding opportunities.
- *Stimulate interest from local private sources to adopt the smaller urban parks.* As noted above the Fun ‘n FITchburg initiative has helped establish an Adopt a Parks Program. There are five smaller parks and playgrounds that still need to be adopted.

- *Investigate user fees as a revenue source.* Look Park in Northampton, MA does this. More on alternative approaches to maintenance and revenue opportunities are discussed in the Best Practices Section.

Goal: *Create opportunities in rural areas for a diversity of recreational activities that will appeal to all age groups on a year round basis.*

Objectives:

- *Develop a multi-purpose trail system that includes all activities. (i.e., biking, walking, cross country skiing).* MRPC notes that some communities have developed Bicycle and Pedestrian Plans to help development of such a multi-purpose trail system. The Fitchburg Greenways Committee could help facilitate such an overall plan, working with the Department of Community Development and Department of Public Works.
- *Develop recreation opportunities on under-utilized City-owned property.*

Goal: *Develop recreation opportunities for under-served groups and in under-served neighborhoods.*

Objectives:

- *Develop tot lots in areas of need.* Here is an opportunity to make use of Vacant Lots for development of such tot lots, especially with lower cost Natural Play Areas (see Best Practices section).
- *Develop recreational opportunities for Fitchburg's maturing population.*
- *Respond to the needs of the physically challenged population while park and open space improvements are contemplated.*

Goal: *Maintain and preserve Fitchburg's historic farms and farm land.*

Objectives:

- *Encourage the purchase and consumption of locally grown produce and products.* The Fun 'n FITchburg initiative as well as the Fitchburg Farmers Association could further this Objective.
- *Encourage the expanded participation of local farms in preservation programs.* The Fitchburg Greenways Committee is actively trying to preserve some of the remaining Apple Orchards in North Fitchburg.

Open Space and Recreation Recommendations:

- *Create an outdoor management plan which will cover the financing of capital improvements and maintenance of open space and recreation initiatives.*
- *Design a watershed / farmland protection program.*
- *Implement changes to the zoning law that will protect rural Fitchburg:*
 - a) *Adopt changes requiring clustering in new developments.* MRPC notes the current best practice to incentive use of clustering open space residential development is to allow such development on a by-right basis, which is consistent with the approach outlined in the new State model bylaw.
 - b) *Incorporate design guidelines for new development in rural Fitchburg that will protect its rural resources.*
- *Design a trail master plan for Fitchburg which will incorporate the Nashua River Greenway and the existing trail network.* See comment under "Develop a multi-purpose trail system that includes all activities" objective above.

- *Improve visual access to the Nashua River from downtown.* MRPC notes both the North Nashua River Master Plan and Green Fitchburg had specific recommendations related to this Recommendation.

MRPC notes that the Nashua River is also highlighted as an important recreation resource. The Nashua River is addressed in the *North Nashua River Master Plan* and *Green Fitchburg Plans* as well.

B. North Nashua River Master Plan

The *North Nashua River Master Plan* (Herein after “NNR Master Plan”) was prepared in June 2004 for the City of Fitchburg with assistance under the Massachusetts Riverways Program under the Massachusetts Department of Fish and Game. Planning assistance was provided by the consulting firms Cosby, Schlessinger, Smallbridge, LLC with Michael Crane Associates.

Seven (7) types of “opportunities” were identified in the North Nashua River Master Plan, with (4) most relevant to this health-equity study:

- Public Access to the River
- Rehabilitating existing riverside buildings and brownfields
- New and improved public open spaces along the river
- Improving river health and connectivity.

The NNR Master Plan authors noted that *“because the study area is long and diverse the report breaks the river into loosely defined segments. The segments are the same scale, but also are thematic and based on characteristics of the river.”* The five (5) River Corridor segments are as follows:

- > **Pipeline Park**
- > **Riverview Drive**
- > **The Mills at Fitchburg**
- > **Downtown and Riverfront Park**
- > **Duck Mill Pond**

Pipeline Park

The first segment detailed in the Plan is Pipeline Park. The NNR Master Plan makes reference to the term Pipeline Park, which has since become more formally known as the Steamline Trail. The City was able to implement the first section of the Steamline Trail since NNR Master Plan, which is .60 miles (see Figures 10 and 11 below).

Figure 10: Signage along The Steamline Trail



Figure 11: Along The Steamline Trail



The Stone Railroad Bridge and future viability of Pipeline Path identified in the NNR Master Plan are both current important planning considerations. The Steamline Trail has been found to be on railroad land in a certain section and there are erosion related concerns with the slope from railroad bed location down to where the Steamline Trail is located. The Fitchburg Greenway Committee is trying to make sure these issues are addressed adequately to preserve the Steamline Trail. MRPC plans to address the Steamline Trail as part of Wachusett Smart Growth Corridor Plan. It is also the subject within the Fitchburg Open Space and Recreation Plan Update.

West Side Water Treatment Plant

The NNR Master Plan had identified West Side Water Treatment Plant as a site for long-term redevelopment opportunities. Today the Plant is now off-line. The authors noted that *“in conjunction with the proposed commuter rail extension (the Plant site) would be ideal mixed-use (residential and commercial) Transit Oriented Development Site.* (In general the authors noted that) *“all potential development sites with riverfront access should provide a publicly accessible walkway with significant open space serving as a buffer along the river.”* MRPC’s Eric R. Smith recalls an example presented at the 2011 Brownfields Conference where the City of Pittsburgh was able to develop such a riverfront walkway during the brownfield clean-up of old steel factories. *“Because these parcels are publicly owned, additional riverfront land should be set aside for riverfront open space. The northern parcel fronting on the pool has an excellent view of the river and falls – opportunities for short-term public access of the northern end of this property should be explored.”*

Indeed this site offers future redevelopment opportunities. It may not be the proper site for a mixed-use Transit Oriented Development site however, given the level of brownfields cleanup work required to permit residential uses here. But the City could consider such uses as food production (Mike O’Hara had indicated to MRPC that there has been discussion of using the treatment plan facilities for processing fats and oils) or perhaps an Industrial-Heritage Museum. The *Green Fitchburg* Report, assessed after the NNR Master Plan, had discussed the Central Steam Plant for an Energy Efficiency and Environmental Education Center (known as e4us); unfortunately the Central Steam Plant will have to be demolished due to economics not favorable for rehabilitation. The e4us concept could be considered for the closed West Fitchburg Treatment Plant.

Riverview Drive

Riverview Drive is identified as the section from the end of existing Steamline Trail at the Central Steam Plant to the Depot Street Bridge. Five areas of the Riverfront Drive section are highlighted in the NNR Master Plan, two of which MRPC has identified as most important from health equity considerations. The first of which is *“the Depot Street bridge (which) is the downstream end of the pipeline. At the bridge there may be an opportunity for a path access point and a small parking area. Land could be purchased or an easement could be provided to allow for a public parking area.”* MRPC notes that Burma Road has been identified by the Fitchburg Greenway Committee as an alternative to the Steamline Trail route to connect Depot Street area to the new Wachusett Trail Station. Burma Road itself is a dead-end residential street off of Depot Street, about 1,000 feet in length. However, a Right-of-Way for a Fitchburg Water Line continues past where Burma Road ends and extends all the way to Fifth Mass Turnpike.

The authors use the term “Long Term Pathway” for the second area being highlighted and noted that *“Along the southern bank of the river between Depot Street and the Mass Innovation Center there are only a few property owners, but a large portion of the property is actively being used for the Munksjo Paper Mill (This Paper Mill is now inactive as Mike O’Hara indicated to MRPC that it closed in 2009). Implementing a path across these properties would require cooperation with existing property and business owners. The other obstacle along this segment is the railroad bridge near the end of River Street; passage under or over the railroad would also be required. Because the arches of this bridge are high, it may be possible to build a relatively inexpensive boardwalk style bridge through one of the arches. If implemented, a path along this segment would extend the Pipeline Path an additional 0.8 miles.”* MRPC is including a recommendation that the City include public river access with trail easement as part of any future redevelopment project approval process.

The Mills at Fitchburg

Within the Mills at Fitchburg section six areas are highlighted, all of which relevance from health-equity considerations:

1. Massachusetts Innovation Center: This is the former Anwelt Shoe Factory that was redeveloped under the Mill Conversion Overlay District Provision, discussed back on page 10.
2. Sheldon Street Parcel: The Sheldon Street Parcel has been successfully redeveloped as the new “Gateway Park” which is shown in Figure 12 on Page 32.
3. Mill Rehab: The NNR Master Plan Authors noted that “A number of mills along this segment of the river provide excellent redevelopment projects. Some are vacant or partially vacant while others house active businesses. Redevelopment potential includes housing and/or office space depending on market conditions. Site plan review of redevelopment proposals should require a publicly accessible riverfront walkway and open space to bring activity to the river’s edge and provide visual oversight of river-edge walkways and parks. The mills in this area would be an interesting place for an interpretative exhibit.” MRPC previously noted under the assessment of Fitchburg’s Zoning Bylaw that Premier Box, which is one of the mills identified in this is area, is being converted into housing under the Smart Growth Overlay (40R) Zoning Program (Riverside Commons). The Riverside Commons project includes pedestrian accessibility by the Nashua River and is located just across the River from the new Gateway Park discussed above.

Figure 12: Gateway Park off of Sheldon Street



4. Robichaud Building: The Plan Authors noted that *"This building is currently being used for storage, but the owner is interested in developing it for more active uses highlighting the river. The owner is very supportive of initiatives to improve access to the river and currently plans to include riverfront access on his property, potentially even a cantilevered walkway over the river."* MRPC contacted Michael O'Hara of the Fitchburg Community Development about the status of this Building. He indicated it is called the "red brick river mill" located at 1146 Main Street and noted the property was bought by a local developer who is currently occupied with two other redevelopment projects. Thus as of the drafting of this Study there is nothing new to report on this parcel although Mr. O'Hara noted that "Robichaud still operates the self-storage facility, V. Ltd., which does the have opportunity for parking there (as part of additional redevelopment in the area)."
5. Crocker Field: The Plan Authors noted that... *"Access to the river's edge at Crocker Field will be difficult because of the wall lined with large pine trees along the northern edge of the field. As a public open space Crocker field can play an important role in linking paths and open spaces in downtown and the mill area to the west. Rehabilitating the edge of the field along Broad, River and Circle Streets would provide an attractive link between the proposed paths ending at the practice field and the bridges leading to the downtown."* MRPC is not aware of any specific plans to implement these considerations.
6. The Bridges: The Plan Authors recommended that *"The bridges crossing the river provide good views of portions of the river that are not physically accessible except at Circle Street. As bridges (in this area along the Nashua River) are reconstructed the feasibility of including places to sit and enjoy the view should be explored."* MRPC received an update from Mike O'Hara indicating that during 2012 the Kimball Street Bridge was replaced. In addition, the River Street Bridge is currently being replaced. Both are MassDOT projects (versus being undertaken by the Fitchburg DPW). The construction design will not include places to "sit and enjoy the view" but there will be new sidewalks and guardrails on both sides. The Circle Street bridge remains as is with Mr. O'Hara not aware of any plans to reconstruct in the near future.

Downtown and Riverfront Park

For the Downtown Fitchburg and Riverfront Park section, seven (7) areas are discussed in the Report. Four (4) of these areas have been assessed within this Report, given their relevance from health-equity considerations:

1. Fitchburg Savings Bank (now the Rollstone Bank & Trust): The Plan Authors noted that *“The Bank is interested in developing an open space on a one (1) acre vacant site they own on the river along Rollstone Street. The Bank currently uses the vacant land for informal activities. The City should encourage the development of more formalized, publically accessible (at least during bank hours) open space.”* Mike O’Hara indicated that the land is still vacant used for recreation (volleyball) by the Bank employees.
2. Riverfront Park. The Riverfront Park (shown in Figure 13 on page 34) was noted to be in its second season during NNR Master Plan. The Park is a successful brownfields redevelopment story and Fitchburg’s Riverfront Park is used as model by U.S. Environmental Protection Agency (EPA) and the case study can be found on their website. The Plan authors had also noted that: *“This river segment is under study by the Army Corp of Engineers for possible in-stream restoration work.”* Upon MRPC’s inquiry on the status of such work, Mike O’Hara’s indicated that a floodwall removal and in-stream restoration project was completed in 2010. The floodwall adjacent to Riverfront Park was removed to provide visual and physical access to the river. In addition, a firm specializing in stream restoration directed the relocation of a portion of riverbed bed to deepen the channel and improve habitat. The Plan had also indicated that *“The riverfront park would be a good place for a public art installation and/or arts related events”*. Indeed public art has been installed (see Figure 14 on page 34) and the Park is home to such events as the Summer Farmers’ Market, Blacksmith Art & Music Festival, and the Nashua River Brewers Festival.
3. (Riverfront) Park Expansion: The NNR Master Plan had noted that the *“original concept for the riverfront park was a two-sided park with the river running through the center – development of a park on the north side of the river would make a very dramatic addition to the existing park. Today this site is a surface parking lot with about 90-100 spaces. The City should work with local merchants to relocate the parking spaces in order to develop a complementary park on the downtown side of the park.”* MRPC inquired with Mike O’Hara to see if this had been discussed. He indicated it had indeed been discussed and found not likely feasible. There was resistance from local merchants when relocation of the parking was discussed. MRPC assessment is that this concept is not probably realistic to be given further consideration as that the parking seems needed for the Riverfront Park itself (the parking area can be seen in Figure 13) and the various business across from this parking lot off of Boulder Drive, for example Chaibo.

Figure 13: Riverfront Park and surrounding area

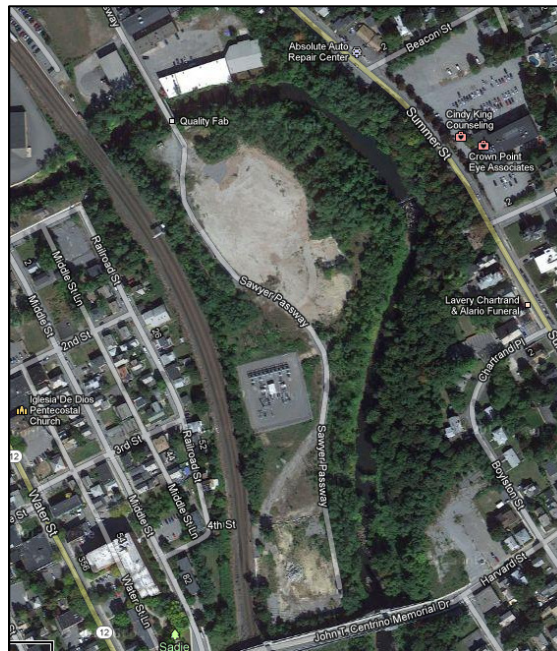


Figure 14: Public Art at Riverfront Park



4. **Power Plant Site:** The NNR Master Plan authors that *“The large vacant site at the bend of the river is large enough for a major redevelopment. Its location within a five or six minute walk to the Commuter Rail station makes it attractive as a Transit Oriented Development site with housing and/or commercial uses. Any proposed use of this site should take advantage of and provide access to the sweeping bend in the river. This brownfield site will need to be cleaned up to prescribed uses. The City should continue pursuing clean-up funds and activities to prepare this site for redevelopment. In the short-term, the feasibility of fencing off the contaminated portions of the site and providing a temporary walkway along the bend in the river should be explored.”* According to Mike O’Hara, all of the power plant site property beyond the Sawyer Passway bridge over the Nashua River is now owned by Fitchburg Gas & Electric (Unitil). All structures have been demolished. A great deal of cleanup is still needed. Another issue facing redevelopment of the site is access, as the narrow Sawyer Passway Bridge is the only current access to the site. The former Power Plant Site and surrounding areas are shown in Figure 15 below.

Figure 15: Aerial Photo of the Downtown Power Plant Site



MRPC notes this brownfield site still needs to be cleaned up. However it does represent a “Smart Growth” redevelopment site. If Sawyer Passway access is problematic and requires a new bridge, perhaps an alternative access could be considered. The NNR Master Plan authors had described an area they called “River Bend” noting that: *“The bend in the river could be made available visible from the sidewalk on Summer Street if brush and over-growth are cleared from the steep embankment between the river and the street.”* MRPC reviewed this site, which is directly across from the medical office building at 76 Summer Street. Mike O’Hara indicated that Fitchburg Gas & Electric (Unitil) owns this hillside land directly across from 76 Summer Street. This area could be one alternative access consideration. A 2nd alternative access consideration can be with a new bridge and roadway off of Harvard Street near an existing parking lot that is across from a neighborhood commercial building.

Duck Mill Pond

For the Duck Mill Pond section area, as shown in Figure 16 on Page 36, five areas are identified in the Report. Of the five, three (3) have been assessed, given their relevance from health-equity considerations:

1. Twin City Rail Trail: The Twin City Rail Trail has been already discussed via the *Vision 2020* Master Plan. It is also subject of the *Green Fitchburg* Report that is assessed next within this Section. The NNR Master Plan authors noted the importance of the Trail from a perspective of bringing people to the Nashua River: *“The proposed Fitchburg to Leominster multi-use path follows a rail right-of-way rather than the North Nashua River, but it will bring people to a site at the river’s edge. The multi-use trail will be a catalyst for the development of future river edge trails. The Fitchburg terminus of the trail is very close to the river and a large opportunity site (which was the Great American Chemical Site, see #3 below). Providing a small parking area at the terminus of the Path will make the path accessible to local neighborhoods and residents who live further away. Because the proposed rail ends at the river, the parking area could be designed to include a river overlook and be located as far from the riverbank as practicable.”* MRPC would like add that both *NNR Master Plan* and *The Green Fitchburg Report* discussed extending the Twin Cities Rail Trail to Downtown Fitchburg. *The NNR Master Plan* called this the “Trail Extension section” and is discussed below. As a Case Study, MRPC notes Turners Falls, MA has been successful in developing a Rail Trail alongside the Connecticut River (see Figure 17 on Page 36).
2. (Twin City Rail) Trail Extension: NNR Master Plan authors noted that *“The end of the multi-use trail is only a short distance from the Fitchburg Gas and Electric opportunity site and the large end in the river. The large obstacle to extending the trail along the edge of this site is bridging the active commuter (MRPC notes use of Freight rail traffic as well) rail line passing over the river just downstream of the Fifth Street Bridge. Although this is an expensive proposition (estimated at a \$1 million at the time of the NNR Master Plan) the City should consider it a long term project and pursue funding sources. This short extension would effectively bring the multi-use path to a point within a few minutes’ walk of the commuter rail station and downtown Fitchburg.”* MRPC notes that the *Green Fitchburg Report’s* exploration of the rail extension includes use of an old railroad tunnel.

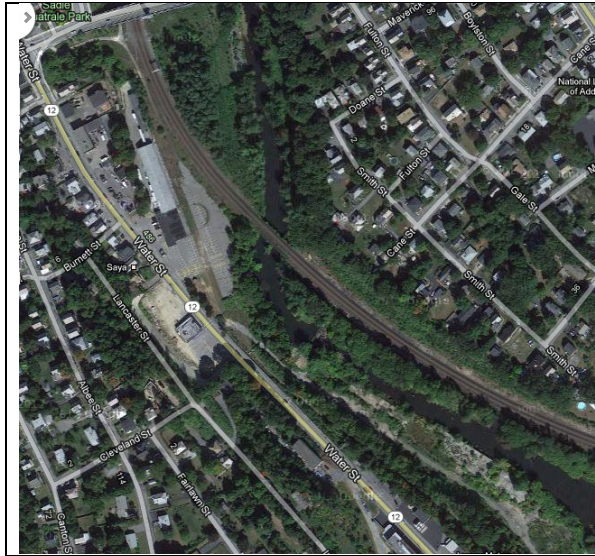


Figure 16: Vicinity of the Duck Mill Section



Figure 17: Bike Path developed in Turners Falls

3. Great American Chemical Site: NNR Master Plan authors indicated *“This large, flat, vacant site provides a major opportunity for redevelopment or open space. Unfortunately, like so many former industrial sites, it is contaminated and will need remediation before it is reused. The linear site would have good access to a very pretty section of the river known as Duck Pond. If the site is redeveloped for private use, the City should work with the property owners to secure an easement for a path along the river’s edge. If possible, the path should connect to the multi-use path to provide a river edge option for path users.* Mike O’Hara specified that the former Great American Chemical Site is between Bemis Road and Water Street by the Halloween World retail establishment. Three condo buildings at 48 units each (144 total) were approved for the Site (known as “Arden Mills”), but only one building nearest Bemis Road has been built. Approximately half (½) of the units remain unoccupied. The Site is still owned by Arden Mills, LLC but there has been no activity there in several years.

C. Green Fitchburg

The “*Green Fitchburg: Opportunities, Strategies & Visions for the Future*” Report (herein after the “*Green Fitchburg*” Report) was prepared by the University of Massachusetts (UMass) Amherst, Landscape Sustainability Studio, in May 2009. The Landscape Sustainability Studio was led by Professor Jack Ahern Ph.D. and a team of nine (9) first year Masters of Landscape Architecture (MLA) Students.

The UMass Studio Team provided a series of recommendations that focused on three (3) areas within the City of Fitchburg:

1. North Nashua River
2. Downtown Fitchburg
3. Water Street

Before each geographic area is assessed, MRPC would like to introduce the concept of *Green Infrastructure*. The *Green Fitchburg* Report authors provided a definition of Green Infrastructure: *“Green infrastructure combines to form an interconnected network of open spaces and natural areas, such as greenways, wetlands, parks, street trees, forest preserves and native plant vegetation, that work*

together to sustain ecological values and functions over time.” The authors indicated that “*Green infrastructure is crucial to combating climate change, **creating healthy built environments, and improving quality of life***”. From the local health equity perspective the last two of these are extremely relevant to this Project hence why emphasis was added.

1. **North Nashua River.** The Green Fitchburg authors assessed three areas of the North Nashua River: a) an Expansion of the Steamline Trail, b) the Central Steam Plant and c) the Downtown River Corridor (which is a distinct discussion versus the Downtown Fitchburg section).
 - a) The Steamline Trail was recommended for an expansion from Mill # 1 (now CanAm) to Mill #3 (the Mill No. 3 Farmstand). The authors noted that “*Because of safety concerns, inaccessibility and the abrupt ending of the existing trail; it is not highly traveled by pedestrians.*” MRPC Staff member, Eric R. Smith, notes the he once walked the Steamline Trail, and although he enjoyed the beauty of the Nashua River and the nice overlook where the Whitman River and Flagg Brook meet to form the North Nashua River, he has not returned because of the trail’s abrupt ending.

The Green Fitchburg authors provided detailed design ideas for the Steamline Trail Expansion: “*The planned extension of the Steamline Trail downstream of the Central Stream Plant to Mill #3 and upstream to Mill #1 will provide the City with a continuous trail system that connects the community to the river while providing a recreational experience for residents and visitors. Our analysis shown in Figures 2-7 and 2-9 revealed that there are many areas of gentle terrain making the trail extensions very viable. We offer the following design ideas for an expanded Steamline Trail:*

- *Establish connections to the trail at access points located at mills and bridges.*
- *Provide additional parking at mill and bridge locations*
- *Designate gathering places (with benches) for pausing and resting where beautiful views of the river or waterfalls exist.*
- *Daylight natural points of interest, such as dams, stone bridges, and tributaries.*
- *Construct bridge crossings over the river where passage of the trail is not feasible.”*

MRPC has included Figures 2-7 and Figures 2-9 as references to this Report within Appendix D.

MRPC notes that current issues with the existing Steamline Trail were previously discussed within the North Nashua River Master Plan assessment and are being assessed within the Wachusett Smart Growth Corridor Analysis Planning Project.

