



Public Safety & Transportation Committee Agenda

City of Newton **In City Council**

Wednesday, May 20, 2020

The Public Safety & Transportation Committee will hold this meeting as a virtual meeting on Wednesday, May 20, 2020 at 7:00 p.m. To view this meeting use this link at the above date and time:
<https://us02web.zoom.us/j/96581816814>

One tap mobile

+13017158592,,96581816814# US (Germantown)

Dial by your location

+1 646 558 8656 US (New York)

Meeting ID: 965 8181 6814

Items Scheduled for Discussion:

Referred to Public Safety & Transportation and Finance Committees

#260-20 Authorization to expend a MassDOT grant in the amount of \$80,000

HER HONOR THE MAYOR requesting authorization to accept and expend an eighty thousand dollar (\$80,000) grant from the MassDOT's Workforce Transportation Program with twenty thousand dollars (\$20,000) in match funding to expand the Bluebikes system.

Referred to Public Safety & Transportation and Finance Committees

#261-20 Accept six Bike Share Stations from MetroFutures Inc.

HER HONOR THE MAYOR requesting authorization to accept six bike share stations worth approximately two hundred twenty-four thousand two hundred fifty-seven dollars (\$224,257) in conjunction with the expansion of the Bluebikes system.

Respectfully submitted,
Jacob D. Auchincloss, Chair

The location of this meeting is accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

260-20 & 261-20

Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

Honorable City Councilors:

I respectfully submit a docket item to your Honorable Council requesting the approval to accept and expend \$80,000 in grant funding from the MassDOT's Workforce Transportation Program to expand the Bluebikes system into Newton this summer. The City will provide \$20,000 in match funding and will contract with Motivate, the firm that manages the Bluebikes system in metro Boston. In addition, the City will be gifted the equipment (including bikes) for six bike share stations from MetroFutures Inc. valued at approximately \$224,257.

Attached is memo from Director of Transportation Planning Nicole Freedman regarding the grant. Also attached is the project summary submitted to MassDOT by the regional collaborative of Arlington, Chelsea, Newton and Watertown. Currently Bluebikes are operating within the Brookline-Cambridge-Boston-Somerville-Everett area.

Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller

May 11, 2020

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2020 MAY 11 AM 11:37
CITY CLERK
NEWTON, MA. 02459



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone
(617) 796-1120
Telefax
(617) 796-1142
TDD/TTY
(617) 796-1089
www.newtonma.gov

Barney S. Heath
Director

MEMORANDUM

Date: May 11, 2020
To: Maureen Lemieux, Chief Financial Officer
From: Nicole Freedman, Director of Transportation Planning
Cc: Barney Heath, Director of Planning
Subject: Request to Docket Item to Accept MassDOT Workforce Transportation Grant,
and bike stations for bike share

We request approval to accept and expend the following items to support Newton's planned bike share system.

1. \$80,000 in grant funding from MassDOT's Workforce Transportation Program
2. A gift of the equipment for six bike share stations including associated bikes from 501(c)(3) MetroFuture Inc, valued at approximately \$224,257.

The City is contracting with Motivate to provide operations for an expansion of the Bluebikes system into Newton in summer, 2020. The City will provide \$20,000 in match funding to assist with this launch.



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO
Astrid Glynn, MassDOT Rail & Transit Administrator

260-20 & 261-20



February 5, 2020

Mr. Ben Cares
City of Chelsea
500 Broadway, Room 101-104
Chelsea, MA 02150

Dear Mr. Cares,

On behalf of Governor Baker and Lieutenant Governor Polito, I am pleased to notify you that the City of Chelsea has been competitively selected to receive a Workforce Transportation Program funding award for the following project(s):

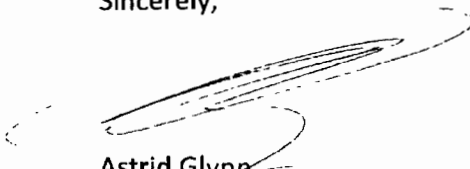
Bike-Share System Implementation Program in the amount of **\$340,000**

Providing more reliable and convenient travel options for workers will be an important component of our economic success. We are very pleased to support your effort in that area.

In the coming weeks, you will receive further information from the MassDOT Transit Unit detailing next steps. Please feel free to contact Thomas Schiavone (Thomas.Schiavone@dot.state.ma.us) if you have any questions in the meantime.

Thank you again for your continued commitment to improving transportation options across the Commonwealth.

Sincerely,



Astrid Glynn
Rail & Transit Administrator

MassDOT's 2019
Workforce Transportation Program Grant
A Bike-Share System Implementation Program
A Regional Application Between
Arlington, MA
Chelsea, MA
Newton, MA
Watertown, MA

Lead Contact for Application:
Benjamin Cares, Planner/Project Manager, City of Chelsea
617.466.4187, bcares@chelseama.gov



Town of Arlington

Adam W. Chapdelaine
Town Manager

730 Massachusetts Avenue
Arlington MA 02476-4908
Phone (781) 316-3090

October 7, 2019

Alex Cox
Manager of Transit Grant Programs
Massachusetts Department of Transportation
10 Park Plaza, Suite 4160
Boston, MA 02116

Re: Workforce Transportation Grant – Joint Bike Share/Blue Bikes Application

Dear Mr. Cox:

I am writing in support of the joint application from Arlington, Newton, Chelsea, and Watertown for capital investment to become part of the Bluebikes bike share program. A majority of residents from the Town of Arlington commute to Boston and Cambridge and would benefit greatly from an interoperable bike share system that would allow these workers to commute directly from Arlington to these cities via bike share.

Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities into neighboring communities. Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is the best option for creating a truly regional and sustainable first/last mile transportation solution. We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that a fully integrated regional bike share system will provide even more benefits to our workers and residents.

The Town plans to put in a 20% share of the \$100,000 requested for our portion of the application, or \$20,000. We have requested capital funding through our budgetary process to pay for this match, which will need to be approved by Town Meeting in spring 2020.

Thank you for your consideration of this application. Should you have questions about this letter, please contact Daniel Amstutz, Senior Transportation Planner, at damstutz@town.arlington.ma.us or at 781-316-3093.

Sincerely,

A handwritten signature in black ink, appearing to read "Adam W. Chapdelaine".

Adam W. Chapdelaine
Town Manager

Cc: Jennifer Raitt, Director, Department of Planning & Community Development



CITY OF CHELSEA, MA

City Hall, 500 Broadway • Chelsea, MA 02150

October 11, 2019

To Whom It May Concern,

I am pleased to submit our regional application for the MassDOT Workforce Transportation Program grant with partner municipalities Arlington, Newton and Watertown. Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities of Boston, Somerville, and Cambridge and into neighboring communities and gateway cities.

Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is the best option for creating a truly regional and sustainable first/last mile transportation solution.

We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that a fully integrated regional bike share system will provide even more benefits to our workers and residents.

Thank you for your consideration of our regional application.

Sincerely,

Thomas G. Ambrosino

City Manager

City of Chelsea



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

October 11, 2019

Astrid Glynn
Rail and Transit Administrator
MassDOT Rail and Transit Division
10 Park Plaza, Suite 4160
Boston, MA 02116

Dear Astrid,

I am pleased to submit our collective application for a MassDOT Workforce Transportation Program grant with partner municipalities Arlington, Chelsea and Watertown for a bike share project.

Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities into our neighboring communities. Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is an excellent option for creating a truly regional and sustainable first/last mile transportation solution. We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that this fully integrated regional bike share system will provide even more benefits to employees and residents. Newton is prepared to commit \$20,000 as match (subject to City Council approval) to \$80,000 in grant money requested for five bike stations in Newton.

Thank you for your consideration of our collective application.

Sincerely,

Ruthanne Fuller

A handwritten signature in blue ink that reads "Ruthanne Fuller".

Mayor, City of Newton



Watertown Town Council

Administration Building
149 Main Street
Watertown, MA 02472
Phone: 617-972-6470

ELECTED OFFICIALS:

Mark S. Sideris,
Council President

Caroline Bays,
Councilor At Large

Anthony J. Donato,
Councilor At Large

Susan G. Falkoff,
Councilor At Large

Anthony Palomba,
Councilor At Large

Angeline B. Kounellis,
District A Councilor

Lisa J. Feltner,
District B Councilor

Vincent J. Piccirilli, Jr.,
District C Councilor

Kenneth M. Woodland
District D Councilor

October 8, 2019

Ms. Astrid Glynn
Rail and Transit Administrator
MassDOT
Ten Park Plaza, Suite 4160
Boston, MA 02116

Re: MassDOT Workforce Transportation Program

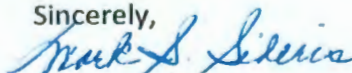
Dear Ms. Glynn:

Watertown is submitting a second application for the Workforce Transportation Program, for a joint program with Newton, Arlington and Chelsea, to launch a bike share program that would expand BlueBikes into the four communities. Watertown has been hosting LimeBikes for the past year and a half, with some success. However, a limiting factor for the LimeBikes program is that bikes cannot be taken into Boston and Cambridge, and therefore cannot be used to access the MBTA subway stations. Expanding BlueBikes into Watertown could potentially greatly increase our public transit ridership. Transit use by residents is lower than it could be because it consists only of buses. BlueBikes would provide residents with an additional means to access the Red and Green Lines. In addition, Watertown has a growing supply of office and lab space, with many new employees coming to Watertown from varying locations. BlueBikes would therefore serve both employees coming into Watertown and residents leaving Watertown during peak commuting hours. We think this could have an impact on congestion and air quality.

The Watertown Town Council strongly supports the application of the four communities, Watertown, Newton, Arlington and Chelsea, to help fund a regional bike share program. In addition to expanding transportation choices in Town, we value the opportunity to develop a regional transportation network with our neighboring communities. The Town is committed to providing a local match (\$20,000), using our TNC funds.

We thank you for your consideration of our project, and look forward to working with you on it.

Sincerely,


Mark S. Sideris
Council President
MSP



185 Berry Street
Suite 5000
San Francisco, CA 94107

10.8.2019

Mr. Alex Cox

Manager of Transit Grant Programs

Massachusetts Department of Transportation

10 Park Plaza, Suite 4160

Boston, MA 02116

Dear Mr Cox,

Lyft is pleased to submit this Letter of Commitment in support of the City of Chelsea's application to the Massachusetts Department of Transportation's Workforce Transportation Program.

As you know, Lyft currently operates the municipally-owned Bluebikes bikeshare system across five municipalities – Somerville, Cambridge, Boston, Everett and Brookline. We are always looking for ways to grow the system, and would be pleased to bring the Bluebikes service to Chelsea in the future if resources allow.

Specifically, we can commit to offering the following in conjunction with Chelsea's application for the

Workforce Transportation Program:

- Install at least \$100,000 of bikeshare equipment under an exclusive bikeshare program in Chelsea.

Please do not hesitate to reach out with any questions.

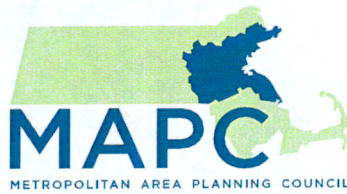
Sincerely,

Miller Nuttle

Miller Nuttle

Senior Manager, Bike and Pedestrian Policy

Lyft



SMART GROWTH AND REGIONAL COLLABORATION

October 11, 2019

Alex Cox

Manager of Transit Grant Programs

Massachusetts Department of Transportation

10 Park Plaza, Suite 4160

Boston, MA 02116

Dear Mr. Cox,

The Metropolitan Area Planning Council is pleased to submit a letter of support of the Town of Arlington and the Cities of Chelsea, Newton, and Watertown's grant application to the Massachusetts Department of Transportation Workforce Transportation Grant Program.

MAPC has worked in close partnership with these communities for the past two years to establish a regional bike share system that connects residents and employees to and from transit, and offers an alternative to vehicle travel for short trips. Advancing regional bike share is an important piece of our mission to promote smart growth and regional collaboration. Not only does bike share encourage more active transportation, but also helps alleviate the growing traffic congestion crisis impacting our region.

Arlington, Chelsea, Newton, and Watertown have all seen strong ridership and enthusiasm among residents for bike share. We are committed to continuing our work with these communities, Lyft, and the cities and towns currently served by the BlueBikes system to grow the network. Among many transportation and public health benefits, this expansion will also offer more residents the ability to bike to job centers in the region. MAPC has been a dedicated partner since the inception of this system, and we look forward to continuing to convene and facilitate these important discussions.

