

Biking in Belmont

Sustainable Belmont Meeting

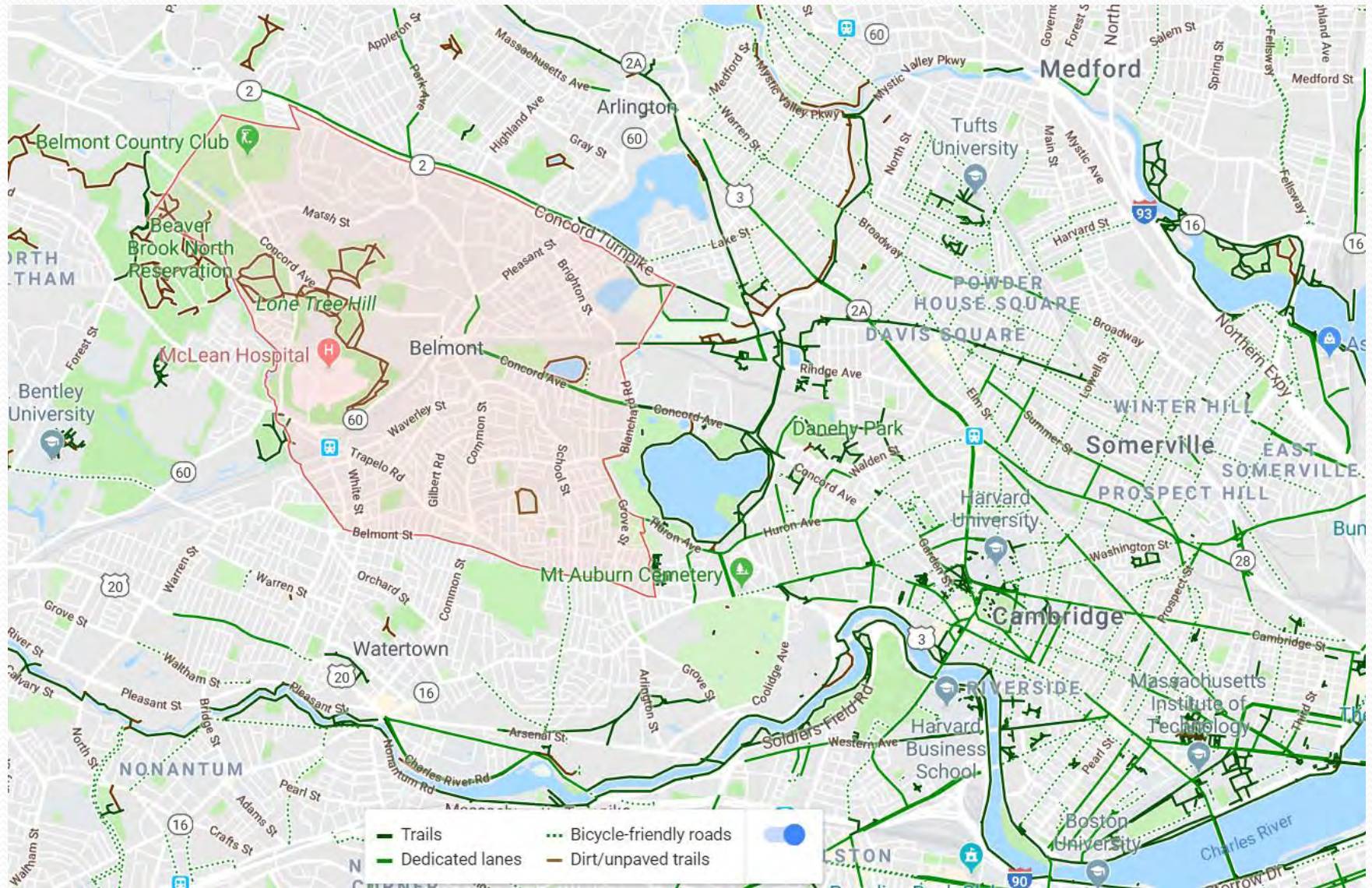
April 4th 2018



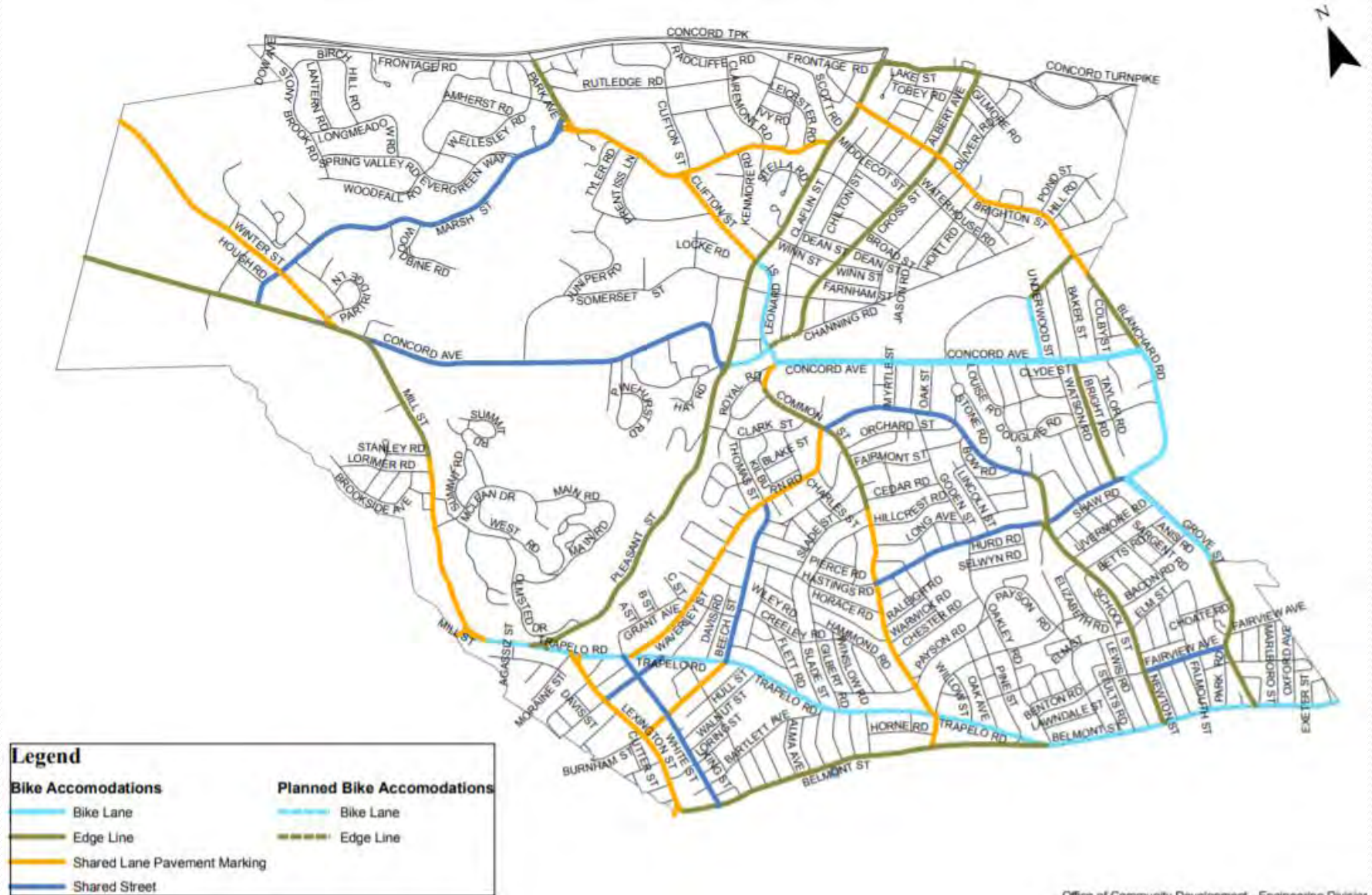
Agenda

- 7:05 – 7:10 Martin Plass & John Kolterman: Introduction
- 7:10 – 7:25 Russ Leino/Jeff Roth (CPAC): Update on Belmont Community Path & other ideas for biking improvements in Belmont
- 7:25 - 7:35 Lucia Willie, Resident: Concept for Belmont Bike and Skate Park with Solar Farm at former Incinerator Site
- 7:35 – 7:55 Karl Alexander, ZAGSTER: Dockless Bike Sharing
- 7:55 – 8:15 Spencer Gober, Town of Belmont: MAPC Regional bike share program
- 8:15 – 8:45 Podium discussion / Q&A

Current Bike Routes in Belmont



Proposed Bike Lanes



BELMONT COMMUNITY PATH

CURRENT STATUS & NEXT STEPS



Proposed Waverley Square "Box Over"