- b) **Central Steam Plant.** The authors devoted four (4) pages to the Central Steam Plant. One concept being considered at the time of the Report by “*the City of Fitchburg is renovation of the vacant Central Steam Plant into an Energy Efficiency and Environmental Education (e4us) Center.*” Unfortunately, further investigation by City Officials found that economics not in favor for renovation of the Central Stream Plant. The City is now looking to demolish the Central Steam Plant and open the site for possible redevelopment opportunities. The City is being aided by a Massachusetts Brownfields Support Team BST, which is actively meeting to help provide resources in cleanup and redevelopment of the Site. The BST includes officials from MassDevelopment, Mass. DCR, MassDOT and U.S. EPA. MRPC recommends ensuring public access along Steamline Trail in this area with any redevelopment plans. As for the e4us concept, perhaps the now closed West Fitchburg WWTP could be the site of such a center (which has been identified on page 29).

c) Downtown River Corridor. The Authors provided a discussion on Riverfront Park (previously discussed in the NNR Master Plan assessment). However, they also provided design alternatives for a continuous trail through Downtown that would “Street Trails” and made recommendations for the “Integrating (of) Public Art”. They cited Concord River Greenway in Lowell as an example. MRPC notes, such a trail system, especially with the Public Art element, could be combined with efforts to establish Downtown Fitchburg as a Cultural District. The authors note that this “Street Trails” construction alternative *“would allow for continuation of the Riverwalk in areas where river access is not feasible. These trails would run along an existing street but would be distinct from a traditional sidewalk in a number of ways (reference is then provided Figure 2-31, which has been incorporated within Appendix D). First, they would have a substantial planted buffer, including shade trees and rain gardens. Second, they would include benches and vegetation in front of the businesses it passes. Finally, a unique paving pattern would clearly mark the path. This paving pattern, commissioned to a local artist, could include a river motif along with elements from Fitchburg’s history made out of metal inlaid into concrete paving.”* The authors conclude that *“This unique experience would connect residents to their river, their town’s history and to each other while also attracting visitors from around the region to walk, shop and admire.*

2. **Downtown Fitchburg:** The authors devote 17 pages for design improvements to Downtown Fitchburg that focus on pedestrian-related improvements as well as green infrastructure related. MRPC notes a reference on Page 50 related to the Creative Economy and that since the *Green Fitchburg* Report was prepared in 2009, Fitchburg’s creative community has come together to work towards establishment of a Fitchburg Main Street Cultural District. For health equity considerations *“The (Authors’) third strategy places emphasis on the structure of the Downtown as it relates to green infrastructure. The configuration of the city is its strength in this regard. The current street block formation includes the pedestrian by design. But, this component can be improved. This segment of our report concentrates on restoring and revitalizing the Downtown with green infrastructure in order to make it a more pedestrian friendly, economically rich and environmentally sustainable resource for Fitchburg’s citizens and businesses... (The authors focus on) a section of the downtown spanning from Water Street to the Upper Common (and note their proposed) improvements will likely improve...and better balance multiple modes of transportation – the vehicle, the bicycle and the pedestrian – leading to an increase in pedestrian traffic downtown. The program explored in this chapter also includes provisions for ADA accessibility and family oriented developments, such as new downtown play areas.”*

MRPC notes that related to the *Green Fitchburg* Report’s recommendations for Pedestrian Improvements and Green Design, in 2012, the City did apply for \$3 million MassWorks Grant to make these Streetscape Improvements along Main Street from North Street to Putnam Street. Unfortunately the City did not receive this MassWorks grant. MRPC has learned that the MassWorks Grant is extremely competitive. For example during the 2011 MassWorks grant round, only one in three projects were funded. However, the City of Fitchburg is looking into use of Community Development Block Grant (CDBG) funds to help with streetscape improvements for the section of Main Street between Prichard Street and Oliver Street at this time.

On pages 61-62 of the *Green Fitchburg* Report is an interesting new Downtown public park idea for a parcel the authors identified as the “Bijou Theatre Lot.” The Bijou Theatre lot is the vacant lot where the “Building Blocks” art project is now located, which is an improvement on how the property looked when the *Green Fitchburg* Report was prepared. The *Green Fitchburg* authors

provided an example of a park in Fairhaven Village (Washington) Green. The site, shown in Figure 18 below, almost looks like it could be right here in Downtown Fitchburg.

Figure 18: Fairhaven Village Green Example



Figure 19: Providence's Grant's Block Lot



MRPC learned from Mike O'Hara that the Tramontozzi family is the property owner of the Bijou Theatre lot property as well as the Theater Block Building next door. During the preparation of this Report MRPC also learned from Ryan McNutt, Director of Housing for the City of Fitchburg, one redevelopment option the City is looking into is working with the Tramontozzi's to redevelop the old Theatre space as a rock-climbing gym. To attract the visitors, the City would look to use the so-called Bijou Theatre Lot has a parking lot. But the City should consider development of this type of Park within the Downtown area. MRPC has identified a vacant lot next to the Boulder Café which offers the opportunity to do something what the City of Providence did for their Downtown Grant's Block Lot (see Figure19 above). This lot is now the "home to Movies on the Block, (Friday evening concerts,) bocce courts and food trucks. It's also the location for Providence Art Festival and other outdoor events."⁶ A recommendation to pursue development of such a park has been included in Section 5.

3. **Water Street:** This section focuses on Water Street (Route 12) from Downtown to the Leominster City Line. MRPC notes that it provides excellent design recommendations to make the corridor pedestrian friendly and achieve installation of green infrastructure elements. The authors begin with the text with an Introduction indicating that: *"Over the years, signs of disinvestment have begun to appear in the neighborhoods along Water Street....The corridor lacks a consistent tree canopy. Sidewalks are intermittent. Parking lots are paved to the edge of the street, often with wide open curb cuts, reducing safety for both traffic and pedestrians and presenting an unattractive auto-oriented environment."* To remedy this situation, the authors provide the term of the area being identified as Fitchburg's "Front Porch" and proposed that *"Fitchburg will build itself a new front porch and paint it green"* and summarize the vision of this study for the Route 12 Water Street corridor. Among the design concepts identified to: *"Enhance the visual appearance of Water Street so that visitors entering Fitchburg, local residents and potential investors see an attractive place of beauty and economic vitality (included):*
 - *Increase tree and shrub cover within and along public rights-of-way*

⁶ <http://downtownprovidence.com/business/grants-block/>

- *Unify design standards of street furnishings (such as benches, lighting and signs)*
- *Enhance the curb appeal of local business and residential properties*

The authors noted that *“the Water Street Corridor provides several opportunities to demonstrate how green infrastructure can be meet to use (the identified) objectives. The first is Water Street itself, right right-of-way and the surrounding properties. The second is the Twin Cities Rail Trail (which has already been discussed at length elsewhere in this Report)... (The Authors then) focus on a small neighborhood known locally as The Patch.”* The Patch is discussed in more detail below.

For Water Street itself, the City is now looking to implement streetscape improvement with hiring of the Landscape Architect, Andrew Leonard, in 2012 for design work and also began outreach efforts. See Figure 20 below for an example of the proposed Water Streetscape Improvements.

Figure 20: Proposed Water Street Streetscape Improvements



MRPC notes that the Water Street – Patch Neighborhood Case Study (which is found on pages 88-98 of the Green Fitchburg Report) has excellent examples for health equity considerations that need further assessment, both for The Patch Neighborhood itself, but other neighborhoods as well. The authors highlighted “Park Improvements”, “Community Gardens”, “Rail Trail Access”, and “Vacant Lots”. There is the opportunity to assess these further with the Health Impact Assessment initiative for the City of Fitchburg related to vacant lots.

The Authors noted that the *“the assets of the Patch neighborhood are favorable circumstances to be recognized, which is its challenges are merely opportunities waiting to be realized* (a reference to Figure 4-40 is provided, which is found in Appendix D of this Report). *The following list summarizes the neighborhood’s assets in greater detail* (MRPC has bolded those assets that have potential health-equity benefits):

- *The neighborhood is clearly defined by distinct edges which spatially enhance the cohesion of place and contributes to the neighborly feel of the neighborhood.*
- *The dimensions of the Patch neighborhood are oriented to the **human** scale.*
- ***A grid street layout favors efficient pedestrian movement.***

- ***The neighborhood by way of proposed connections to rail trail, redesigned tunnel under the rail tracks and attractive foot bridge is well connected and close to Downtown Fitchburg, to Fitchburg State University and to the commuter train into Boston.***
- ***The bus line stops along Water Street between 3rd Street and John T. Centrino Memorial Drive, further connects the residents to the larger city extents and the Region.***
- ***The Sadie Quatrale Park/Playground provides recreation for children.***
- ***Homes appear in good condition. Two new homes have recently been completed along 1st Street.***
- ***Homes close to the street and to one another give an intimate and appealing face-to-face feel to the neighborhood. The broader streets provide an opportune framework for the **Living Streets model** (introduced below).***
- ***Open (Vacant) lots offer opportunities for both open space and new housing.”***

Proposed Design Strategies are then introduced for the four concepts identified above. MRPC notes for the Twin Cities Rail Trail, the authors propose use of a buried underpass near 1st and Railroad Streets. For the Improve Park concept, the authors noted that *“the existing city park at 1st and Railroad Streets is an open space in disrepair. However, the space has played an important role in the neighborhood for many decades. Today, many people representing a broad spectrum of ages use the park for skateboarding, basketball and other fun and healthy activities. This (Green Fitchburg) Report presents two proposals that address common open space redevelopment in the Patch Neighborhood. The first addresses the existing park space at 1st and Railroad Streets (Figure 4-44a and b) and the second proposes a restructuring of the open community space to a more centralized position within the broader context of the Patch Neighborhood (Figure 4-45 a and b). MRPC has provided the specific recommendations to improve the Patch Neighborhood’s parks along with each image within Appendix D of this Report.*

Almost related to a “Complete Streets” concept, the authors promote the concept of Living Streets and Green Alley for use in the Patch Neighborhood. *“Living streets can be defined as an extension of living space that supports community life and it a way to put all of the primary themes, connectivity, green infrastructure, and community image and quality of life to work. The broader roads (1st through 4th, Middle and Railroad Street provide an opportune framework for the Living Streets model. Figures 4-46, 4-47a and b illustrate some of the characteristics that comprise a Living Street that could be employed in the Patch Neighborhood, as well in other Fitchburg neighborhoods.”* MRPC notes that the Living Streets examples are found within Appendix D as well.

Among the benefits noted by the Authors of both Living Streets and Green Alleys are both health-equity related and green infrastructure-related:

“Green alleys employ permeable pavements, open-bottom catch basins, high-albedo pavements and recycled materials...Green Alley design principles....the use of bollards and raised crosswalks, and shared street space for vehicles, bicycles and pedestrians. In addition to the ecological benefits, these infrastructure changes have both economic and aesthetic advantages as follows (highlighted are ones with benefits on health equity considerations):

- *Narrower streets, bump-outs, bump-ins and speed bumps can calm traffic for the safety of pedestrian, bikers and children.*
- *Living Streets positively impact quality of life, by encouraging active living.”*

Other benefits noted for green infrastructure include use of rain gardens and permeable pavement for sidewalk and street side parking reducing impervious surfaces.

Finally, MRPC would like to include Author's recommendations on the reuse of vacant lots, which hopefully can be assessed in greater detail during the Vacant Lot Health Impact Assessment initiative. The Green Fitchburg authors introduce the Vacant Lots section noting that *"at present 20% of the existing parcels in the Patch neighborhood are vacant. Many of the lots are segregated from the neighborhood with chain link fencing. Most of the lots are overgrown and represented wasted, unused, neglected land. Vacant lots are potentials waiting to be rediscovered. At the 3rd & Water Streets' juncture, two empty lots could be redesigned to this aim* (reference then provided to Figure 4-48a and b, which has been included in Appendix D). The Authors suggest redeveloping these vacant lots for commercial ventures, which makes sense to MRPC. Though any redevelopment considered here should include pedestrian and green infrastructure-related amenities.

The author propose use of community gardens as a strategy to address the neighborhood's vacant lots *"...Community gardens provide an extension to the open space and living street concepts. Community gardens have proven successful as a means to connect people with each other and with a place: community gardens build community...Community gardens not only use abandoned vacant spaces adding to the identity and inhabited feel of a neighborhood, but they also provide, in economically challenging times, a viable source for fresh healthy food. The diagram in Figure 4-49 (MRPC has included this diagram within Appendix D) suggests potential locations for community gardens in the Patch neighborhood.*

Potential Locations of Community Gardens in the Patch Neighborhood:

- *On railroad land along Railroad Street near rail trail access point two.*
- *Along the Middle Street edge of the proposed centralized park.*
- *On church property along Middle Street behind St. Bernard's Church.*
- *Temporarily located on any existing vacant lots waiting redevelopment.*

In the Best Practices review found in Section 4, MRPC has included case studies from other communities that have used community gardens to both promote urban agriculture and as a strategy to address use of vacant lot.

D. Revitalizing John Fitch Highway: A Technical Assistance Report

MRPC first identified the Urban Land Institute (ULI)'s *Revitalizing John Fitch Highway* Report within the Transportation *Vision 2020* Master Plan element assessment. The City of Fitchburg was fortunate to receive an ULI Technical Assistance Panel (TAP). The TAP, provided under ULI's Boston District Council, was able to bring to the City of Fitchburg in September 2011 *"stakeholders, City and community leaders, and a panel of land use and development professionals for a day-long session focused on revitalizing the John Fitch Highway Commercial Corridor* (the segment of John Fitch Highway between Townsend and Summer Streets was the TAP's target area)." The Report was finalized on November 9, 2011.

The John Fitch Highway ULI Report identifies the same unfriendly pedestrian environment associated with John Fitch Highway as noted in the *Vision 2020* Master Plan. The ULI Report also highlights the serious stormwater management challenges of the corridor. To address the repeated flooding of Baker Brook (which had been diverted when John Fitch Highway was created in the 1950s), the Authors note that *"the critical next step in this planning process must be completion of a comprehensive storm water management study to identify all contributing factors (catchment areas, soil data, flow paths, and stream capacity. This must happen before any significant investment is made to address the flooding condition on a parcel by parcel basis."* MRPC notes that we are assisting the City of Fitchburg update

their FEMA-required Local Hazard Mitigation Plan. As part of the identification of various Mitigation Actions, we will recommend that the City commence on the comprehensive storm water management study for the John Fitchburg Highway Corridor and also help identify potential funding sources.

The authors provide “Green Infrastructure” based solutions to the stormwater management issues facing the Corridor. Among the Green-Infrastructure Solutions is “a brookside bikepath” – this would be a *“brookside, linear green space and walking/bike path that would increase permeable surface along the Brook, facilitate more pedestrian-friendly movement throughout the corridor and take advantage of Baker Brook as an environmental amenity.”*

The authors then provide a series of safety and traffic calming and appearance-related recommendations to make the John Fitch Highway both more attractive (for business and economic development) and pedestrian-friendly (where the health-equity considerations come into play).

Specific physical designs for John Fitch Highway were recommended, that included (MRPC notes these design recommendations are elements of an overall Complete Streets-based design approach):

- *“Introduction of intermittent medians in the middle lane to prevent use as a travel lane. A median would decrease the perceived distance across the 60 to 66-foot right-of-way, and provide the physical space necessary to incorporate green infrastructure, such as rain gardens and swales, to improve groundwater recharge during significant storm events.*
- *Introduction of dedicated bike lanes would provide a safer space for bikers and by narrowing the dedicated car lanes would help to calm traffic.*
- *Introduction of crosswalks with visual and tactile differences for perception by drivers would increase pedestrian safety and also serve to calm traffic. Incorporation of rumble strips when approaching crosswalks would increase this effort.”*

On the appearance issue, the Authors note that it *“will be an ongoing, long-term project that will occur on two parallel tracks: publicly controlled shared space and privately owned parcels and developments.”* For the public space, design improvements were suggested that echo the John Fitch Highway design recommendations identified above. They would also add street furnishings, such as pedestrian-level street lights.

“For areas and structures within privately owned parcels the City can prepare and institute design guidelines that govern redevelopment and renovation activities in the future (MRPC notes that the Planning Board could adopt these Design Guidelines and provide reference to them within their Site Plan Review Rules and Regulations.) These guidelines should address:

- *Building Setbacks – staggering building segments to create a rhythm between buildings built along the street and those set back can: (1) create greater values by increasing the number of building corners in the development, and (2) improve the pedestrian/shopper experience through the mix of front and back entrances and storefronts.*
- *Parking Setbacks – Parking should be configured to complement building setbacks, essentially staggering the setbacks of buildings and parking. One building would be near the roadway with room for sidewalks, street furnishings, and bike paths, while the next would be setback maybe 100 sf to 150 sf so parking could be in front of the buildings. Parking at the rear of the building will create a better streetscape, while parking at the front of the building will present easier parking visibility and convenience for drivers. As mentioned above, the staggering of buildings allows more accessibility and visibility of building corners.”*

MRPC notes the issue of parking setback requirements, such as suggested above, is also discussed in the Best Practices section with relevant Recommendations provided.

3) Conduct a review of the proposed CLURPA (Comprehensive Land Use Reform and Partnership Act) Legislation and how the development and implementation of health equity-related zoning initiatives relate to this proposed Legislation.

CLURPA stands for “Comprehensive Land Use Reform & Partnership Act.” MRPC notes that land use reform efforts been underway for many years (MRPC’s Eric R. Smith notes it has been discussed since he moved to Massachusetts in July 1995). The CLURPA Legislation was introduced by Sen. Jamie Eldridge in 2011. Although it did make it out of Committee in 2012 as noted, which is the furthest any recent land use reform legislation efforts have gone, it ultimately stalled out when the State Legislature session ended on June 30, 2012. As will be discussed below, a new version of CLURPA has been filed for the new Legislative session.

To provide some background information and importance of land use reform legislation, in a study conducted in the 2000’s, the American Planning Association (APA) ranked Massachusetts with some of the worst land use laws in the Nation (among bottom 10 states). One example was provided of the use of “Approval Not Required (ANR)” subdivision process that was highlighted on page 12. Land use and zoning reform would remove the ANR provisions and replace it with a Minor Subdivision review process, which what most other states have.

Besides the removal of the ANR subdivision process, other highlights of benefits for health-equity considerations that zoning and land use reform would provide include:

- Improve opportunities for open space in subdivisions by removing the existing 3-year restriction for such lands identified to be used for park or playground use by the residents. The reform efforts would allow up to 5% of the subdivision land area to be used for such park area.
- Promotes alternative zoning tools that would benefit health, such as Form-based Zoning⁷ and Transfer of Development Rights, all of such would facilitate greater opportunities for development of mixed use neighborhoods and the preservation of open space for recreational and agricultural land uses.

The latest Land Use and Zoning Reform Bill has been introduced into the 2013 State Legislature Session, as “An Act Promoting the Planning and Development of Sustainable Communities” (House Bill #1859), by Representative Stephen Kulik and Senator Daniel Wolf.

The Public Health community has gotten behind the land use efforts through the ActFRESH campaign, of which Fun ‘n FITchburg is a partner of. ActFRESH has included the passing of land use and zoning reform legislation as one of their three policy priorities for the 2013-2014 State Legislative Session. As ActFRESH notes *“smarter zoning codes can improve health by promoting community features like mixed*

⁷ A form-based code (FBC) is a means of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm by controlling physical form primarily, with a lesser focus on land use, through municipal regulations. (http://en.wikipedia.org/wiki/Form-based_code).

commercial-residential districts that encourage walking and biking, preservation of open space that promotes recreation, improved access to healthy food choices, and reduced exposure to pollution.”

A brand new Fact Sheet has been released by ActFRESH on March 12, 2013 highlights seven (7) benefits that the latest Land Use and Zoning Reform Bill would offer the opportunity to improve Public Health. MRPC has discussed some of these previously. But some additional ones we believe are important to highlight here are as follows:

1. ***“Updates and streamlines the Commonwealth’s master planning statutes to address sustainable development and public health.*** *The current master planning law lacks focus, too often resulting in overly-complicated and costly plans that don’t sufficiently focus on action planning and implementation. The elements currently required in a plan are the same regardless of community size or characteristics, and the development of a master plan does not require public input. The current law is entirely re-written:*
 - *The elements of a master plan are updated to reflect the state’s Sustainable Development Principles, including public health considerations.*
 - *Several public health objectives are woven into five master planning elements required for all communities. These include assessment and promotion of active transportation and public health considerations of open space protection and recreation.*
 - *In addition to the required elements, communities can choose among seven optional elements, and may customize their treatment according to local needs. For the first time, the statute includes a public health element that communities may include in their master plans. The public health element focuses on an inventory of the conditions in the natural and built environment which promote or inhibit health, as well as opportunities to increase access to health-promoting community assets.”* MRPC provides discussion of a Health Master Plan element within the Best Practices Section and includes a corresponding recommendation in Section 5.
 - *“All elements of the master plan must be assessed against an existing regional plan, in order to avoid inconsistent strategies across municipal lines within the same geographic region.*
 - *Community input through a public hearing is required before a plan may be adopted by the planning board. The plan must ultimately be adopted by the local legislative body.*
2. ***Promotes consistency between planning and zoning.*** *Current Massachusetts law does not require zoning to be consistent with a local master plan. As a result, many municipalities have not created or updated their plans and master plans developed with extensive community input may never be effectively implemented. The law is changed to make master plans an option for municipalities. But to incentivize thoughtful local planning, municipalities that have zoning codes consistent with master plans are provided with additional legal protections.*
3. ***Creates an opt-in program to incentivize smart growth.*** *Current development patterns are not resulting in smart-growth-consistent development that allows communities to benefit from the public health benefits of strong planning. A new “Planning Ahead for Growth Act” provides strong incentives for smart growth planning, with public health explicitly stated as a goal.*

In exchange for adopting measures that embrace these goals, communities are given enhanced planning tools and preferential consideration for infrastructure funding and other state funds and grants. Certified communities would be given:

- *Enhanced ability to assess development impact fees (discussed further below).*
- *Preference for state discretionary funds and grants.*
- *Priority for state infrastructure investments, such as water and sewer infrastructure, school building funds, and biking and walking facilities.*
- *Requirements that the state take into consideration regional plans and local master plans in its capital spending.*
- *Eligibility to receive state planning funds to reimburse for costs of developing and reviewing implementing regulations.*

\$2,000,000 is appropriated for reimbursements to communities and regional planning agencies that that prepare and review plans under this section.

4. ***Formalizes guidelines for development impact fees.*** *Development impact fees are charges that developers pay to cities and towns that can support public infrastructure, including public transit, sidewalks, bike paths, and open space, parks, and recreational facilities. Rationally-based impact fees are predictable for developers and can reduce local opposition to projects, because there is confidence that projects will bear their fair share of impacts on public facilities. The bill would explicitly authorize such fees where there is a rational nexus to the impacts created by a development.”* MRPC notes that many states use Development Impact Fees to help offset costs of the public infrastructure noted above. However, the outdated Land Use laws currently in effect in Massachusetts actually preclude such use, outside a special act for Cape Cod.

4) Conduct a review of best practices related to health equity-related planning initiatives both within and outside the Commonwealth of Massachusetts. Part of this review will involve reviewing other Robert Wood Johnson Foundation’s Healthy Kids Healthy Communities grant recipients for their efforts to develop and implement healthy zoning bylaws and regulations.

MRPC has provided a review of various health equity related planning initiatives both within and outside the Commonwealth of Massachusetts. We have divided our Best Practices review into the following categories: Urban Agriculture (related to Healthy Eating but also identified as a strategy for addressing a community’s vacant lots), Corner Stores and other Healthy Eating initiatives; Active Living, such as innovative public space development and existing park space maintenance, complete streets, developing walkable communities; and other general Planning initiatives that have include the various health-equity related initiatives.