Thank you for your consideration, and please do not hesitate to reach out if you have any questions.

Sincerely,

Eric Bourassa

Director of Transportation

Metropolitan Area Planning Council

Erin Wortman, President | Adam Chapdelaine, Vice President | Samuel Seidel, Treasurer | Sandra Hackman, Secretary | Marc Draisen, Executive Director Metropolitan Area Planning Council | 60 Temple Place | Boston, Massachusetts 02111 | 617-933-0700 | 617-482-7185 fax | mapc.org

INTRODUCTION

The municipalities of Arlington, Chelsea, Newton and Watertown are seeking funding to supplement the capital and start-up costs of a bike-share system provided through Lyft's Bluebikes program. Through this partnership, the municipalities propose a coordinated effort consisting of contracting, marketing, deployment, and operational management.

Each municipality has seen significant ridership in their current bike-share systems under Lime. Unfortunately, Lime's contract will terminate at the beginning of May 2020, thus leaving our municipalities without a system, unless a viable alternative is financed, procured, and deployed. Inter-municipal consultations and public feedback have magnified the need to maintain a bike share system, with preferences expressed for a network with physical docking stations. Access to bicycle transportation is key for the municipalities, as the regional workforce increasingly depends on bicycling as a commuting method, particularly employees that work evening and overnight shifts after the MBTA has closed down.

The BlueBike system, overseen by Lyft, offers an opportunity to conceive a regional, integrative bike share system, underscored by the interoperability with the existing BlueBike network in Boston and surrounding communities. In order to contract with Lyft, municipalities must contribute \$100,000 (50%) to a total start-up cost of \$200,000. Once operational, Lyft will fully subsidize maintenance costs if the municipalities grant to Lyft the exclusive right to operate bike share systems in their jurisdiction. In order to continue a bike-share system within our municipalities, we are submitting this application to fund the implementation of the BlueBikes system at or around May 1st, 2020, in order to coincide with Lime's departure.

A regional expansion of a demonstrably successful bike-share system, evidenced by the experience of Boston, Cambridge, and Somerville, is an effective way to continue a promotion of a modal shift away from single occupancy vehicles within the municipalities, while serving demographic cohorts that are in need of innovative and cost-effective modes of transportation to and from their places of work.

Additionally, we have coordinated our efforts to establish a cohesive implementation plan, project scope, and budgetary forecast in order to demonstrate the feasibility of this project upon receipt of grant funding. This is underpinned by a comprehensive citizen outreach and engagement plan. This engagement approach is centered on informing the public of the availability and ease of use of bike sharing and soliciting input on the system's architecture and siting locations. Furthermore, we have also compiled letters of support from each City's Executive Officer, all of which are poised to lead the implementation of this system if grant funding is secured, as well as Lyft, whom have committed to fund a share of capital start-up costs.

The total project cost for each municipality is \$200,000, equaling a total project cost for all municipalities of \$800,000. Each municipality, as outlined within their attached respective budgets, has committed at least 20% matching funds in order to satisfy the grant requirement, through a combination of capital funding and/or Lyft's private commitment. Based on this financial plan,

Chelsea is requesting \$100,000 in MassDOT grant funds, while Arlington, Newton, and Watertown are each requesting \$80,000 in grant funds. Therefore, we respectfully request a total of \$340,000.

ANALYSIS OF LIME-BIKE DATA

Demonstrable ridership shows a demand for bike-share systems within our communities. For example, the Metropolitan Area Planning Council (MAPC) noted approximately 30,000 trips per month were observed across sixteen cities and towns from June through October. Ridership dropped significantly during winter months from January through March, but still maintained approximately 1,500 trips per month. In Table 1, we show each municipality's Lime bike ridership from April 1, 2018 through June 30th, 2019.

Table 1: Bike Share Applicant Municipalities (April 1st, 2018 to June 30th, 2019)

Municipality	Total Number of Trips	Total Weekday Trips	Total Weekend Trips
Arlington	17,327	12,592	4,734
Chelsea	13,455	10,138	3,317
Newton	19,420	14,314	5,106
Watertown	14,335	10,161	4,174
Total	64,537	47,205	17,332

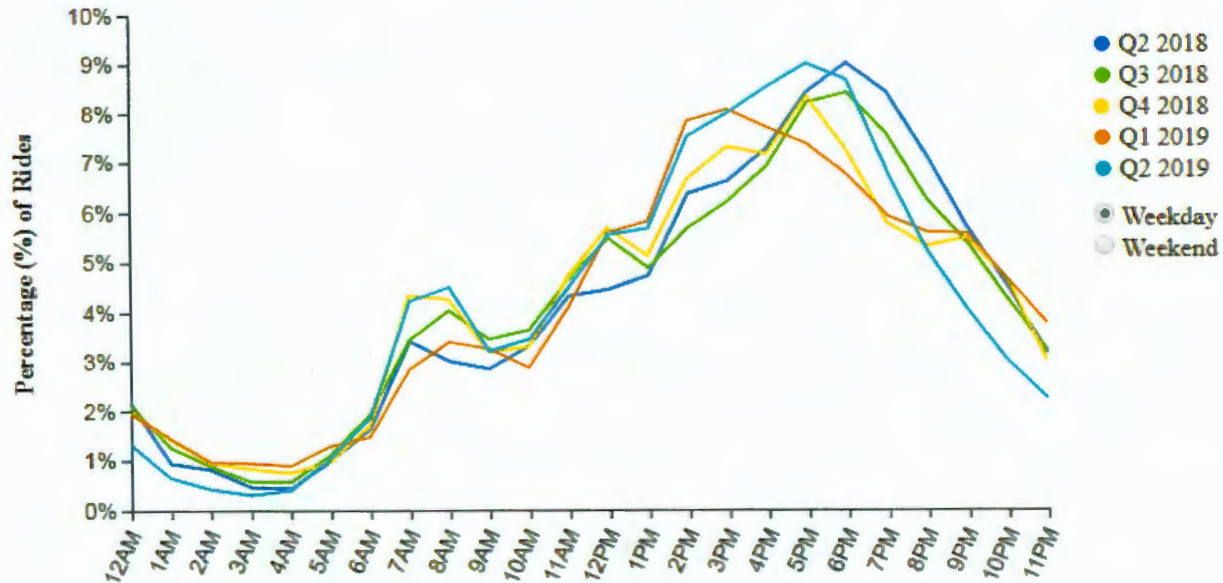
*MAPC's Dockless Bike Travel in Metro Boston Report

This data supports that there is a significant level of demand for bike-share within our municipalities. Additionally, as illustrated in the graph below, high levels of usage occurred during peak commuting hours, specifically during afternoon trips (Figure 1). According to MAPC Lime Data, which documented over 250,000 trips from April 1, 2018 to June 30th, 2019 the majority of rides occurred daily within evening peak hours.

Additionally, survey data (Attachment #1) collected by the MAPC illuminates our resident's usage of the existing bike-share systems for commuting purposes. A diverse cross-section of 233 riders were surveyed in order to assess their purposes for using Lime's bike-share system, yielding 78 riders stating they used Lime bike's system for commuting purposes. Therefore, with the continuation of a bike-share system, we estimate that our ridership post-implementation of the Bluebikes system will be comprised of at least 33% workforce or student commuters. Moreover, with targeted implementation of Bluebike stations within central business districts and careful coordination with businesses and other employers, our implementation plan will increase projected workforce ridership and promote further modal shift while providing an innovative, sustainable transportation mode to our communities.

Figure 1: MAPC Lime Data (2019)

Hourly Pattern of Trips by Quarter on Weekdays or Weekends



It is important to note that these ridership numbers are reflective of Lime's *dockless* system; however, we do not expect ridership to decrease in moving to a station-based system like Bluebikes. Rather, we believe that a regionally connected system within Boston's metropolitan region, with stations located at key public transit stops and station and businesses districts will demonstrably increase ridership, and specifically ridership within workforce populations.

Additionally, based on dialogue with Lyft and other BlueBikes partners, there is also a strong potential for the Bluebikes system to evolve towards hybrid docked and dockless bike types, pending action from the state legislature on the topic. In order for these hybrid bike systems to become more viable, however, a strong docked bike system must be established in order to develop financial stability and a robust initial rider network.

BENEFIT OF BLUEBIKES TO WORKFORCE TRANSPORTATION AND REGION

Through an analysis of existing bike-share data, we have demonstrated demand for the current bike-share system within each of our municipalities. We have also related how existing data demonstrates a potential need for bike-share systems within our workforce, through observations of peak usage during commuting hours, and through the MAPC survey results. Beyond this, the introduction of a Bluebikes system will increase ridership among our workforce populations if implemented in a way that benefits central business districts and key public transit locations.

Our implementation plan involves significant coordination with Lyft representatives and businesses in order to target locations that will benefit the largest population of potential riders while ensuring Lyft reaches their ridership and budgetary benchmarks. Lyft has communicated to each of our municipality's their desire to implement stations within central business districts and along key transit routes, as this benefits dense populations with characteristics that align with high usage and the potential to use bike-shares for commuting and daily purposes. We believe this will promote further usage of bike-share systems to commute to and from work directly and within first-mile and last mile-gaps between transit.

NATCO released a report on bike-share systems throughout the United States. Their review of bike-share data within Seattle, WA resulted in the following findings on docked systems versus dockless systems, which reinforces our assumptions on how a station-based bike-share system will benefit our municipality's workers:

"Data from Seattle suggests that dockless bike share may be used differently from station-based bike share systems in other places around the U.S. and world. For example, typically station-based systems generate the most trips on weekdays and use within the average day follows 9-5 commuting patterns. In 2017, 48% of all station-based bike share trips took place during rush hours (7-9AM or 4-6PM), and 76% of all trips took place on weekdays.¹

In contrast, dockless bike share in Seattle has an evening peak but no morning rush hour peak and trips are spread out over the day with highest use seen on weekends, suggesting more recreational use.

The presence of weekday and AM/PM rush hour peaks is important because it suggests that station-based systems are part of a city's overall transportation network and are used in the course of a typical commute to work or school. For instance, annual member surveys from Washington, DC and Chicago also show significant bike share to transit crossover: 65% of Capital Bike Share members and 42% of Divvy members respectively report using bike share as part of longer transit commutes."²

The findings of Seattle's study as published in NATCO also make a substantial case for the ability of bike-share systems to supplement public transportation routes, especially when effectively placed at key transit locations. Moreover, a transition from Lime's dockless system to the station-based system under Lyft will likely generate increased ridership among workers and residents alike, which will be furthered by the tactical siting of the BlueBikes docking systems in key employment centers, industry clusters, and central business districts.

Finally, Lyft provides financial accessibility of Bluebikes to low-income demographics through a robust low-income program. Low-income individuals tend to have diminishing affordability for expensive single-occupancy vehicles and rely heavily on public transportation. Through provision of an innovative solution to filling public transportation gaps within last-mile

¹ NATCO's Bike Share and Shared Micromobility Initiative, Bike Share in the U.S.: 2017

and first-mile trips, Bluebikes can provide a bike-share system that benefits a particular subset of a lower-income workforce population.

ENVIRONMENTAL IMPACT

Modal shifts from single-occupancy vehicles towards public transportation and bicycling may reduce congestion within Boston's metropolitan urban core and inner ring when coupled with other congestion reduction policy measures. Our municipalities are working towards infrastructure that promotes and accommodates walking, bicycling, and the use of public transit.

Notably, each of municipalities has participated to some degree within the Complete Streets initiative through MassDOT. Infrastructure improvements under this program include increased safety among cyclists through the implementation of bicycle lanes and signage programs which help to encourage cycling within our communities. Through our participation in this effort we have demonstrated our ability to provide adequate infrastructure in order to accommodate a regional bike-share system, and to further increase modal shifts within our municipalities.

Each of our municipalities has some level of characteristics that qualify them as Environmental Justice (EJ) communities (Attachment #3). We have vulnerable communities who are more susceptible than others to the impacts of pollutants and health hazards perpetuated by the use of cars and other motor-vehicles. Primarily, asthma rates have been reported state-wide by Mass.gov at the rate of 10.2% among adults and 12.9% among children. These rates are significantly higher among residents in close proximity to congested, densely populated, and highly traveled streets, who often fall within at least one of the three characteristics of EJ populations. Any modal shift from a motor-vehicle to the use of bikes will contribute to the reduction of pollutants that disproportionately affect these EJ communities.