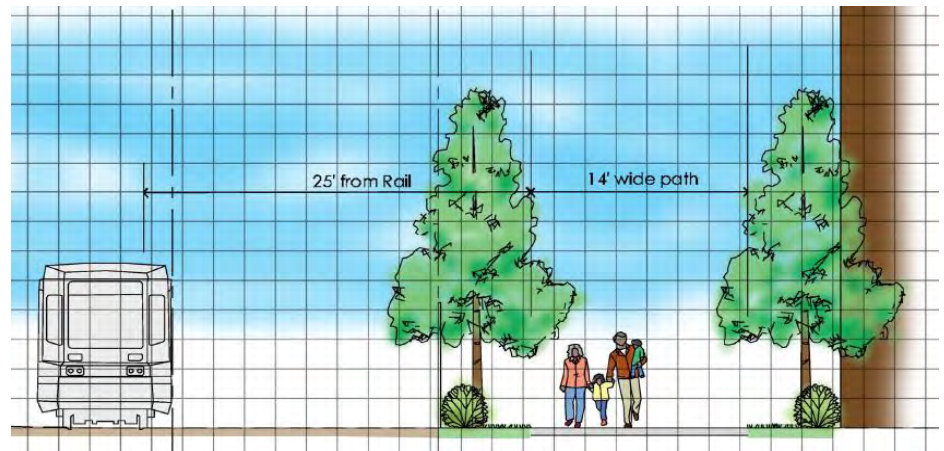
Presentation to
Sustainable Belmont

April 4, 2018

Russ Leino, Chair,
Community Path
Implementation Advisory
Committee

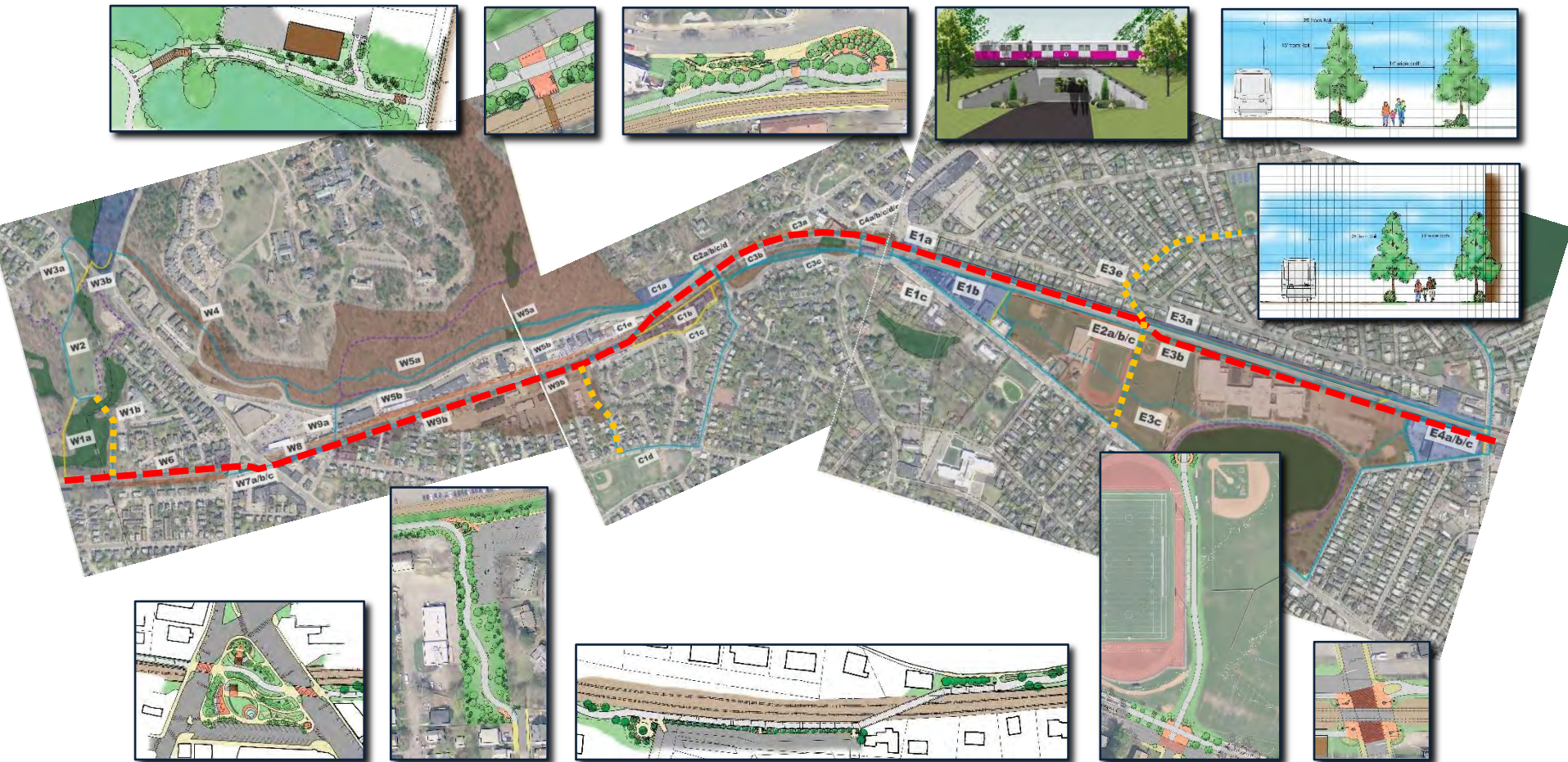
FEASIBILITY STUDY: COMPLETE

- Engineering consultant was asked to recommend a single route for a community path that will best serve Belmont's residents AND function as a key segment of the MCRT.
- Feasibility study intended to advance to conceptual design and planning cost estimate
 - Define path options
 - Quantify impacts
 - Quantify costs
 - Weight and rank alternatives



RECOMMENDED ROUTE

Estimated Cost: \$27.9 Million



RECOMMENDED ROUTE SPURS

- Construct spurs through initial or subsequent funding

- Connect to Beaver Brook - \$0.73 M
- Connect to Town Field - \$0.79 M
- Connect to Concord Avenue - \$0.44 M
- Connect to Winn Brook Elementary - \$0.77 M

Concord Ave.



Town Field



Beaver Brook



Winn Brook



NEXT STEPS: 25% DESIGN & FUNDING

■ What is 25% design?

- Preliminary design plans, cost estimate, permitting, and detailed land survey
- Additional opportunities for public engagement, especially abutter input
- Completion necessary to begin application process for state/federal funding

■ How much will this cost?

- Rule of thumb: design phase = approx. 10% of total project cost, so likely \$2.5-\$3M for the recommended route (25% design = likely approx. 5-6% of total project cost)
- Funding for design will likely need to be a combination of Town funds (e.g., CPA), established grant funding (e.g., DCR), ad hoc state funding (e.g., budget earmark), and private fundraising



NEXT STEPS: TIMELINE

- Feasibility Study Accepted and Recommended Route Endorsed by BOS; CPIAC Charged with Pursuing Funding, Procuring Design Consultant, and Moving Forward with Implementation – December 2017
- Research/Pursue Funding for Preliminary/Final Design – 2018
- Issue RFP for Design and Select Consultant – 2018
- Preliminary/Final Design with State Agency Review – 2018 & 2019
- Town Procure Funding/Property for Construction Phase – 2019
- Construction of Belmont Community Path – 2020 & 2021

Bicycling in Belmont

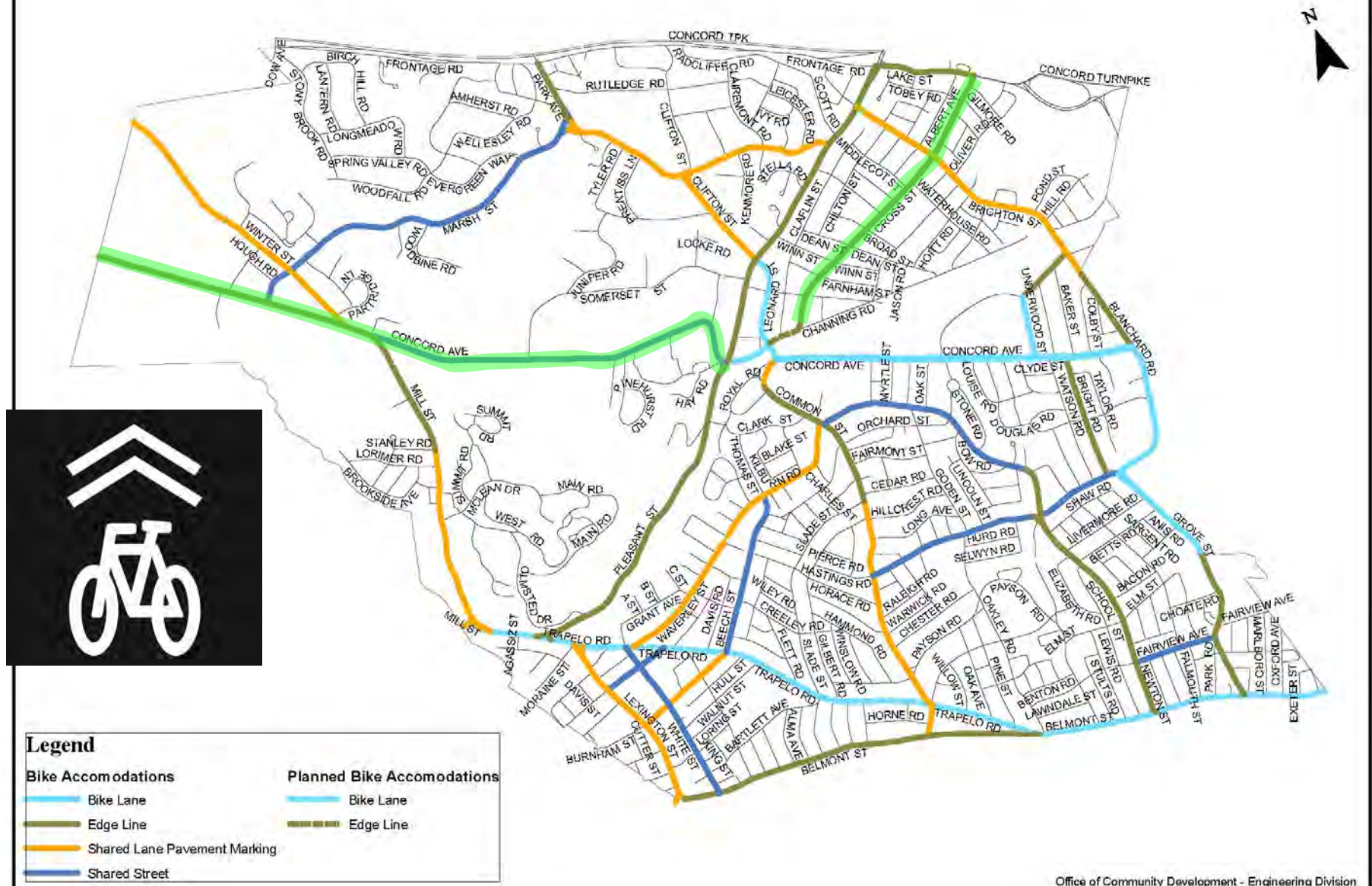
J. M. Roth

4 April 2018

jrothim@yahoo.com / 339.223.1235 (mobile)