As part of this review, MRPC has reviewed the various case studies relevant to the Health Equity-related initiatives addressed in this study that have been developed and implemented by other Robert Wood Johnson Foundation (RWJF)’s Healthy Kids Healthy Communities grant recipients. The full set of available case studies can be found at the RWJF’s Healthy Kids Healthy Communities (HKHC) case studies website: <http://www.healthykidshealthycommunities.org/communities/case-examples>. The bibliography with references of the various case studies and best practices that MRPC has researched while preparing this Report is included as Appendix E.

Community Gardens/Urban Agriculture (related to Healthy Eating)

According to Wikipedia, “Urban agriculture is the practice of cultivating, processing, and distributing food in or around a village, town, or city. Urban agriculture can also involve animal husbandry, aquaculture, agroforestry, and horticulture⁸.” MRPC notes there are lots of urban agricultural-related examples to provide as Best Practices, especially from the efforts by various cities and towns over the past few years. MRPC notes that some communities have included some animal husbandry within their definition of Urban Agriculture, which usually is limited to the keeping of backyard chickens or bees. MRPC is aware of a proposed ordinance by Fitchburg City Councilor Dolores Thibault-Munoz that would allow keeping of backyard chickens. Therefore, our Best Practices review of Urban Agricultural includes both sets of communities.

Within Massachusetts:

- **Boston, MA:** The City established Urban Agriculture Overlay Districts (“UAOD”) as a zoning overlay district to the underlying zoning within the Greater Mattapan Neighborhood District. The zoning change is part of larger an Urban Agricultural effort across the City that was even featured on WCVB (Channel 5) in 2012. The UAODs zoning requirements target land appropriate for and limited to:
 - The cultivation of plants, herbs, fruits, flowers, or vegetables, including the cultivation and tillage of soil and the production, cultivation, growing and harvesting of any agricultural, floricultural or horticultural commodity and
 - Composting (the accelerated biodegradation and stabilization of organic material under controlled conditions for beneficial garden use) only of materials produced on site.

As noted Boston’s zoning change is a part of larger Urban Agriculture effort by the City. Economic benefits of urban agriculture to the City were noted in a July 2012 report prepared by The Conservation Law Foundation and CLF Ventures, Inc. entitled “*Growing Green: Measuring Benefits, Overcoming Barriers, and Nurturing Opportunities for Urban Agriculture in Boston.*” The *Growing Green* Report targets 50 acres in the City for urban agricultural opportunities, as this would produce nearly 200 jobs the authors note. Such jobs are beyond just growing and harvesting of crops but also include jobs related to food distribution, such as “*packaging produce for delivery to market.*” Therefore, there are positive economic development considerations for such allowing urban agriculture opportunities within Fitchburg in addition to the health-equity benefits.

- **Springfield MA:** The City of Springfield adopted a Community Garden Ordinance in 2012 to help establish community gardens on **vacant lots** (emphasis added; MRPC notes that further discussion of Best Practices related to urban agricultural opportunities is part of the tool box on strategies to address vacant lots). Springfield allows “Community Gardens” (which they have defined as: “*Land that is gardened by a group of individuals sharing responsibility for the site either independently or under the auspices of a public or nonprofit organization*”) in all zoning districts, and on both private and public lands, subject to meeting a set of performance standards. MRPC also believes it is Important to note that the City of Springfield has a Food Policy Council, charged “*To promote public and private food policies and efforts that improve access to nutritious, affordable, culturally appropriate, fresh, and safe foods for all residents of Springfield.*” A recommendation for the City of Fitchburg to create a similar body has been included in this Report.

⁸ http://en.wikipedia.org/wiki/Urban_agriculture

- **Holyoke, MA and Nuestras Raices:** for the City of Holyoke, Nuestras Raices (Spanish for “Our Roots”) has been a successful organization that has fostered the development of Community Gardens across the City of Holyoke. Nuestras Raices is a grassroots organization that fosters economic, human, and community development in predominantly Latino Holyoke through projects relating to food, agriculture and the environment.

According to their Community Garden’s website, Nuestras Raices indicates that :*“The beauty of the gardens has heightened a sense of pride in belonging to Holyoke neighborhoods. The gardens better the overall environment of Holyoke. Holyoke property value increases. The gardens serve to heighten air quality. They create safer communities. The gardens improve the environment of Holyoke. Neighbors and community members of all ages have come together to transform Holyoke’s abandoned urban lots into colorful and active spaces where both gardens and new relationships grow. **The vacant lots of Holyoke now used for gardening were once filled with garbage, needles, and the remains of demolished buildings** (emphasis added). They presented health problems for residents including children, negatively impacted community pride, precluded investment, and created spaces for criminal activities. These sites are now flourishing community gardens creating fundamental changes to the city of Holyoke and are serving to empower community members.”* See their website for more info: <http://www.nuestras-raices.org/>

MRPC notes that the issue of community gardens and crime reduction was subject of an article in the July/August 2012 Mother Jones magazine. The magazine article features urban agriculture case studies from Chicago and Philadelphia, in which urban farming seems to reduce crime and violence. MRPC notes the Philadelphia case study was related to the City’s efforts to improve the 54,000 vacant lots (as of 2000) and MRPC discusses more about the Philadelphia experience later in this Best Practices Section.

MRPC contacted Diego Argarita of Nuestras Raices to inquire if zoning had been impediment to their successful community garden initiative. He noted Nuestras Raices started their efforts 20 years ago and never had any difficulties with zoning related issues with the City of Holyoke. Each community garden would be (is) reviewed by different city agencies, such as the Board of Health and Planning. He noted that is actually has become more difficult to do new community gardens today due to stricter U.S. EPA and Mass. Department of Environmental Protection (DEP) regulations.

Diego did note that Nuestras Raices is working with the City to allow Farmstands at the Community Garden sites, but not trying to treat this as an “Agricultural” use. MRPC inquired if they are looking for commercial designation and he indicated they have not figured that out yet. Nuestras Raices hope to have the Farmstands to at least cover some of the costs associated with maintaining the community garden (such expenses include utilities, water, tools and toolshed as well as the Seasonal Staff Coordinator).

MRPC notes that Nuestras Raices teamed up with The Trustees of Reservation (TTR)’s Land of Providence Reservation, as Nuestras Raices has leased 12 acres of the 26-acre reservation for farming. The Montachusett Region is fortunate to have the Growing Places Garden Project organization. The Clinton-based entity, whose mission “*is to improve the food security and nutrition education of people with limited economic means*” is a Fun ‘n FITchburg Partner and

helped establish raised-bed Community Gardens in the Green Acres development. Also TTR has helped facilitate development of Community Gardens in the new Fitchburg Gateway Park.

- **Somerville, MA:** MRPC first became aware of Somerville's initiatives via a Boston Globe online article from October 19, 2012 entitled "*Chickens part of Somerville effort to promote urban agriculture.*" Fitchburg City Councilor Dolores Thibault-Munoz provided MRPC with links for more details of their Urban Agriculture program and other communities that have passed Ordinances to allow Backyard Chickens. For Somerville, MRPC reviewed "*The ABCs of Urban Agriculture*" which is a summary of the City's new ordinance and health regulations and a good introductory document to Urban Agriculture in general.

The City's new rules, for example, allow residents to raise chickens although permits are required for this use. The cost is \$50 for the first year and \$25 every year after to keep chickens. The City does cap the number of chickens at six per household and prohibits roosters. Chicken owners also must clean their coops once a week and compost the manure. Somerville also allows bee keeping with a maximum of two hives per lot, and there is a permit fee as well.

- **Worcester, MA:** The Regional Environmental Council of Central Massachusetts (REC) provides a series of Best Practices related to Urban Agriculture, including an example of Urban Farming to Corner Stores. In 2003, REC initiated YouthGROW, an urban agriculture-focused youth development and employment program for low-income teens. YouthGROW have a big city garden in a former vacant lot off of Main Street in Fitchburg. Within the City of Worcester is also the Artichoke Food Co-op, which was started and run by Clark University students. The REC's YouthGROW was able to sell some of their produce at Artichoke as well as Farmer's Market venues.

The economic development side of this Best Practice can be seen in YouthGROW's Drop it Like It's HOT SAUCE™ initiative. According to their website the hot sauce "*is made from scratch by YouthGROW members and staff with seasonal ingredients from our youth farms (when available). Our recipe was designed and market-tested by YouthGROW youth to highlight local ingredients; it features Thai Hot Pepper, Jalapeno, and Habanero.*" See REC's website for more details: <http://www.recworchester.org>.

Outside Massachusetts:

- **Madison, WI Community Gardens** – The City of Madison, Wisconsin put Community Gardens as a policy priority back in 1999. A Goal was established in the City's Comprehensive Plan to have 1 Community Garden for every 2000 households.
- **Providence, RI: The provision of Community Gardens is included as a priority within the City's Master Plan** (*Master Plan for 2021: Providence Tomorrow*): "*Environmental Sustainability as a Priority. The City of Providence has embraced the commitment to becoming a "green" city, pledging to lead by example and to incorporate standards for energy efficiency, reduce and emissions reduction; to promote the use of green materials; to and support community gardens and small-scale agriculture in City parks and elsewhere; and to strive to remove compostable materials from the solid waste stream and facilitate the use of revitalized soil for gardening, small-scale agriculture and bank stabilization.*" The Master Plan noted development of eight (8) new Community Gardens. Their Master Plan established following goal "*that every Providence resident live within a ten-minute walk of a community garden.*"

To help further urban agricultural implementation, the City established the Urban Agriculture Task Force in 2004. This Task Force is a fifty-member, city-wide coalition of growers, community development organizations, government agencies, chefs, landscapers, anti-hunger advocates, healthy professional, and environmentalists dedicated to promoting practices and policies to strengthen our city's local food system. One of the coordinating entities is the non-profit Southside Community Land Trust. MRPC notes they just held their 4th Annual "*Urban Agriculture Spring Kickoff*" event which featured demonstrations and educational programs "on seed starting, urban chicken keeping, beekeeping, composting and other food-growing topics."

Providence, RI also adopted a provision to allow backyard chickens. They allow 1 hen per 800 square feet of lot area with a maximum of six per lot. There are a host of other requirements that are part of their Backyard Chicken Ordinance.

MRPC notes that the City of Providence established a Healthy Communities Office in 2012 "*to improve the health and wellness of Providence residents.*" The City also has an Office of Sustainability that notes as of 2012, the City now has 42 community gardens (including 14 owned and managed by the Southside Community Land Trust, 20 home gardens, and 10 school gardens in the Community Grower's Network).

- **Minneapolis, MN:** The City of Minneapolis adopted significant zoning changes in March 2012 to allow set of Urban Agricultural-related uses, such as:
 - Small Market Gardens: which are defined as 10,000 square feet or < of growing area on the ground, on a rooftop, or inside a building. A new temporary use permit was also created, allowing a farmstand to operate for up to 15 days per year. This allows market and community gardeners limited ability to sell products at the location they are grown.
 - Large Market Gardens: Similar to the Small Market Gardens, are allowed on the ground, on a rooftop, or inside a building. But defined for such spaces that are 10,000 square feet or greater. Are allowed but a conditional use permit (similar to Mass. Special Permit process) required; Their use must be compatible with surrounding properties.
 - Urban Farms: limited to industrial district and their general commercial district, it does allow for produce to be grown, processed and distributed on the same lot.

It is important to note that each urban agricultural use has a set of development and design standards. MRPC also notes that these zoning changes were part of a larger food planning effort:

- *The Homegrown Minneapolis Report*, prepared in 2009, contained a variety of recommendations related to improving the growth, processing, distribution, consumption, and waste management of healthy, locally grown foods within the city. One of the adopted implementation steps for the next phase of work was to develop a citywide topical plan on community gardens and urban agriculture.
- *Urban Agriculture Policy Plan (UAPP)*, which was adopted by the Minneapolis City Council on April 15, 2011. This is that topical plan that had been recommended in the Homegrown Minneapolis Report. The UAPP led to development of the set of urban agricultural zoning recommendations that the City was able to adopt in March 2012.
- **The HKHC Grantee Grant County, NM**, program includes the following goal: "*promotes the development of local food system (defined as the cycle of food production, processing, distribution, purchasing, consumption and waste) to increase the availability, affordability, and*

accessibility of healthy food to low-income family.” The Grant County HKHC Partners developed a set of strategies to reach their goal, which have included:

- Grant County Food Policy Council. A food and agricultural advisory body to the Grant County Board of Commissioners comprised of 13 appointed members. See website for more info. <http://www.grantcountyhkhc.com/Food%20Systems2.html>
- MRPC notes that the Town of Silver City, NM (located within Grant County) updated their Land Use and Zoning Code to provide explicit definitions and land use protections for Community Gardens and Farmers’ Markets.
- Definition for Community Garden: *“Land used for the cultivation of fruits, vegetables, plants, flowers and herbs by multiple users. The land shall be served by a water supply sufficient to support the cultivation practice used on the site. Such land may include available public land to provide open space, recreation, education, social connections, economic development opportunities and a local food source.”* Community Gardens are allowed by-right in all zones.
- Definition for Farmers’ Market: *“An outdoor market open to the public, operated by a governmental agency, a nonprofit corporation, or one or more Producers, at which (a) at least 50 percent of the products sold are Farm Products or Value added Farm Products and (b) at least 50 percent of the vendors regularly participating during the market’s hours of operation are Producers, or family members or employees of Producers.”* Farmers’ Markets are allowed by-right in all commercial and industrial zones and one of their five residential zones.

Vacant Lots and Urban Agriculture

From the Urban Agriculture perspective the use of vacant lots for urban agricultural-related uses has been identified in a number of communities as a priority (for variety of reasons, some of which has already been highlighted). A summary of this Best Practices research has been provided below.

PolicyLink’s *“Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities”* 2012 Report. In this Report the Authors note that: *“A vibrant movement is changing the landscape, economic outlook, and vitality of cities across the country. The recent recession affected many low income communities—taking with it manufacturing centers, jobs, and people while leaving behind abandoned homes and **vacant lots** (emphasis added). Now a new crop of urban farmers, along with activists, and community organizations are turning that land into productive use and turning around their communities.”*

In the section *“Policy Considerations and Recommendations”* the very first such recommendation involves vacant lots:

- ***“Identify and provide land for farming.*** *Local governments can identify **vacant lots** (Emphasis added) and make this information publicly available, authorizing contracts with private landowners.*

The PolicyLink’s Urban Agriculture Report provides a Cleveland case study:

Cleveland, Ohio: *“In 2007, **Neighborhood Progress**, a nonprofit organization working to restore and maintain the health and vitality of Cleveland’s neighborhoods, **launched a citywide planning initiative to tackle the issue of land vacancies**. The group sponsored a **study** to identify productive re-uses of vacant land that could build healthy communities and protect people,*

current stakeholders, investments, and the value of homes.” MRPC notes that the highest recommended strategy for vacant land re-use was urban agriculture.

“Neighborhood Progress is now working with the City of Cleveland to implement agricultural pilot projects throughout the city over the next several years. The most successful ones will be brought up to scale. A total of 66 projects aiming to renovate vacant land have been implemented throughout Cleveland, 31 of which are urban agriculture-related (13 are market gardens and the remainder are community gardens, orchards, or vineyards). The urban farms will provide supplemental income to many farmers and primary income for one or two farmers. While the projects are limited to city-owned land, of the 20,000 vacant lots in Cleveland, the city owns 7,500—well over one-third of the vacant land. The city has agreed to a five-year lease for the pilot projects, with the goal of transferring title to the community group or individual farmer after the expiration of the lease.”

“The city recognizes that converting vacant land into an asset saves the city money in the long run. It costs close to \$1,000 to maintain a vacant lot: mowing the lot, responding to police calls involving crime and violence at the sites, and cleaning up after illegal dumping. As a result, Cleveland has also been progressively amending its zoning and health codes to provide increased land security to farmers by allowing for composting toilets, on-site sales, changes to fencing requirements, and farm animal and honey bee provisions.

“The city has also established an agreement with the water department to provide fire hydrant access to urban farms and community gardens so that farmers can access water without spending \$1,500 to \$4,500 to gain permanent access to a water line.

*“Cleveland is also home to the newly launched **Green City Growers Cooperative**, which will operate a five-acre hydroponic greenhouse that will produce leafy greens and herbs to be sold to nearby grocery stores and wholesale produce businesses.”*

MRPC notes that the Cleveland-based Neighborhood Progress non-profit studied and toured the City of Philadelphia to learn more about that City’s *LandCare Program*, which will be discussed later in this Best Practices section. MRPC notes that for **Cleveland**, Urban agriculture has been made part of their vacant lot strategy. MRPC has obtained a copy of the Study referenced on page 50, entitled *“Re-imaging a More Sustainable Cleveland: Citywide Strategies for Reuse of Vacant Land”* that was adopted by the City Cleveland City Planning Commission on December 19, 2008. MRPC notes that Neighborhood Progress subsequently prepared the *“Re-imaging Cleveland>> Ideas to Action Resource Book”* in January 2011, which provides a series of vacant land reuse strategies that include healthy eating and active living related considerations. Both Reports will be assessed further as part of the City of Fitchburg Vacant Lot Health Impact Assessment Project. Thanks to research efforts by Donna Wysokenski of the Montachusett Opportunity Council, MRPC is also aware of other vacant lot reuse initiatives in Pittsburgh, Pennsylvania; Buffalo, New York; and Flint, Michigan that will also be incorporated into the Vacant Lot Health Impact Assessment Project.

Other Healthy Eating Initiatives, including Corner Stores

Northborough has created a “Building a Healthy Northborough” initiative. MRPC reviewed a July 10, 2012 article from the MetroWest Daily News regarding Northborough’s “Building a Healthy Northborough” initiative. As of the article’s publication eight (8) businesses have bought into the

initiative, which is *“a program run by Health Agent Jamie Terry that strives to get healthier options on local menus to help fight childhood obesity.”* Ms. Terry *“indicated that 10 more businesses are interested in joining and will be working with the town-hired nutritionist. The funds for the nutritionist came from a \$60,000 grant the Town received from the State’s Mass in Motion program. Restaurants in the program receive a sticker with the Healthy Northborough logo to place on their windows, and should be receiving materials to place on their table to draw attention to the healthy menu offerings.”*

HKHC Grantee Example of the City of Watsonville, CA and the surrounding Pajaro Valley. The City of Watsonville launched a **“Healthy Eating Options”** program to score restaurants for offering healthy menus. According to an October 13, 2010 article in the Santa Cruz Sentinel...*“To earn a building permit, restaurants will need to earn six points out of possible 19 by taking such steps as offering water for free, smaller portions at lower cost, salad dressing on the side and providing corn instead of flour tortillas. Restaurants that earn nine or more points will be recognized through an award program.”* A review of the Program indicates that nine points brings recognition of an “Award Certificate” and 13 points gives the restaurant a “Golden Carrot Award.” The program is codified into Chapter 14-29 of the City’s Municipal Code as “Healthy Eating Options”.

The City of Worcester’s WooFood Program: Based on MRPC’s review of the WooFood Program’s website (<http://www.woofood.org/about-us.html>) and a review of the “The WooFood Revolution” article from the February 9, 2012 Worcester Magazine, MRPC was able to learn some basics of the City of Worcester WooFood Program. According to the Worcester Magazine article: *“Three UMass Medical Students launched a nonprofit to expand the healthful movement and better the entire eating experience in their own community through a new venture they called WooFood. The concept of WooFood is simple: offer restaurant-goers an easy way to order their favorite meal – just make it healthier. Participating Worcester restaurants go through an introduction of the WooFood goals and standards, chefs work to integrate healthy ingredients into their most popular dishes and wait staff is trained on how to effectively promote the WooFood certified option.”* MRPC’s Eric R. Smith first learned of the WooFood program while visiting the Worcester Art Museum’s Café. The three UMass Medical School medical students started WooFood in August of 2010 by combining their *“love for good food and good health...(whose) primary goal is to integrate healthy, delicious food into every restaurant in Worcester.”*

Corner Stores. MRPC notes that our research of approaches to offer healthy food at corner stores appears to generally go beyond zoning regulatory initiatives. The approaches include both financial and technical assistance, for example. Reviews of some of the researched initiatives are provided below. More information and case studies are available upon request to MRPC.

MRPC notes that Fun ‘n FITchburg is focusing on healthy food access during the current work program (2013) by working with Market Basket to improve the Supermarket’s healthy food offerings. While MRPC realizes the importance of this task, the City of Fitchburg will still need to have a healthy corner store initiative, or other-related efforts to increase access to healthy food. Our rationale for this assessment is that most of the Lower Cleghorn neighborhood is outside a one-mile radius of the Water Street Market Basket location and are not serviced by a full-service grocery store (see map provided as Figure 21 on Page 54). Such lack of grocery store availability could qualify the neighborhood as being within an urban “food desert”. According to the American Nutrition Association’s website: *“Food deserts are defined as parts of the country void of fresh fruit, vegetables, and other healthful whole foods, usually found in impoverished areas. This is largely due to a lack of grocery stores, farmers’ markets, and healthy food providers. The USDA defines what’s considered a food desert and which areas will be helped by this initiative:*

As noted most of the Lower Cleghorn neighborhood is outside one mile from the Water Street Supermarket. It is also one of the three lower-income communities that are the focus of the Fun 'n FITchburg efforts to reduce obesity. MRPC reiterates the findings of the *Vision 2020* Master Plan that indicated “the percentage of Fitchburg residents without access to an automobile is significantly higher than that of the region, county, and state (based on 1990 Census Data).”

Letter Landscape

Area: 87,306.19643 sq ft
Perimeter: 33,127.93 ft

DISCLAIMER: The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

MrMapper

⁹ <http://americannutritionassociation.org/newsletter/usda-defines-food-deserts>

has provided review of the Springfield, MA below as a Best Practice, noting however the City is further ahead than most of the other Mass in Motion communities. MDPH started their initiative by conducting a literature review of best practices and prepared a Draft Guidance Document. MPDH also had a webinar in September 2012 (which MRPC's Eric R. Smith participated in).

According to Ms. Brush with MDPH the first step is undertaking a Corner Store Program is an assessment. This process involves the community identifying 2-3 corner stores within the community that are likely located in a "food desert" as defined on page 53-54, and located near a community institution, such as a school for example. It was also suggested by Ms. Brush that an ethnic-owned Corner Store might be a good target as their population might be more receptive to having fresh produce that fits their ethnic-based diet. She did indicate that undertaking a corner store program is time consuming. MRPC does provide a corner store-based recommendation within Section 5.

The City of Springfield has launched targeting a corner store pilot program. MRPC learned about the City's initiative via a feature on the WAMC Northeast Public Radio Station. The Station's website has an electronic version of the feature, entitled *Healthier Choices Sought For Neighborhood Corner Stores* at: <http://www.wamc.org/post/healthier-choices-sought-neighborhood-corner-stores>. *"The City of Springfield's health department is working with five convenience stores to help promote stock and promote fruits and vegetables, low fat milk, whole grain breads and healthy snacks. The stores are located in inner city neighborhoods without a full-line food market, or are frequented by children on their way home from school or office workers looking for a quick bit on their break... The program will provide a small subsidy to stores to help put in the infrastructure, such as refrigeration equipment, needed to stock fresh food. It will also help to train store staff in consumer education techniques, such as offering free samples of healthy foods. A marketing campaign will identify the locations of the stores offering healthy food choices."* Finally it was noted that Springfield's Healthy Corner Store Initiative is funded with \$10,000 from Harvard Pilgrim Healthcare.

