



Mayor Martin J. Walsh



Request for Information

Informing the City of Boston's understanding of electric cargo bikes as a last-mile and point-to-point delivery solution

ISSUED BY:

Boston Transportation Department
Mayor's Office of New Urban Mechanics
Boston Environment Department

RFI Issue Date: July 20, 2020, 9:00 am EST

RFI Closing Date: August 24, 2020, 12:00 pm EST

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SECTION 1.0 | NOTICE TO RESPONDENTS (ADVERTISEMENT)

***City of Boston
Transportation Department***

Request for Information
For informing the City of Boston's understanding of electric cargo bikes
as a last-mile and point-to-point delivery solution

EV00008250

Contact Information

Samantha Devine

samantha.devine@boston.gov.

The City of Boston ("the City"), acting through its Commissioner of Transportation, invites submittals for the request for information generally described above, and particularly as set forth in the Request for Information ("RFI"). The RFI shall be available from **9:00 am on Monday, July 20th, 2020** from the City's Supplier Portal at boston.gov/supplierportal (Bid Event EV00008250).

Proposals are due no later than **12:00 pm on Monday August 24, 2020** via email to samantha.devine@boston.gov. Refer to Section 3.0 of the RFI for complete information on the submission process and details.

Gregory T. Rooney, Acting Commissioner
(July 20, July 27, 2020)



1. OPENING LETTER

Dear Bostonians, Business Owners, Delivery Workers and Experts, Bike-riders, and Environmentalists:

In 2017, Mayor Martin J. Walsh committed to [make Boston carbon neutral by 2050](#). We've also set an [aspirational goal to quadruple the mode share of bikes](#). But over the past 10 years, [deliveries of online purchases in Boston's metro region have surged](#), contributing to congestion and air pollution. More recently, during the COVID-19 pandemic, many residents have turned to online delivery to get groceries and many other essential goods, in order to remain physically distant and healthy.

As we chart our way towards a cleaner, healthier transportation system, we need to explore and deploy new technologies. Electric cargo bikes are light electric vehicles (LEVs) that can be used for both point-to-point and last-mile deliveries, without contributing to air or noise pollution. In cities across America and the world, e-cargo bikes have emerged as a nimble, carbon-neutral and active last-mile delivery solution, including London, Miami, New York City, Montreal, Berlin, Oslo, and others. These cities are working with partners such as UPS, DHL, Amazon, DB Schenker, supermarket chains, and others, to test out different models. E-cargo bikes may be a solution for Boston, too:

- 20% of inner city deliveries could be undertaken by cargo bikes (Amsterdam University of Applied Sciences, 2018)
- Electric cargo bikes are more cost effective than delivery trucks for journeys under 6-mile in high density residential areas with low delivery volumes (Sheth & al., 2019)
- Boston has been testing new curb use rules, including new curbside parking and pull-over restrictions, and using curb space for different purposes at different times of day.

Our goal with this RFI is to understand how e-cargo bikes could fit into Boston's delivery landscape, existing initiatives in the Boston metro area and elsewhere that could inform our potential approach, current obstacles to e-cargo bike adoption by private businesses, and other opportunities to green last-mile deliveries. This RFI will also give the City a picture of who (private business, logistics solution providers, supply chain experts, e-cargo bike providers) may already be experimenting with or thinking about e-cargo bike deployment in the Boston area, or who may have an interest in partnering or supporting potential pilots.

Supporting the uptake of cargo bikes and e-cargo bikes could help achieve clean logistics, and reinforce Boston's transition towards becoming a healthier and more resilient community.

Sincerely,
City of Boston



2. OVERVIEW

In order to reduce our emissions from transportation, which accounted for 29% of our community-wide emissions in 2017, we must support electrification across all travel modes and we must think creatively. Go Boston 2030, and [the Climate Action Plan Update](#) lay the framework for prioritizing policies and programs that support sustainable personal travel habits for our residents, and ensure that public transit, active transportation, and shared trips are the mode of choice. Competition for the curb is increasing, with more and more interactions occurring at our curbs: from ride-hailing companies, to the promotion of shared services like car share and our Bluebikes system, to protected bike and bus lanes. The City is currently establishing curb management principles, strategies and framework to direct the distribution of curbspace among modes and services.

In addition to the way we travel, we need to adapt the way we get goods delivered. Parcel delivery services must be reconstructed to support our goal of carbon neutrality, get goods to our residents in a more efficient manner, and optimize the use of our curbspace. The City is seeking information about last-mile delivery services, and how we can integrate e-cargo bikes into our system. The City will use this gathered information to explore the possibility of a Memorandum of Understanding (MOU) or Request for Proposals (RFP).