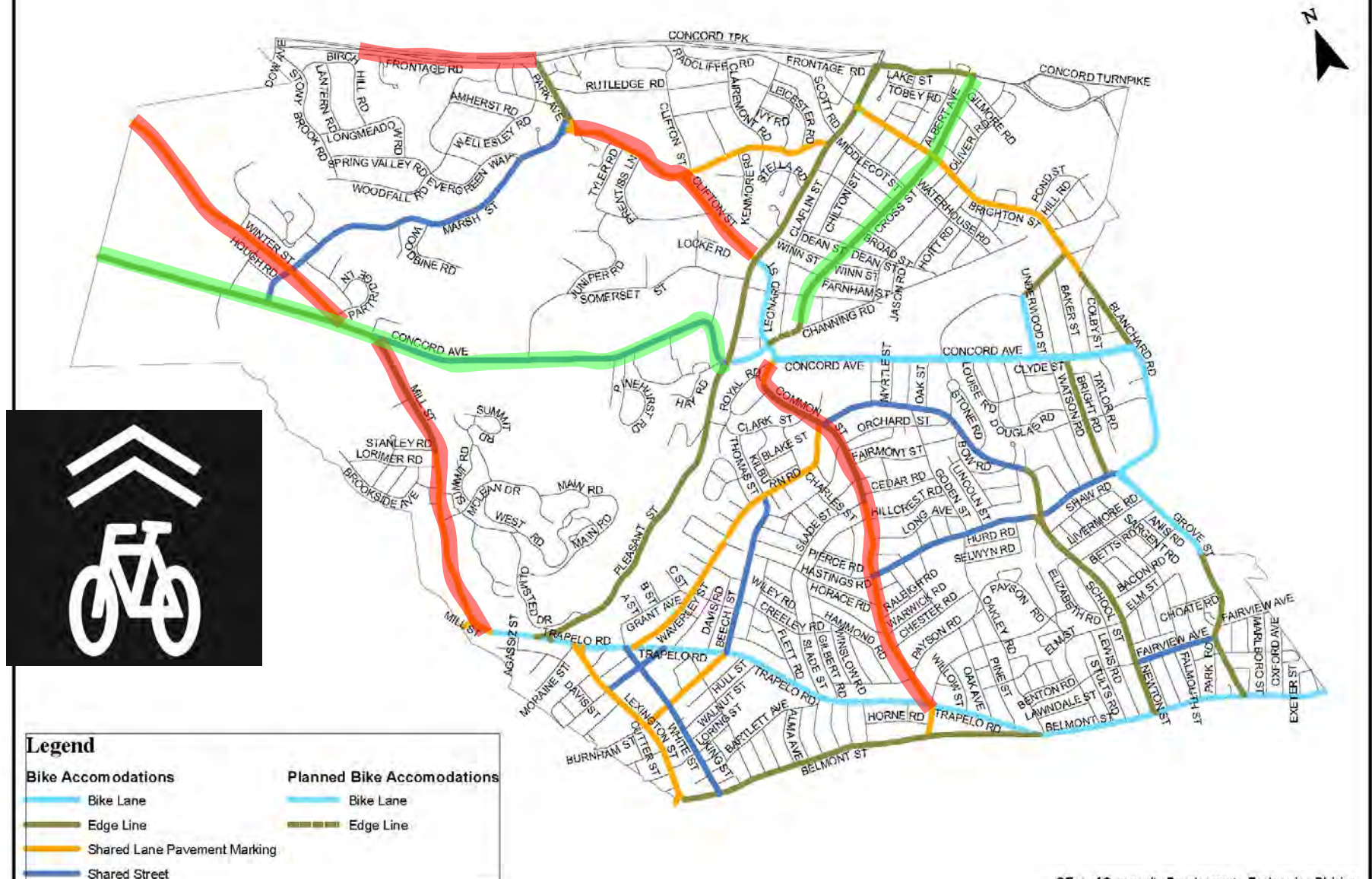
Shared-Lane Markings (SLMs)

Bicycle Accommodations - Belmont Massachusetts



Shared-Lane Markings (SLMs)

Bicycle Accommodations - Belmont Massachusetts



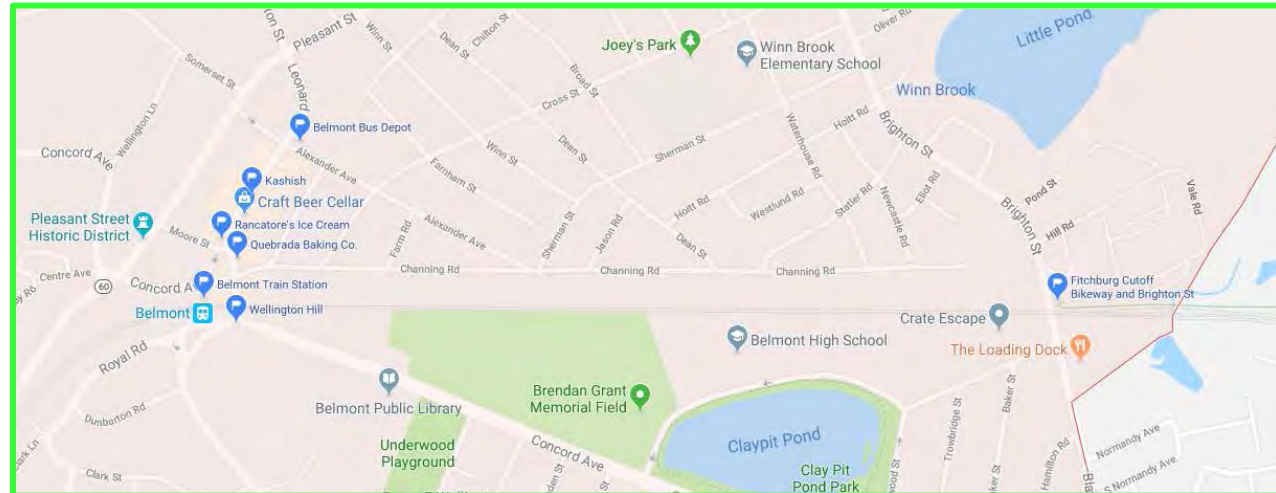
Biking Direction Signage for Belmont Center and Path to Alewife

- Wayfinding signs for bike routes between Belmont Center and Alewife
- Message is that it is easy to bike places
- Done in Lexington previously
- Look for signs this spring!

IT IS A 6
MIN. BIKE
RIDE TO THE
FITCHBURG
CUTOFF
BIKE PATH*



* This path accesses Alewife Station, and is also known as the Belmont Community Path.



Bicycle Parking and Bicycle Shelters

- Covered bicycle parking 2x more used than uncovered
- People want covered and safe places to park bikes
- Schools and businesses ideal locations
- MAPC discounts on bicycle shelters
- Bike parking costs pay for themselves (health, air quality, and congestion)
- Need to invest in such infrastructure in Belmont



Additional Topics

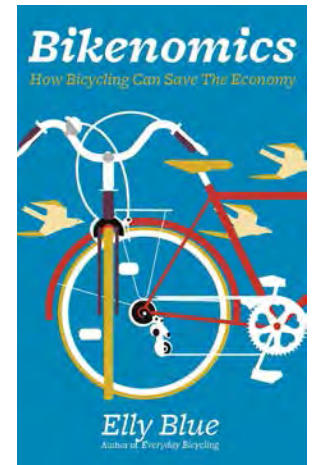
- Winter access to Fitchburg Cutoff Bikeway – How can it be improved?
- Bay State Bike Week (May 12 – 20) and Bike Month (May)
- Cyclovia Belmont – Can we organize something like this on Concord Ave. in the summer
 - “Recreation Sundays”



Memorial Drive (Cambridge)



- Suggested reading: Bikenomics (Elly Blue)



Belmont Bike and Skate Park with Solar Array

A preliminary proposal
by
an ad-hoc group of Belmont residents

April 2018

What is a Bike Park?



What is a Bike Park?



What is a Bike Park?



Images of Bijou Bike Park



The small line is super fun with a bunch of rollers, ramps and mini-drops. Practice your skills here before moving on.

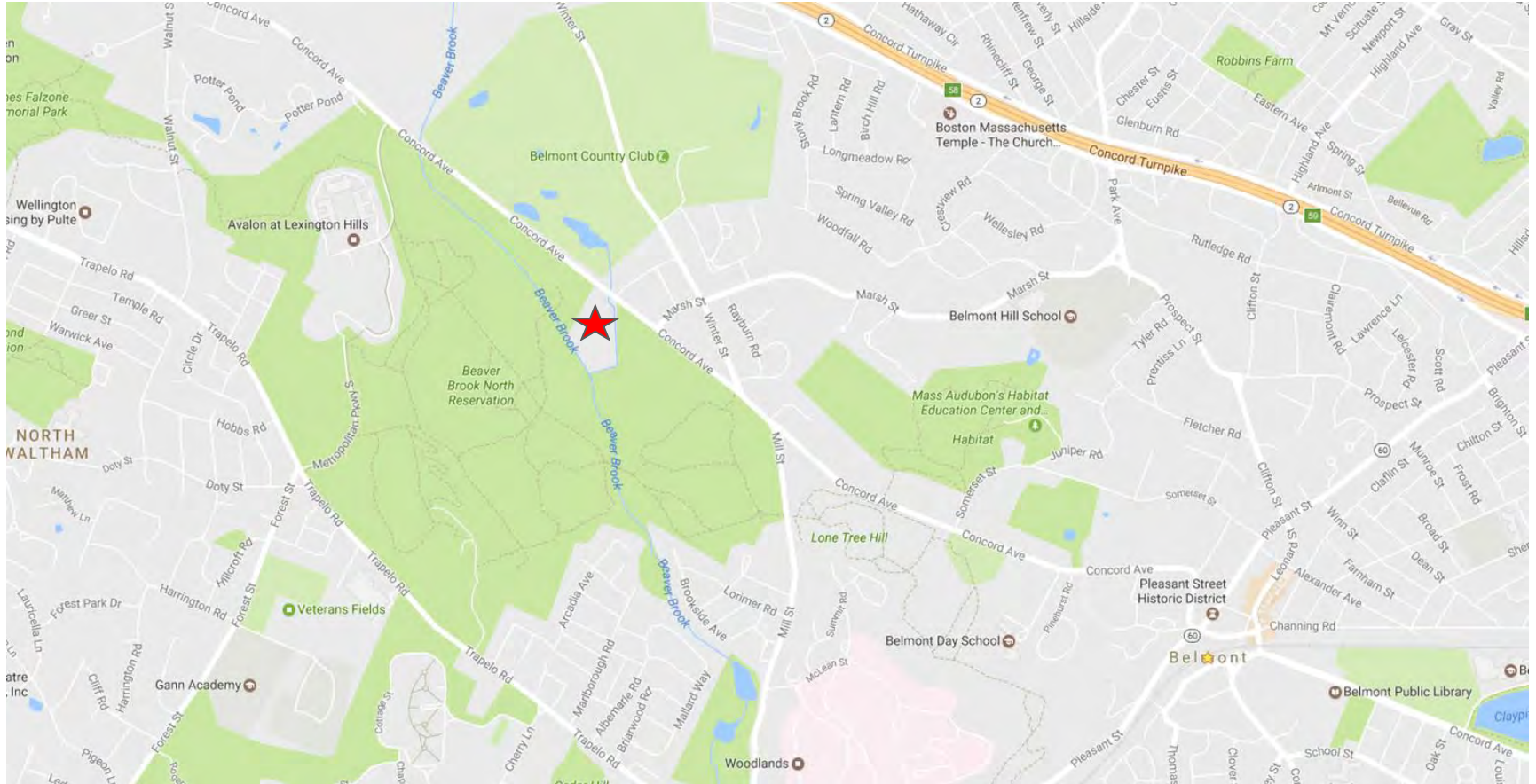


The 3 best parts of the bike for young kids and beginners are the small pump track, small slopestyle line and the loop trail.