Minneapolis, Minnesota: According to the October 11, 2012 online *Governing* magazine article, "A Fresh Start: City Requires Corner Stores to Sell Healthy Produce" *"The Minneapolis city council passed an ordinance in 2008 that required corner stores to sell five varieties of perishable produce (becoming the first city to make it a condition for doing business). The health department expanded the regulation in 2009 to require that stores that are certified by the Women, Infants and Children program (a federal program that gives those populations support to purchase food) carry seven varieties and 30 pounds of fresh produce.*

The article noted that *"in the last three years, the statute has changed the face of corner stores in Minneapolis. When the rule took effect, the health department estimated that only 25 percent of stores were compliant. But by 2011, the city issued only three citations (for 364 stores) for non-compliance over the entire year. Those numbers would seem to indicate wholesale buy-in from the business community."*

The article did note discussions within the business community over concerns that onerous regulations would raise their cost of doing business. To address these concerns the City has put some incentives in place, such as providing up *"\$400 worth of displays and signage to individual stores to meet those requirements."* Businesses also got *"a leg up on purchasing the produce through a \$200 initial stipend from the City. Health department officials have conducted consultations with store owners to give them a sense of what they need to do to comply and what the customers in their neighborhoods are looking for. They've held kick-off events, complete with taste testing demonstrations, so that the community is*

aware of their new healthy food options- and will hopefully patronize the businesses that sell them, making it a win-win for both sides.”

MRPC concludes the Corner Store Best Practices review by indicating that our findings indicate in order to promote and provide healthy food at corner stores involves technical and financial assistance. Besides the specifics as noted above, MRPC learned of a Corner Store program in East Los Angeles where a participating corner store received the refrigeration equipment to carry fresh produce via a grant program that was administered by the University of California, Los Angeles (UCLA).

PolicyLink’s Healthy Food Access Portal: MRPC finally wants to conclude the Healthy Eating Best Practices Section by highlighting PolicyLink’s recently developed Healthy Food Access Portal. This web resource, which can be accessed at: <http://www.healthyfoodaccess.org/>, is a brand new online tool that can be used by the Fun ‘n FITchburg initiative and the City of Fitchburg in general to further healthy food considerations beyond the Initiative’s existing strategies and the case studies identified in this Report. During the introductory webinar on their Portal held on March 6, 2013, PolicyLink provided some facts such as 25 million Americans live greater than 1 mile from a Supermarket (which helps define the food desert). PolicyLink also provided some innovative financing options to help increase healthy food that are being made available, such as the **Healthy Food Finance Initiative (HFFI)**. The Obama administration has created the Healthy Food Financing Initiative (HFFI), which is a national grants and loans program for projects that increase access to healthy foods in underserved communities (MRPC notes that it is a National program, based on a State-wide program developed within Pennsylvania).

The innovative financing options and various case studies are available from the Healthy Food Access Portal. For example, MRPC identified a 2013 Report available for download entitled *“the Healthy Food Financing Handbook from advocacy to implementation”* by The Food Trust. This Report provides a good introductory description of the HFFI:

“The HFFI is a partnership between the U.S. Departments of Treasury, Agriculture and Health and Human Services to provide financing for developing and equipping grocery stores, small retailers, corner stores and farmers’ markets selling healthy food in underserved areas. These one-time resources help fresh food retailers overcome the higher initial barriers to entry into underserved, lower-income urban, suburban and rural communities and also support renovation and expansion of existing stores so they can provide the healthy foods that communities want and need. Since 2010 HFFI funds have been given to 47 CDFIs (Community Development Financial Institutions) and community development corporations across the country to disseminate to fresh food retail projects in their regions. The Healthy Food Financing Program is anticipated to grow and support an increasing number of projects across the country.”

MRPC did a quick search of the Healthy Food Access Portal by State to see what resources and/or case studies are available for Massachusetts. This query revealed a report entitled *“Food For Every Child: The Need for More Supermarkets in Massachusetts”* prepared in December 2010 also by The Food Trust (of note is that one of the funding sources of this Report was the Robert Wood Johnson Foundation). This Report provides some statistics of interest to Fitchburg. It notes that in general *“Massachusetts has fewer supermarkets per capita than almost any other state...In Lowell and Fitchburg, the number of supermarkets would need to double to adequately serve the population.”* MRPC previously noted the likely food desert of the Cleghorn neighborhood.

During MRPC's work so far on the Wachusett Smart Growth Corridor Study, Mayor Wong has expressed the need for a Supermarket to serve the Cleghorn and West Fitchburg neighborhoods in the vicinity of the new Wachusett MBTA Train Station. During the MRPC's continued work on the Wachusett Smart Growth Corridor Study, we will further analyze the Food for Every Child and the Healthy Food Financing Handbook studies as part of recommending economic development strategies around developing a new grocery store and/or improving access to healthy food within the Cleghorn/West Fitchburg area.

Active Living

Philadelphia, PA: The City of Philadelphia has undertaken significant planning efforts to address the City's Vacant Lots. For parks, an active living consideration, the City prepared a Plan in 2009 entitled: *"Green 2015: An Action Plan for the First 500 Acres."* This Green 2015 Plan included a goal to add 500 acres of new parkland, including making use of vacant lots and also *"Creating Innovative Partnerships that can reduce long-term maintenance."* The Plan stated *"As we all know, vacant lots hurt our communities. Transforming these empty spaces into parks and green places creates important new opportunities for kids to play and neighbors to gather."*

The Plan identifies a host of private funding sources to call upon for green-space improvement projects. Although some are Pennsylvania or Philadelphia-specific, the City of Fitchburg could look into the following sources: the American Cities Foundation, Pepsi Refresh Challenge, the Awesome Foundation, and KaBoom! Playgrounds.

MRPC's review of the Green 2015 Plan's discussion on *"Maintaining New Green Spaces"* the Authors notes an issue that sounds very familiar with comments received during Fun 'n FITchburg's park audits:

"Ongoing maintenance of open space is of critical importance....Citizens we questioned told us that their use of existing parks is often negatively affected by the perceived lack of safety or of regular maintenance. PPR (Philadelphia Parks and Recreation) has made 'clean, safe and ready to use' a priority and is committed to achieving these standards for existing as well as new park spaces. PPR is also studying ways to improve upon current practices, including new ways to generate revenue, ways to design parks that are easier to maintain, and ways to create more multi-functional spaces"

The Plan notes that *"Many of the inefficiencies that make existing PPR sites difficult to maintain can be addressed in the design of new sites. **Poor design often results in inefficient maintenance practices (emphasis added).** Examples from across the country demonstrate how simple design practices can make park spaces more viable and successful as well as cheaper to maintain. Parks that are well maintained better serve their communities and inspire neighborhood investment."*

The Plan does offer various design ideas to simply maintenance (The Plan includes a footnote that refers to the following document by Andropogon Associates: *Creating Sustainable Community Parks: A Guide to Improving Quality of Life by Protecting Natural Resources*, Pennsylvania Department of Conservation and Resources. 2007):

- *"Install irrigation cisterns linked to roof leaders*
- *Replace concrete and asphalt with porous surfaces*
- *Create rain gardens in lesser-used areas, planted with greensward, low-mow or meadow.*
- *Strategically place shade trees adjacent to buildings and over thermal masses such as paved area, parking lots, pools, and walls*
- *Plant native trees or shrubs that produce food for wildlife.*

- *Make green waste into compost, which can improve the nutrient quality of the soil and help retain some of its moisture content.*
- *Plant sports fields with buffalo grass, which needs no mowing or watering, as used in the new Kensington Creative and Performing Arts High School.*
- *Remove invasive plants that are not native to Pennsylvania and could potentially harm the environment.*
- *Identify opportunities to combine complementary programming, such as using farm and fields to manage stormwater, installing cisterns over hard courts, etc.*
- *Install educational signage and do outreach on sustainable-design practices to encourage people to treat green spaces with care, and*
- *Protect and restore buffers in our large waterfront practices wherever possible.”*

MRPC notes that many of the above recommendations take a “Green Infrastructure” approach.

Both MRPC and MOC are aware of the opportunity for “Natural Play Areas” to help lower ongoing maintenance costs. According to MassAudubon: *“Unlike static, traditional playgrounds, nature play areas give children the chance to solve problems and construct their surroundings through natural elements and unstructured exploration.”*¹⁰ MOC and the Green Acres neighborhood have included a Natural Play Area in their Plans for the Green Field area within Green Acres.

The Philadelphia Green 2015 Plan noted *“it is important to identify sources of funding in addition to the municipal budget to pay for the ongoing maintenance of green space...Park systems in other cities have been able to generate as much as 35 percent of their operating budget from outside sources of revenue. For example, more than 40 partnerships operate in support of parks in New York City, spending \$87 million annually on upkeep.”* (The GreenPlan references a *New Yorkers for Parks: Supporting Our Parks: A Guide to Alternative Revenue Strategies* Report, which MRPC has downloaded in our digital Planning Library).

MRPC notes that **Philadelphia** has taken a comprehensive approach in dealing with the City’s large number of vacant lots. These efforts are known as the *Philadelphia LandCare Program*. It is an effort led by both the Philadelphia City Office of Housing and Community Development and the Philadelphia Horticultural Society, which “Cleans and Greens” selected lots in key neighborhoods. There are now more than 2,000 vacant lots are being maintained. Parks, playgrounds or community gardens are targeted uses. Through its Philadelphia Green program, the Philadelphia Horticultural Society initiated a vacant land management study that resulted in a report called *“Managing Vacant Land in Philadelphia: A Key Step Toward Neighborhood Revitalization.”* (MRPC has this Report on file and we will review for more specific recommendations for Fitchburg as part of the Vacant Lot Health Impact Assessment Project). The *Green Fitchburg* Report authors had noted that *“In the (Philadelphia Managing Vacant Land) report is the recognition that vacant lots are not intrinsically negative, but rather are assets or opportunities for redevelopment. **This is based on the premise that if these lots are regularly mowed or cleaned, they will add to the attractiveness of the neighborhood- contributing then to the quality of life of residents** (emphasis added), as well as drawing new infill development to the neighborhood.”*

“To revitalize vacant spaces, the City of Philadelphia contracts with Philadelphia Green in two ways:

¹⁰ For more information on MassAudubon’s Natural Play Areas see their website at: <http://www.massaudubon.org/EcoKids/natureplay.php>

1. *The first is the Vacant Land Stabilization Program, which involves the application of topsoil, seeding, tree planting and the building of fences. The first stage reestablishes the neighborhood lot.*
2. *The second course of action is called Community LandCare, which draws on organized neighborhood community groups who maintain the lots with regular mowing and cleaning.*

As a way to monitor and support these efforts, Philadelphia Green established an office of Vacant Land Management as a division of the Redevelopment Authority. Through this agency, management of the vacant lots is divided into four (4) primary strategies: Clean and Lien, Acquisition, Maintenance and Disposition. Further monitoring and support for the program comes from several city based intermediary organizations that work to advocate, advise and assist community group efforts. “

MRPC believes there is the need for Fitchburg to consider Philadelphia’s *LandCare* Program as a model. The Philadelphia Horticultural Society has provided MRPC with an 8-page summary document of this Program. The information will be incorporated as part of the Vacant Lot Health Impact Assessment Project.

Philadelphia has another Best Practice related to Active Living related to “The Porch” at the 30th Street Train Station. MRPC learned about this initiative from the Better Cities and Town’s online blog article entitled *“Lively new park-in-phase creates a ‘front porch’ for Philly”* by Kaid Benfield on August 9, 2012. The article notes that *“The Porch is a lively new public space just outside the city’s iconic train station. The creation of University City District (UCD), a Philadelphia-based organization dedicated to revitalization and community improvement, The Porch opened last fall and has been hopping all summer with activity. It is at once ambitious and low-key.”*

“The new 50-foot-wide, block-long plaza replaces an unnecessary outer parking lane and barren sidewalk on one side of the station with seating, tables, shade, plantings and, depending on the week or day, perhaps music, a farmers’ market, a beer garden, or even miniature golf (see Figure 22 below).” The UCD organization *“sees this new space as Philadelphia’s front porch, a welcoming entryway to the city, as well as a place to linger and socialize, and to entertain and be entertained. The Porch serves to balance the indoor grandeur of 30th Street Station with the wonder and expanse of Philadelphia.”*

Figure 22: The Porch at 30th Street Station, Philadelphia



The Porch example is an example of a **Lighter, Quicker Cheaper** approach promoted by the **Place for Public Spaces (PPS)**. According to PPS, *“Lighter, Quicker, Cheaper (LQC) describes a local development strategy that has produced some of the world’s most successful public spaces – one that is lower risk and lower cost, capitalizing on the creative energy of the community to efficiently generate new uses and revenue for places in transition.”*¹¹ MRPC notes that this LQC design approach was the focus of a November 2012 article in the American Planning Association’s monthly *Planning* magazine entitled “From Pop-up to Permanent” which highlights an example of *“a weed-strewn lot about a mile east of Downtown”* Buffalo that is now hosting a summertime concert series, among other activities. MRPC notes that the approach with Providence’s Grant’s Block Lot is similar and a similar approach recommended for either the vacant lot with Building Blocks (so called Bijou Theater lot) or the vacant lot next to the Boulder Café.

New York City developed a comprehensive set of “*Active Design Guidelines*” in 2010. They divide these Guidelines into Urban Design (Creating an Active City) and Building Design (Creating Opportunities for Daily Physical Activity). MRPC focuses on the Urban Design guidelines here with the six key recommended measures in order to design *“neighborhoods, streets, and outdoor spaces that encourage active transportation and recreation, including walking and bicycling”*. The six recommended measures include:

- Develop and maintain mixed land use in city neighborhoods;
- Improve access to transit and transit facilities;
- Improve access to plazas, parks, open spaces, and recreational facilities, and design these spaces to maximize their active use where appropriate;
- Improve access to full-service grocery stores and fresh produce;
- Design accessible, pedestrian-friendly streets with high connectivity, traffic calming features, landscaping, lighting, benches, and water fountains;
- Facilitate bicycling for recreation and transportation by developing continuous bicycle networks and incorporating infrastructure like safe indoor and outdoor bicycle parking.

MRPC notes that one of the City’s specific strategies under the Programming Streetscapes Strategy is to “Organize pedestrian-oriented programs, such as charity walks and vehicular street closures, that make wide avenues available for walking and bicycling.” This led to the development of the City’s Summer Streets program. – Summer Streets is a program of the NYC Department of Transportation in which designated routes are temporarily closed to motor vehicles and opened to people for walking, bicycling, running, and exercising over multiple weekends. The example of Park Avenue is shown in Figure 23 on Page 61. Perhaps the City of Fitchburg could consider a similar Summer Streets initiative by closing Boulder Drive on Sundays during the summer months.

¹¹ <http://www.pps.org/reference/lighter-quicker-cheaper-2-2/>

Figure 23: Park Avenue, New York City, during its Summer Streets program



“Complete Streets”

To address active living considerations many communities have adopted a “Complete Streets” policy with a corresponding set of design requirements to allow other non-motorized users the opportunity to travel safely along a community’s streets. According to the National Complete Streets Coalition: *“Instituting a Complete Streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.”*

The National Complete Streets Coalition has identified ten elements of a Comprehensive Complete Streets policy:

- Includes a vision for how and why the community wants to complete its streets
- Specifies that ‘all users’ includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs that Complete Streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes. Includes specific next steps for implementation of the policy

The Coalition's website at: <http://www.smartgrowthamerica.org/complete-streets/> has a comprehensive set of information related to development of a Complete Streets Policy for the City of Fitchburg. One of their resources is a "Complete Streets Local Policy Workbook" which MRPC has downloaded for its Planning Library and can provide to the Fun 'IN FITchburg Partnership, if they do not have it already. The first step towards development of a Complete Streets Policy is for the Fitchburg City Council to adopt a Complete Streets Resolution, which is what the Fun 'IN FITchburg Partnership is attending to submit to the City Council for approval in 2013.

MRPC's research of HKHC Communities uncovered some Complete Street-related Best Practices. **The HKHC Community of City of Sacramento** actually adopted a set of Pedestrian Friendly Street Standards before having a full the Complete Streets Policy. Following the development of draft standards and a public participation process, the City of Sacramento developed new standards that included:

- The minimum width of local residential streets was reduced from 36 feet to 30 feet.
- Flexibility in the design of new streets was introduced by providing options. For example, sidewalk and planter strips were designated as minimums and can be increased at the request of the developer.
- For collector streets, landscaped medians are required if the projected traffic volume exceeds a certain threshold
- 7' parking lanes may be included depending on the adjacent land use
- Bicycle lanes are required on arterial streets
- Planter strips are required on all streets.
- Traffic calming devices such as bulbouts or traffic circles are encouraged to enhance the pedestrian environment

The **HKHC community of Houghton, Michigan** has prepared some educational outreach materials that the City used to help their community adopt a Complete Streets policy. Offering a "*five reasons Houghton should enact Complete Streets now*" within a handout prepared by the Houghton Bike Task Force, the Task Force's five reasons they believed why the City of Houghton should adopt Complete Street provisions were: 1) Livability, 2) Economic Development, 3) Health, 4) Safety, and 5) Funding.

MRPC confirmed that Houghton has since adopted a Complete Streets Ordinance by reviewing the Michigan Complete Streets Coalition's website (<http://michigancompletestreets.wordpress.com/>). The Coalitions website notes that the Houghton City Council passed a Complete Streets Ordinance, effective January 1, 2011. Houghton became the sixth Michigan city, and the first in the Upper Peninsula, to enact a Complete Streets ordinance. An additional 16 Michigan cities have passed resolutions supporting the use of Complete Streets design principles, giving Michigan more such policies than any other state.

The Houghton ordinance calls for transportation improvement projects which "*...provide appropriate accommodation for bicyclists, pedestrians, transit users and motorists of all ages and abilities.*" It further states that all street plans, including new roads and renovations, shall include such accommodations as sidewalks, curb ramps, bike lanes and signage to "*...maximize walkable and bikeable streets wherever feasible.*"

The ordinance also specifies that street projects should incorporate elements of Houghton's bike and pedestrian plans and various state and national design criteria, in order to improve access and safety for all user groups. It also provides for certain exceptions, such as when "*...the cost (of the transportation enhancement project) would be excessively disproportionate to the need for probable use.*"

The “Chicane” Best Practice as one Complete Streets / Traffic Calming Example:

MRPC and the Fun ‘n FITchburg initiative learned about the “Chicane” during the September 2012 Mark Fenton site visit of the Green Acres neighborhood. According to Wikipedia: “A *chicane* is an artificial feature creating extra turns in a road, used in motor racing and on streets to slow traffic for safety. Chicane comes from the French verb *chicaner*, which means ‘to quibble’ or ‘to prevent justice’. Chicanes are a type of ‘horizontal deflection’ used in traffic calming schemes to reduce the speed of traffic. Drivers are expected to reduce speed to negotiate the lateral displacement in the vehicle path. There are several variations of traffic calming chicanes, but they generally fall into one of two broad categories:

- Single-lane working chicanes, which consist of staggered buildouts, narrowing the road so that traffic in one direction has to give way to opposing traffic
- Two-way working chicanes, which use buildouts to provide deflection, but with lanes separated by road markings or a central island.

Limited accident data for chicane schemes indicate a reduction in injury accidents (54%) and accident severity.”¹² An example of a Chicane is provided in Figure 24 below. MOC’s Donna Wysokenski located an online animation showing the Chicane implementation, which is available at: <http://www.streetfilms.org/chicane-animated-traffic-calming/>

Figure 24: Example of a Chicane Traffic Calming Implementation



Other Active Living-related Best Practices

Walkable Communities ([walkable.org](http://www.walkable.org)) has 12 Steps to make a community walkable. The various 12 steps are presented below. The full details of each step are found at their FAQs webpage: <http://www.walkable.org/faqs.html>.

1. Intact town centers
2. Residential densities, mixed income, mixed use
3. Public space
4. Universal design
5. Key streets are speed controlled
6. Streets & trails are well linked
7. Design is properly scaled to 1/8, 1/4, and 1/2 mile radius segments
8. The town is designed for people

¹² <http://en.wikipedia.org/wiki/Chicane>

9. The town is thinking small
10. In walkable communities there are many people walking
11. The town and the neighborhoods have a vision
12. Decision-makers are visionary, communicative, and forward-thinking

More resources and best practices on development of a “Pedestrian-Friendly Fitchburg” can be found at **The Pedestrian and Bicycle Information Center’s** website: www.walkinginfo.org. The Pedestrian and Bicycle Information Center (PBIC) offers webinars on a variety of topics related to pedestrian and bicycle safety. MRPC has participated in several of their webinars, which can be reviewed at: www.walkinginfo.org/webinars.

Finally, a series of Best Practices are found within the **Walk-Friendly Communities (WFC)**’s *“Giving Cities Legs: Ideas and Inspirations from Walk-Friendly Communities.”* Walk Friendly Communities is a national recognition program developed to encourage towns and cities across the U.S. to establish or recommit to a high priority for supporting safer walking environments. The WFC program will recognize communities that are working to improve a wide range of conditions related to walking, including safety, mobility, access, and comfort. See their website for more info: <http://www.walkfriendly.org/>

MRPC notes that one community within Massachusetts is currently designated as a “Walk Friendly Community.” The City of Northampton’s “Bronze” designation was granted for considerations that included:

- “The Transportation section of the 2008 *Sustainable Northampton Comprehensive Plan*, includes many strategies, actions, and targets related to walkability. For example, the Plan goal to “Improve circulation system to accommodate development and encourage bicycle and pedestrian transit” has metrics such as the percent of the population able to get basic services without driving or bike paths/multi-use trails within a half-mile of 70 percent of households.
- Northampton’s Complete Streets Policy document, adopted in 2005, identifies the responsible agency for each item in the Policy.
- Northampton has 22.6 miles of trails, with another 12 miles planned or proposed. The City’s trail system does an excellent job of linking with destinations such as schools, shopping, and other amenities.”

Incorporating Health into Master Plans

Omaha, NE: The City of Omaha Health has incorporated into the City’s Master Plan via an effort they call “Environment Omaha”. (See <http://www.omahabydesign.org/projects/environmental-element/> for more details). This effort was led by Omaha by Design, an urban design and environmental nonprofit dedicated to improving the way Omaha functions, looks and feels. This nonprofit worked with the City of Omaha to develop an Environmental Element of the City’s Master Plan that includes a section on “Community Health”.

The Community Health section of the Environmental Element seeks to help Omaha improve and increase:

- Neighborhoods with mixed uses and connectivity to destinations
- Parks, open spaces and recreational facilities
- Access to and availability of healthy food

- Access to health services and economic opportunities
- Walking, biking and public transit
- High quality, healthy and affordable housing
- Safe and healthy neighborhoods and public spaces
- Environmental quality

The Active Omaha goal (one of three Community Health Goals) seeks to help Omaha become an active community that supports healthy lifestyles with multiple and diverse environments to promote physical activity for all people in every season. The other two goals are “Safe Omaha” and “Healthy Omaha”.

The City of Fitchburg should consider incorporating a Health element within the next update to the City’s Master Plan.

The Benefits of Shared Parking

The following benefits of Shared Parking are taken from a “*Fact Sheet: Shared Parking*” provided as part the Santa Fe Depot (CA) Specific Plan Update:

“Shared parking can have a variety of benefits. Some can be clearly defined, while others are less tangible, however they all help in **creating community and enhancing a sense of place**.

- Shared parking reduces land devoted to parking, thereby allowing room for more context sensitive site planning and project design and providing more space **for open spaces, walkways or other urban amenities**.
- Reductions in the amount of surface parking provided for each land use means less impermeable surface for each new development. That can leave more room for swales, vegetation and other features that prevent stormwater runoff from reaching storm sewers, thus reducing creek, rivers, and ocean pollution.
- Shared parking increases communication and coordination between individual businesses and among business districts and neighborhood residents. By necessity, shared parking brings people together to consider how they can meet mutual needs.”