I. BACKGROUND

A growing number of consumers would like fast home deliveries. Consumers also heavily factor in cost of the delivery. Last-mile deliveries make up a significant share of the total delivery cost - often more than 50% of the total cost of the delivery. Cost can drive the market, and without influence or interference could result in more vehicle miles travelled, higher noise levels, and potentially more deliveries by automation, resulting in zero-occupancy vehicles crowding our streets. Currently, projections show that bike couriers will only make up 2% of parcel deliveries in the next 10 years. The City's tactical and organized support of e-cargo bikes is necessary to ensure that this delivery method is successful and adopted.¹

II. OUR GOALS

We aim to reduce the burden that vehicular parcel delivery weighs on Boston's limited curb space. We also seek to counter the rise of vehicle traffic and ensuing air pollution tied to consumer preference for at-home delivery, and pilot and scale innovative delivery solutions that accelerate Boston's path to carbon neutrality. We hope to have increased last-mile parcel deliveries delivered by (an) e-cargo bike(s). We hope to support local

¹ [How Customer Demands Are Reshaping Last Mile Parcel Delivery](#)



businesses in reducing their dependence on vehicles and instead have access to e-cargo bikes to meet their business needs.

3. RFI RESPONSES

Please provide recommendations on how the City can support the electric cargo bike last-mile delivery network. Recommendations should include partnership opportunities, current barrier analysis, current demand analysis, density considerations, and impact analysis. All recommendations should strive for a sustainable, long-term solution.

Recommendations could consider:

- Opportunities for last-mile freight distribution networks including suggested zones for parcel delivery based on current demand
- Identifying and evaluating essential freight corridors
- Potential to couple deliveries across applications and companies
- Locations for bike parking during delivery sessions, safety considerations and charging accommodations
- Evaluation of community-based refrigerated delivery lockers
- Suggestions for potentially revenue and pricing models for use of a public asset, specifically curbspace
- Retiming deliveries in congested areas to off-peak
- Potential ordinances, policies, or taxes that could support this success of this initiative
- Cost and administrative burden of program
- Collaboration with researchers to study the impacts
- Suggestions for pilot programs
- Results on current opinions of parcel delivery drivers to shift to e-cargo bikes
- Solutions for seasonality/inclement weather concerns of couriers and clients of services
- Data platforms or other data management systems that might be necessary to manage a fleet of cargo e-bikes, and the associated data privacy and data access stipulations
- Role of Main Streets and Business Improvement Districts

I. OUR STREETS

As we think about adding devices or services to our streets and sidewalks, please know that we consider our streets and sidewalks a precious asset. Our residents tend to like them clean, uncluttered, and in good repair, and our team works incredibly hard to make them that way.



II. OUR RESOURCES

As a city, our budget for experimentation is in some ways constrained. Moreover, it's challenging to fund new initiatives when the return is not clear and the civic value is undefined. We're open to public/private partnerships, and interesting, new business models. We also recognize that alternative revenue streams have tradeoffs. Let us know the strategies you are proposing as well as any tradeoffs you see and how you would mitigate those tradeoffs.

III. RFI CONTACT

Samantha Devine
Transportation Department, City Hall 7th Floor
1 City Hall Square
Boston, MA 02201
Email: samantha.devine@boston.gov

IV. TIMELINE

The table below includes relevant events and deadlines for this RFI:

Event	Date and Time
RFI Release Date	7/20/2020 9:00 am
Teleconference for Interested Parties	8/3/2020 1:00 - 2:00 pm
Respondent Information Due Date	8/24/2020 5:00 pm

The City of Boston may change these dates at its sole discretion.

The teleconference is not mandatory for respondents but will serve as an opportunity to walk through the RFI document and answer any questions. Please use the call-in information below to join the Teleconference at the specified time.

The Teleconference dial in number: 1.202.795.3352
Access Code: 860 914 801

V. RESPONSES

Please submit your response to this RFI via email to samantha.devine@boston.gov by 12:00 pm Boston local time on August 24, 2020. Within the email please use the following subject



line: “(Respondent Organization’s Name) - Response to E-Cargo Bike RFI.” Responses can be in any format that the respondent believes best captures your ideas, plans or other information you believe could be important or useful to the City.

VI. CONFIDENTIALITY

The City of Boston is subject to public records laws and it must comply with associated obligations. [A Guide to the Massachusetts Public Records Law](#) is available here. Your response will be public record. If respondents do not wish to provide certain components of the requested information, please share as much information as can be provided

Appendix 1: (Disclosure)

This RFI is for information and planning purposes only and shall not be construed as a solicitation or as an obligation on the part of the City to issue any competitive procurement or award a contract.

The City will not award a contract on the basis of responses to this RFI nor otherwise pay for the preparation of any information submitted, for any vendor presentation, or the City’s use of such information.

All responses to this RFI will be on public record under the Massachusetts’ Public Records, Law, Mass. Gen. L. ch. 66 s. 10, regardless of confidentiality notices to the contrary.

By submitting, the applicant authorizes the City of Boston to publicize, refer to, and use your application as it sees fit.