The hammock is one of signature features on the large line – gap on, gap off.

Incinerator Parcel Location: Street Map



Incinerator Parcel Location: Multi-Use Trail Map

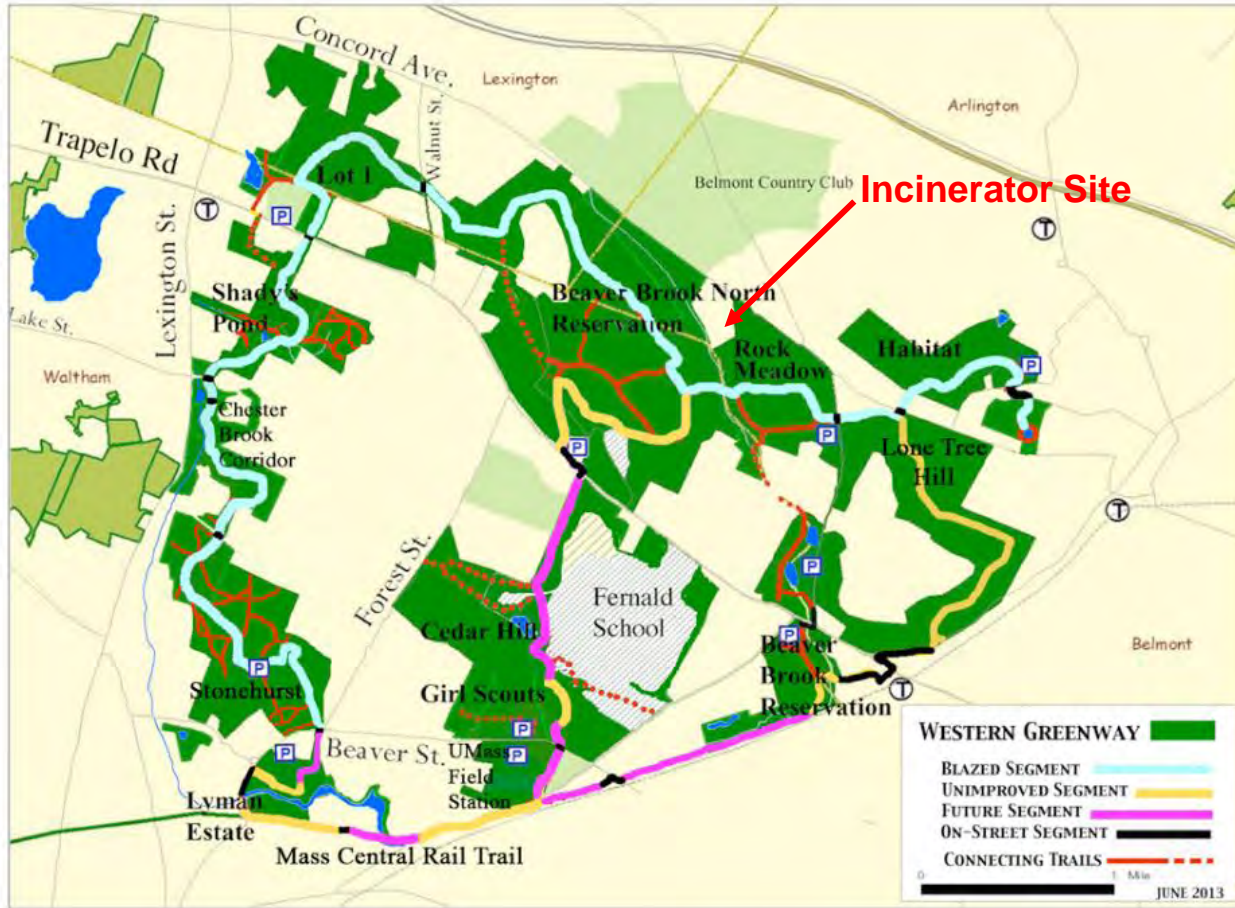
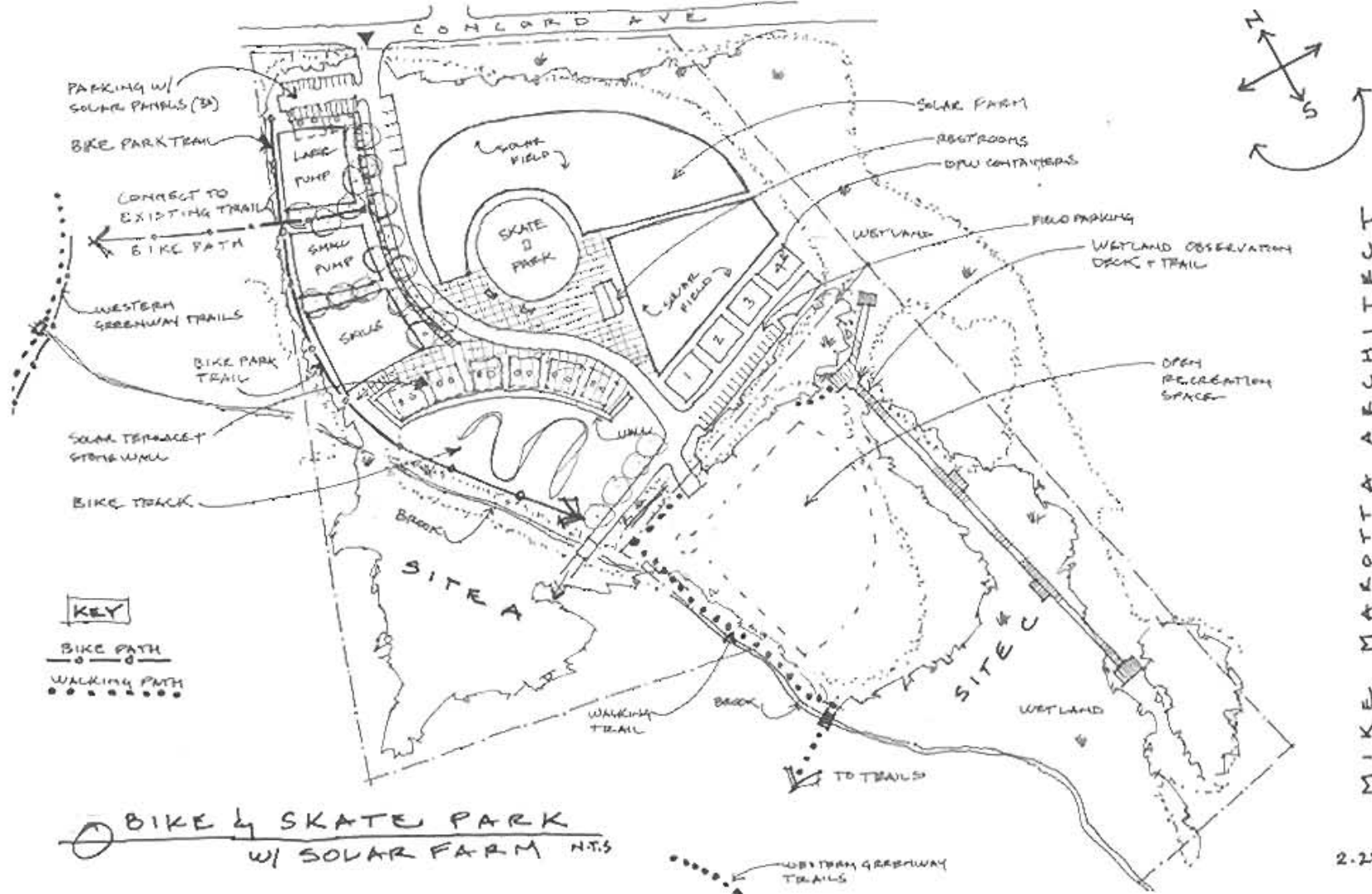


Image off by the [Western Greenway](#). Red arrow marks the incinerator site.

[illegible]

Key Features of Concept Plan

- 3+ acre Solar Farm
- Skate Park
- 3 acre Bike Park
- Multiple access points to Western Greenway
- Potential for a recreational complex on parcel C including:
 - Ball Fields
 - Dog Park
 - Boardwalk
- Restrooms
- Parcel A is left undeveloped for DPW needs



2.25.18

Thank you for your time.

Any questions?

Lucia Wille
Travis Frank
Roger Colton
Marty Bitner

Michael Marotta
Roger Wrubel
Tom Grimble

W

1.

Dc

Dc

“P

Dc

Dc

As



Metropolitan Area Planning Council's (MAPC's) Regional Dockless Bike Share System

Agenda | Tonight's Presentation Topics

1. Important Terminology
2. Catalyst for the Regional Approach
3. Cost
4. Timeline to Date
5. Participating Municipalities
6. Vendors
7. Draft Statement of Work (SOW)
8. Draft Bicycle Parking Regulations
9. Bicycle Counts
10. Potential Bicycle Locations
11. Next Steps
12. My Contact Information



Important Terminology

01.

Request for Proposal (RFP)

A document used by an agency or company to procure professional services, often through a bidding process.

02.

Memorandum of Understanding (MOU)

Governs how the municipalities will work with one another and with MAPC to prepare for and implement the dockless bike share system. It outlines the roles and responsibilities of the municipalities and MAPC.

03.

Master Contract

Exists between MAPC and the vendors. This document is undergoing the final stages of internal review at MAPC, and essentially states that the vendor will agree to the rules and regulations set out in the RFP, and will commit to provide the goods and services they described in their proposals.

04.

Statement of Work (SOW)

Is the contractual agreement that will exist between the municipalities and the vendor. This document outlines a plan for how the system will be implemented, and identifies points of contact in each municipality and among the vendors.

Catalyst | What prompted the idea of a regional system?