MRPC previously noted in our Zoning Bylaw Assessment that the City of Fitchburg does have the Common Parking Zoning provision, which is a positive from a health-equity consideration. However, our assessment is that it needs to be amended as currently individual establishments are allowed to measure parking within 800 feet of premises but for common parking the distance is currently only 500 from the establishments.

Parking Location and Design

As indicated in the ULI John Fitch Highway Report, in order to provide a pedestrian friendly environment, it is recommended to have off-street to the rear (and sometimes the side) of buildings facing the street. One best practice of zoning requiring this type of parking arrangement is found within the Town of Ashburnham Zoning Bylaw’s Site Plan Review section. Although limited to the Village Center Zoning District, one design requirement indicates that “*No off-street parking area, except for one required driveway, shall be located between the street line and the front line of the building.*” MRPC recommends Fitchburg consider something similar for John Fitch Highway as part of implementing the

recommended design guidelines of the ULI John Fitch Highway Report. Or perhaps the design standard could be implemented at other neighborhood commercial areas as well.

5) Based on the results of the review and analysis in Tasks #1-4, provide recommended changes to Zoning and Subdivision Rules to improve the health of the City's residents. In addition, provide recommended next steps and processes required to assist in overseeing implementation.

MRPC concludes the *Health Equity-related Initiatives Zoning and Regulatory Analysis Study* with a series of recommendations that will hopefully lead to improved health of the City's residents. The recommendations are provided within the following categories: Zoning Ordinances Changes to Promote Active Living, Zoning Ordinances Changes to Promote Healthy Eating, Subdivision Regulations changes to Promote Active Living, Planning and Policy Needs and Opportunities to Promote Active Living, Planning and Policy Needs and Opportunities to Promote Healthy Eating and Overall Planning and Policy Needs and Opportunities.

The recommendations include identified next steps and processes required to assist in overseeing implementation, such as responsible entity. The various recommendations are summarized in Table 1 at the end of this Section

Zoning Ordinances Changes to Promote Active Living

- The City of Fitchburg should amend the "Flexible Development" Zoning Provisions so they are allowed "by-right". MRPC notes that the State has a new model Open Space Design Bylaw that is now written such development provisions can be permitted on a by-right basis. The by-right approach for Open Space Design-type developments has been adopted by a number of communities; including by the Town of Ashburnham in 2012 (MRPC noted in our Zoning Assessment that Fitchburg's Flexible Development provisions are essentially the same as Open Space Design provisions). The Planning Board and the Office of Community Development could take the lead in developing such amendments to the Flexible Development Provisions. MRPC notes that MassAudubon is co-sponsoring a Workshop (the Nashua River Watershed Association is another co-sponsor) on Thursday, April 25, 2013 related to learning more about the State's new Open Space Design Bylaw.
- Amend the Common Parking requirement to have the measurement for parking requirement equal 800 feet from premises. The Planning Board and the Office of Community Development could take the lead in developing such amendments
- Allow Commercial Recreation in at least some of Fitchburg's Residential Zoning Districts and change the Special Permit Granting Authority to the Planning Board. The Planning Board and the Office of Community Development could take the lead in developing such amendments
- Change the Assisted and Independent Living Facilities (ALF/ILF) zoning provision's buffer requirement to allow recreational trails and sidewalks to also be exempt from the buffer provision (in addition to driveways). The Planning Board and the Office of Community Development could take the lead in developing such amendments.
- PUDs need to go through a Subdivision-type of Design Standard Review. The Planning Board should adopt a set of PUD Rules and Regulations that include provisions of similar Design Standards that are incorporated within newly built subdivisions under Subdivision Control Law.

The Planning Board and the Office of Community Development could take the lead in developing such amendments.

- For submittal information on Site Plans add the requirement for the following information: Location, names, and present widths of streets bounding, approaching, and within 1,200 feet (quarter mile) of the development. The Planning Board and the Office of Community Development could take the lead in developing this amendment to the Planning Board's Special Permit and Site Plan Review Regulations.
- Adopt Design Guidelines, within the Planning Board's Site Plan Review Regulations, for John Fitch Highway, per the ULI Report's Recommendations. The Planning Board and the Office of Community Development could take the lead in developing such design guidelines.
- Change zoning for parking within John Fitch Highway and other identified commercial areas to have parking allowed in the rear (possibly the side) of the building. The Planning Board and the Office of Community Development could take the lead in developing such amendments.

Zoning Ordinances Changes to Promote Healthy Eating

- MRPC notes that there are a number of issues to consider in adopting a set of urban agriculture standards, based on our Best Practices review. Therefore our first recommendation is for the City to create Urban Agriculture Task Force. The Task Force should include representation from the Mayor's Office, City Council, Office of Community Development, Board of Health, Farmers Market Association, Fun 'N Fitchburg, and include other interested citizens.
- One set of specific recommendations at this time is to add Farmers' Markets and Community Gardens as a distinct "use" category allowed by-right in most Zoning Districts, per the HKHC Grantee Silver City, NM Best Practice. The Office of Community Development could take the lead working with the Fun 'N Fitchburg initiative, Fitchburg Farmers' Market Association and the Planning Board.

Subdivision Regulations changes to Promote Active Living

- Revise the Fitchburg's Planning Board's Subdivision Rules and Regulations so that it is clear there is one set of sidewalk provisions (these edits should be incorporated into an overall review that would address the current formatting problems MRPC has identified with this document). The Planning Board and the Office of Community Development could take the lead in developing such amendments.
- Explore use of any monies collected by the Fitchburg Planning Board from developers to put sidewalks on at least one side of the street in areas such as Rollstone Road, Franklin Road and Ashby State Road. The Planning Board and the Office of Community Development could take the lead on this task. Actual implementation for such use would likely require assistance from the DPW, Mayor's Office and possibly City Council.
- For the Development Impact Statement provision change the "may" to "shall" for subdivisions above a certain size (MRPC suggests such as subdivisions of 5 lots or greater). The Planning Board and the Office of Community Development could take the lead in developing this amendment.
- The Planning Board and the Office of Community Development could take the lead in developing this amendment.
- Change the Industrial Subdivision provisions to require installation of street lights, sidewalks and street trees as the default standard. The Planning Board and the Office of Community Development could take the lead in developing this amendment.

- Reduce the Street Width Standards to a more appropriate width, perhaps 24 feet (two 12' travel lanes). However, the actual width standards to decide upon should be given further consideration, based on anticipated traffic and also inclusion of "Complete Street" design elements. Perhaps the Planning Board and Office of Community Development could investigate this matter further with input from the DPW and the Fun 'IN FITburg initiative.

Planning and Policy Needs and Opportunities to Promote Active Living

- The City of Fitchburg should continue to take a leadership role in moving the Twin Cities Rail Trail project forward in order to have a pedestrian-friendly corridor parallel to Water Street (Route 12) from Downtown Fitchburg to Downtown Leominster (North Main Street). MRPC has learned from Larry Cassasa, Business Manager of the Fitchburg Department of Public Works (DPW), that the whole 4.2-mile corridor needs to be purchased by both cities under Federal Railbanking Laws via what is called a "Notice of Interim Trail Use". Therefore, the City needs to continue working with the City of Leominster. Former Congressman John Olver had provided a set of Federal funds back in the mid 2000's for rail trail development in Central Massachusetts, which included the Twin Cities Rail Trail. MRPC has learned that approximately \$500,000 is still available as of this Report date and MassDOT officials have expressed their interest and support of the Twin Cities Rail Trail. In addition, \$7.3 million for the Project is identified in Gov. Patrick's Transportation Bond Bill. The Fitchburg DPW, Office of Community Development and the Mayor's Office, with support of the Fun 'N FITchburg initiative, could help facilitate the City continue its leadership role of this initiative. MRPC is able to offer technical assistance through its Transportation Planning services.
- This recommendation could ultimately be incorporated into a Zoning Provision. However, there could be an overall Policy adopted to include public river access with a trail easement as part of any future redevelopment project for properties that have access / frontage on or along the Nashua River (or one its tributaries), including any redevelopment of the Munksjo Mill or Central Steam Plant sites). The Fitchburg DPW, Office of Community Development and Fitchburg Greenways Committee could work together on such a Policy with zoning recommendations that could then be adopted.
- The City of Fitchburg should pursue development of a Downtown Park on a vacant lot on Main Street per the Fairhaven Village Green and Providence's Grant's Block Lot examples. The Fitchburg DPW, Office of Community Development and the Mayor's Office, with support of the Fitchburg Main Street Cultural District Partnership, could take the lead on this initiative.
- Park Maintenance: The City of Fitchburg should explore additional funding sources that can be targeted for park maintenance. These include innovation funding opportunities that have been highlighted within this Report. The DPW and Parks Board Commissioners could take the lead on this initiative.
- In addition, the City of Fitchburg should give further consideration for adoption of the Massachusetts Community Preservation Act (CPA). The CPA, passed by State Legislature in 2000 *"allows communities to create a local Community Preservation Fund for open space protection, historic preservation, affordable housing and outdoor recreation. Community preservation monies are raised locally through the imposition of a surcharge of not more than 3% of the tax levy against real property, and municipalities must adopt CPA by ballot referendum."*¹³ MRPC notes the State Legislature amended the CPA in 2012 to allow for maintenance of existing open space and recreational facilities. The City of Fitchburg should

¹³ <http://www.communitypreservation.org/content/cpa-overview> MRPC notes that according to the Community Preservation Coalition's website 44% of Massachusetts's communities have now adopted the CPA.

conduct a fiscal assessment of the costs and benefits associated with CPA adoption, as it does provide a State match on local funds raised (the percentage had once been 100%, but as more communities have adopted the CPA it has lowered down to 26% for FY 2013). The Community Perseveration Coalition offers a free presentation about the various elements of the CPA and the City should arrange this presentation within City sometime during 2013. Perhaps this could be facilitated by Fun 'n FITchburg Partnership with support of the Planning Board, Conservation Commission, Fitchburg Greenways Committee, Fitchburg Historical Society and other entities, as the CPA has potential benefits beyond the health equity initiatives identified in this Study.

- The City should adopt a Complete Streets Policy. The first step towards achieving such a Policy is City Council adoption of Complete Streets Resolution. The Fun 'N Fitchburg is already taking the lead of Complete Streets Policy initiative.
- The Pedestrian Generator Checklist developed by Fun 'n FITchburg should be incorporated into development reviews conducted by Neighborhood Improvement Code Enforcement and it could be incorporated into the Planning Board's Site Plan Review and Special Permit Rules and Regulations.
- Preservation and Further Expansion of the Steamline Trail: The City should work on preserving the existing .6 mile section and seeking funding for implementing, with goal of getting pedestrian link to from Downtown Fitchburg, Lower Cleghorn neighborhood onto the Wachusett Train Station. The Fitchburg Greenways Committee should take the lead on this initiative with assistance from DPW and Office of Community Development. MRPC can provide Technical Assistance as part of funding under the Wachusett Smart Growth Corridor Study.
- The continuous "Street Trail" to facilitate the North Nashua River Downtown Fitchburg should be explored for implementation. This Street Trail concept could indeed include a Public Art component, as was noted in the *Green Fitchburg* Report, which cited the example of Concord River Greenway in Lowell. The Street Trail initiative could become part of the Fitchburg Main Street Cultural District; therefore MRPC recommends that the Fitchburg DPW, Office of Community Development and the Mayor's Office, with support of the Fitchburg Main Street Cultural District Partnership, could take the lead on this initiative.

Planning and Policy Needs and Opportunities to Promote Healthy Eating

- In addition to the Urban Agriculture Task Force recommended for the urban agricultural zoning bylaw provisions, the City of Fitchburg should establish a Food Council. The Food Council could help oversee all the Healthy Eating recommendations that are recommended within this Study. The City Council or Mayor could appoint member to a Food Policy Council. Alternatively it could be a Subcommittee established under the Fun 'n FITchburg Partnership.
- Develop a Food Systems Plan. Of note, MRPC is trying to obtain funding for the development of a Regional Food Systems Plan. Some communities, including Concord and Northampton in Massachusetts, have developed Local Food Systems Plans. Office of Community Development and the Fitchburg Farmers' Market could take the lead. MRPC could provide Technical Assistance on this planning effort.
- Fitchburg should develop a Corner Store Program. This recommendation could wait for implementation until 2014, when there will be more Massachusetts-based Case Studies for the set of Mass-in-Motion communities that are undertaking a program this year. Alternatively, or in addition to the development of a Corner Store Program, the City should pursue siting of an additional grocery store within the Lower Cleghorn/West Fitchburg neighborhood. The Mayor's Office and Office of Community Development could take the lead on the grocery store initiative.

Hopefully the Corner Store Program could be incorporated into a future Fun 'n FITchburg initiative.

Overall Planning and Policy Needs and Opportunities

MRPC notes these recommendations would be leading to improvements in both Active Living and Healthy Eating Health-related Equity considerations:

- The City of Fitchburg should include a section on Health as part of a future update to the 1998 Vision 2020 Master Plan. MRPC recommends that the City consider embarking on a process to begin updating its Vision 2020 Master Plan as it is now 15 years old. Generally, best planning practices are for Master Plans to be updated every five years. Possible State Funding toward development of a new Master Plan could be provided by the State Legislature if it passes the current Land Use and Zoning Reform legislation and the City opts in for the “*Planning Ahead for Growth Act*” components of this legislation.
- For development of vacant lots include green infrastructure elements. This would include at The Patch Neighborhood lots off of Water Street that were identified for commercial redevelopment, lots used for natural play areas, community gardens, or other targeted uses. MRPC notes that the potential to opportunity to implement Green Infrastructure elements City-wide as part of an overall Stormwater Management Plan (including as was recommended by ULI for John Fitch Highway in the Baker Brook corridor).
- The Fun 'n FITchburg Partnership should prioritize each of the above recommendations for further refinement and prioritization. In order to help with that process, MRPC recommends the Fun 'n FITchburg Partnership review the “Health Action Steps Matrix” example provided in the DRAFT WalkBikeNC (North Carolina) Plan. This Tool was provided by Philip Bors, Senior Project Officer, of the Robert Wood Johnson Foundation’s Healthy Kids, Healthy Communities and Active Living By Design initiatives. Using the Health Action Steps Matrix example, which is provided as Appendix F, for each of the proposed action items in this Section 5 consider its healthy eating and/or physical activity impact, feasibility and inclusion of health equity and rank order them as “low, medium or high.” Finally, the Partnership participants would choose their top five recommended action steps. In providing such ranking, the following considerations would want to be asked by the Fun 'n FITchburg Partnership for each recommended Action:
 - Considerations
 - Physical Activity Impact: Will this result in more people walking and bicycling?
 - Feasibility: Are there resources and the will to make this happen?
 - Health Equity: Is this likely to directly serve those across different populations?

See Table 1 on the following page for a summary of recommendations along with suggested responsible entities and a timetable for Implementation.

Table 1: Summary of Recommendations

<u>Recommendation</u>	<u>Responsible Entity(ies)</u>	<u>Proposed Completion Date/Timetable</u>	<u>Potential Funding Sources (if known)</u>
1) Zoning Ordinances Changes to Promote Active Living:			
A) Amend the “Flexible Development” Zoning Provisions so they are allowed “by-right”	PB, OCD	2013-14	DLTA
B) Amend the Common Parking zoning requirement to have the measurement for parking measurement equal 800 feet from premises	PB, OCD	2013-14	
C) Allow Commercial Recreation in at least some of Fitchburg’s Residential Zoning Districts and change the Special Permit Granting Authority to the Planning Board	PB, OCD	2013-14	
D) Change the Assisted and Independent Living Facilities (ALF/ILF) zoning provision’s buffer requirement to allow recreational trails and sidewalks to also be exempt from the buffer provision (in addition to driveways)	PB, OCD	2013-14	
E) adopt a set of PUD Rules and Regulations that include provisions of similar Design Standards that are incorporated within newly built subdivisions under Subdivision Control Law	PB, OCD	2014-15	
F) For submittal information on Site Plans add the requirement for the following information: Location, names, and present widths of streets bounding, approaching, and within 1,200 feet (quarter mile) of the development	PB, OCD	2013-14	
G) Adopt Design Guidelines, within the Planning Board’s Site Plan Review Regulations, for John Fitch Highway	PB, OCD	2014-15	
H) Change zoning for parking within John Fitch Highway and other identified commercial areas to have parking allowed in the rear (possibly the side) of the building	PB, OCD	2014-15	
2) Zoning Ordinances Changes to Promote Healthy Eating			
A) Appoint an Urban Agriculture Task Force to develop a specific set of urban agricultural zoning (and health) requirements	Mayor or City Council for appointments	2013 for appointments	
B) In the Interim, add Farmers’ Markets and Community Gardens as a distinct “use” category allowed by-right in most Zoning Districts	OCD, FIF, PB, FFMA	2013-14	
3) Subdivision Regulations changes to Promote Active Living			

Recommendation	Responsible Entity(ies)	Proposed Completion Date/Timetable	Potential Funding Sources (if known)
A) Revise the Fitchburg's Planning Board's Subdivision Rules and Regulations so that it is clear there is one set of sidewalk provisions	PB, OCD	2013-14	
B) Explore use of any monies collected by the Fitchburg Planning Board from developers to put sidewalks on at least one side of the street in areas such as Rollstone Road, Franklin Road and Ashby State Road.	PB, OCD, DPW, Mayor's Office City Council	2013-14	
C) For the Development Impact Statement provision change the "may" to "shall" for subdivisions above a certain size (such as subdivisions of 5 lots or greater)	PB, OCD	2013-14	
D) For submittal information on Definitive Plans, MRPC recommends an increase to 1,200 feet (approx. quarter mile) the following information: Location, names, and present widths of streets bounding, approaching, and within the subdivision	PB, OCD	2013-14	
E) Change the Industrial Subdivision provisions to require installation of street lights, sidewalks and street trees as the default standard	PB, OCD	2013-14	
G) Reduce the Street Width Standards to a more appropriate width	PB, OCD, DPW, FIF	2014-15	
4) Planning and Policy Needs and Opportunities to Promote Active Living			
A) Twin Cities Rail Trail - City continue its leadership role in Rail Trail development and implementation	DPW, OCD, FIF, Mayor's Office, MassDOT, MRPC	2013	Olver Earmarked Funds, CPA, DCR RTG, Commonwealth of Massachusetts
B) Adopt a Policy to include public river access with a trail easement as part of any future redevelopment project for properties that have access / frontage on or along the Nashua River (or one its tributaries), e.g. Munksjo Mill or Central Steam Plant sites	OCD, DPW, FGC	2014-15	
C) Pursue development of a Downtown Park on a vacant lot on Main Street	OCD, DPW, Mayor's Office, CDP	2014-15	Gateway Cities Gateway Park Program
D) Explore Innoative Park Maintenance Practices for Adoption	DPW, Parks Board Commissioners	2013-14	
E) Conduct Educational Campaign and Fiscal Assessment of the CPA	FIF with other City Boards/Committees	2013-15	
F) Adopt a Complete Streets Policy. The first step towards achieving such a Policy is City Council adoption of Complete Streets Resolution.	FIF, DPW, OCD	2013-14	

Recommendation	Responsible Entity(ies)	Proposed Completion Date/Timetable	Potential Funding Sources (if known)
G) The Pedestrian Generator Checklist developed by Fun 'n FITchburg should be incorporated into development reviews conducted by Neighborhood Improvement Code Enforcement (NICE) and it could be incorporated into the Planning Board's Site Plan Review and Special Permit Rules and Regulations	FIF, DPW, OCD, Planning Board	2013-14	
H) Preservation and Further Expansion of the Steamline Trail	FGC, DPW, OCD, MRPC	2013-15	DCR RTG, NPS RT and CAP
I) The continuous "Street Trail" to facilitate the North Nashua River Downtown Fitchburg should be explored for implementation	DPW, OCD, Mayor's Office, CDP	2014-15	
5) Planning and Policy Needs and Opportunities to Promote Healthy Eating			
A) Establish a Food Council		2013-14	
B) Develop a Food Systems Plan	OCD, FFMA, MRPC	2014-15	
C) Develop a Corner Store Program / Facilitate Grocery Store Siting and Development	Mayor's Office, OCD, FIF	2014-15	
6) Overall Planning and Policy Needs and Opportunities			
A) Master Plan Update with Health Element	OCD, Planning Board	2014-16	Potential if Land Use Reform Passes
B) Green Infrastructure Incorporated into Vacant Lot and other Stormwater Management planning	DPW	2014-ongoing	US EPA Section 319, FEMA
C) The Fun 'n FITchburg Partnership should prioritize each recommendation for further refinement and prioritization. In order to help with that process, the Fun 'n FITchburg Partnership should review the "Health Action Steps Matrix" example provided in Appendix F of this Study.	FIF	2013	

Abbreviations -

PB - Planning Board

OCD - Office of Community Development

DPW - Department of Public Works

MRPC - Montachusett Regional Planning Commission

US EPA -United States Environmental Protection Agency

DLTA - District Local Technical Assistance

FGC - Fitchburg Greenways Committee

FIF - Fun 'N FITchburg

CPA - Community Preservation Act

CDP - Fitchburg's Cultural District Partnership

FFMA - Fitchburg Farmer's Market Association

MassDOT - Massachusetts Department of Transportation

FEMA - Federal Emergency Management Agency

NPS RT and CAP - National Park Service Recreational Trail and Conservation Assistance Program

DCR RTG - Massachusetts Department of Conservaton and Recreation's Recreation Trails Grant Program

APPENDIX A

City of Fitchburg Zoning Map

ASHBURNHAM

WESTMINSTER

ASHBY

CITY OF FITCHBURG ZONING MAP

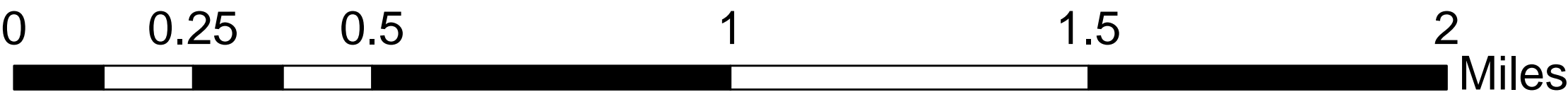
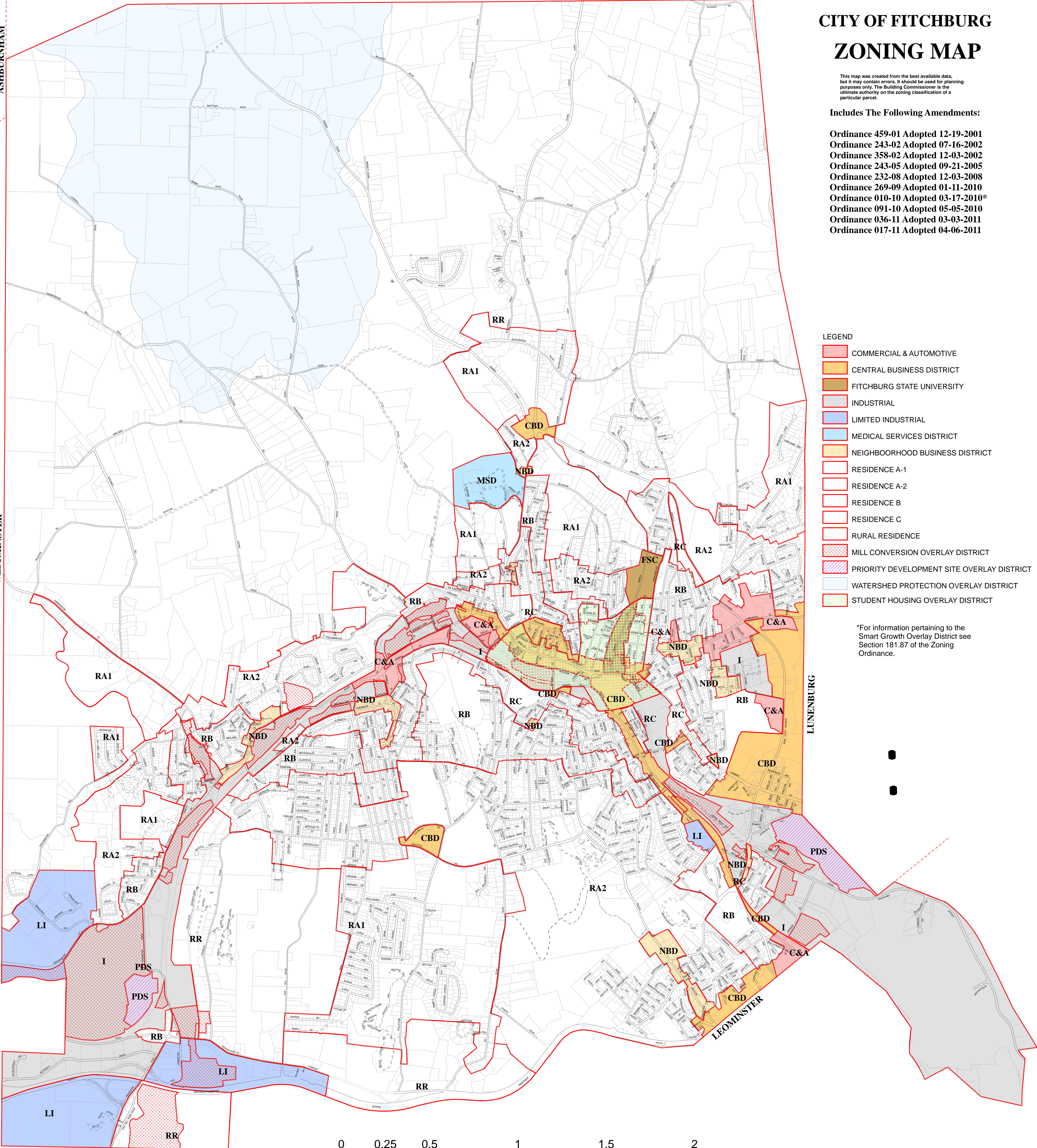
This map was created from the best available data, but it may contain errors. It should be used for planning purposes only. The Building Commissioner is the ultimate authority on the zoning classification of a particular parcel.