The act of cycling produces virtually zero greenhouse gas emissions, making it enormously beneficial to the reduction of emissions state-wide. Any modal shift from a motor-vehicle to the use of bikes will contribute to the reduction of pollutants that disproportionately affect these EJ communities. We are confident that these metrics will result in a positive Air Quality Benefit Analysis (Attachment #2), resulting in significant reduction in CO₂ levels and other greenhouse gas emissions.

IMPLEMENTATION PLAN

Our implementation plan outlines our strategy once we have secured adequate funding to engage in a contract with Lyft, which would occur from May 2020 until May 2022, with the ability to continue this contract if each municipality chooses to do so.

1. Contract with Lyft

- a. Contract with Lyft would begin May 1st, 2020 and run for two years, with the option to renew the contract for another two years, and subsequently, an additional two years. That means each municipality has the opportunity to continuously contract with Lyft, to at least May of 2026 or potentially further
- b. The contract, per municipality, enables the installation of five bike-share stations through a commitment of \$100,000 by the municipality. Subsequently, Lyft covers all other yearly expenses related to Operations and Maintenance of the system

2. Site Suitability Assessment

- a. Municipal Staff create standardized methodology for selecting locations for each station, in consultation with stakeholders. This methodology will be consistently applied throughout all municipalities involved in this grant application. Municipal Staff will hold two (2) public meetings as part of this process to gather feedback on the assessment. Through their respective Complete Streets planning initiatives, the municipalities have conducted a gap analysis, which yielded findings that can be integrated into this assessment
- b. Public Right-of-Ways, transit hubs, dense residential areas, and business districts are primary targets in order to ensure active ridership and benefit to workforce population. Key indicators for consideration will include, but not be limited to, employment density, residential density, industry clusters, public transit stop and station locations, demography, and socioeconomic characteristics

3. Stakeholder Engagement

- a. Coordinate with community based non-profits and other entities that can promote the installation of stations and ensure residents will be aware of the locations and function of these stations.
- b. Engage with businesses in municipality in order to assess who within their workforce can benefit from bike sharing systems
- c. Promote effort during regularly scheduled municipal meetings, such as stakeholder committees, board and commission meetings, and executive leadership meetings
- d. Coordinate with local Chambers of Commerce and other trade, industry, and labor groups to collect feedback and disseminate information about the effort.

4. Public Engagement

- a. Hold public meetings to discuss installation of stations and ride share system; assess community feedback and tailor outreach efforts to increase awareness on bike safety and usage of ride sharing systems
- b. Installation involves delivery, off-loading, and placement of equipment. Installation does not require other attendant infrastructure, such as electrical connections, as the stations are self-sustaining

5. Installation of Stations

- a. Municipal Staff along with Lyft Representatives monitor the physical installation of stations
- b. Installation involves delivery, off-loading, and placement of equipment. Installation does not require other attendant infrastructure, such as electrical connections, as the stations are self-sustaining
- c. Overall 20 stations would be installed between our four municipalities with 15 bikes per station; therefore, 300 bikes would be introduced to the regional bike-share system

6. Monitoring of Ridership and Modal Shift

- a. Ongoing data collection from Lyft in order to assess ridership, rider habits, and benefit to workforce and other demographics within municipal populations
 - i. Three mechanics may be deployed in order to monitor activity and benefit of bike-share systems to workforce populations

1. First-mile and last-mile utility during peak commuting hours can be assessed through Lyft's amalgamation of data
2. Diverse cross-sectional surveying of Bluebike users by regional planning commissions like MAPC, or individually within municipalities, or through Lyft itself
3. Evaluation of ridership during off-hours of public transportation within Lyft amalgamated data sets

KEY PERSONNEL

The following staff members for each municipality will oversee the implementation, operation, maintenance, and outreach of the Bluebikes system. In this way, we ensure sustainability and longevity of the system during and after its implementation.

Arlington			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Daniel Amstutz	Planning & Community Development	Senior Transportation Planner	Primary project manager for bike share for City
Erin Zwirko	Planning & Community Development	Assistant Director	Oversees specific project goals and benchmarks, coordinates with Senior Transportation Planner
Jennifer Raitt	Planning & Community Development	Director	Oversees general project goals and benchmarks

Chelsea			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Benjamin Cares	Planning & Development	Project Manager, Planner	Primary Project Manager, Primary project manager for bike share for City
Alexander Train	Planning & Development	Assistant Director	Oversees specific project goals and benchmarks, coordinates with Project Manager
John DePriest	Planning & Development	Director	Oversees general project goals and benchmarks

Newton			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Nicole Freedman	Planning Department	Director of Transportation Planning	Primary project manager for bike share for City

Barney Heath	Planning Department	Director of Planning and Development	Oversees all Planning Department activity
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Watertown			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Laura Wiener	Planning and Community Development Department	Senior Transportation Planner	Primary project manager for bike share for City
Steve Magoon	Community Development and Planning	Direct of Planning and Community Development and Assistant Town Manager	Oversees all activities within DCDP

BUDGET

The full start-up and implementation cost of the Bluebikes system through Lyft is \$200,000 per municipality, totaling \$800,000. This cost covers the installation of five stations within the municipality, and subsequently Lyft will cover the operations and maintenance cost for the stations and bikes for the duration of the contract period. This financing scheme is sustainable because each municipality pays a portion of the start-up cost and then is not required to inject any further capital in order to run and maintain the Bluebikes system.

Matching requirements for this grant are broken down in the budget appended to this application. Each municipality more than satisfies the matching requirement of the grant, averaging a match of 57.5% of total project funds across our four municipalities.

PARTNERSHIPS

The ongoing implementation of bike-share system within Boston and its surrounding municipalities is an existing partnership in and of itself unified under the MAPC's oversight and management. Through this regional grant application, we reinforce this unified effort and demonstrate how a regional bike-share system provides an effective means of transportation within our municipalities and its connectivity to the metropolitan region. We believe that this partnership with the MAPC qualifies as a public and regional partnership under this program. Following a grant award, the municipalities intend to continue meeting monthly through this regional bike share working group.

Additionally, we will establish a public-private partnership with Lyft. This partnership, as outlined above within the implementation process and budget, allows for sustainable implementation and maintenance of bike-share stations. Each municipality contributes staff time, expertise, and on-the-ground knowledge for effective placement and planning of bike-share systems, while Lyft provides the financial capital and administrative oversight to continue

providing Bluebikes to match demand, and can adequately run the necessary operations and maintenance of the system.

CONCLUSIONS

Each of our municipalities has demonstrated demand for bike-share systems over the past year of contracting with Lime. Through MAPC survey data, we have seen that a diverse cross-section of 233 individuals utilize Lime bikes for commuting to work or school. Additionally, further analysis of data has yielded high percentages of ridership during peak commuting hours. Considering these two forms of data, it appears that there is significant demand for bike-share systems as a form of commuting. Our municipalities believe that we can increase this modal shift by connecting to existing Bluebike systems under Lyft within Boston, Somerville, Cambridge and subsequently, the entire region of the Boston Metropolitan Area.

In order to achieve our goals in providing a regional bike-share system to each of our municipalities, we hope to supplement the installation and start-up of a Bluebikes system through funding by the Workforce Transportation Grant. We are confident that through careful planning and coordination with businesses, Lyft, our residents, and the region as a whole, we will achieve our projected ridership benchmarks and see ridership increase substantially within workforce users.

ATTACHMENT #1 (MAPC Survey Results)

MAPC Lime Riders' Characteristics, Travel Patterns, and Preferences

In June 2019, we distributed a survey to MAPC-area riders and collected 233 responses.

We found:

MAPC-area Lime riders are a diverse cross-section of the city's residents and visitors:

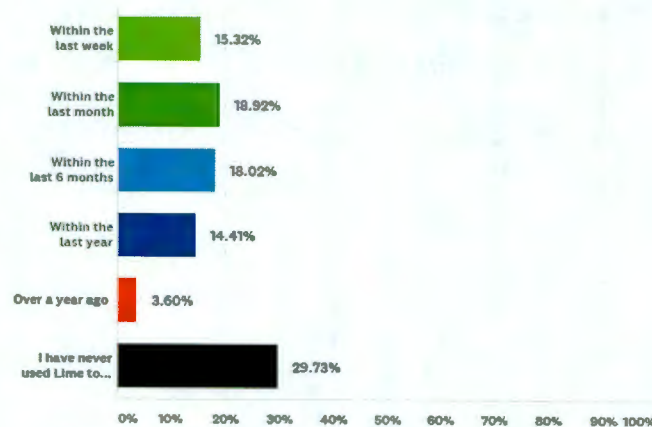
- **39% of riders** live in households earning **less than \$75,000 a year**.
 - Most Lime riders are employed: **77% work full time** and 8% work part time. About 15% of riders are students.
 - 81% of riders have an Associate, Bachelor's, or advanced (e.g., PhD, MD) degree.
 - The **average age** of a Lime rider is **37**, and 25% of Lime riders are 46 or older.
 - 75% of riders in the survey were White, 13% were Asian, and 12% were Hispanic.
 - **38% of riders** in the survey identified as **female** and 60% identified as male. This proportion of female riders is as high or higher than many docked bikeshare systems as well as personal bicycle use.
 - Only **5.6% of riders** stated that they lived outside of the MAPC region.
 - **53% of riders** last took a ride on a *personal bike* over a month ago, suggesting that Lime may be activating new riders.
 - **40% of riders** used BlueBike in the last month, showing how Lime and BlueBike are providing a robust network of first and last-mile solutions for MAPC-area travelers.
-

Lime enables MAPC-area riders to reduce their reliance on cars:

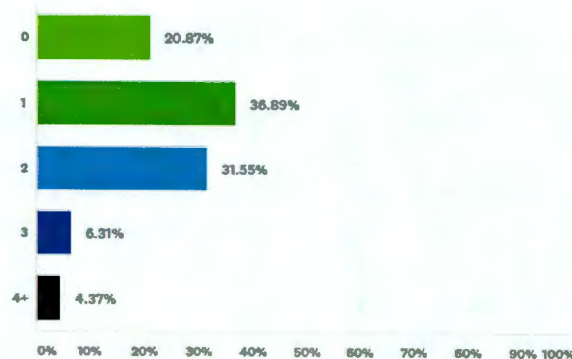
- On their most recent Lime rides, **32.8% of riders** used Lime rather than a car (personally owned, taxi, or ridehailing).
- **34.2% of riders** used Lime to get to or from public transit within the last month.
- Due to our riders' shift away from car trips, we estimate that Lime saved roughly **61 metric tons of CO2** that would have otherwise been emitted (as of July 2019).

- **57.8% of riders** live in households that own 1 or fewer cars.

Q7 When was the last time you used Lime to get to or from public transit?



Q9 How many cars do you or your household currently own?



Lime helps MAPC-area riders fulfill their everyday transportation needs. On their most recent Lime rides:

- **33% of riders** used Lime to commute to or from work or school.
- **17.2% of riders** used Lime to travel to or from dining or entertainment.

ATTACHMENT #2

Attachment B: Air Quality Benefits Analysis

This grant program is funded through the Congestion Mitigation and Air Quality Improvement (CMAQ)

Program, which is administered by the Federal Highway Administration (FHWA). The purpose of the CMAQ Program is to support transportation projects, transit service, and other related efforts that contribute to air quality improvements and mitigate the impacts of congestion. As such, to meet federal requirements related to CMAQ, project applicants are required to demonstrate that their proposed projects will reduce emissions and provide an air quality benefit. The questions in this section address this requirement.

The answers provided to these questions will be reviewed by the CMAQ Consultation Committee, which consists of members from the Massachusetts Department of Transportation (MassDOT), the

Massachusetts Department of Environmental Protection (MassDEP), the U.S. Environmental Protection Agency (EPA), and regional planning agencies within Massachusetts.