01. Municipalities began testing pilot dockless systems within their respective boundaries, and neighboring municipalities began to discover the dockless bikes were being ridden into and left within their boundaries.

02. MAPC observed municipalities in the region starting to pilot dockless systems on their own, often using competing companies, and felt that a regional approach would result in a more successful and effective system.

03. MAPC reached out to municipalities within the region to gauge interest in participating, and to discuss the preferred approach to executing a dockless bike share system within the region.

Catalyst | What prompted the idea of a regional system?

01. Municipalities began testing pilot dockless systems within their respective boundaries, and neighboring municipalities began to discover the dockless bikes were being ridden into and left within their boundaries.

02. MAPC observed municipalities in the region starting to pilot dockless systems on their own, often using competing companies, and felt that a regional approach would result in a more successful and effective system.

03. MAPC reached out to municipalities within the region to gauge interest in participating, and to discuss the preferred approach to executing a dockless bike share system within the region.

Catalyst | What prompted the idea of a regional system?

01. Municipalities began testing pilot dockless systems within their respective boundaries, and neighboring municipalities began to discover the dockless bikes were being ridden into and left within their boundaries.

02. MAPC observed municipalities in the region starting to pilot dockless systems on their own, often using competing companies, and felt that a regional approach would result in a more successful and effective system.

03. MAPC reached out to municipalities within the region to gauge interest in participating in and to discuss the preferred approach to executing a dockless bike share system within the region.

\$\$ | What's the cost?

01. A nominal fee will be assessed by the vendors each time a rider uses a bike.
02. An additional fee may be charged to riders who do not properly park a bike after their ride, or fail to finish a ride on time.
03. Each municipality may assess a nominal fee to the vendors for each bike located within their boundaries.
04. There is **NO COST TO THE MUNICIPALITIES** for participating in this system.

\$\$ | What's the cost?

- 01.** A nominal fee will be assessed by the vendors each time a rider uses a bike.
- 02.** An additional fee may be charged to riders who do not properly park a bike after their ride, or fail to finish a ride on time.
- 03.** Each municipality may assess a nominal fee to the vendors for each bike located within their boundaries.
- 04.** There is **NO COST TO THE MUNICIPALITIES** for participating in this system.

\$\$ | What's the cost?

01. A nominal fee will be assessed by the vendors each time a rider uses a bike.
02. An additional fee may be charged to riders who do not properly park a bike after their ride, or fail to finish a ride on time.
03. Each municipality may assess a nominal fee to the vendors for each bike located within their boundaries.
04. There is **NO COST TO THE MUNICIPALITIES** for participating in this system.

\$\$ | What's the cost?

01. A nominal fee will be assessed by the vendors each time a rider uses a bike.
02. An additional fee may be charged to riders who do not properly park a bike after their ride, or fail to finish a ride on time.
03. Each municipality may assess a nominal fee to the vendors for each bike located within their boundaries.
04. There is **NO COST TO THE MUNICIPALITIES** for participating in this system.



Timeline to Date

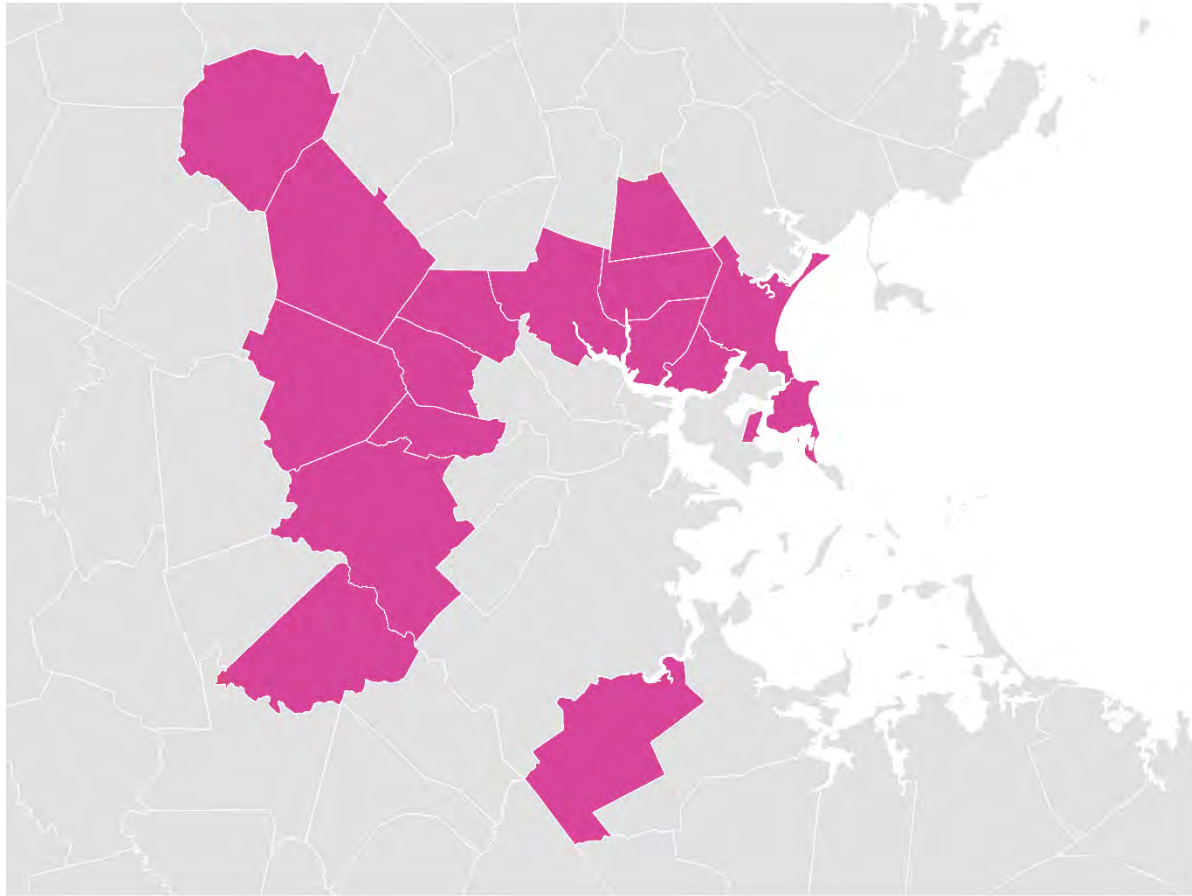
Fall 2017 – Municipalities worked with MAPC to develop a Request for Proposals (RFP).

November 2017 – Belmont Board of Selectmen (BOS) voted unanimously to approve having Belmont listed as a participating municipality.

December 2017 – MAPC released the RFP.

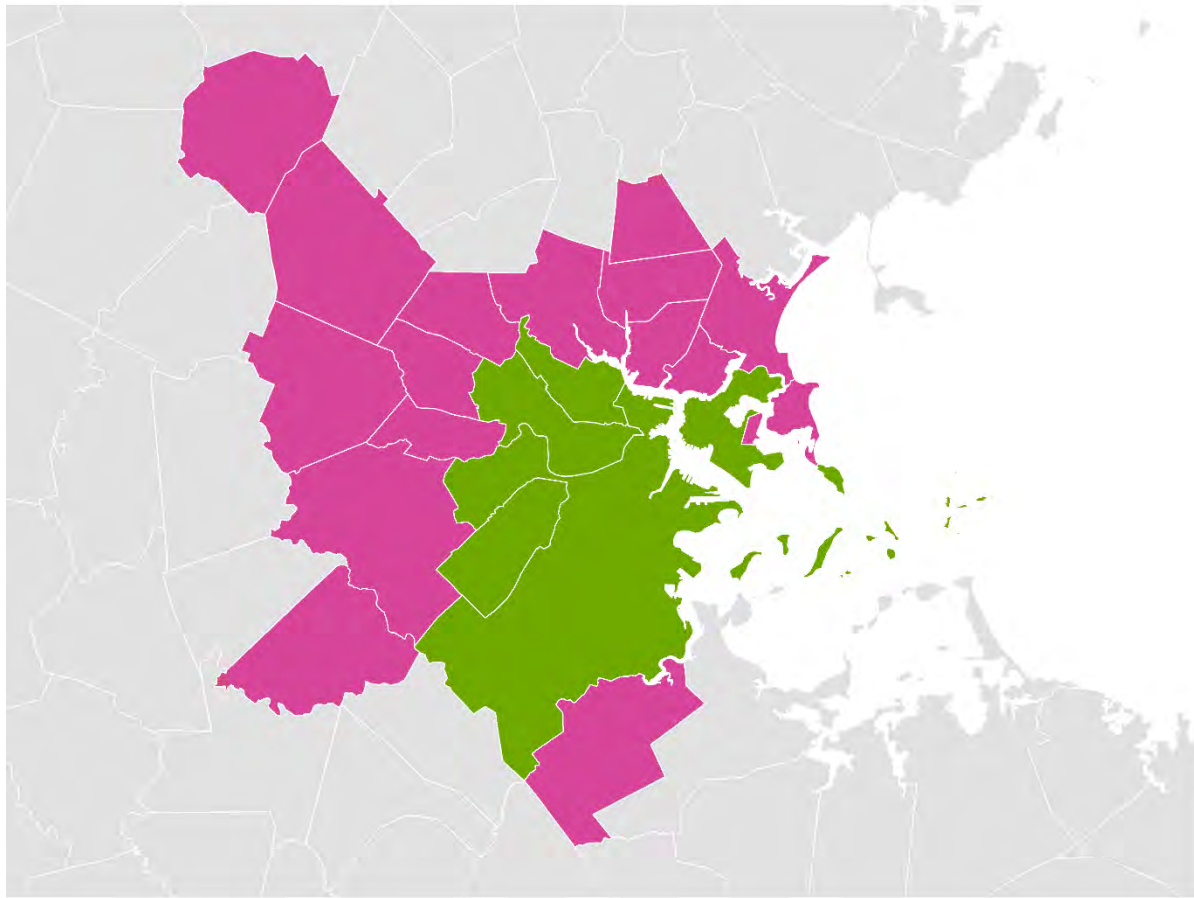
Winter 2018 – MAPC reviewed vendor proposals and selected two vendors and finalized the Memorandum of Understanding (MOU) to be signed by all participating municipalities.

16 | Participating Municipalities



Arlington
Bedford
Belmont
Chelsea
Everett
Lexington
Malden
Medford
Melrose
Milton
Needham
Newton
Revere
Waltham
Watertown
Winthrop

04 | Municipalities with Hubway



Boston
Brookline
Cambridge
Somerville



Who are the vendors?