Includes The Following Amendments:

- Ordinance 459-01 Adopted 12-19-2001
- Ordinance 243-02 Adopted 07-16-2002
- Ordinance 358-02 Adopted 12-03-2002
- Ordinance 243-05 Adopted 09-21-2005
- Ordinance 232-08 Adopted 12-03-2008
- Ordinance 269-09 Adopted 01-11-2010
- Ordinance 010-10 Adopted 03-17-2010*
- Ordinance 091-10 Adopted 05-05-2010
- Ordinance 036-11 Adopted 03-03-2011
- Ordinance 017-11 Adopted 04-06-2011

- LEGEND
- COMMERCIAL & AUTOMOTIVE
 - CENTRAL BUSINESS DISTRICT
 - FITCHBURG STATE UNIVERSITY
 - INDUSTRIAL
 - LIMITED INDUSTRIAL
 - MEDICAL SERVICES DISTRICT
 - NEIGHBORHOOD BUSINESS DISTRICT
 - RESIDENCE A-1
 - RESIDENCE A-2
 - RESIDENCE B
 - RESIDENCE C
 - RURAL RESIDENCE
 - MILL CONVERSION OVERLAY DISTRICT
 - PRIORITY DEVELOPMENT SITE OVERLAY DISTRICT
 - WATERSHED PROTECTION OVERLAY DISTRICT
 - STUDENT HOUSING OVERLAY DISTRICT

*For information pertaining to the Smart Growth Overlay District see Section 181.87 of the Zoning Ordinance.



APPENDIX B

MRPC Review of the City of Fitchburg's Subdivision Rules and Regulations

To follow is MRPC’s review of the “Rules and Regulations Governing the Subdivision of Land, Fitchburg, Massachusetts (Hereinafter “The Fitchburg Subdivision Rules and Regulations”)”

TABLE OF CONTENTS – Page 2

PURPOSE

1. AUTHORITY 2 – Page 4 has the “Authority and Purpose”

1-2. Purpose

The Subdivision Control Law has been enacted for the purpose of protecting **the safety, convenience and welfare** of the inhabitants of the Town by regulating the laying out and construction of ways in subdivisions providing access to the lots therein, and ensuring sanitary conditions in subdivisions and in proper cases **parks and open areas**.

2. GENERAL 2 – Begins on Page 5

2.0 Definitions

2.1 Plan Believed Not to Require Approval

2.2 Subdivision

2.3 Compliance with Zoning

2.4 Effect of Prior Recording of Plan

2.5 Development Impact Statement *Is not in Section 2.5*

2.6 Procedures

3. PROCEDURE FOR SUBMISSION AND APPROVAL OF PLANS – Begins on Page 10

3.0 Pre-Submission Review

3.1 Preliminary Plan

3.2 Definitive Plan

Page 13: Development Impact Statement (listed as Section 3.5, but then the sections are numbered 2.5

The Planning Board **may** require a developer of a subdivision or of more than one building on a lot to submit a Development Impact Statement (DIS) on the effects the proposed action has or will have on: (1) the immediate neighborhood or land area, (2) surrounding neighborhoods or land areas, and (3) the community at large. The DIS shall include a detailed assessment of the probable impacts of the proposed action on a wide variety of environmental, fiscal, and socioeconomic elements and factors.

Fiscal and socioeconomic impacts shall include traffic circulation and safety, neighborhood character, school enrollment, public facilities, associated fiscal expenditures and revenues, and effect on housing and other development activity.

2.5.1 Procedure

Upon submission to the Planning Board of a Preliminary/Definitive Subdivision Plan, Cluster Development, or Planned Unit Development, the applicant is required to submit a general statement of notification of the proposed action summarizing the following points:

- (1) A brief description of the proposed action and the area(s) or activities affected;
- (2) Existing baseline conditions with a summary of probable impacts;
- (3) A brief analysis of available alternatives and their effect.

Based on a review of the above three items, developer the Planning Board will determine whether a complete Development Impact Statement (**see Appendix A – come back to this – see Page for this review**) will be required of the applicant. If required, the entire cost of the Development Impact Statement will be the responsibility of the applicant. The DIS shall be prepared by a registered professional engineer or member of the AmMRPCan Institute of Certified Planners.

At a preliminary scoping session to be held between the applicant and the Planning Staff, and upon submission of evidence from the developer, the Board may waive any section(s) of the requirements which it deems non applicable to the proposed project or may require additional information on any aspect of the requirements.

Preliminary Plan begins on page 15 and is numbered 3-5:

Relevant for active living considerations on Page 16 amongst Contents of Plan:

6. The existing and proposed lines of streets, ways, and their classification as a major, secondary, minor A or B street, easements, and any public areas, within or adjacent to the subdivision; with ownership status and existing pavement, if any, designated for abutting ways. The legal status of a way shall be as determined by the Town Engineer and/or Town Clerk.

8. Sight distances at intersections of subdivision roads with existing streets. Sight distances shall be measured in accordance with Section 3-1.4.

Definitive Plan begins on page 19 and is numbered 3-6:

Relevant for active living considerations on Page 18 amongst General Provisions:

P. Nine (9) copies of the Environmental Analysis report, when required;

Relevant for active living considerations on Page 19 amongst Contents of Plan (Plot Plan):

3.2.1.1.1 Existing and proposed lines of streets, lots, rights-of-way, easements, and public or common areas within the subdivision. The proposed names of proposed streets shall be shown in pencil until they have been approved by the City Council. The purpose of easements shall be indicated.

3.2.1.1.2 Location, names, and present widths of streets bounding, approaching, and within three hundred (300) feet of the subdivision.

Page 20 Definitive Plan Sheet:

6. Existing and proposed lines of streets and their classification as a Major, Secondary, Minor A or B street, ways, lots, easements and public or common areas within the subdivision with ownership status and existing pavement, if any. The proposed names of proposed streets shall be shown in pencil until they have been approved by the Board's Engineer.

Page 20-21 Site Plan:

3.2.1.2.4 Location of all the following improvements unless specifically waived in writing by the Board: street paving, **sidewalks**, **street lighting standards**, all utilities above and below ground (i.e. telephone, cable television, gas) , curbs, gutters, storm drainage, all easements, and hydrants.

MRPC not sure why introduction to Sheet C on Page 22 is labeled "BARNSTABLE"?

Under §3-6.9 Development Agreement, relationship to Open Space subdivision:

2. Exhibit 1 Conditions of Approval: Exhibit 1 shall contain all the Planning Board's conditions of approval of the subdivision plan and special permit for an open space subdivision, if any. Exhibit 1 shall be attached to and made a part thereof the Development Agreement, when applicable.

MRPC notes two more references to Barnstable on Page 24

4. REQUIRED IMPROVEMENTS AND DESIGN STANDARDS 33 – Begins on Page 29

4.0 Basic Requirements

4.1 Streets Streets Labeled as 4-2 ***But on bottom of Page 42 there is a new Streets 4.1 within the "second Section 4". MRPC to discuss with Mike O'Hara before analysis.***

4-2.1. Location of Streets

1. The streets shall be designed and located so as, in the opinion of the Board, to be continuous and in alignment with existing streets; to provide adequate access to all lots in the subdivision; **by streets that are safe and convenient for travel**; to lessen congestion in such streets and adjacent public streets; to reduce danger from the operation of motor vehicles; to secure safety in case of fire, flood, panic and other emergency; to insure compliance with applicable Zoning Ordinance; to secure adequate provision for proper drainage and water, sewers and other utilities; **and to coordinate the streets in the subdivision with each other and with the existing street system of the Town, and the streets in neighboring subdivisions**

2. The proposed streets shall be designed and located so as to conform to the Master Plan, if any, as adopted in whole or in part by the Board.

3. Provision satisfactory to the Board shall be made for the proper projection of streets, or for access to adjoining property that is not yet subdivided.

4. Due consideration will be given by the Board to the attractiveness of the layout and to the conformance of the ways to the topography. Streets shall be laid out with curvilinear lines wherever possible. ***Why preference for curvilinear streets? Grid street pattern can actually have better walkability aspects.***

5. Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Board, such strips shall be in the public interest.

7. Subdivisions shall be designed so as to minimize the length of roads.

8. Road layouts shall be located and designed so as to create easily accessed lots at or near grade level.

9. Subdivisions shall be designed so as to avoid creating lots with double frontage, except when one frontage is on a Major Street.

10. Where a subdivision borders on a major street, access to lots shall be provided from a parallel local street and access to the major road shall be minimized.

Page 30, §4-2.3 Dead End Streets

Review the provisions with Mike O'Hara.

4.2 Sidewalks Sidewalks labeled as 4.5– Begins on Page 31 ***But then there is the second Sidewalks Section labeled as 4.2 within 2nd Section 4 – see Page 46-47 of document.***

4-5.1 Where required.

Unless the Board determines that pedestrian movement is otherwise provided for, sidewalks shall be installed on both sides of subdivision streets. Where sidewalks are not required, the Board may require that the grading of the right of way be so executed as to make possible later additions of sidewalks without major regarding pedestrian access other than by routes parallel with roadways may be permitted provided easement are established.

4-5.1 Sidewalk waiver.

The Planning Board may grant a waiver of one side walk - deposit amount of cost of cost savings in a sidewalk account.

4-5.3 Location of Road Surface

In order to accommodate a sidewalk and/or bicycle path, the Planning Board may require that the paved surface of the roadway be offset to one side of the right of way.

4-5.4 Green Strips

Sidewalks and/or bicycle paths shall be separated from the roadway by a strip of land loamed and seeded to the specifications of **Section 5-12 "Grass Plots"**. Sidewalks and/or bicycle paths shall be located as close as possible to the outside line of the right-of-way. Street trees shall be planted in the green strip.

Note reference above is to Section 5-12 – Section 4.4 is Grass Strip for real.

Page 32-33:

4-5.5 Sidewalk Length

Sidewalks shall extend the full length of each side of the street.

4-5.6 Sidewalk Width

Sidewalks shall have a minimum width of five (5) feet. All sidewalks shall conform to AmMRPCan Disabilities Act requirements and Massachusetts Architectural Access Board standards, 521 CMR, and as may be amended.

4.3 Curbing and Shoulders.

4.4 Grass Strip 4.4 Grass Strip – Page 32 **A second one exists too**

Grass strips shall be provided on each side of the roadway between the roadway and the sidewalk on the side of the street. Where no sidewalk is to be installed, the grass strip shall extend between the roadway and the street side line. The minimum width shall be as follows:

Collector: 5 feet if with sidewalk 10 feet if no sidewalk

Minor: 5 feet if with sidewalk 8 feet if no sidewalk

4.5 Street Trees ??? **First time I see Street Trees is in the other Section 4 “Trees and Plantings” discussed below. The 2nd Section 4.0 has Street Trees 4.5**

4.6 Bounds

4.7 Street Names and Street Name Signs

4.8 Water

4.9 Sewerage

4.10 Storm Drainage

4.11 Easements

4.12 Grading of Slopes

4.13 Open Space **Open Spaces labeled as 4.8– Begins on Page 33 The second Section 4 has another Open Space section which is 4.13. I have put that text below the 4.8 text.**

Before approval of a plan, the Board **may** also in proper cases, require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air. The Board **may**, by appropriate endorsement of the plan, require that no building be erected upon such park or parks for a period of not more than three (3) years without its approval. These parks shall be offered for just compensation to the Town in the form of a deed, with the Town having the option of accepting or releasing these areas within the three (3) year period. *CLURPA would change this provision to promote more park development more favorably.*

4.13 Open Space

4.13.0 **The applicant shall consider the relationship of the proposed subdivision to the City of Fitchburg Open Space and Recreation Plan. This consideration shall include proposals for amenities within the subdivision which conform to the stated objectives of said plan.**

4131 **The Board **may** require that an area of park or parks. In no event shall the required reserved area exceed five percent of the total area of the subdivision.**

4.13.2 **Such reservation shall be made where particular natural features, abutting public land, or potential neighborhood need for recreation space make later public acquisition desirable.**

4.13.3 **Any open space or playground land shall be provided with appropriate frontage on a street, and pedestrian ways will normally**

be required to provide access from each of the surrounding streets, if any, on which the open space, park or playground has no frontage. Further, such parks and/or playgrounds may be required to have maintenance provided for by covenants and agreements acceptable to the Board, unless public acquisition is accomplished by the community.

Note no 3 year requirement / standard is within this Open Space section.

4.14 Protection of Natural Features *Protection of Natural Features labeled as 4.9– Begins on Page 33*

Regard shall be shown for all natural features, such as large trees, water courses, scenic points, historic spots, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision. *The 2nd Section 4 has 4.14 Protection of Natural Features, which language is just about identical.*

Note at this point in the Subdivision Rules and Regulations on top of Page 34, the text jumps to items related to Definitive Plan Administration under Section 3.2.

Then on Page 38 starts a new Section 4 entitled “Required Improvements in Subdivisions, Design Standards and Construction Specifications.”

Under this Section 4 is the following sub-section 4.0.7 “Sidewalks and Bicycle Paths” On Page 40:

4.0.7 Sidewalks and Bicycle Paths

Unless the Board determines that pedestrian movement is otherwise provided for, sidewalks on both sides of the roadway, having a width of not less than five (5) feet shall be constructed between the roadway and the right-of-way line, as close to the latter as practicable, and generally parallel with the roadway. Pedestrian access other than by routes parallel with roadways may be permitted, provided easements are established.

The Planning Board may require a bicycle path from four (4) to eight (8) feet in width within a subdivision. In certain cases the sidewalk requirement may be waived where bicycle paths are provided.

4.0.11 Trees and Plantings (Page 41)

4.0.11.1 Existing Trees. Trees on the site, especially those over twelve (12) inches in diameter, should be preserved. Following is a list of recommended measures for the protection of trees:

- (a) There shall be no operation of heavy equipment or storage of any materials under said tree within its natural drip line trees as needed during the summer months to aid growth.
- (b) Wherever possible, no grading or filling should be done within the drip line.

- (c) Supplemental irrigation shall be provided to new trees as needed during the summer months to aid growth.
- (d) No bituminous concrete paving or vehicle parking should be located under conifers. No more than twenty percent (20%) of the area under any deciduous trees' natural drip line may be so paved.
- (e) All drainage from paved areas should be directed away from root zones.

Page 42 has the second Streets section (Section 4.1) related to "Location and Alignment"

WOW the traveled way requirements as specified in 4.1.1.0 are too large...

4.1.1.0 The width of street right-of-ways and travelled ways. shall not be less than the following:

<u>Right of Way</u>	<u>Travelled Way</u>	
Minor Streets	50 feet	28 feet
Collector Streets	60 feet	34 feet

Greater width shall be required by the Board when deemed necessary for present and future vehicular travel. *MRPC recalls Mark Fenton indicating 12 foot travel lanes are as wide streets need to be. This brings down the traveled way width to 24 feet.*

4.1.1.1 The street cross section shall comply with Typical Street Sections, contained in Appendix C herein. ***MRPC to review***

Adequate Access section important for pedestrian considerations:

4.1.3.0 The Planning Board will evaluate the adequacy of the existing and resulting roadway network system to support the vehicular and pedestrian traffic flows generated by a proposed subdivision. The following criteria will be employed in this evaluation:

- a) The existing and resulting level of service (LOS) at all affected intersections.
- b) The existing and resulting volume to capacity ratios of adjoining road-ways.
- c) The geometric design of all existing and resulting affected intersections.
- d) The physical condition of existing roadways, including, but not limited to, pavement width, pavement condition, horizontal and vertical alignments, sight impairments, surface drainage facilities and pedestrian facilities.

4.1.3.1 The Planning Board will require the following minimum post-development standards for the surrounding roadway network:

- a) Affected intersections shall operate at a Level of Service "C" or better.
- b) Volume to capacity ratios shall not exceed .50 on adjoining roadways used for access or egress from the subdivision.
- c) All geometric designs of affected intersections shall conform to the minimum roadway design requirements of these regulations.

d) The physical condition of existing roadways used for access or egress from the subdivision shall conform to the minimum roadway design requirements of these regulations including, but not limited to, pavement width, pavement condition, horizontal and vertical alignments, sight distances, surface drainage facilities and **pedestrian facilities**.

4.1.3.2 The Planning Board will require the applicant to provide all needed improvements, at no cost to the City to meet the minimum standards established above to ensure adequate access for a proposed subdivision.

The second Sidewalk section 4.2:

4.2 Sidewalks

- 4.2.0 Sidewalks shall be provided on both sides of streets, unless at the discretion of the Planning Board, one sidewalk will adequately serve the anticipated pedestrian traffic.
- 4.2.1 Sidewalks shall be not less than five feet in width on collectors and four feet on minor streets and shall be located so that the back of the sidewalk conforms to the lot lines.
- 4.2.2 The sidewalks shall have a transverse slope or crown of 1/4 of an inch per foot, sloping towards the street.
- 4.2.3 Preparation of the base shall be accomplished by removing material to a depth of 10 inches below finished design grade. Any soft spots of undesirable material shall be removed and replaced with gravel. The excavated area shall be filled with a minimum eight inches of gravel and well compacted (i.e., two passes of roller or vibratory compactors)
- 4.2.4 Forms shall be set to grade, then a one inch compacted binder and one inch compacted surface course of Type I bituminous concrete shall be placed, except at driveways where the binder thickness shall be two inches.
- 4.2.5 At all intersections the sidewalks shall be constructed across the grass plot to the edge of the travelled way.
- 4.2.6 In addition, public off-street walkways, bikeways, or bridle paths may be required by the Board to provide circulation or access to schools, playgrounds, parks, shopping, transportation, open space, or community facilities, or to break up long blocks, or for such other reason as the Board may determine. Such ways may or may not be part of normal sidewalk provisions, but they shall not be a part of any lot in the subdivision.

Then there is a 2nd Grass Strip section 4.4 on Page 48-49

4.15 Industrial Subdivision...**Within the 2nd Section 4.0 Industrial Subdivision shows up on Page 56...MRPC has some issues to identify here.**

4.15 Industrial Subdivision

4.15.0 Industrial subdivisions shall comply with all requirements of these Subdivision Regulations except as noted in this section.

4.15.1 All streets shall be constructed as collector streets and all appropriate design standards shall apply except as noted in this section.

4.15.2 Curb radii shall not be less than fifty (50) feet.

4.15.3 The width of the traveled way shall be forty (40) feet.

4.15.4 Roadway grades shall not exceed 8.0 percent.

4.15.5 Dead-end streets shall not exceed 750 feet in length unless, in the opinion of the Board, a greater length is necessitated by topography or other local conditions.

4.15.6 **Street lights shall not be required unless, in the opinion of the Board, such street lighting is necessary for safe travel within the subdivision.**

4.15.7 **Sidewalks shall not be required, unless, in the opinion of the Board, such sidewalks are necessary for safe pedestrian access within the subdivision.**

4.15.8 **Street trees shall not be required unless, in the opinion of the Board, such street trees are necessary for public amenity within the subdivision.**

4.17 Safety **Numbering issue w/ table of contents 2nd Section 4 Safety is 4.16, #ing follows from that**

4.18 Clean Up and Restoration.

4.18 Inspection

4.19 As-Built Drawings

4.20 Variation

4.21 Reference

5. ADMINISTRATION **Section V begins on Page 59**

5.0 Authority

5.1 Waiver of Compliance **5.1 blank on Page 59**

5.2 Inspection

On Page 60 after Section 5.2.4 the text goes back to Section 4 – Street Trees

4.0.11.2 Note that on page 61, there is another separate Street Trees section 5-13.

5.3 Separability

- 5.4 Amendments
- 5.5 Invalidation by State Law

Street Lights 5-17

Installation of street lights shall be governed by standards and styles approved by the Planning Board and on file with the Fitchburg Gas and Electric Light Company. Street lights should be provided at intersections of streets and should not exceed a standard separation of **250 feet**.

APPENDIXES 64

- Appendix A: Development Impact Statement
- Appendix B: Forms
- Appendix D: Typical Roadway Cross Sections

Review of Development Impact Statement, Appendix A

Relevance of Health Equity Issues, especially Active Living:

VIII. MANMADE ENVIRONMENT

A. Land Use

- (1) Describe how the proposed project conforms with the growth plans for the area and the City in general.
- (2) Describe land uses adjacent to the project.
- (3) Describe any existing or proposed public or common recreational or open areas within the subdivision.
- (4) Discuss the site's proximity to transportation, shopping educational facilities, recreational facilities, etc.

Section IX – Public Facilities.

F. Traffic facilities

- (1) Discuss future vehicular circulation patterns including number and types of vehicles inside and outside of development and nearby arteries and intersections.
- (2) Describe the proposed pedestrian circulation pattern.
- (3) Discuss the location and number of parking spaces proposed.
- (4) Describe the condition of adjacent roadways that will be impacted by this project.

(5) Provide all relevant data including trip generations, vehicle to capacity ratios, level of service analyses of affected intersections, etc.

X. COMMUNITY SERVICES

A. Schools

(1) Discuss the effect of the subdivision on existing schools, including number and ages of children generated by the subdivision.

(2) Describe the location of the nearest existing schools.

B. Recreation

(1) Describe existing and proposed recreational facilities, including active and passive types; age groups participating, and state whether recreational facilities and open space are available to all residents.

(2) Indicate location and width of existing and proposed pedestrian ways, bikeways or bridle paths.