Questionnaire

- 1.) Please select the category that most closely aligns with the proposed project:

Transit/Shuttle Service (Section A)

Bike share (Section B)

Qualitative Analysis / Other (Section C)

A. Transit/Shuttle Service Questions

- 1.) Does your organization currently operate a transit or shuttle service? If not, skip to question 2. If yes, please complete the following tables:

Table 1: Summary of Currently-Operated Transit/Shuttle Vehicles					
Vehicle ID	Vehicle Type	Occupancy	Year of Manufacture	Vehicle Length	Fuel Required
1					
2					
3					
4					

Vehicle ID	Round Trips / Day	Length of Route (mi)	Average Speed (mph)	Daily Ridership	Days Operated / Year	Operation Hours

1						
2						
3						
4						

- 2.) Please provide the following details about the proposed transit or shuttle service and vehicles. If unsure, provide an estimate or leave blank:

Table 2: Summary of Proposed Transit/Shuttle Vehicles					
Vehicle ID	Vehicle Type	Occupancy (Number of Passengers)	Year of Manufacture	Vehicle Length	Fuel Required

Vehicle ID	Round Trips / Day	Length of Route (mi)	Average Speed (mph)	Daily Ridership	Days Operated / Year	Operation Hours

B. Bike Share Questions

- 1.) How many bikes will be included in this project?

300 bikes total will be included; five stations with fifteen bikes each will be implemented among four municipalities as a part of this program.

- 2.) What is the expected average bike trip length?

The expected average bike trip length is 0.6 miles, based on the average trip taken by Lime bike riders and according to MAPC data.

3.) What is the expected average number of trips per bike per day?

We expect an average number of 1.7 trips per bike per day, this value was calculated through an analysis performed by NATCO under their Bike Share and Micromobility Initiative on station-based systems.

4.) How many days of the year will your proposed bike share operate?

Approximately 365, although this will be heavily affected by inclement weather and the decision making process of each municipalities Planning & Development and Public Works Departments.

C. Qualitative Analysis

If none of the areas above apply to your project, please provide a qualitative assessment of why your project is expected to reduce emissions, citing applicable research where possible.

Please note that although quantitative analysis of air quality impacts is expected for almost all project types under the CMAQ program, an exception will be made when it is not possible to accurately quantify emissions benefits. In these cases, qualitative assessments based on reasoned and logical determinations that the projects or programs will decrease emissions will be conducted.

ATTACHMENT #3 (List of Environmental Justice Communities)

Municipality	EJ criteria (Minority, Income, English Isolation)*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Acton	M	1.00	3	15	20.0%	7181	21924	32.8%
Adams	I	1.00	6	10	60.0%	5237	8485	61.7%
Agawam	I	1.00	1	17	5.9%	1213	28438	4.3%
Amherst	MIE	1.36	11	22	50.0%	14166	37819	37.5%
Andover	M	1.00	2	20	10.0%	2957	33201	8.9%
Aquinnah	M	1.00	1	1	100.0%	311	311	100.0%
Arlington	MI	1.17	6	44	13.6%	7333	42844	17.1%
Ashland	M	1.00	1	9	11.1%	901	16593	5.4%
Athol	I	1.00	2	8	25.0%	3108	11584	26.8%
Attleboro	MI	1.50	4	30	13.3%	5470	43593	12.5%
Ayer	MI	1.00	4	7	57.1%	3962	7427	53.3%
Barnstable	MI	1.38	8	38	21.1%	8838	45193	19.6%
Barre	I	1.00	1	4	25.0%	883	5398	16.4%
Becket	I	1.00	1	2	50.0%	1071	1779	60.2%
Belmont	M	1.00	5	27	18.5%	5360	24729	21.7%
Beverly	MI	1.50	2	30	6.7%	1727	39502	4.4%
Billerica	M	1.00	1	30	3.3%	2746	40243	6.8%
Boston	MIE	1.60	396	559	70.8%	456403	617603	73.9%
Braintree	MI	1.00	4	26	15.4%	4722	35744	13.2%
Brockton	MIE	1.34	84	87	96.6%	90,817	93810	96.8%
Brookfield	I	1.00	1	3	33.3%	891	3390	26.3%
Brookline	MIE	1.16	19	38	50.0%	29249	58732	49.8%
Burlington	M	1.00	2	15	13.3%	5088	24498	20.8%
Cambridge	MIE	1.18	55	88	62.5%	70972	105162	67.5%
Canton	M	1.00	1	11	9.1%	3085	21561	14.3%
Chelmsford	M	1.00	1	22	4.5%	1003	33802	3.0%
Chelsea	MIE	2.00	27	27	100.0%	35177	35177	100.0%
Chicopee	MIE	1.35	20	43	46.5%	28146	55298	50.9%
Clinton	MI	1.50	4	10	40.0%	5204	13606	38.2%
Dalton	I	1.00	2	7	28.6%	1538	6756	22.8%
Danvers	I	1.00	1	16	6.3%	912	26493	3.4%

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Dartmouth	I	1.00	1	19	5.3%	1300	34032	3.8%
Dedham	M	1.00	2	21	9.5%	2814	24729	11.4%
Dennis	I	1.00	3	18	16.7%	1853	14207	13.0%
Dracut	I	1.00	1	18	5.6%	1173	29457	4.0%
Eastham	I	1.00	1	6	16.7%	920	4956	18.6%
Easthampton	I	1.00	2	12	16.7%	2499	16053	15.6%
Easton	I	1.00	1	11	9.1%	1696	23112	7.3%
Everett	MIE	1.52	27	27	100.0%	41667	41667	100.0%
Fairhaven	I	1.00	2	15	13.3%	1898	15873	12.0%
Fall River	MIE	1.29	56	81	69.1%	59242	88857	66.7%
Falmouth	I	1.00	2	26	7.7%	1955	31531	6.2%
Fitchburg	MIE	1.57	23	32	71.9%	24680	40318	61.2%
Framingham	MIE	1.65	20	45	44.4%	32550	68318	47.6%
Franklin	I	1.00	1	17	5.9%	1467	31635	4.6%
Gardner	MI	1.00	5	13	38.5%	7999	20228	39.5%

Municipality	EJ criteria*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Gloucester	I	1.00	4	23	17.4%	4824	28789	16.8%
Grafton	M	1.00	1	10	10.0%	2115	17765	11.9%
Great Barrington	I	1.00	3	7	42.9%	2395	7104	33.7%
Greenfield	I	1.00	3	17	17.6%	3438	17456	19.7%
Harwich	I	1.00	1	12	8.3%	523	12243	4.3%
Haverhill	MI	1.38	13	40	32.5%	21313	60879	35.0%
Holbrook	M	1.00	1	9	11.1%	1635	10791	15.2%
Holyoke	MIE	2.15	27	37	73.0%	29053	39880	72.9%
Lancaster	I	1.00	1	4	25.0%	1900	8055	23.6%
Lawrence	MIE	2.27	55	55	100.0%	76377	76377	100.0%
Lee	I	1.00	1	6	16.7%	994	5943	16.7%
Leicester	I	1.00	1	8	12.5%	1050	10970	9.6%
Lenox	I	1.00	1	7	14.3%	480	5025	9.6%
Leominster	MI	1.33	12	26	46.2%	20721	40759	50.8%
Lexington	M	1.00	11	22	50.0%	16604	31394	52.9%
Lincoln	M	1.00	1	5	20.0%	1286	6362	20.2%
Lowell	MIE	1.46	70	80	87.5%	93309	106519	87.6%

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Ludlow	M	1.00	1	11	9.1%	2413	21103	11.4%
Lynn	MIE	1.75	56	72	77.8%	72884	90329	80.7%
Malden	MIE	1.38	50	52	96.2%	57638	59450	97.0%
Mansfield	M	1.00	1	14	7.1%	1703	23184	7.3%
Marlborough	MI	1.25	8	21	38.1%	14178	38499	36.8%
Mattapoiset	I	1.00	1	6	16.7%	569	6045	9.4%
Medford	MIE	1.15	20	53	37.7%	21905	56173	39.0%
Melrose	I	1.00	2	27	7.4%	2017	26983	7.5%
Methuen	MIE	1.40	15	35	42.9%	17463	47255	37.0%
Middleborough	I	1.00	2	14	14.3%	2189	23116	9.5%
Middleton	M	1.00	1	4	25.0%	3322	8987	37.0%
Milford	MIE	1.67	6	19	31.6%	6249	27999	22.3%
Millbury	I	1.00	1	10	10.0%	949	13261	7.2%
Milton	M	1.00	8	25	32.0%	7390	27003	27.4%
Monson	I	1.00	2	7	28.6%	556	8560	6.5%
Montague	I	1.00	4	8	50.0%	3,852	8437	45.7%
Nantucket	M	1.00	3	11	27.3%	3764	10172	37.0%
Natick	M	1.00	2	26	7.7%	2696	33006	8.2%
New Bedford	MIE	1.81	62	87	71.3%	66180	95072	69.6%
Newton	MI	1.00	10	64	15.6%	12723	85146	14.9%
North Adams	I	1.00	6	12	50.0%	7791	13708	56.8%
North Andover	MI	1.00	3	19	15.8%	4135	28352	14.6%
North Attleborough	I	1.00	1	18	5.6%	855	28712	3.0%
North Brookfield	I	1.00	1	5	20.0%	929	4680	19.9%
Northampton	MI	1.33	6	19	31.6%	7412	28549	26.0%
Norwood	MI	1.00	4	21	19.0%	5956	28602	20.8%
Oak Bluffs	MIE	1.50	2	5	40.0%	1189	4527	26.3%
Orange	I	1.00	2	7	28.6%	2311	7839	29.5%
Orleans	I	1.00	2	7	28.6%	1524	5890	25.9%

Municipality	EJ criteria*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Palmer	I	1.00	2	9	22.2%	3067	12140	25.3%
Peabody	MIE	1.50	6	32	18.8%	11074	51251	21.6%
Pittsfield	MI	1.58	19	48	39.6%	16445	44737	36.8%

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Plainville	I	1.00	1	5	20.0%	1004	8264	12.1%
Plymouth	MI	1.00	2	38	5.3%	1879	56468	3.3%
Provincetown	I	1.00	2	5	40.0%	1116	2942	37.9%
Quincy	MIE	1.16	50	72	69.4%	68791	92271	74.6%
Randolph	MI	1.05	19	19	100.0%	32112	32112	100.0%
Revere	MIE	1.44	36	42	85.7%	45247	51755	87.4%
Rockland	I	1.00	1	11	9.1%	1982	17489	11.3%
Salem	MIE	1.89	9	33	27.3%	12967	41340	31.4%
Saugus	I	1.00	1	20	5.0%	1872	26628	7.0%
Sharon	M	1.00	1	11	9.1%	2069	17612	11.7%
Sheffield	I	1.00	1	4	25.0%	729	3257	22.4%
Shirley	M	1.00	1	4	25.0%	3153	8147	38.7%
Shrewsbury	ME	1.17	6	20	30.0%	11670	35608	32.8%
Somerville	MIE	1.29	35	69	50.7%	40721	75754	53.8%
Southbridge	MIE	1.70	10	16	62.5%	11182	16719	66.9%
Spencer	I	1.00	1	10	10.0%	886	11688	7.6%
Springfield	MIE	1.81	110	121	90.9%	137083	153060	89.6%
Stoneham	I	1.00	1	17	5.9%	560	21437	2.6%
Stoughton	MI	1.17	6	19	31.6%	6661	26962	24.7%
Taunton	MIE	1.44	9	31	29.0%	13206	55874	23.6%
Tisbury	I	1.00	1	5	20.0%	702	3949	17.8%
Waltham	MI	1.18	28	48	58.3%	36094	60632	59.5%
Ware	I	1.00	2	7	28.6%	2894	9872	29.3%
Wareham	MI	1.00	4	17	23.5%	4522	21822	20.7%
Warren	I	1.00	1	4	25.0%	1296	5135	25.2%
Watertown	M	1.00	6	29	20.7%	6268	31915	19.6%
Webster	I	1.00	3	11	27.3%	5211	16767	31.1%
Wellesley	M	1.00	3	23	13.0%	5550	27982	19.8%
West Springfield	MIE	1.63	8	20	40.0%	11166	28391	39.3%
Westborough	M	1.00	4	12	33.3%	6589	18272	36.1%
Westfield	MI	1.27	11	26	42.3%	14147	41094	34.4%
Westford	M	1.00	1	12	8.3%	2230	21951	10.2%
Weymouth	M	1.00	2	45	4.4%	3868	53743	7.2%
Whitman	I	1.00	1	13	7.7%	705	14489	4.9%
Wilbraham	I	1.00	1	9	11.1%	1278	14219	9.0%
Williamstown	MI	1.00	1	7	14.3%	861	7754	11.1%

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Winchendon	I	1.00	2	7	28.6%	1897	10300	18.4%
Winchester	M	1.00	1	15	6.7%	2938	21374	13.7%
Winthrop	E	1.00	1	19	5.3%	876	17497	5.0%
Woburn	M	1.00	5	28	17.9%	8689	38120	22.8%
Worcester	MIE	1.75	106	149	71.1%	127938	181045	70.7%
Yarmouth	I	1.00	5	22	22.7%	4783	23793	20.1%



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

260-20 & 261-20

Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

Honorable City Councilors:

I respectfully submit a docket item to your Honorable Council requesting the approval to accept and expend \$80,000 in grant funding from the MassDOT's Workforce Transportation Program to expand the Bluebikes system into Newton this summer. The City will provide \$20,000 in match funding and will contract with Motivate, the firm that manages the Bluebikes system in metro Boston. In addition, the City will be gifted the equipment (including bikes) for six bike share stations from MetroFutures Inc. valued at approximately \$224,257.