MAPC has not yet announced who the selected vendors will be, but plan to announce once the Master Contract has been executed.

We do know that they have chosen two competing vendors.

Bike share users will be able to utilize both vendors, but both will function as a separate entity.



Draft Statement of Work (SOW)

MAPC prepared a draft SOW for each municipality to use as a template, and Belmont will work with the vendors to customize the SOW to meet local needs and concerns.

Topics addressed in the draft SOW include:

- Municipal and Vendor Project Managers
- Methods for issue resolution
- Compliance with data security legislation
- Future changes to the scope of work
- Liability
- Project plan – parking regulations and customer service
- Contract Termination



Draft Bicycle Parking Regulations

The vendor will inform customers of how to appropriately park bicycles.





Draft Bicycle Parking Regulations

Bicycles shall be parked on the sidewalk, at a public bike rack, or other locations expressly permitted by the municipality that is consistent with the local regulations.





Draft Bicycle Parking Regulations

Bicycles must not be parked immediately adjacent to or within:
Transit zone, loading zone, accessible parking zone or other facilities specifically
designated for handicap accessibility, fire hydrant, street furniture, curb ramp,
entryway, driveway, or parklet.





Draft Bicycle Parking Regulations

Use of public sidewalks must not:

- a) Adversely affect the streets or sidewalk;
- b) Not inhibit pedestrian movement; or,
- c) Create conditions which are a threat to public safety and security.





Draft Bicycle Parking Regulations

Bicycles parked in one location for more than seven consecutive days without moving may be removed by the municipality at the expense of the bike share vendor.





Draft Bicycle Parking Regulations

Any bicycle that is parked incorrectly shall be re-parked or removed by the vendor based on these times:

Within 3 hours of receiving notice:

6 AM – 6 PM on weekdays, not including holidays

Within 12 hours of receiving notice:

All other times



Draft Bicycle Parking Regulations

An inoperable bike, or any bicycle that is not safe to operate, shall be removed from the public right-of-way by the vendor and made not available to the public, within 24 hours notice.





How many bikes will there be in the system?

Each municipality was asked to provide both a minimum and maximum number of bikes to be located within their boundaries:

Belmont:

35 minimum and 50 maximum

*Based on vendor market study and potential bike locations.

System-wide (approximately):

1,500 minimum and 3,600 maximum

MAPC's Regional Dockless Bike Share System



Potential locations within Belmont.

Date: 3/20/2018

1. Town Hall Municipal Complex

The Complex, located in Belmont Center, serves as both the geographic and civic core of the Town, while Belmont Center is both an employment and shopping destination for residents and non-residents. The Complex is also proximate to the Belmont Commuter Rail Station and a bus stop serving multiple bus routes, making it a transit-rich location within Town.

2. Belmont Commuter Rail Station

Locating a bicycle at the Station will create synergy between the commuter rail and the bikeshare system, as well as the proposed Community Path.

3. Belmont Center Fire Station

The Fire Station is already home to a ZipCar location, and locating a bicycle here would encourage synergy between the two systems. Additionally, the Fire Station is proximate to the businesses along Leonard Street and existing bike lane infrastructure.

4. The Library

The Library is heavily used by residents, and serves as an important and vital asset to the community. It is also proximate to existing bike lanes along Concord Avenue and the proposed Community Path.

5. Royal Belmont

The Royal Belmont is proximate to Alewife Station as well as the Minuteman Commuter Bikeway, and provides residential density that is needed to support the bikeshare system.

6. Fitchburg Cutoff Bike Path/Hill Estates

Hill Estates provides the residential density needed to support the bikeshare system, and is proximate to the Fitchburg Cutoff Bike Path, Alewife Station, and the proposed Community Path.

7. Concord Avenue and Bright Road

This intersection is proximate to the existing bike lanes along Concord Avenue, bus routes connecting Belmont to Harvard Square, and the Fitchburg Cutoff Bike Path.

8. Grove Street Playground

The Playground offers recreational and open space amenities, is adjacent to existing bike lanes along Grove Street, and is along a bus route connecting Belmont Center to Harvard Square. The Playground is also proximate to Fresh Pond, and the Cambridge/Belmont line.

9. Harvard Lawn

Harvard Lawn is one of the densest neighborhoods in Town, which is beneficial to the bikeshare system, and is proximate to the existing bike lanes along Trapelo Road.

10. Cushing Square

Cushing Square serves as a shopping destination and is served by a bus route that connects the Waverley Square Commuter Station with Harvard Square, it also will offer the needed residential density once construction of the Bradford (formerly Cushing Village) is complete.

11. Beech Street Center/Town Field

The Center and Town Field are a civic and cultural hub for the Town, and also provide recreational and open space amenities.

12. Pequotette Park

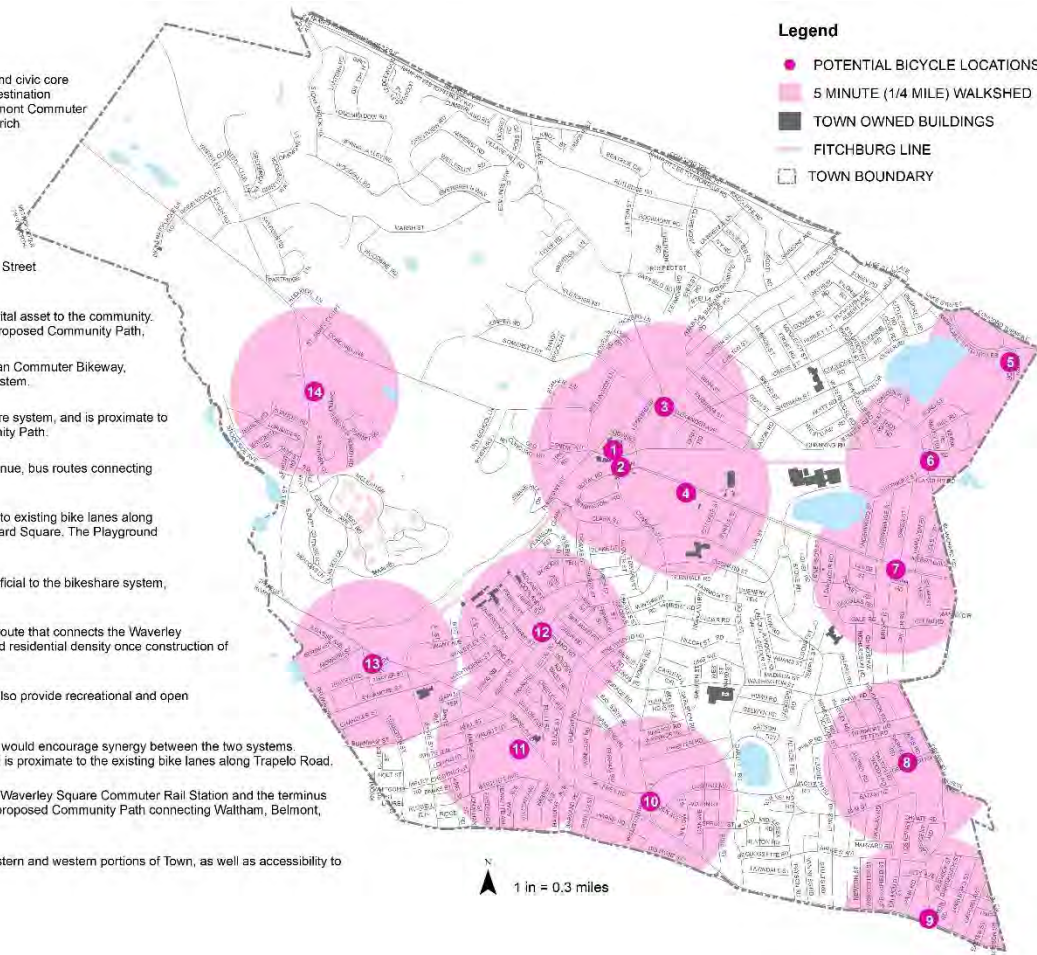
The Park is already home to a ZipCar location, and locating a bicycle here would encourage synergy between the two systems. Additionally, the park provides recreational and open space amenities, and is proximate to the existing bike lanes along Trapelo Road.

13. Waverley Square

The Square is an important shopping destination and is the location of the Waverley Square Commuter Rail Station and the terminus of a bus route connecting Belmont to Harvard Square. It is also along the proposed Community Path connecting Waltham, Belmont, and Cambridge.