C. Public Health

(1) Discuss the project's effects on residents' public health due to changes in water quality, air quality, noise levels, etc.

XI. HUMAN CONSIDERATIONS

A. Aesthetics and visual impact

(1) Discuss the change in the present character of the area due to the project, i.e., land use, density of development, etc.

(2) Discuss the measures to be taken to minimize the adverse effects of the project, i.e., architecture, buffers, etc.

B. Parks, forests and recreational areas

(1) Discuss how the siting and construction of the project will affect existing and potential park and recreation areas, open spaces, natural areas, and scenic values.

C. Public Health

(1) Discuss the project's effects on residents' public health due to changes in water quality, air quality, noise levels, etc.

MRPC notes reference to Barnstable on top of Appendix B page.

APPENDIX C

Brief Chronology of Efforts to Create the Twin Cities Rail Trail

Brief Chronology of Efforts to Create the Twin-Cities Rail Trail

2003

-Twin City Trail Association is formed to promote creation of trail and assist 2 cities in negotiations with CSX Corporation for acquisition of corridor

2004

-Ongoing negotiations with CSX begin
-Congressman Olver obtains \$4 million federal earmark for trails in his district

2005

-2 Cities obtain appraisal of CSX corridor with value of \$1.5 million
-CSX obtains appraisal of its corridor with value of \$8.9 million
-2 Cities obtain Urban Self-Help grant from EOE A for \$500,000

2006

2 Cities offer \$1.5 million for corridor, based on appraisal and assumption of availability of \$1 million from federal earmark and \$500K in state USF grant. Offer rejected by CSX.

2007/8

-CSX and Cities agree to commission new appraisal, based on negotiated guidelines. Appraised value per Petersen-LaChance is \$3.2 million—assuming repair of washed out culvert and RR bed, restoration of expired NITU, and any environmental clean-up.
-Alternative “net liquidation” appraisal of CSX holdings (without NITU or culvert restoration) obtained by 2 cities from Petersen-LaChance: \$1.325 million.
-Phase I and Phase II Environmental Assessments done by TRC, with Brownfields Assessment Grant funds via MRPC. No major environmental issues identified.
-2 Cities issue 2nd offer to CSX of \$2,262,500, subject to restoration of culvert and NITU – rejected

2009

-2 Cities issue 3rd offer to CSX of \$2,262,500, subject to same conditions, except CSX will pay City of Leominster full cost of restoring culvert via payment at closing.
-CSX indicates it will accept conditions and offer of \$2.3/2.4 million. Sides agree to negotiate further
-City of Leominster sues CSX for environmental damage caused by failed culvert.
-CSX ends negotiations due to pending litigation

2010-11

-CSX uses “shadow” corporation (Georgetown High Line Railway) to restore NITU. Cities do not contest legality of this action with the federal STB in order to protect integrity of corridor.
-No further negotiations take place.
-MassDOT announces initial plan to remove RR bridge @ Rte 2 as part of interchange improvement. Cities express concern that this action violates NITU and request guarantee of bridge replacement.

2012 - Mid May

-Contacted Maurice O'Connel, CSX's government relations officer, who referred us to Lang Tarrant and Elizabeth Steele. Both indicated in subsequent conversations that CSX was interested in re-starting negotiations. Ms. Steele referred to "a new day" at CSX and committed to contact CSX's outside legal counsel re: the Leominster case, before getting back to us to restart negotiations.

2013 – March

-No new communications received. No confirmation that Leominster litigation has been officially settled. Bulk of original congressional earmark committed to other projects.

APPENDIX D

Excerpts and Figures from the UMass Amherst's *Green Fitchburg* Report

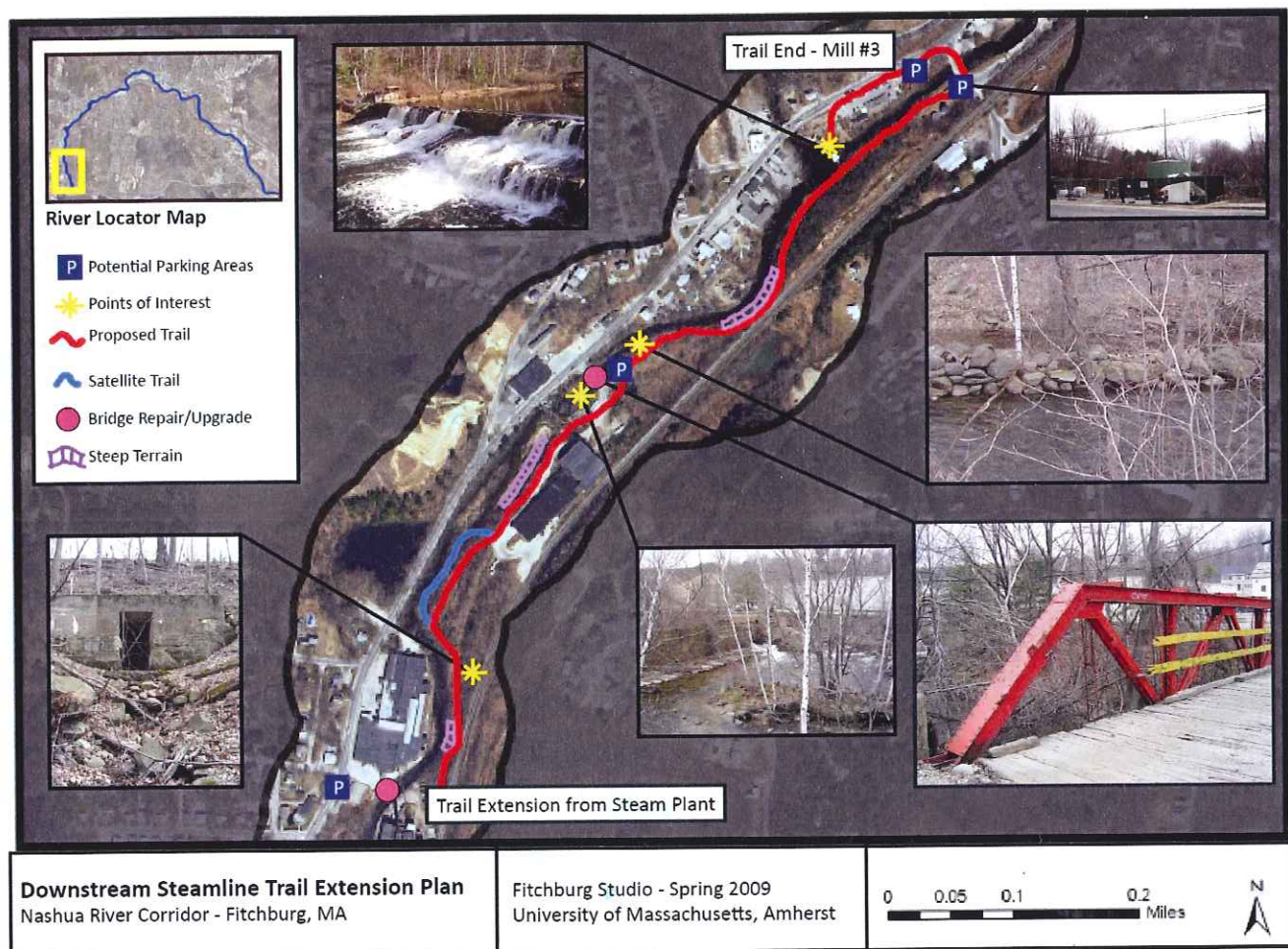


Figure 2-7: Plan of Downstream Steamline Trail Extension

In addition, in areas of the trail implementation where steep terrain is evident, a variety of construction alternatives are suggested as depicted in Figure 2-8, such as "cut and fill" trail sections, boardwalks and retaining walls. A variety of sources on sustainable trail design are available at websites such as the National Trails Training Partnership at <http://www.americantrails.org/resources/trailbuilding/MASustain.html> and the U.S. Department of Transportation, Federal Highway Administration at <http://www.fhwa.dot.gov/Environment/fspubs/07232806/index.htm>.

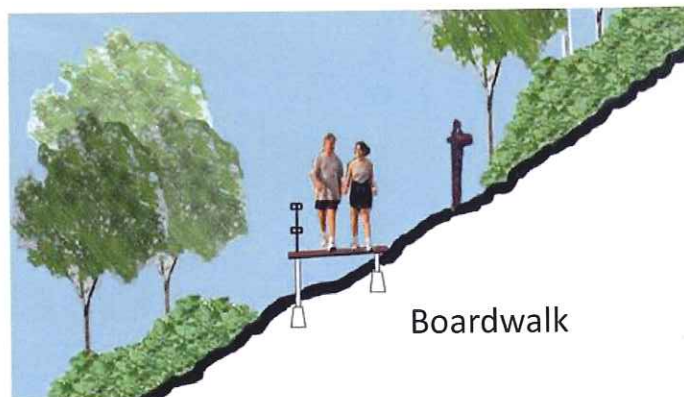
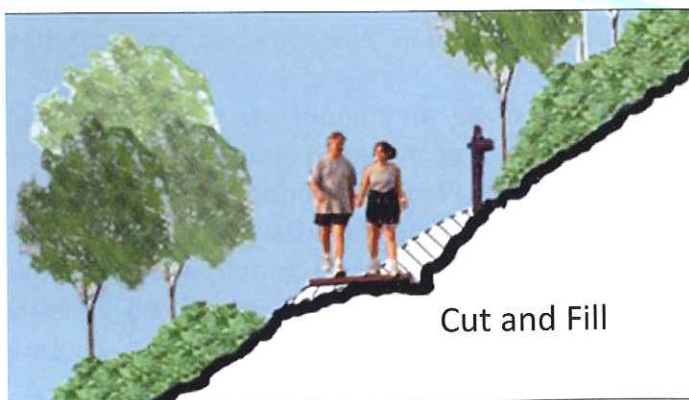
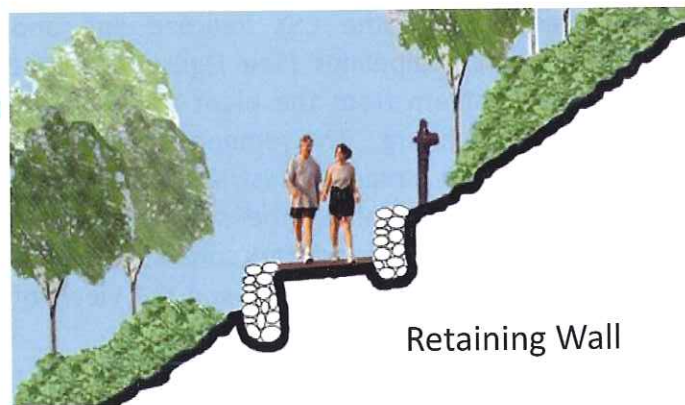


Figure 2-8: Examples of alternative trail construction methods for sloping conditions

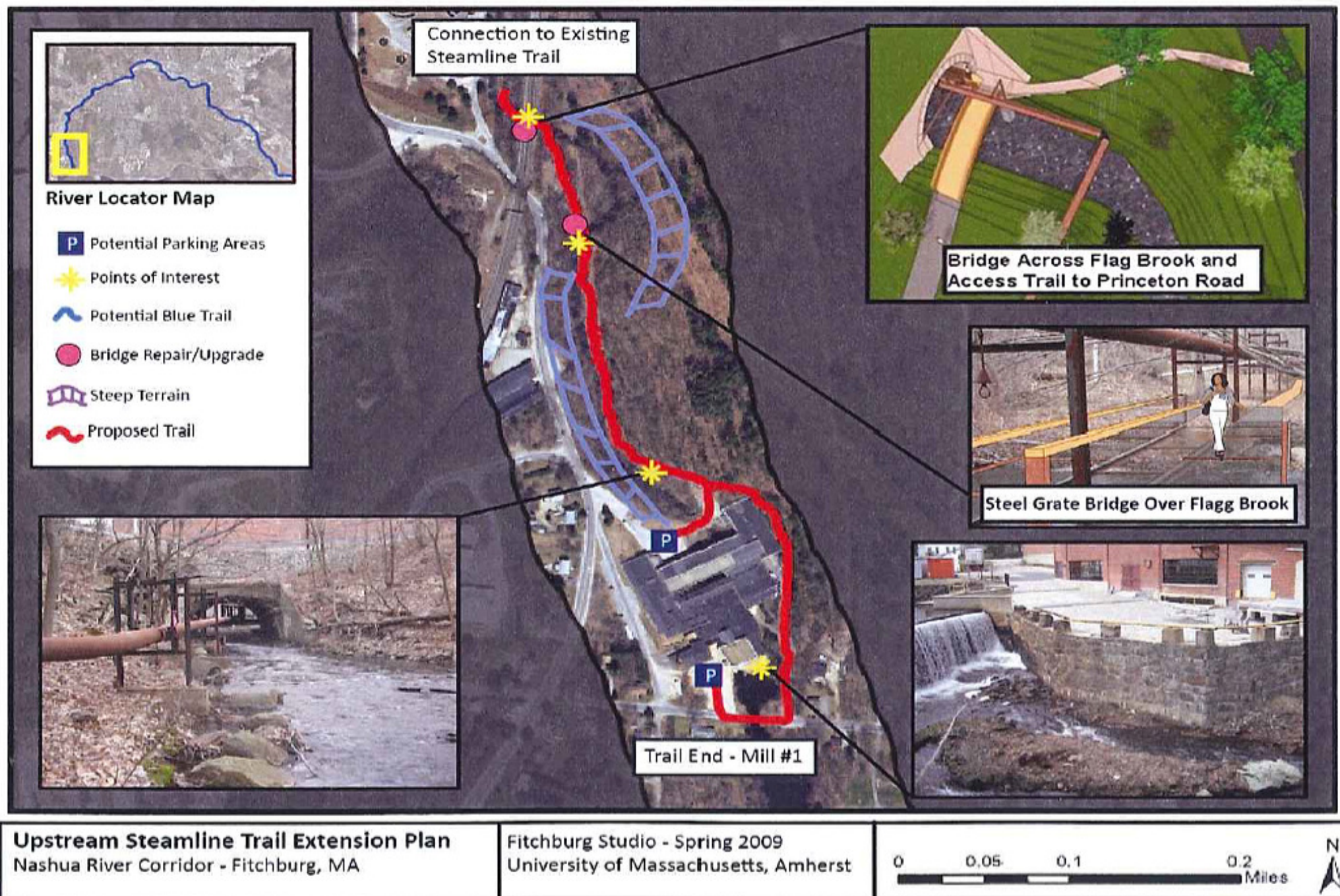


Figure 2-9: Plan of Upstream Steamline Trail Extension

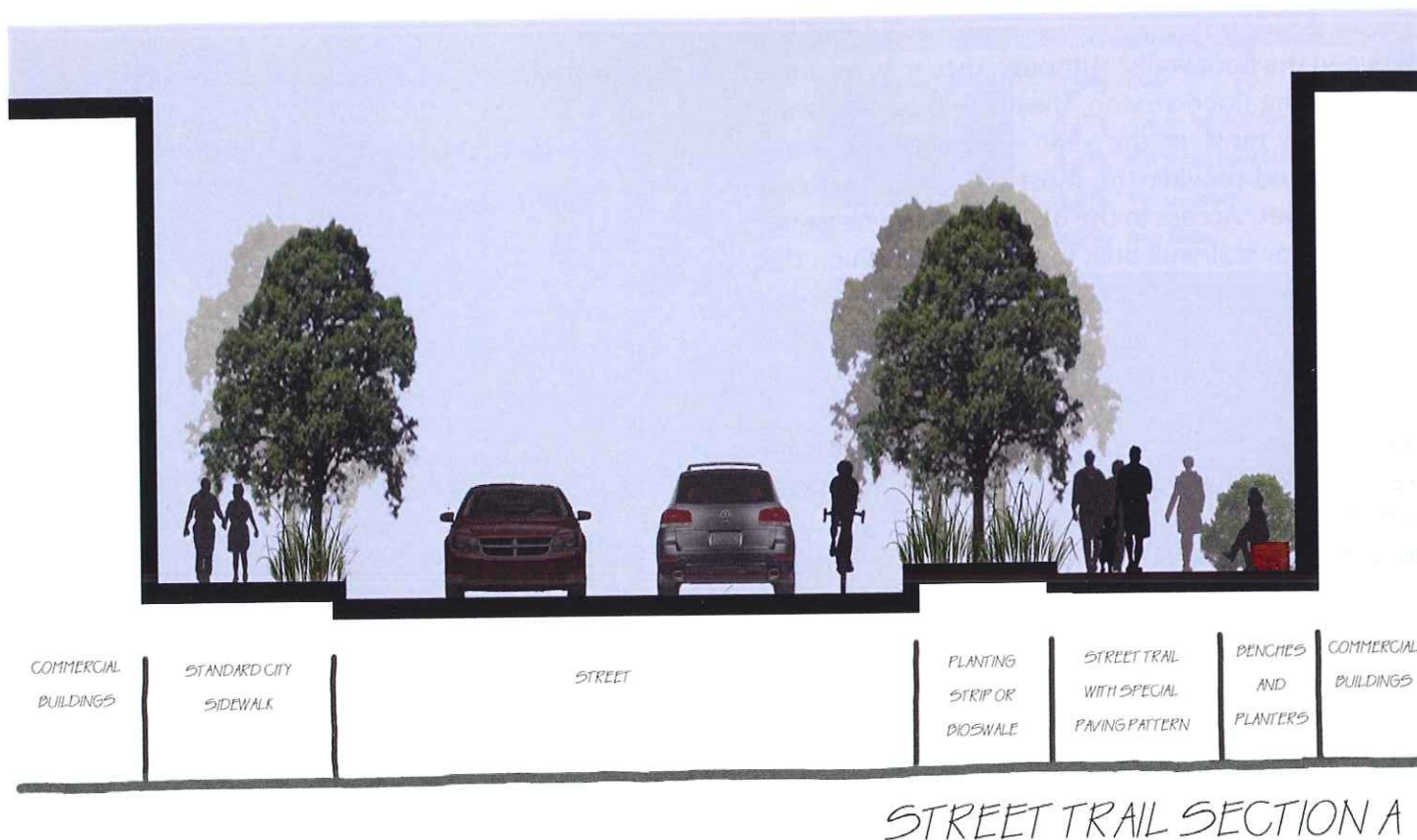


Figure 2-31: Typical section of on-street trail

Street Trails would allow for continuation of the Riverwalk in areas where river access is not feasible. These trails would run along an existing street but would be distinct from a traditional sidewalk in a number of ways (See Figure 2-31). First, they would have a substantial planted buffer, including shade trees and rain gardens. Second, they would include benches and vegetation in front of the businesses it passes. Finally, a unique paving pattern would clearly mark the path. This paving pattern, commissioned to a local artist, could include a river motif along with elements from Fitchburg's history made out of metal inlaid into concrete paving.

When these three trail types come together to form a continuous Riverwalk downtown, the result could be a diversity of experiences that engage people with the river in unique and meaningful ways. In addition, the trail would be punctuated by interpretive signs as well as murals, mosaics and other public art projects that would enrich the experience and add to its broader appeal. Finally, spur trails would connect the Riverwalk to downtown, neighborhoods and schools in a similar manner to the street trails.

What does this experience add up to? A visitor or resident would be able to pick up an ice cream cone in town and walk down a tree-lined street trail towards the river, passing shops, restaurants and shady benches for sitting. At the river, the person might encounter a sign explaining the history of the stone bridge while enjoying a mural painted by local schoolchildren about their town. He might stop on the steps at Riverfront Park to read the paper overlooking the river and then stroll along the riverbed or ascend to a boardwalk where he would be able to stop and chat with neighbors and friends about the mosaic inlaid into the opposite floodwall or the unique sculptural bench alongside the path. Eventually, the person could return to downtown in order to shop or dine out or take a spur trail into a neighborhood.

This unique experience would connect residents to their river, their town's history and to each other while also attracting visitors from around the region to walk, shop and admire.

CHALLENGES

Vacant lots are dispersed throughout the neighborhood.



Vacant Land Appears Unkempt



Trees are sparse along 1st, 2nd, 3rd and Middle Streets. Many of the street trees are scrubby. Few healthy adult specimens offer the benefits of cooling, water absorption and beauty.



A city park on the corner of Railroad and 1st Street is in disrepair.



Legend

— NORTH NASHUA RIVER
— TRAIN TRACKS

Ownership

Church Owned
City Owned
GEO Owned

Privately Owned
Rail Owned
Patch Parcels

0 50 100 200 300 400 Yards

ASSETS

New Homes



Connections



Turn of the Century Worker Housing in Good Condition



Walkable



Human Scale

Parks



Fitchburg State UMass Amherst Spring 2009

Figure 4-40: Challenges & Assets - Empty Lots in Yellow (Parcel Map Mass GIS, 2009)

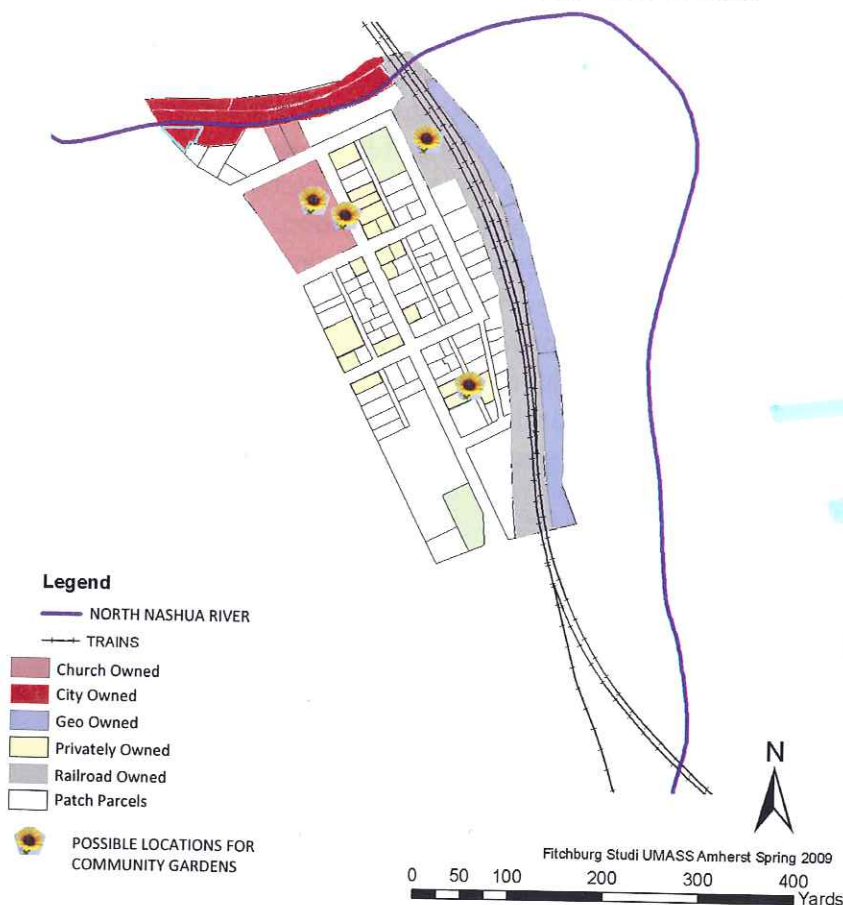


Figures 4-48b: Water Street & 3rd looking west, after

Figure 4-49 introduces the idea of the community garden. Community gardens provide an extension to the open space and living street concepts. Community gardens are proven successful as a means to connect people with each other and with a place: community gardens build community. Additionally, the presence of community gardens as part of the fabric of a neighborhood is another form of green

infrastructure. Community gardens not only use abandoned vacant spaces adding to the identity and inhabited feel of a neighborhood, but they also provide, in economically challenging times, a viable source for fresh healthy food. The diagram in Figure 4-49 suggests potential locations for community gardens in the Patch neighborhood.