Attached is memo from Director of Transportation Planning Nicole Freedman regarding the grant. Also attached is the project summary submitted to MassDOT by the regional collaborative of Arlington, Chelsea, Newton and Watertown. Currently Bluebikes are operating within the Brookline-Cambridge-Boston-Somerville-Everett area.

Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller

May 11, 2020

RECEIVED
2020 MAY 11 AM 11:37
CITY CLERK
NEWTON, MA. 02459



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone
(617) 796-1120
Telefax
(617) 796-1142
TDD/TTY
(617) 796-1089
www.newtonma.gov

Barney S. Heath
Director

MEMORANDUM

Date: May 11, 2020
To: Maureen Lemieux, Chief Financial Officer
From: Nicole Freedman, Director of Transportation Planning
Cc: Barney Heath, Director of Planning
Subject: Request to Docket Item to Accept MassDOT Workforce Transportation Grant,
and bike stations for bike share

We request approval to accept and expend the following items to support Newton's planned bike share system.

1. \$80,000 in grant funding from MassDOT's Workforce Transportation Program
2. A gift of the equipment for six bike share stations including associated bikes from 501(c)(3) MetroFuture Inc, valued at approximately \$224,257.

The City is contracting with Motivate to provide operations for an expansion of the Bluebikes system into Newton in summer, 2020. The City will provide \$20,000 in match funding to assist with this launch.



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO
Astrid Glynn, MassDOT Rail & Transit Administrator

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February 5, 2020

Mr. Ben Cares
City of Chelsea
500 Broadway, Room 101-104
Chelsea, MA 02150

Dear Mr. Cares,

On behalf of Governor Baker and Lieutenant Governor Polito, I am pleased to notify you that the City of Chelsea has been competitively selected to receive a Workforce Transportation Program funding award for the following project(s):

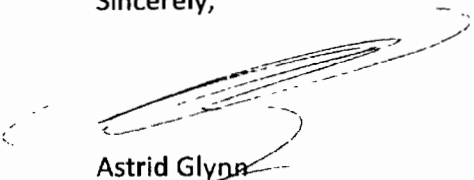
Bike-Share System Implementation Program in the amount of **\$340,000**

Providing more reliable and convenient travel options for workers will be an important component of our economic success. We are very pleased to support your effort in that area.

In the coming weeks, you will receive further information from the MassDOT Transit Unit detailing next steps. Please feel free to contact Thomas Schiavone (Thomas.Schiavone@dot.state.ma.us) if you have any questions in the meantime.

Thank you again for your continued commitment to improving transportation options across the Commonwealth.

Sincerely,



Astrid Glynn
Rail & Transit Administrator

MassDOT's 2019
Workforce Transportation Program Grant
A Bike-Share System Implementation Program
A Regional Application Between
Arlington, MA
Chelsea, MA
Newton, MA
Watertown, MA

Lead Contact for Application:
Benjamin Cares, Planner/Project Manager, City of Chelsea
617.466.4187, bcares@chelseama.gov



Town of Arlington

Adam W. Chapdelaine
Town Manager

730 Massachusetts Avenue
Arlington MA 02476-4908
Phone (781) 316-3090

October 7, 2019

Alex Cox
Manager of Transit Grant Programs
Massachusetts Department of Transportation
10 Park Plaza, Suite 4160
Boston, MA 02116

Re: Workforce Transportation Grant – Joint Bike Share/Blue Bikes Application

Dear Mr. Cox:

I am writing in support of the joint application from Arlington, Newton, Chelsea, and Watertown for capital investment to become part of the Bluebikes bike share program. A majority of residents from the Town of Arlington commute to Boston and Cambridge and would benefit greatly from an interoperable bike share system that would allow these workers to commute directly from Arlington to these cities via bike share.

Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities into neighboring communities. Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is the best option for creating a truly regional and sustainable first/last mile transportation solution. We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that a fully integrated regional bike share system will provide even more benefits to our workers and residents.

The Town plans to put in a 20% share of the \$100,000 requested for our portion of the application, or \$20,000. We have requested capital funding through our budgetary process to pay for this match, which will need to be approved by Town Meeting in spring 2020.

Thank you for your consideration of this application. Should you have questions about this letter, please contact Daniel Amstutz, Senior Transportation Planner, at damstutz@town.arlington.ma.us or at 781-316-3093.

Sincerely,

A handwritten signature in black ink, appearing to read "Adam W. Chapdelaine".

Adam W. Chapdelaine
Town Manager

Cc: Jennifer Raitt, Director, Department of Planning & Community Development



CITY OF CHELSEA, MA

City Hall, 500 Broadway • Chelsea, MA 02150

October 11, 2019

To Whom It May Concern,

I am pleased to submit our regional application for the MassDOT Workforce Transportation Program grant with partner municipalities Arlington, Newton and Watertown. Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities of Boston, Somerville, and Cambridge and into neighboring communities and gateway cities.

Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is the best option for creating a truly regional and sustainable first/last mile transportation solution.

We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that a fully integrated regional bike share system will provide even more benefits to our workers and residents.

Thank you for your consideration of our regional application.

Sincerely,

Thomas G. Ambrosino

City Manager

City of Chelsea



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

260-20 & 261-20

Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

October 11, 2019

Astrid Glynn
Rail and Transit Administrator
MassDOT Rail and Transit Division
10 Park Plaza, Suite 4160
Boston, MA 02116

Dear Astrid,

I am pleased to submit our collective application for a MassDOT Workforce Transportation Program grant with partner municipalities Arlington, Chelsea and Watertown for a bike share project.

Our bike share project will enable the first major expansion of Bluebikes beyond the inner core cities into our neighboring communities. Expanding the Bluebikes bike share system, by adding twenty new stations in four new communities, is an excellent option for creating a truly regional and sustainable first/last mile transportation solution. We have seen the potential for bike share over the last two years with our Lime Bike system; we are confident that this fully integrated regional bike share system will provide even more benefits to employees and residents. Newton is prepared to commit \$20,000 as match (subject to City Council approval) to \$80,000 in grant money requested for five bike stations in Newton.

Thank you for your consideration of our collective application.

Sincerely,

Ruthanne Fuller

A handwritten signature in blue ink that reads "Ruthanne Fuller".

Mayor, City of Newton



Watertown Town Council

Administration Building
149 Main Street
Watertown, MA 02472
Phone: 617-972-6470

ELECTED OFFICIALS:

Mark S. Sideris,
Council President

Caroline Bays,
Councilor At Large

Anthony J. Donato,
Councilor At Large

Susan G. Falkoff,
Councilor At Large

Anthony Palomba,
Councilor At Large

Angeline B. Kounellis,
District A Councilor

Lisa J. Feltner,
District B Councilor

Vincent J. Piccirilli, Jr.,
District C Councilor

Kenneth M. Woodland
District D Councilor

October 8, 2019

Ms. Astrid Glynn
Rail and Transit Administrator
MassDOT
Ten Park Plaza, Suite 4160
Boston, MA 02116

Re: MassDOT Workforce Transportation Program

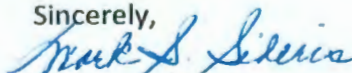
Dear Ms. Glynn:

Watertown is submitting a second application for the Workforce Transportation Program, for a joint program with Newton, Arlington and Chelsea, to launch a bike share program that would expand BlueBikes into the four communities. Watertown has been hosting LimeBikes for the past year and a half, with some success. However, a limiting factor for the LimeBikes program is that bikes cannot be taken into Boston and Cambridge, and therefore cannot be used to access the MBTA subway stations. Expanding BlueBikes into Watertown could potentially greatly increase our public transit ridership. Transit use by residents is lower than it could be because it consists only of buses. BlueBikes would provide residents with an additional means to access the Red and Green Lines. In addition, Watertown has a growing supply of office and lab space, with many new employees coming to Watertown from varying locations. BlueBikes would therefore serve both employees coming into Watertown and residents leaving Watertown during peak commuting hours. We think this could have an impact on congestion and air quality.

The Watertown Town Council strongly supports the application of the four communities, Watertown, Newton, Arlington and Chelsea, to help fund a regional bike share program. In addition to expanding transportation choices in Town, we value the opportunity to develop a regional transportation network with our neighboring communities. The Town is committed to providing a local match (\$20,000), using our TNC funds.

We thank you for your consideration of our project, and look forward to working with you on it.

Sincerely,


Mark S. Sideris
Council President
MWS



185 Berry Street
Suite 5000
San Francisco, CA 94107

10.8.2019

Mr. Alex Cox

Manager of Transit Grant Programs

Massachusetts Department of Transportation

10 Park Plaza, Suite 4160

Boston, MA 02116

Dear Mr Cox,

Lyft is pleased to submit this Letter of Commitment in support of the City of Chelsea's application to the Massachusetts Department of Transportation's Workforce Transportation Program.

As you know, Lyft currently operates the municipally-owned Bluebikes bikeshare system across five municipalities – Somerville, Cambridge, Boston, Everett and Brookline. We are always looking for ways to grow the system, and would be pleased to bring the Bluebikes service to Chelsea in the future if resources allow.

Specifically, we can commit to offering the following in conjunction with Chelsea's application for the

Workforce Transportation Program:

- Install at least \$100,000 of bikeshare equipment under an exclusive bikeshare program in Chelsea.

Please do not hesitate to reach out with any questions.

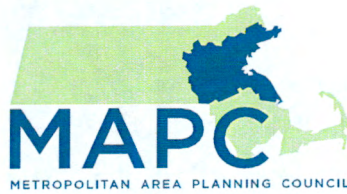
Sincerely,

Miller Nuttle

Miller Nuttle

Senior Manager, Bike and Pedestrian Policy

Lyft



SMART GROWTH AND REGIONAL COLLABORATION

October 11, 2019

Alex Cox

Manager of Transit Grant Programs

Massachusetts Department of Transportation

10 Park Plaza, Suite 4160

Boston, MA 02116

Dear Mr. Cox,

The Metropolitan Area Planning Council is pleased to submit a letter of support of the Town of Arlington and the Cities of Chelsea, Newton, and Watertown's grant application to the Massachusetts Department of Transportation Workforce Transportation Grant Program.

MAPC has worked in close partnership with these communities for the past two years to establish a regional bike share system that connects residents and employees to and from transit, and offers an alternative to vehicle travel for short trips. Advancing regional bike share is an important piece of our mission to promote smart growth and regional collaboration. Not only does bike share encourage more active transportation, but also helps alleviate the growing traffic congestion crisis impacting our region.

Arlington, Chelsea, Newton, and Watertown have all seen strong ridership and enthusiasm among residents for bike share. We are committed to continuing our work with these communities, Lyft, and the cities and towns currently served by the BlueBikes system to grow the network. Among many transportation and public health benefits, this expansion will also offer more residents the ability to bike to job centers in the region. MAPC has been a dedicated partner since the inception of this system, and we look forward to continuing to convene and facilitate these important discussions.

Thank you for your consideration, and please do not hesitate to reach out if you have any questions.

Sincerely,

Eric Bourassa

Director of Transportation

Metropolitan Area Planning Council

Erin Wortman, President | Adam Chapdelaine, Vice President | Samuel Seidel, Treasurer | Sandra Hackman, Secretary | Marc Draisen, Executive Director Metropolitan Area Planning Council | 60 Temple Place | Boston, Massachusetts 02111 | 617-933-0700 | 617-482-7185 fax | mapc.org

INTRODUCTION

The municipalities of Arlington, Chelsea, Newton and Watertown are seeking funding to supplement the capital and start-up costs of a bike-share system provided through Lyft's Bluebikes program. Through this partnership, the municipalities propose a coordinated effort consisting of contracting, marketing, deployment, and operational management.