14. Lone Tree Hill Parking Lot

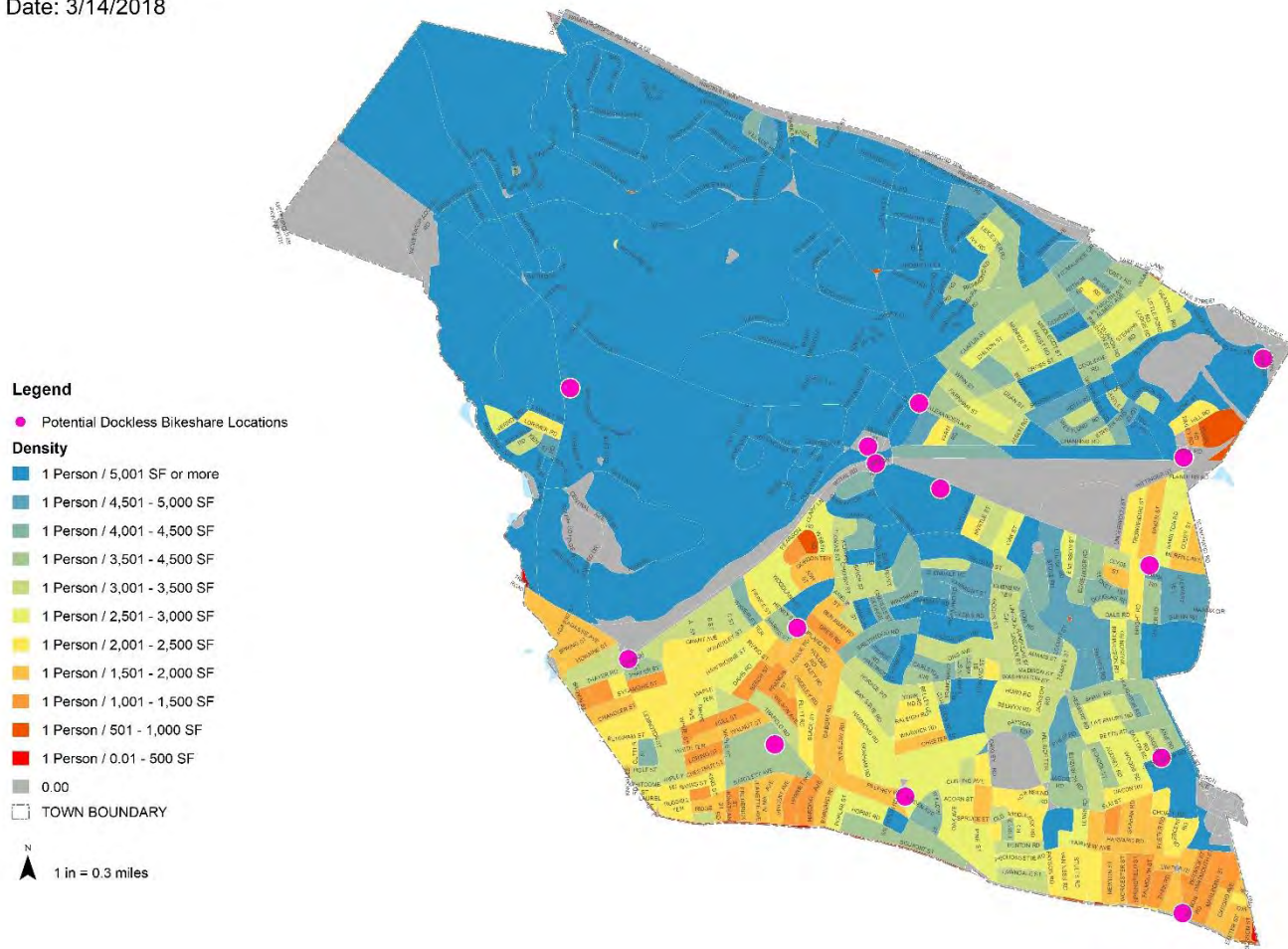
The Lone Tree Hill Parking Lot would provide connectivity between the eastern and western portions of Town, as well as accessibility to valuable and proximate open space amenities and trail networks.