COMMUNITY GARDENS - PROPOSED LOCATIONS



Potential Locations of Community Gardens in the Patch Neighborhood

- On railroad land along Railroad Street near rail trail access point two.
- Along the Middle Street edge of proposed centralized park.
- On church property along Middle Street behind St. Bernard's Church.
- Temporarily located on any existing vacant lots waiting redevelopment.

Figure 4-49: Community Garden Concept in the Patch Neighborhood (Mass GIS, 2009)

CONCEPT ONE: Link Neighborhood with Proposed Twin City Rail Trail

The Patch neighborhood is strategically aligned with the proposed Twin City Rail Trail, with downtown Fitchburg and parks. The neighborhood has two well-defined access points to the rail trail. The first access point is located at the corner of Railroad and 1st Streets (Figure 4-42a and b). This access point is unique because of the existence of an underpass that once extended under the active rail line. Currently, this underpass is completely filled and hidden in scrub brush. This buried underpass is the first of two vital connections that links the rail trail and Patch neighborhood to the downtown commercial district. The second connection is a footbridge that completes the connection to the downtown area. Excavation of the tunnel is recommended in order to reestablish this important connection. The second access point located at Railroad and 4th Streets is where the rail trail right-of-way narrows (Figure 4-43a and b). To

To connect to downtown Fitchburg, it must pass through the Patch neighborhood. The development of both entry points to the trail system has many advantages and fulfills the objectives of the broader themes of connectivity, community identity and quality of life, and green infrastructure, as follows:

- Access for pedestrian and/or bicycle travel to a continuous rail trail, connecting to the downtown and park areas.
- Connection to major/important destinations such as the Fitchburg Green senior housing and the Sadie Quatralle playground, offering extended opportunity for recreation, exercise and mobility.
- Alternate transportation corridor for the residents of Fitchburg who don't own automobiles.
- Improved appearance of the Patch neighborhood, as well as an economic benefit in the form of increased property values.



Figure 4-42a and b: Access point at 1st and Railroad Streets, before and after



Figure 4-43a and b: Access point at 4th and Railroad Streets, before and after

CONCEPT TWO: Improve Parks

The existing city park at 1st and Railroad Streets is an open space in disrepair. However, the space has played an important role in the neighborhood for many decades. Today, many people representing a broad spectrum of ages use the park for skateboarding, basketball and other fun and healthy activities. This report presents two proposals that address common open space redevelopment in the Patch neighborhood. The first addresses the existing park space at 1st and Railroad Streets (Figure 4-44a and b) and the second proposes a restructuring of the open community space to a more centralized position within the broader context of the Patch Neighborhood (Figure 4-45a and b). Transformation of the existing park space at 1st and Railroad Streets could create a better functioning athletic and recreational park that improves quality of life and the image of city.

Some recommendations for improvement and community involvement include:

- Plantings to screen, shade and reduce stormwater runoff.
- Picnic tables and benches to enhance the park's appearance and comfort.
- City programs could be developed for active games.
- A "Name the Park" competition could be held to involve neighborhood residents in the redevelopment process.

Currently, privately-owned, vacant and unkempt lots exist on Middle Street between 1st & 2nd Streets, while a city park resides on the periphery of the neighborhood. Moving the current community space to a central location would benefit the Patch neighborhood in multiple ways with implementation of the following recommendations:

- Construct a new children's playground that shares common design characteristics with Sadie Quatralle Park.
- Provide ample seating nodes for gathering and resting to encourage social interaction.
- Provide native plantings to screen, shade and reduce storm water runoff.
- Utilization of consistent park design criterion that focuses on safety, comfort, accessibility and appearance.

A centralized park in the Patch neighborhood can positively impact the community by uniting neighborhood coherence, providing opportunities to visually celebrate and accentuate the historical character, and bring safety to the forefront. Establishing community spaces can set a precedent for other Fitchburg neighborhoods to follow, promote the economy through increased property values and improve the overall appearance of the neighborhood.



Figures 4-44a and b: City Park at Railroad and 1st Streets, before and after



Figure 4-45a and b: Middle Street between 1st & 2nd looking east, before and after

CONCEPT THREE: Create Living Streets - Green Alleys

Living streets can be defined as an extension of living space that supports community life and is a way to put all of the primary themes, connectivity, green infrastructure, and community image and quality of life, to work. The broader roads (1st through 4th, Middle and Railroad Streets) provide an opportune framework for the Living Streets model. Figures 4-46, and 4-47a and b illustrate some of the characteristics that comprise a Living Street that could be employed in the Patch neighborhood, as well in other Fitchburg neighborhoods.



Figure 4-46: Railroad Street & 1st Looking South



Figures 4-47a and b: 2nd Street looking west, before and after

Related to the Living Street idea is the Green Alley. The lanes that transverse north to south through the Patch Neighborhood, Water Lane and Middle Lane are narrower with homes in close proximity with one another and shallowly set back from the street. Green alleys employ permeable pavements, open-bottom catch basins, high-albedo pavements and recycled materials. These features address both storm water runoff and heat island effects. Green Alley design principles focus on generous distribution of street trees, rain gardens, synergistic parking designs, the use of bollards and raised crosswalks, and shared street space for vehicles, bicycles and pedestrians. In addition to the ecological benefits, these infrastructure changes have both economic and aesthetic advantages as follows:

- Narrower streets, bump-outs, bump-ins and speed bumps calm traffic for the safety of pedestrians, bikers and children.
- Permeable pavements for sidewalks and street side parking reduce impervious surfaces.
- Rain gardens and street trees provide creative and ecologically beneficial management of stormwater, and also add to the attractiveness of a neighborhood.
- Living Streets employed in neighborhoods or business districts can increase the competitiveness of the city as a desirable place to live.
- Living Streets positively support and enhance property values and save the city money.
- Living Streets positively impact quality of life by encouraging outdoor living.

CONCEPT FOUR: Reuse Vacant Lots – Gateway at Water and 3rd Streets

At present twenty percent of the existing parcels in the Patch neighborhood are vacant. Many of the lots are segregated from the neighborhood with chain link fencing. Most of the lots are overgrown and represent wasted, unused, neglected land. Vacant lots are potentials waiting to be rediscovered. At the 3rd & Water Streets' juncture, two empty lots could be redesigned to this aim (Figure 4-48a and b). Rebuilding new commercial venues and applying green infrastructure design principles at this juncture fulfills two central objectives. It supports a vision of Water Street as a vibrant extension of the downtown and a destination of its own, as well as acknowledges a significant historic neighborhood by providing a visual gateway to the neighborhood. The strategies explored in this concept further recognize the themes of green infrastructure, community identity and quality of life, and connection. Similar design principles from the Living Street model apply here, as follows:

- Redeveloping vacant lots provide an opportunity to add vegetation and street amenities that further green the city.
- The remaking of the lots at 3rd and Water Streets creates an attractive, formal entry to the Patch neighborhood.
- Redesigning and reusing vacant lots makes a neighborhood look cared for and thereby improves safety and quality of life.
- Well-designed commercial buildings and plantings increases the competitiveness of a city to attract new residents.



Figures 4-48a: Water Street & 3rd looking west, before

The Massachusetts Reconnaissance Report for Fitchburg (page 18) states that "Fitchburg residents place high value on the community's strong sense of place, which is created by its varied natural features and land use patterns adapted to the unique setting of the hills and river valley". This value of place appropriately extends to historic neighborhoods like the Patch, as well as to more contemporary neighborhoods. Cohesive, beautiful and green neighborhoods are part of the city's most valuable assets. There is a need and a strong supporting

rationale to develop the aesthetic characteristics, green infrastructure and connectivity of these places. The Patch, like other neighborhoods, is about the human connection to the city and the rich cultural memory of the city. Such neighborhoods need to be brought into the present while honoring the past. The Patch neighborhood provides an essential working palette that can extend to and inform design of other neighborhoods. The design concepts that have been presented provide valuable ideas that can help the city realize its goals for a competitive sustainable city (Figure 4-50).

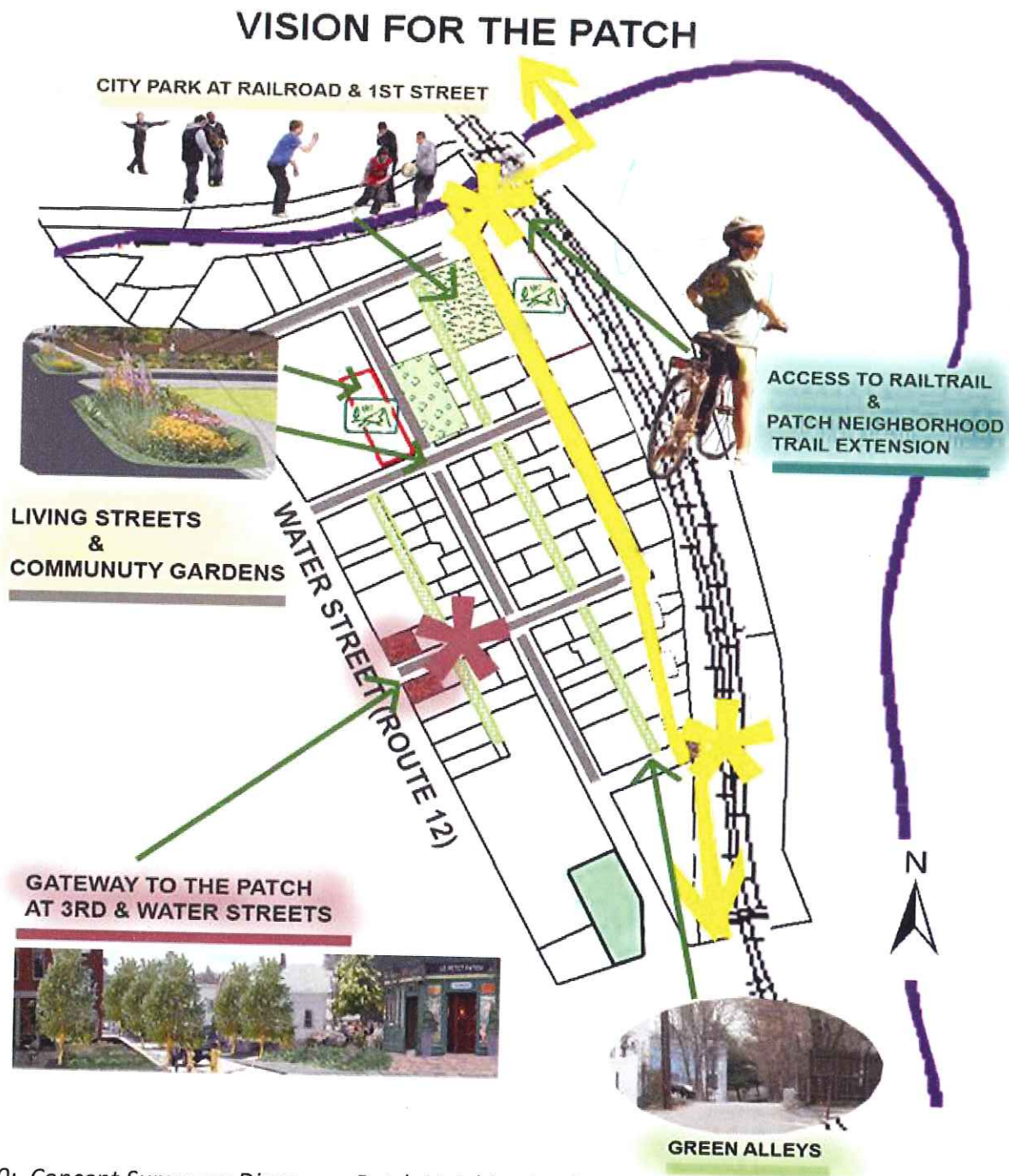


Figure 4-50: Concept Summary Diagram - Patch Neighborhood (Mass GIS, 2009)

APPENDIX E

Bibliography

Bibliography of Documents Reviewed / Researched for preparation of
The City of Fitchburg Health Equity-related Initiatives
Zoning and Regulatory Analysis Study

City of Fitchburg documents

City of Fitchburg Zoning Bylaw (Chapter 181), as adopted on July 17, 2011 as Ordinance #272-01 *with amendments through April 6, 2011*

City of Fitchburg, Planning Board Rules and Regulations Governing the Subdivision of Land; Effective 9/13/88 with amendments through March 21, 1990

Fitchburg Planning Board Rules & Regulations for Special Permits and Site Plan Review. Adopted on April 2, 2002 with most recent revisions made on June 12, 2012.

City of Fitchburg Master Plan Vision 2020, 1998

North Nashua River Master Plan: prepared in June 2004 for the City of Fitchburg with assistance under the Massachusetts Riverways Program under the Massachusetts Department of Fish and Game. Planning assistance was provided by the consulting firms Cosby, Schlessinger, Smallbridge, LLC with Michael Crane Associate

Green Fitchburg: Opportunities, Strategies & Vision for the Future. Report by the Landscape Sustainability Studio, UMass Amherst, Professor Jack Ahern, Ph.D., FASLA, May 2009

Revitalizing John Fitch Highway Report, Prepared by the Urban Land Institute (ULI)'s Technical Assistance Panel (TAP), November 9, 2011.

Best Practices Examples and Supporting Documents

HKHC Resources and Case Studies

Active Living By Design Resource Guide (HKHC Community Partners Resources), November 2011.

The following resources were researched from the above Resource Guide:

Desoto-Marshall-Tate Counties, MS: How to Start a Community Garden Toolkit (May 2010)
(Silver City) Grant County, NM (Land Use and Zoning Code Provisions for Community Gardens,
Farmer's Markets, Streets and Trails (December 2010). *Eric notes have this info from HKC
Strategies to Reverse Childhood Obesity (see below).*

HKHC Strategies to Reverse Childhood Obesity, May 2011.

In addition, the full set of available case studies can be found at the RWJF's Healthy Kids Healthy Communities (HKHC) case studies website:

<http://www.healthykidshealthycommunities.org/communities/case-examples>

MRPC researched resources from following

- Community Gardens - <http://www.healthykidshealthycommunities.org/hkhc-caseexamples-communitygardens>;

- From Farmer's Market link to Grant County, New Mexico's Food Systems initiatives.: <http://www.grantcountyhkhc.com/Food%20Systems2.html> .
- From Healthy Food Retail:" The youth-led advocacy efforts in Watsonville/Pajaro Valley, CA resulted in the incorporation of healthy eating in the City of Watsonville's permitting processes for new restaurants"
- Complete Streets: City of Sacramento's Pedestrian-Friendly Street Standards.

Comprehensive Plans and Zoning Codes

Providence, RI: *The Master Plan for 2021: Providence Tomorrow*

Environment Omaha, Prepared by Omaha by Design. Omaha Master Plan included a "Community Health" component/element. Community Health issues include the design of sites and neighborhoods for active living; economic opportunities throughout the community; access to essential services for all neighborhoods; and access to affordable and healthy food. Safety issues include crime prevention, design for safe active transportation modes, and natural hazards such as flooding or severe storms/wind.

Buffalo Green Code: A Preview of Buffalo's New Zoning, Making the City a Better Place to Live, Work & Invest.

Active Living Resources

Walkable Communities (walkable.org) 12 Steps to make a community walkable.

Active Design Guidelines: Promoting Physical Activity and Health in Design. Prepared by the City of New York Department of Design and Construction (DDC), Health and Mental Hygiene, Transportation (DOT), and the City Planning Department

"From Pop-Up to Permanent: Small, Nimble Projects are Adding Value to public Spaces," by JoAnn Grego, American Planning Association's Planning Magazine. November 2012

Green2015: An Action Plan for the First 500 Acres, Philadelphia, Pennsylvania. December 2010. Prepared by PennPraxis for Philadelphia Parks and Recreation.

Supporting Our Parks: A Guide to Alternative Revenue Strategies. Prepared by New Yorkers For Parks, June 2010.

Better Cities and Town's online blog article: "*Lively new park-in-phase creates a 'front porch' for Philly*" by Kaid Benfield, August 9, 2012.

Healthy Eating / Active Living Cities Campaign: Healthy Zoning Regulations document.

Healthy Community Design Checklist, United States Center for Disease Control.

LEED-ND and Healthy Neighborhoods: An Expert Panel Review

Project for Public Spaces: Lighter, Quicker, Cheaper information via web: <http://www.pps.org/reference/lighter-quicker-cheaper-2-2/>

National Complete Streets Coalition resources: <http://www.smartgrowthamerica.org/complete-streets/>

Michigan Complete Streets Coalition: (<http://michigancompletestreets.wordpress.com/>)

Urban Agricultural-related

Land Use and Planning Policies to Support Community and Urban Gardening, Public Health & Policy: Planning for Healthy Places, Last Updated 7/31/2008

Growing Green: Measuring Benefits, Overcoming Barriers, and Nurturing Opportunities for Urban Agriculture in Boston. By the Conservation Law Foundation and CLF Ventures, Inc., July 2012.

Regional Environmental Council of Central Massachusetts Food Justice Program info:
<http://www.recworchester.org>

The Homegrown Minneapolis Report, prepared in 2009

Urban Agriculture Policy Plan (UAPP), adopted by the Minneapolis City Council on April 15, 2011.

Growing Urban Agriculture: Equitable Strategies and Policies for Improving Access to Healthy Food and Revitalizing Communities. PolicyLink. 2012 Authors: Allison Hagey, Solana Rice and Rebecca Flourney.

The Community Garden as a Tool for Community Empowerment: A Study of Community Gardens in Hampden County; A Thesis Presented by Shanon C. Kearney, September 2009, Department of Landscape Architecture and Regional Planning.

"Divine Providence: Conservation and Agriculture meet at our reservation in Holyoke" Special Places: Summer 2010, Volume 18, No 2, The Trustees of Reservations.

Corner Stores and Healthy Eating

Northborough's "Building a Healthy Northborough" MetroWest Daily News article, July 10, 2012

"Watsonville to score restaurants for offering healthy menus" Santa Cruz Sentinel article, October 13, 2010.

"WooFood Revolution" Worcester Magazine article, February 9, 2012

"Healthier Choices Sought for Neighborhood Corner Stores" by Paul Tuthill for WAMC radio (online edition).

"A Fresh Start: City Requires Corner Stores to Sell Healthy Produce" by Dylan Scott from online *Governing* article, October 11, 2012 (<http://www.governing.com/blogs/view/gov-minneapolis-requires-corner-stores-to-sell-fresh-produce.html>)

"the Healthy Food Financing Handbook from advocacy to implementation" by The Food Trust, 2013.

"Food For Every Child: The Need for More Supermarkets in Massachusetts" prepared by The Food Trust, December 2010.

Vacant Lot Specific

"Re-imagining a More Sustainable Cleveland: Citywide Strategies for Reuse of Vacant Land" adopted by the City Cleveland City Planning Commission on December 19, 2008.

"Re-imagining Cleveland>> Ideas to Action Resource Book", Prepared by Neighborhood Progress, January 2011.

Managing Vacant Land in Philadelphia: A Key Step Towards Neighborhood Revitalization: Final Report of the Vacant Land Management Study. The Pennsylvania Horticultural Society and Philadelphia Green. Prepared by Fairmount Ventures, Inc., March 2000.

MRPC notes that all of these resources are available in both our digital and hard copy planning library and are available upon request.

APPENDIX F

Health Action Steps Matrix Example

HEALTH ACTION STEPS MATRIX

Directions

The following action steps are taken from the DRAFT *WalkBikeNC* plan. These action steps may need further refinement and prioritization. In order to help with that process, please read the action steps; consider its physical activity impact, feasibility and inclusion of health equity; and rank order them “low, medium or high.” Finally, please choose your top five recommended action steps.

Considerations

Physical Activity Impact: Will this result in more people walking and bicycling?

Feasibility: Are there resources and the will to make this happen?

Health Equity: Is this likely to directly serve those across different populations?

ID	Recommended Action Step	Physical Activity Impact	Feasibility	Health Equity	Top 5 from all sections	Comments/ Refined language
Health: Engagement/encouragement of non-traditional groups						
H1	Update NCDOT planning guides and/or checklists during planning processes (e.g. CTPs) to prioritize inclusion of low-income, people of color, older adults, youth and people with disabilities. Seek transportation equity for lower-income communities.					
H2	Reach out to other organizations, including non-profits, to identify appropriate ways to boost resident engagement in transportation planning.					
H3	Convene annual pedestrian summit with broad engagement of non-traditional groups/organizations.					
H4	Continue annual bicycle summit and expand broad engagement of non-traditional groups/organizations.					
H5	Establish user on-line system and other networks to educate non-traditional groups about transportation issues.					
H6	Conduct targeted social media, advertisements, marketing campaigns and/or other promotional efforts to increase active transportation.					
H7	Work with non-traditional organizations (e.g. El Pueblo, NAACP, NC Alliance for Disability Advocates) to identify the most effective and appropriate messages to encourage increased active transportation among low-income, people of color, youth, older adults, people with disabilities.					
H8	Develop a focused outreach approach to increase bicycling among women and girls.					

Health: Institutionalization of health professionals/advocates into transportation planning processes						
H9	Make health professionals part of the planning and project scoping projects.					
H10	Reach out to local health directors and boards of health to communicate through training and technical assistance the importance of participation in local/regional transportation planning.					
H11	Identify and implement incentives for local health officials to collaborate on transportation planning efforts.					
H12	Develop educational and informational materials for local health departments and boards of health regarding transportation planning and implementation.					

Health: Community leader outreach						
H13	Develop educational materials for local leaders, elected officials and boards/commissions regarding the benefits of active transportation and informational materials on transportation planning and implementation.					
H14	Work through state councils and organizations to reinforce (to local leaders and officials) the importance of health considerations in local planning (e.g. NC League of Municipalities, NC Association of County Commissioners).					

Health: Data						
H15	Prepare health data sets and reports that can be used in transportation planning, implementation and performance evaluation.					
H16	Develop prioritization criteria that can be easily and objectively rated to indicate transportation projects that are likely to serve low-income, people of color, youth, older adults and people with disabilities.					
H17	Include health/equity criteria in project prioritization.					
H18	Adopt high-priority performance measures described in Chapter 8.					
H19	Convene to develop the most relevant and practical indicators for physical activity data.					
H20	Identify and implement the collection of new indicators for ongoing surveillance, such as children walking to school, active commuters, etc. for measuring performance.					
H21	Provide funding, resources and tools for local communities to collect longitudinal data (i.e. measuring the economic and health impacts) before and after pedestrian and bicycling projects are implemented.					

Health: Planning and Programs						
H22	Follow new NCDOT Public Health Policy adopted October 4, 2012.					
H23	Create health factor requirements that are appropriately scaled to project or plan size.					
H24	Create an incentives structure for comprehensive planning that includes health component and improves land use to reduce distances between important destinations.					
H25	Collaborate to incorporate more local school officials into transportation planning efforts.					
H26	Engage vast network of possible non-profit partners in NC, many of which support healthy living.					
H27	Maintain and establish new education, encouragement, and enforcement programs recommended in Chapter 7.					

Health: CTG Program						
H28	Provide awarded communities with technical assistance provided by NCDOT to ensure that physical activity is made safer and more accessible through bicycle and pedestrian projects that are in line with the expertise of transportation professionals.					
H29	Add to “Strategic Direction IIA: Active Living” an explicit mention of the incorporation of bicycle and pedestrian projects as a sub-goal for this effort.					
H30	The CTG program is led by the Health Department, thus CTG coordinators and staff members come primarily from health-focused backgrounds. Create an additional position for a transportation professional, or properly train coordinators with the necessary skill set to guide communities in the implementation of bicycle and pedestrian projects.					