Each municipality has seen significant ridership in their current bike-share systems under Lime. Unfortunately, Lime's contract will terminate at the beginning of May 2020, thus leaving our municipalities without a system, unless a viable alternative is financed, procured, and deployed. Inter-municipal consultations and public feedback have magnified the need to maintain a bike share system, with preferences expressed for a network with physical docking stations. Access to bicycle transportation is key for the municipalities, as the regional workforce increasingly depends on bicycling as a commuting method, particularly employees that work evening and overnight shifts after the MBTA has closed down.

The BlueBike system, overseen by Lyft, offers an opportunity to conceive a regional, integrative bike share system, underscored by the interoperability with the existing BlueBike network in Boston and surrounding communities. In order to contract with Lyft, municipalities must contribute \$100,000 (50%) to a total start-up cost of \$200,000. Once operational, Lyft will fully subsidize maintenance costs if the municipalities grant to Lyft the exclusive right to operate bike share systems in their jurisdiction. In order to continue a bike-share system within our municipalities, we are submitting this application to fund the implementation of the BlueBikes system at or around May 1st, 2020, in order to coincide with Lime's departure.

A regional expansion of a demonstrably successful bike-share system, evidenced by the experience of Boston, Cambridge, and Somerville, is an effective way to continue a promotion of a modal shift away from single occupancy vehicles within the municipalities, while serving demographic cohorts that are in need of innovative and cost-effective modes of transportation to and from their places of work.

Additionally, we have coordinated our efforts to establish a cohesive implementation plan, project scope, and budgetary forecast in order to demonstrate the feasibility of this project upon receipt of grant funding. This is underpinned by a comprehensive citizen outreach and engagement plan. This engagement approach is centered on informing the public of the availability and ease of use of bike sharing and soliciting input on the system's architecture and siting locations. Furthermore, we have also compiled letters of support from each City's Executive Officer, all of which are poised to lead the implementation of this system if grant funding is secured, as well as Lyft, whom have committed to fund a share of capital start-up costs.

The total project cost for each municipality is \$200,000, equaling a total project cost for all municipalities of \$800,000. Each municipality, as outlined within their attached respective budgets, has committed at least 20% matching funds in order to satisfy the grant requirement, through a combination of capital funding and/or Lyft's private commitment. Based on this financial plan,

Chelsea is requesting \$100,000 in MassDOT grant funds, while Arlington, Newton, and Watertown are each requesting \$80,000 in grant funds. Therefore, we respectfully request a total of \$340,000.

ANALYSIS OF LIME-BIKE DATA

Demonstrable ridership shows a demand for bike-share systems within our communities. For example, the Metropolitan Area Planning Council (MAPC) noted approximately 30,000 trips per month were observed across sixteen cities and towns from June through October. Ridership dropped significantly during winter months from January through March, but still maintained approximately 1,500 trips per month. In Table 1, we show each municipality's Lime bike ridership from April 1, 2018 through June 30th, 2019.

Table 1: Bike Share Applicant Municipalities (April 1st, 2018 to June 30th, 2019)

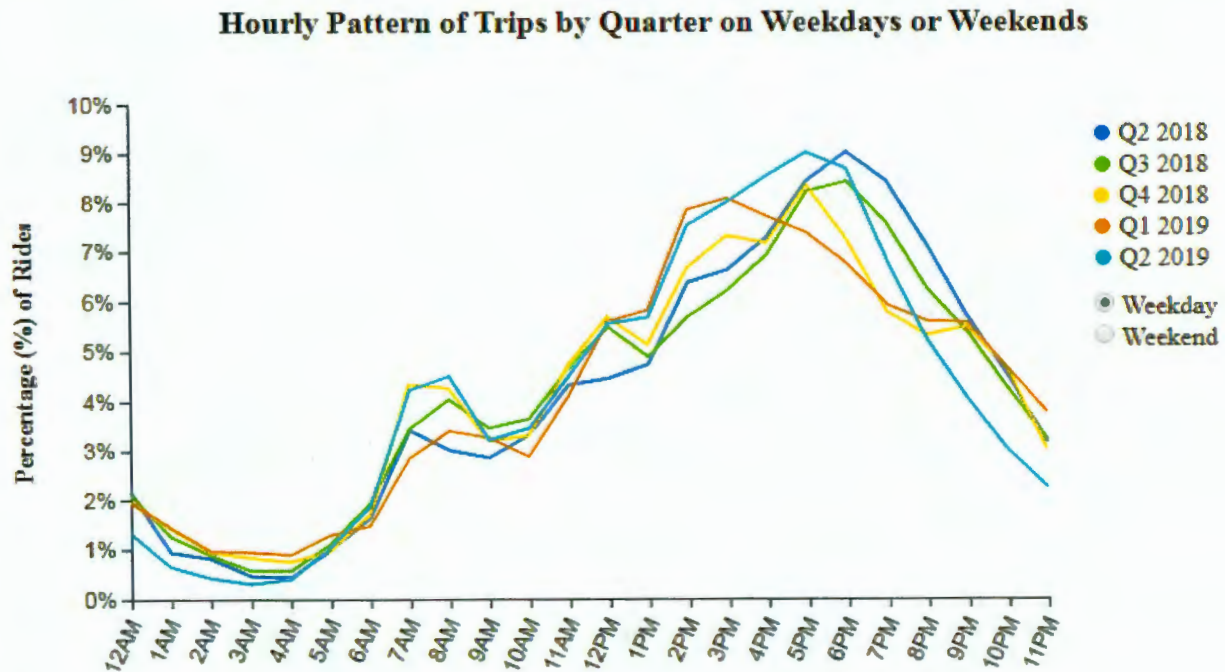
Municipality	Total Number of Trips	Total Weekday Trips	Total Weekend Trips
Arlington	17,327	12,592	4,734
Chelsea	13,455	10,138	3,317
Newton	19,420	14,314	5,106
Watertown	14,335	10,161	4,174
Total	64,537	47,205	17,332

*MAPC's Dockless Bike Travel in Metro Boston Report

This data supports that there is a significant level of demand for bike-share within our municipalities. Additionally, as illustrated in the graph below, high levels of usage occurred during peak commuting hours, specifically during afternoon trips (Figure 1). According to MAPC Lime Data, which documented over 250,000 trips from April 1, 2018 to June 30th, 2019 the majority of rides occurred daily within evening peak hours.

Additionally, survey data (Attachment #1) collected by the MAPC illuminates our resident's usage of the existing bike-share systems for commuting purposes. A diverse cross-section of 233 riders were surveyed in order to assess their purposes for using Lime's bike-share system, yielding 78 riders stating they used Lime bike's system for commuting purposes. Therefore, with the continuation of a bike-share system, we estimate that our ridership post-implementation of the Bluebikes system will be comprised of at least 33% workforce or student commuters. Moreover, with targeted implementation of Bluebike stations within central business districts and careful coordination with businesses and other employers, our implementation plan will increase projected workforce ridership and promote further modal shift while providing an innovative, sustainable transportation mode to our communities.

Figure 1: MAPC Lime Data (2019)



It is important to note that these ridership numbers are reflective of Lime's *dockless* system; however, we do not expect ridership to decrease in moving to a station-based system like Bluebikes. Rather, we believe that a regionally connected system within Boston's metropolitan region, with stations located at key public transit stops and station and businesses districts will demonstrably increase ridership, and specifically ridership within workforce populations.

Additionally, based on dialogue with Lyft and other BlueBikes partners, there is also a strong potential for the Bluebikes system to evolve towards hybrid docked and dockless bike types, pending action from the state legislature on the topic. In order for these hybrid bike systems to become more viable, however, a strong docked bike system must be established in order to develop financial stability and a robust initial rider network.

BENEFIT OF BLUEBIKES TO WORKFORCE TRANSPORTATION AND REGION

Through an analysis of existing bike-share data, we have demonstrated demand for the current bike-share system within each of our municipalities. We have also related how existing data demonstrates a potential need for bike-share systems within our workforce, through observations of peak usage during commuting hours, and through the MAPC survey results. Beyond this, the introduction of a Bluebikes system will increase ridership among our workforce populations if implemented in a way that benefits central business districts and key public transit locations.

Our implementation plan involves significant coordination with Lyft representatives and businesses in order to target locations that will benefit the largest population of potential riders while ensuring Lyft reaches their ridership and budgetary benchmarks. Lyft has communicated to each of our municipality's their desire to implement stations within central business districts and along key transit routes, as this benefits dense populations with characteristics that align with high usage and the potential to use bike-shares for commuting and daily purposes. We believe this will promote further usage of bike-share systems to commute to and from work directly and within first-mile and last mile-gaps between transit.

NATCO released a report on bike-share systems throughout the United States. Their review of bike-share data within Seattle, WA resulted in the following findings on docked systems versus dockless systems, which reinforces our assumptions on how a station-based bike-share system will benefit our municipality's workers:

"Data from Seattle suggests that dockless bike share may be used differently from station-based bike share systems in other places around the U.S. and world. For example, typically station-based systems generate the most trips on weekdays and use within the average day follows 9-5 commuting patterns. In 2017, 48% of all station-based bike share trips took place during rush hours (7-9AM or 4-6PM), and 76% of all trips took place on weekdays.¹

In contrast, dockless bike share in Seattle has an evening peak but no morning rush hour peak and trips are spread out over the day with highest use seen on weekends, suggesting more recreational use.

The presence of weekday and AM/PM rush hour peaks is important because it suggests that station-based systems are part of a city's overall transportation network and are used in the course of a typical commute to work or school. For instance, annual member surveys from Washington, DC and Chicago also show significant bike share to transit crossover: 65% of Capital Bike Share members and 42% of Divvy members respectively report using bike share as part of longer transit commutes."²

The findings of Seattle's study as published in NATCO also make a substantial case for the ability of bike-share systems to supplement public transportation routes, especially when effectively placed at key transit locations. Moreover, a transition from Lime's dockless system to the station-based system under Lyft will likely generate increased ridership among workers and residents alike, which will be furthered by the tactical siting of the BlueBikes docking systems in key employment centers, industry clusters, and central business districts.

Finally, Lyft provides financial accessibility of Bluebikes to low-income demographics through a robust low-income program. Low-income individuals tend to have diminishing affordability for expensive single-occupancy vehicles and rely heavily on public transportation. Through provision of an innovative solution to filling public transportation gaps within last-mile

¹ NATCO's Bike Share and Shared Micromobility Initiative, Bike Share in the U.S.: 2017

and first-mile trips, Bluebikes can provide a bike-share system that benefits a particular subset of a lower-income workforce population.

ENVIRONMENTAL IMPACT

Modal shifts from single-occupancy vehicles towards public transportation and bicycling may reduce congestion within Boston's metropolitan urban core and inner ring when coupled with other congestion reduction policy measures. Our municipalities are working towards infrastructure that promotes and accommodates walking, bicycling, and the use of public transit.

Notably, each of municipalities has participated to some degree within the Complete Streets initiative through MassDOT. Infrastructure improvements under this program include increased safety among cyclists through the implementation of bicycle lanes and signage programs which help to encourage cycling within our communities. Through our participation in this effort we have demonstrated our ability to provide adequate infrastructure in order to accommodate a regional bike-share system, and to further increase modal shifts within our municipalities.

Each of our municipalities has some level of characteristics that qualify them as Environmental Justice (EJ) communities (Attachment #3). We have vulnerable communities who are more susceptible than others to the impacts of pollutants and health hazards perpetuated by the use of cars and other motor-vehicles. Primarily, asthma rates have been reported state-wide by Mass.gov at the rate of 10.2% among adults and 12.9% among children. These rates are significantly higher among residents in close proximity to congested, densely populated, and highly traveled streets, who often fall within at least one of the three characteristics of EJ populations. Any modal shift from a motor-vehicle to the use of bikes will contribute to the reduction of pollutants that disproportionately affect these EJ communities.

The act of cycling produces virtually zero greenhouse gas emissions, making it enormously beneficial to the reduction of emissions state-wide. Any modal shift from a motor-vehicle to the use of bikes will contribute to the reduction of pollutants that disproportionately affect these EJ communities. We are confident that these metrics will result in a positive Air Quality Benefit Analysis (Attachment #2), resulting in significant reduction in CO₂ levels and other greenhouse gas emissions.

IMPLEMENTATION PLAN

Our implementation plan outlines our strategy once we have secured adequate funding to engage in a contract with Lyft, which would occur from May 2020 until May 2022, with the ability to continue this contract if each municipality chooses to do so.