Population Density

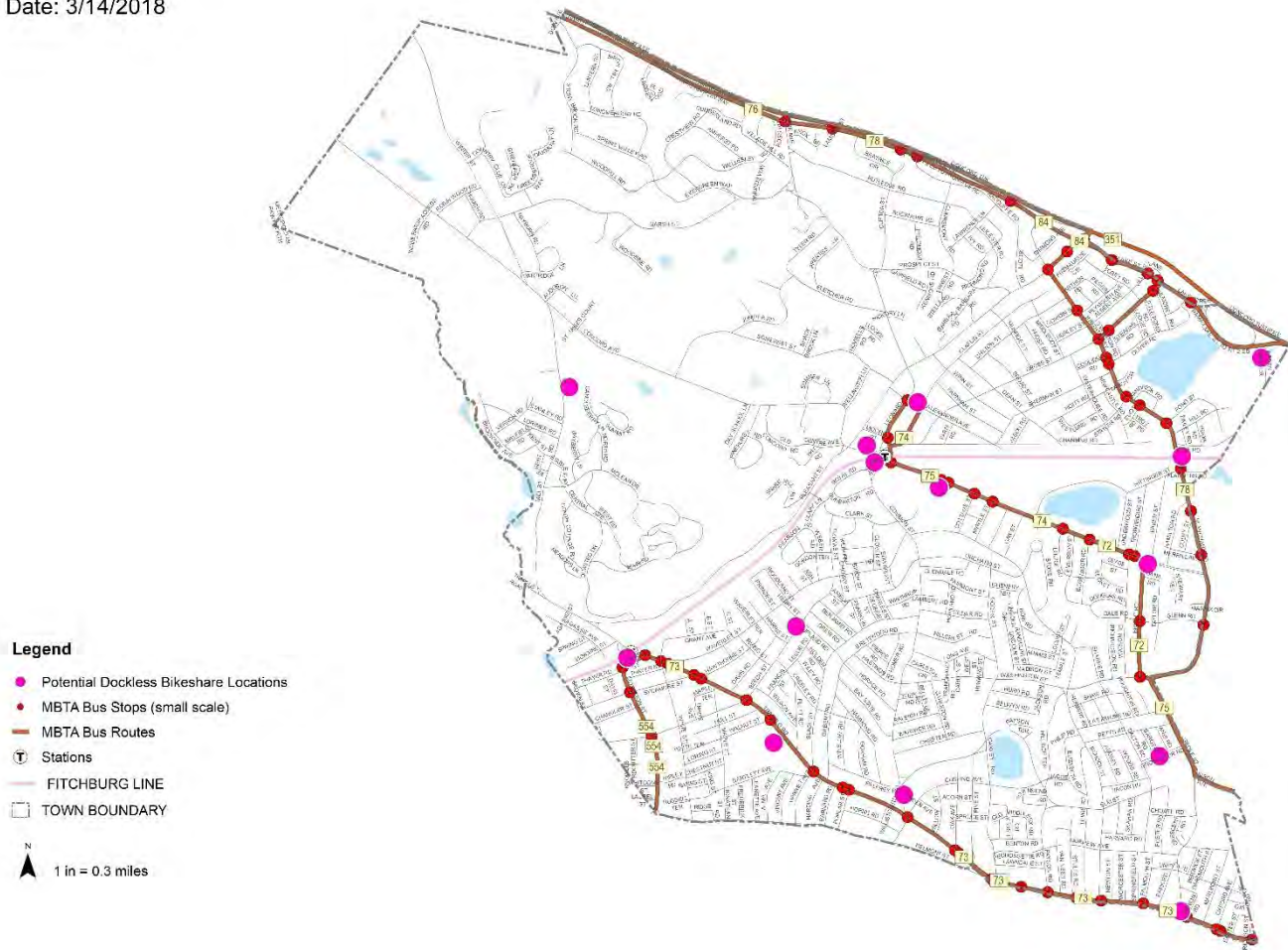
Date: 3/14/2018





Public Transit

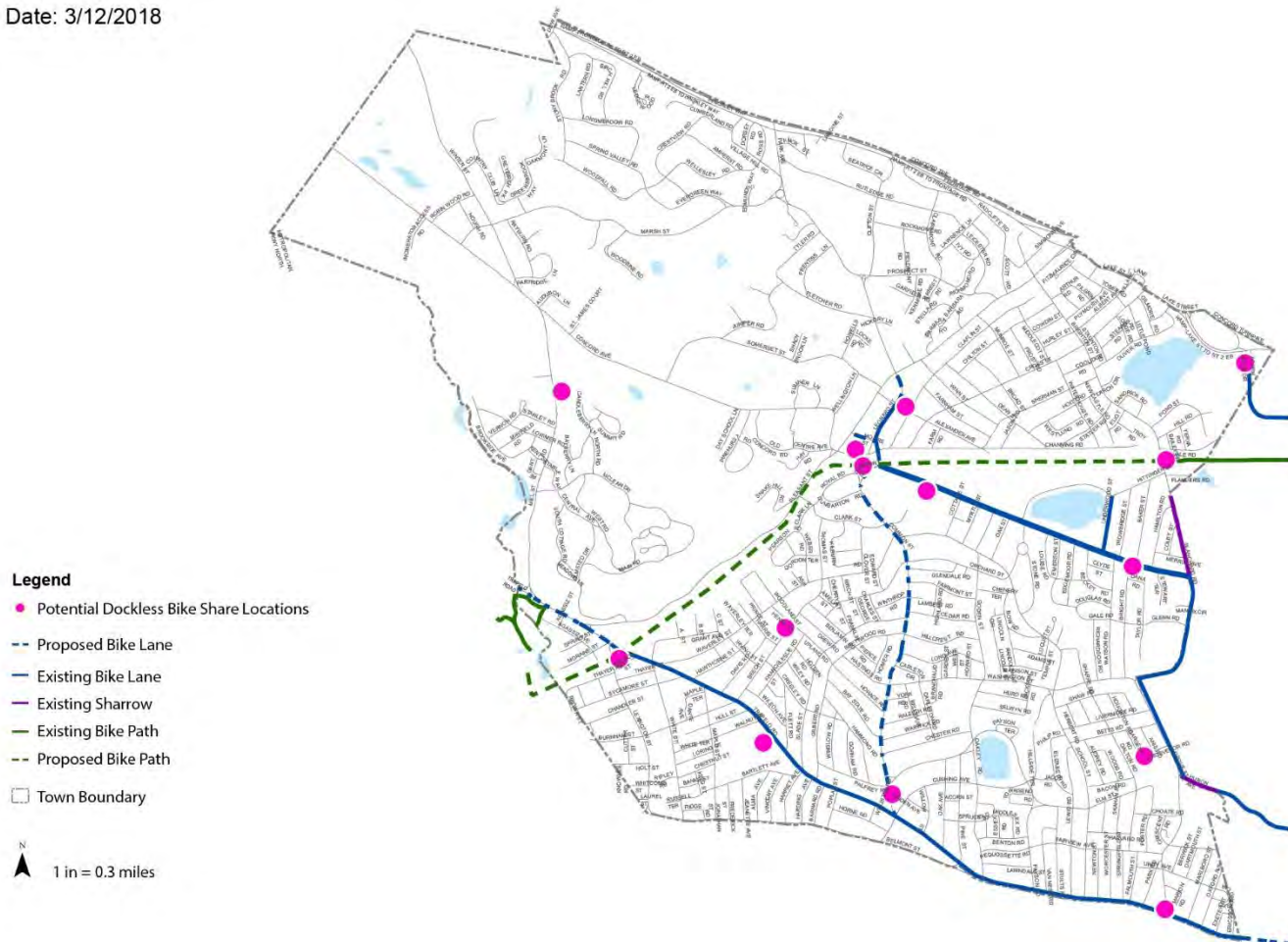
Date: 3/14/2018





Existing and Proposed Bicycle Infrastructure

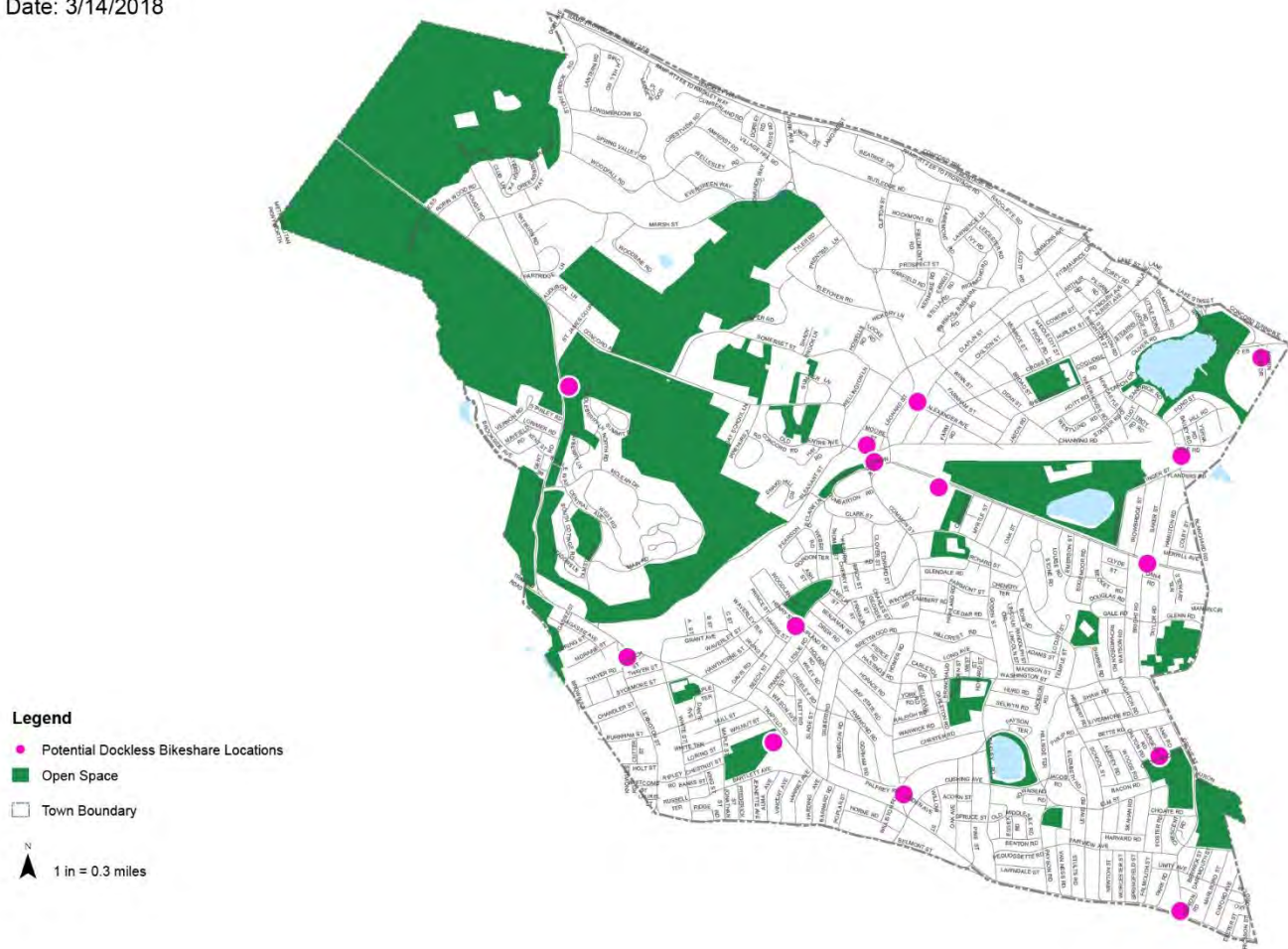
Date: 3/12/2018





Open Space Amenities

Date: 3/14/2018



MAPC's Regional Dockless Bike Share System



Potential locations within Belmont.

Date: 3/20/2018

1. Town Hall Municipal Complex

The Complex, located in Belmont Center, serves as both the geographic and civic core of the Town, while Belmont Center is both an employment and shopping destination for residents and non-residents. The Complex is also proximate to the Belmont Commuter Rail Station and a bus stop serving multiple bus routes, making it a transit-rich location within Town.

2. Belmont Commuter Rail Station

Locating a bicycle at the Station will create synergy between the commuter rail and the bikeshare system, as well as the proposed Community Path.

3. Belmont Center Fire Station

The Fire Station is already home to a ZipCar location, and locating a bicycle here would encourage synergy between the two systems. Additionally, the Fire Station is proximate to the businesses along Leonard Street and existing bike lane infrastructure.

4. The Library

The Library is heavily used by residents, and serves as an important and vital asset to the community. It is also proximate to existing bike lanes along Concord Avenue and the proposed Community Path.

5. Royal Belmont

The Royal Belmont is proximate to Alewife Station as well as the Minuteman Commuter Bikeway, and provides residential density that is needed to support the bikeshare system.

6. Fitchburg Cutoff Bike Path/Hill Estates

Hill Estates provides the residential density needed to support the bikeshare system, and is proximate to the Fitchburg Cutoff Bike Path, Alewife Station, and the proposed Community Path.

7. Concord Avenue and Bright Road

This intersection is proximate to the existing bike lanes along Concord Avenue, bus routes connecting Belmont to Harvard Square, and the Fitchburg Cutoff Bike Path.

8. Grove Street Playground

The Playground offers recreational and open space amenities, is adjacent to existing bike lanes along Grove Street, and is along a bus route connecting Belmont Center to Harvard Square. The Playground is also proximate to Fresh Pond, and the Cambridge/Belmont line.

9. Harvard Lawn

Harvard Lawn is one of the densest neighborhoods in Town, which is beneficial to the bikeshare system, and is proximate to the existing bike lanes along Trapelo Road.

10. Cushing Square

Cushing Square serves as a shopping destination and is served by a bus route that connects the Waverley Square Commuter Station with Harvard Square, it also will offer the needed residential density once construction of the Bradford (formerly Cushing Village) is complete.

11. Beech Street Center/Town Field

The Center and Town Field are a civic and cultural hub for the Town, and also provide recreational and open space amenities.

12. Pequotette Park

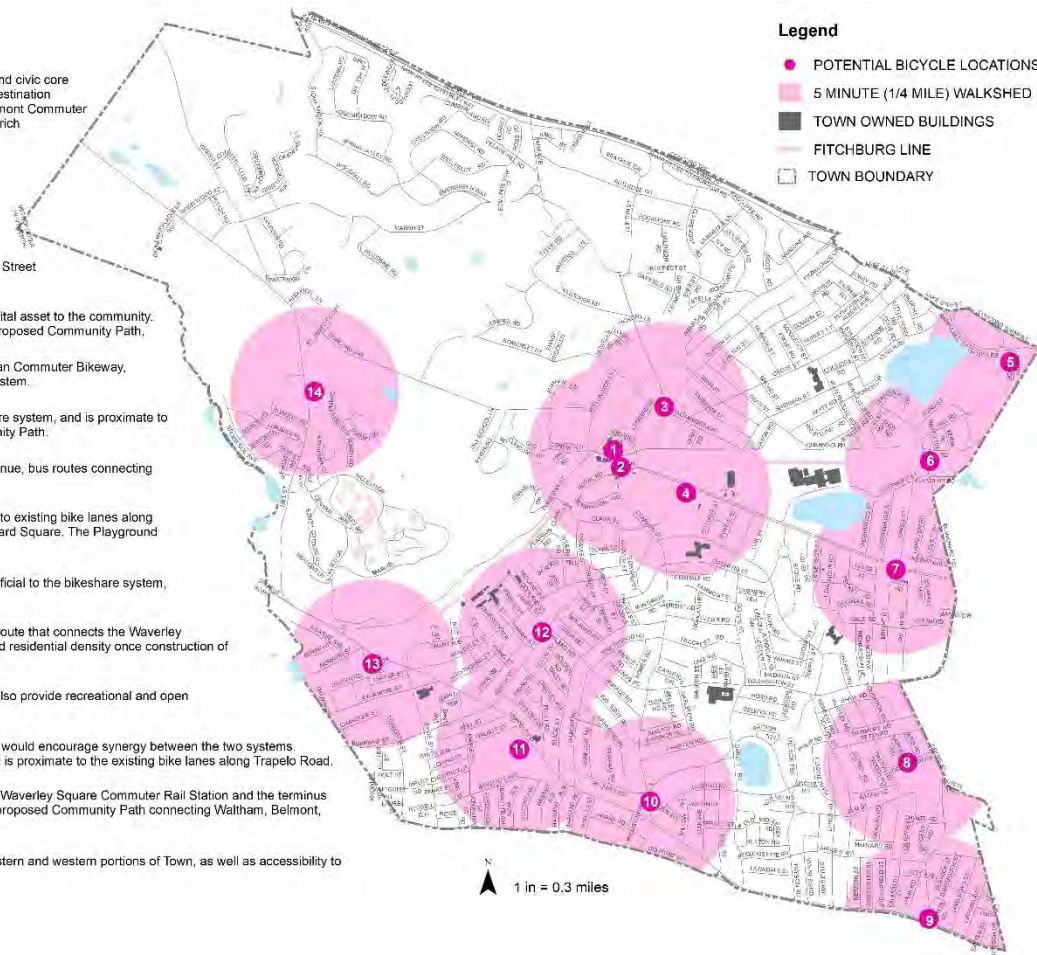
The Park is already home to a ZipCar location, and locating a bicycle here would encourage synergy between the two systems. Additionally, the park provides recreational and open space amenities, and is proximate to the existing bike lanes along Trapelo Road.

13. Waverley Square

The Square is an important shopping destination and is the location of the Waverley Square Commuter Rail Station and the terminus of a bus route connecting Belmont to Harvard Square. It is also along the proposed Community Path connecting Waltham, Belmont, and Cambridge.

14. Lone Tree Hill Parking Lot

The Lone Tree Hill Parking Lot would provide connectivity between the eastern and western portions of Town, as well as accessibility to valuable and proximate open space amenities and trail networks.





Next Steps

April 9th, 2018 – Belmont Board of Selectmen vote on whether or not to sign the MOU.

Spring 2018 – MAPC and the vendors will finalize their Master Contract; Town of Belmont will work with vendors to draft a Statement of Work (SOW) that will function as the contract between the Town and the vendors

Late Spring/Early Summer 2018 – SOW will be finalized and the system will be launched (some municipalities have expressed ability to and interest in an earlier launch).

Next 3 Years – The Master Contract can be renewed annually for 3 years; additional bikes may be added to the system over time.