1. Contract with Lyft

- a. Contract with Lyft would begin May 1st, 2020 and run for two years, with the option to renew the contract for another two years, and subsequently, an additional two years. That means each municipality has the opportunity to continuously contract with Lyft, to at least May of 2026 or potentially further
- b. The contract, per municipality, enables the installation of five bike-share stations through a commitment of \$100,000 by the municipality. Subsequently, Lyft covers all other yearly expenses related to Operations and Maintenance of the system

2. Site Suitability Assessment

- a. Municipal Staff create standardized methodology for selecting locations for each station, in consultation with stakeholders. This methodology will be consistently applied throughout all municipalities involved in this grant application. Municipal Staff will hold two (2) public meetings as part of this process to gather feedback on the assessment. Through their respective Complete Streets planning initiatives, the municipalities have conducted a gap analysis, which yielded findings that can be integrated into this assessment
- b. Public Right-of-Ways, transit hubs, dense residential areas, and business districts are primary targets in order to ensure active ridership and benefit to workforce population. Key indicators for consideration will include, but not be limited to, employment density, residential density, industry clusters, public transit stop and station locations, demography, and socioeconomic characteristics

3. Stakeholder Engagement

- a. Coordinate with community based non-profits and other entities that can promote the installation of stations and ensure residents will be aware of the locations and function of these stations.
- b. Engage with businesses in municipality in order to assess who within their workforce can benefit from bike sharing systems
- c. Promote effort during regularly scheduled municipal meetings, such as stakeholder committees, board and commission meetings, and executive leadership meetings
- d. Coordinate with local Chambers of Commerce and other trade, industry, and labor groups to collect feedback and disseminate information about the effort.

4. Public Engagement

- a. Hold public meetings to discuss installation of stations and ride share system; assess community feedback and tailor outreach efforts to increase awareness on bike safety and usage of ride sharing systems
- b. Installation involves delivery, off-loading, and placement of equipment. Installation does not require other attendant infrastructure, such as electrical connections, as the stations are self-sustaining

5. Installation of Stations

- a. Municipal Staff along with Lyft Representatives monitor the physical installation of stations
- b. Installation involves delivery, off-loading, and placement of equipment. Installation does not require other attendant infrastructure, such as electrical connections, as the stations are self-sustaining
- c. Overall 20 stations would be installed between our four municipalities with 15 bikes per station; therefore, 300 bikes would be introduced to the regional bike-share system

6. Monitoring of Ridership and Modal Shift

- a. Ongoing data collection from Lyft in order to assess ridership, rider habits, and benefit to workforce and other demographics within municipal populations
 - i. Three mechanics may be deployed in order to monitor activity and benefit of bike-share systems to workforce populations

1. First-mile and last-mile utility during peak commuting hours can be assessed through Lyft's amalgamation of data
2. Diverse cross-sectional surveying of Bluebike users by regional planning commissions like MAPC, or individually within municipalities, or through Lyft itself
3. Evaluation of ridership during off-hours of public transportation within Lyft amalgamated data sets

KEY PERSONNEL

The following staff members for each municipality will oversee the implementation, operation, maintenance, and outreach of the Bluebikes system. In this way, we ensure sustainability and longevity of the system during and after its implementation.

Arlington			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Daniel Amstutz	Planning & Community Development	Senior Transportation Planner	Primary project manager for bike share for City
Erin Zwirko	Planning & Community Development	Assistant Director	Oversees specific project goals and benchmarks, coordinates with Senior Transportation Planner
Jennifer Raitt	Planning & Community Development	Director	Oversees general project goals and benchmarks

Chelsea			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Benjamin Cares	Planning & Development	Project Manager, Planner	Primary Project Manager, Primary project manager for bike share for City
Alexander Train	Planning & Development	Assistant Director	Oversees specific project goals and benchmarks, coordinates with Project Manager
John DePriest	Planning & Development	Director	Oversees general project goals and benchmarks

Newton			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Nicole Freedman	Planning Department	Director of Transportation Planning	Primary project manager for bike share for City

Barney Heath	Planning Department	Director of Planning and Development	Oversees all Planning Department activity
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Watertown			
<i>Staff Person</i>	<i>Department</i>	<i>Title</i>	<i>Role</i>
Laura Wiener	Planning and Community Development Department	Senior Transportation Planner	Primary project manager for bike share for City
Steve Magoon	Community Development and Planning	Direct of Planning and Community Development and Assistant Town Manager	Oversees all activities within DCDP

BUDGET

The full start-up and implementation cost of the Bluebikes system through Lyft is \$200,000 per municipality, totaling \$800,000. This cost covers the installation of five stations within the municipality, and subsequently Lyft will cover the operations and maintenance cost for the stations and bikes for the duration of the contract period. This financing scheme is sustainable because each municipality pays a portion of the start-up cost and then is not required to inject any further capital in order to run and maintain the Bluebikes system.

Matching requirements for this grant are broken down in the budget appended to this application. Each municipality more than satisfies the matching requirement of the grant, averaging a match of 57.5% of total project funds across our four municipalities.

PARTNERSHIPS

The ongoing implementation of bike-share system within Boston and its surrounding municipalities is an existing partnership in and of itself unified under the MAPC's oversight and management. Through this regional grant application, we reinforce this unified effort and demonstrate how a regional bike-share system provides an effective means of transportation within our municipalities and its connectivity to the metropolitan region. We believe that this partnership with the MAPC qualifies as a public and regional partnership under this program. Following a grant award, the municipalities intend to continue meeting monthly through this regional bike share working group.

Additionally, we will establish a public-private partnership with Lyft. This partnership, as outlined above within the implementation process and budget, allows for sustainable implementation and maintenance of bike-share stations. Each municipality contributes staff time, expertise, and on-the-ground knowledge for effective placement and planning of bike-share systems, while Lyft provides the financial capital and administrative oversight to continue

providing Bluebikes to match demand, and can adequately run the necessary operations and maintenance of the system.

CONCLUSIONS

Each of our municipalities has demonstrated demand for bike-share systems over the past year of contracting with Lime. Through MAPC survey data, we have seen that a diverse cross-section of 233 individuals utilize Lime bikes for commuting to work or school. Additionally, further analysis of data has yielded high percentages of ridership during peak commuting hours. Considering these two forms of data, it appears that there is significant demand for bike-share systems as a form of commuting. Our municipalities believe that we can increase this modal shift by connecting to existing Bluebike systems under Lyft within Boston, Somerville, Cambridge and subsequently, the entire region of the Boston Metropolitan Area.

In order to achieve our goals in providing a regional bike-share system to each of our municipalities, we hope to supplement the installation and start-up of a Bluebikes system through funding by the Workforce Transportation Grant. We are confident that through careful planning and coordination with businesses, Lyft, our residents, and the region as a whole, we will achieve our projected ridership benchmarks and see ridership increase substantially within workforce users.

ATTACHMENT #1 (MAPC Survey Results)

MAPC Lime Riders' Characteristics, Travel Patterns, and Preferences

In June 2019, we distributed a survey to MAPC-area riders and collected 233 responses.

We found:

MAPC-area Lime riders are a diverse cross-section of the city's residents and visitors:

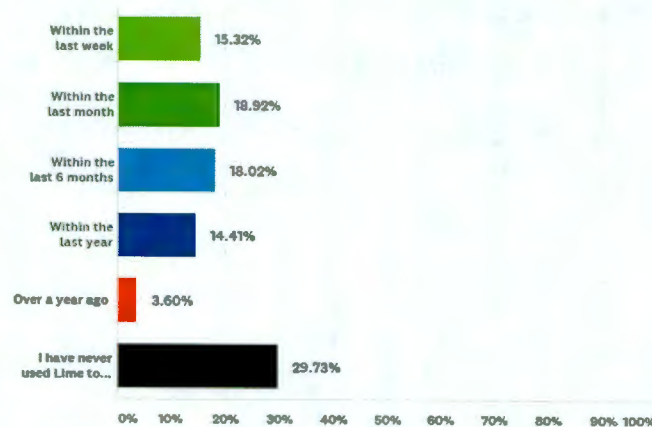
- **39% of riders** live in households earning **less than \$75,000 a year**.
 - Most Lime riders are employed: **77% work full time** and 8% work part time. About 15% of riders are students.
 - 81% of riders have an Associate, Bachelor's, or advanced (e.g., PhD, MD) degree.
 - The **average age** of a Lime rider is **37**, and 25% of Lime riders are 46 or older.
 - 75% of riders in the survey were White, 13% were Asian, and 12% were Hispanic.
 - **38% of riders** in the survey identified as **female** and 60% identified as male. This proportion of female riders is as high or higher than many docked bikeshare systems as well as personal bicycle use.
 - Only **5.6% of riders** stated that they lived outside of the MAPC region.
 - **53% of riders** last took a ride on a *personal bike* over a month ago, suggesting that Lime may be activating new riders.
 - **40% of riders** used BlueBike in the last month, showing how Lime and BlueBike are providing a robust network of first and last-mile solutions for MAPC-area travelers.
-

Lime enables MAPC-area riders to reduce their reliance on cars:

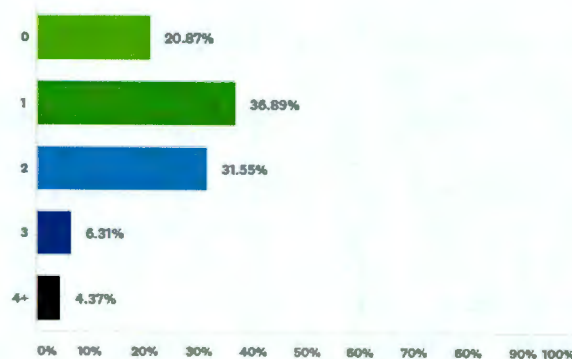
- On their most recent Lime rides, **32.8% of riders** used Lime rather than a car (personally owned, taxi, or ridehailing).
- **34.2% of riders** used Lime to get to or from public transit within the last month.
- Due to our riders' shift away from car trips, we estimate that Lime saved roughly **61 metric tons of CO2** that would have otherwise been emitted (as of July 2019).

- **57.8% of riders** live in households that own 1 or fewer cars.

Q7 When was the last time you used Lime to get to or from public transit?



Q9 How many cars do you or your household currently own?



Lime helps MAPC-area riders fulfill their everyday transportation needs. On their most recent Lime rides:

- **33% of riders** used Lime to commute to or from work or school.
- **17.2% of riders** used Lime to travel to or from dining or entertainment.

ATTACHMENT #2

Attachment B: Air Quality Benefits Analysis

This grant program is funded through the Congestion Mitigation and Air Quality Improvement (CMAQ)

Program, which is administered by the Federal Highway Administration (FHWA). The purpose of the CMAQ Program is to support transportation projects, transit service, and other related efforts that contribute to air quality improvements and mitigate the impacts of congestion. As such, to meet federal requirements related to CMAQ, project applicants are required to demonstrate that their proposed projects will reduce emissions and provide an air quality benefit. The questions in this section address this requirement.

The answers provided to these questions will be reviewed by the CMAQ Consultation Committee, which consists of members from the Massachusetts Department of Transportation (MassDOT), the

Massachusetts Department of Environmental Protection (MassDEP), the U.S. Environmental Protection Agency (EPA), and regional planning agencies within Massachusetts.

Questionnaire

- 1.) Please select the category that most closely aligns with the proposed project:

Transit/Shuttle Service (Section A)

Bike share (Section B)

Qualitative Analysis / Other (Section C)

A. Transit/Shuttle Service Questions

- 1.) Does your organization currently operate a transit or shuttle service? If not, skip to question 2. If yes, please complete the following tables:

Table 1: Summary of Currently-Operated Transit/Shuttle Vehicles					
Vehicle ID	Vehicle Type	Occupancy	Year of Manufacture	Vehicle Length	Fuel Required
1					
2					
3					
4					

Vehicle ID	Round Trips / Day	Length of Route (mi)	Average Speed (mph)	Daily Ridership	Days Operated / Year	Operation Hours

1						
2						
3						
4						

- 2.) Please provide the following details about the proposed transit or shuttle service and vehicles. If unsure, provide an estimate or leave blank:

Table 2: Summary of Proposed Transit/Shuttle Vehicles					
Vehicle ID	Vehicle Type	Occupancy (Number of Passengers)	Year of Manufacture	Vehicle Length	Fuel Required

Vehicle ID	Round Trips / Day	Length of Route (mi)	Average Speed (mph)	Daily Ridership	Days Operated / Year	Operation Hours

B. Bike Share Questions

- 1.) How many bikes will be included in this project?

300 bikes total will be included; five stations with fifteen bikes each will be implemented among four municipalities as a part of this program.

- 2.) What is the expected average bike trip length?

The expected average bike trip length is 0.6 miles, based on the average trip taken by Lime bike riders and according to MAPC data.

3.) What is the expected average number of trips per bike per day?

We expect an average number of 1.7 trips per bike per day, this value was calculated through an analysis performed by NATCO under their Bike Share and Micromobility Initiative on station-based systems.

4.) How many days of the year will your proposed bike share operate?

Approximately 365, although this will be heavily affected by inclement weather and the decision making process of each municipalities Planning & Development and Public Works Departments.

C. Qualitative Analysis

If none of the areas above apply to your project, please provide a qualitative assessment of why your project is expected to reduce emissions, citing applicable research where possible.

Please note that although quantitative analysis of air quality impacts is expected for almost all project types under the CMAQ program, an exception will be made when it is not possible to accurately quantify emissions benefits. In these cases, qualitative assessments based on reasoned and logical determinations that the projects or programs will decrease emissions will be conducted.

ATTACHMENT #3 (List of Environmental Justice Communities)

Municipality	EJ criteria (Minority, Income, English Isolation)*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Acton	M	1.00	3	15	20.0%	7181	21924	32.8%
Adams	I	1.00	6	10	60.0%	5237	8485	61.7%
Agawam	I	1.00	1	17	5.9%	1213	28438	4.3%
Amherst	MIE	1.36	11	22	50.0%	14166	37819	37.5%
Andover	M	1.00	2	20	10.0%	2957	33201	8.9%
Aquinnah	M	1.00	1	1	100.0%	311	311	100.0%
Arlington	MI	1.17	6	44	13.6%	7333	42844	17.1%
Ashland	M	1.00	1	9	11.1%	901	16593	5.4%
Athol	I	1.00	2	8	25.0%	3108	11584	26.8%
Attleboro	MI	1.50	4	30	13.3%	5470	43593	12.5%
Ayer	MI	1.00	4	7	57.1%	3962	7427	53.3%
Barnstable	MI	1.38	8	38	21.1%	8838	45193	19.6%
Barre	I	1.00	1	4	25.0%	883	5398	16.4%
Becket	I	1.00	1	2	50.0%	1071	1779	60.2%
Belmont	M	1.00	5	27	18.5%	5360	24729	21.7%
Beverly	MI	1.50	2	30	6.7%	1727	39502	4.4%
Billerica	M	1.00	1	30	3.3%	2746	40243	6.8%
Boston	MIE	1.60	396	559	70.8%	456403	617603	73.9%
Braintree	MI	1.00	4	26	15.4%	4722	35744	13.2%
Brockton	MIE	1.34	84	87	96.6%	90,817	93810	96.8%
Brookfield	I	1.00	1	3	33.3%	891	3390	26.3%
Brookline	MIE	1.16	19	38	50.0%	29249	58732	49.8%
Burlington	M	1.00	2	15	13.3%	5088	24498	20.8%
Cambridge	MIE	1.18	55	88	62.5%	70972	105162	67.5%
Canton	M	1.00	1	11	9.1%	3085	21561	14.3%
Chelmsford	M	1.00	1	22	4.5%	1003	33802	3.0%
Chelsea	MIE	2.00	27	27	100.0%	35177	35177	100.0%
Chicopee	MIE	1.35	20	43	46.5%	28146	55298	50.9%
Clinton	MI	1.50	4	10	40.0%	5204	13606	38.2%
Dalton	I	1.00	2	7	28.6%	1538	6756	22.8%
Danvers	I	1.00	1	16	6.3%	912	26493	3.4%

Dartmouth	I	1.00	1	19	5.3%	1300	34032	3.8%
Dedham	M	1.00	2	21	9.5%	2814	24729	11.4%
Dennis	I	1.00	3	18	16.7%	1853	14207	13.0%
Dracut	I	1.00	1	18	5.6%	1173	29457	4.0%
Eastham	I	1.00	1	6	16.7%	920	4956	18.6%
Easthampton	I	1.00	2	12	16.7%	2499	16053	15.6%
Easton	I	1.00	1	11	9.1%	1696	23112	7.3%
Everett	MIE	1.52	27	27	100.0%	41667	41667	100.0%
Fairhaven	I	1.00	2	15	13.3%	1898	15873	12.0%
Fall River	MIE	1.29	56	81	69.1%	59242	88857	66.7%
Falmouth	I	1.00	2	26	7.7%	1955	31531	6.2%
Fitchburg	MIE	1.57	23	32	71.9%	24680	40318	61.2%
Framingham	MIE	1.65	20	45	44.4%	32550	68318	47.6%
Franklin	I	1.00	1	17	5.9%	1467	31635	4.6%
Gardner	MI	1.00	5	13	38.5%	7999	20228	39.5%

Municipality	EJ criteria*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Gloucester	I	1.00	4	23	17.4%	4824	28789	16.8%
Grafton	M	1.00	1	10	10.0%	2115	17765	11.9%
Great Barrington	I	1.00	3	7	42.9%	2395	7104	33.7%
Greenfield	I	1.00	3	17	17.6%	3438	17456	19.7%
Harwich	I	1.00	1	12	8.3%	523	12243	4.3%
Haverhill	MI	1.38	13	40	32.5%	21313	60879	35.0%
Holbrook	M	1.00	1	9	11.1%	1635	10791	15.2%
Holyoke	MIE	2.15	27	37	73.0%	29053	39880	72.9%
Lancaster	I	1.00	1	4	25.0%	1900	8055	23.6%
Lawrence	MIE	2.27	55	55	100.0%	76377	76377	100.0%
Lee	I	1.00	1	6	16.7%	994	5943	16.7%
Leicester	I	1.00	1	8	12.5%	1050	10970	9.6%
Lenox	I	1.00	1	7	14.3%	480	5025	9.6%
Leominster	MI	1.33	12	26	46.2%	20721	40759	50.8%
Lexington	M	1.00	11	22	50.0%	16604	31394	52.9%
Lincoln	M	1.00	1	5	20.0%	1286	6362	20.2%
Lowell	MIE	1.46	70	80	87.5%	93309	106519	87.6%

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Ludlow	M	1.00	1	11	9.1%	2413	21103	11.4%
Lynn	MIE	1.75	56	72	77.8%	72884	90329	80.7%
Malden	MIE	1.38	50	52	96.2%	57638	59450	97.0%
Mansfield	M	1.00	1	14	7.1%	1703	23184	7.3%
Marlborough	MI	1.25	8	21	38.1%	14178	38499	36.8%
Mattapoissett	I	1.00	1	6	16.7%	569	6045	9.4%
Medford	MIE	1.15	20	53	37.7%	21905	56173	39.0%
Melrose	I	1.00	2	27	7.4%	2017	26983	7.5%
Methuen	MIE	1.40	15	35	42.9%	17463	47255	37.0%
Middleborough	I	1.00	2	14	14.3%	2189	23116	9.5%
Middleton	M	1.00	1	4	25.0%	3322	8987	37.0%
Milford	MIE	1.67	6	19	31.6%	6249	27999	22.3%
Millbury	I	1.00	1	10	10.0%	949	13261	7.2%
Milton	M	1.00	8	25	32.0%	7390	27003	27.4%
Monson	I	1.00	2	7	28.6%	556	8560	6.5%
Montague	I	1.00	4	8	50.0%	3,852	8437	45.7%
Nantucket	M	1.00	3	11	27.3%	3764	10172	37.0%
Natick	M	1.00	2	26	7.7%	2696	33006	8.2%
New Bedford	MIE	1.81	62	87	71.3%	66180	95072	69.6%
Newton	MI	1.00	10	64	15.6%	12723	85146	14.9%
North Adams	I	1.00	6	12	50.0%	7791	13708	56.8%
North Andover	MI	1.00	3	19	15.8%	4135	28352	14.6%
North Attleborough	I	1.00	1	18	5.6%	855	28712	3.0%
North Brookfield	I	1.00	1	5	20.0%	929	4680	19.9%
Northampton	MI	1.33	6	19	31.6%	7412	28549	26.0%
Norwood	MI	1.00	4	21	19.0%	5956	28602	20.8%
Oak Bluffs	MIE	1.50	2	5	40.0%	1189	4527	26.3%
Orange	I	1.00	2	7	28.6%	2311	7839	29.5%
Orleans	I	1.00	2	7	28.6%	1524	5890	25.9%

Municipality	EJ criteria*	Mean EJ criteria count in BGs	Number of EJ BlockGroups	Number of BlockGroups in municipality	Percent of BlockGroups in EJ	Population in EJ BlockGroups	Total population in municipality	Percent of population in EJ BGs
Palmer	I	1.00	2	9	22.2%	3067	12140	25.3%
Peabody	MIE	1.50	6	32	18.8%	11074	51251	21.6%
Pittsfield	MI	1.58	19	48	39.6%	16445	44737	36.8%

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Plainville	I	1.00	1	5	20.0%	1004	8264	12.1%
Plymouth	MI	1.00	2	38	5.3%	1879	56468	3.3%
Provincetown	I	1.00	2	5	40.0%	1116	2942	37.9%
Quincy	MIE	1.16	50	72	69.4%	68791	92271	74.6%
Randolph	MI	1.05	19	19	100.0%	32112	32112	100.0%
Revere	MIE	1.44	36	42	85.7%	45247	51755	87.4%
Rockland	I	1.00	1	11	9.1%	1982	17489	11.3%
Salem	MIE	1.89	9	33	27.3%	12967	41340	31.4%
Saugus	I	1.00	1	20	5.0%	1872	26628	7.0%
Sharon	M	1.00	1	11	9.1%	2069	17612	11.7%
Sheffield	I	1.00	1	4	25.0%	729	3257	22.4%
Shirley	M	1.00	1	4	25.0%	3153	8147	38.7%
Shrewsbury	ME	1.17	6	20	30.0%	11670	35608	32.8%
Somerville	MIE	1.29	35	69	50.7%	40721	75754	53.8%
Southbridge	MIE	1.70	10	16	62.5%	11182	16719	66.9%
Spencer	I	1.00	1	10	10.0%	886	11688	7.6%
Springfield	MIE	1.81	110	121	90.9%	137083	153060	89.6%
Stoneham	I	1.00	1	17	5.9%	560	21437	2.6%
Stoughton	MI	1.17	6	19	31.6%	6661	26962	24.7%
Taunton	MIE	1.44	9	31	29.0%	13206	55874	23.6%
Tisbury	I	1.00	1	5	20.0%	702	3949	17.8%
Waltham	MI	1.18	28	48	58.3%	36094	60632	59.5%
Ware	I	1.00	2	7	28.6%	2894	9872	29.3%
Wareham	MI	1.00	4	17	23.5%	4522	21822	20.7%
Warren	I	1.00	1	4	25.0%	1296	5135	25.2%
Watertown	M	1.00	6	29	20.7%	6268	31915	19.6%
Webster	I	1.00	3	11	27.3%	5211	16767	31.1%
Wellesley	M	1.00	3	23	13.0%	5550	27982	19.8%
West Springfield	MIE	1.63	8	20	40.0%	11166	28391	39.3%
Westborough	M	1.00	4	12	33.3%	6589	18272	36.1%
Westfield	MI	1.27	11	26	42.3%	14147	41094	34.4%
Westford	M	1.00	1	12	8.3%	2230	21951	10.2%
Weymouth	M	1.00	2	45	4.4%	3868	53743	7.2%
Whitman	I	1.00	1	13	7.7%	705	14489	4.9%
Wilbraham	I	1.00	1	9	11.1%	1278	14219	9.0%
Williamstown	MI	1.00	1	7	14.3%	861	7754	11.1%

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Winchendon	I	1.00	2	7	28.6%	1897	10300	18.4%
Winchester	M	1.00	1	15	6.7%	2938	21374	13.7%
Winthrop	E	1.00	1	19	5.3%	876	17497	5.0%
Woburn	M	1.00	5	28	17.9%	8689	38120	22.8%
Worcester	MIE	1.75	106	149	71.1%	127938	181045	70.7%
Yarmouth	I	1.00	5	22	22.7%	4783	23793	20.1%