

# **Request for Expressions of Interest**

regarding a

borough-wide demonstration project of

**Dockless Bike Share** 

on

Staten Island

RELEASE DATE: April 22, 2019

## **AUTHORIZED AGENCY CONTACT PERSON**

Proposers are advised that the Authorized Agency Contact Person for all matters concerning this RFEI is:

### **David Maco**

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#### SECTION 1. PURPOSE OF THE RFEI

The New York City Department of Transportation ("NYCDOT") is releasing this Request for Expressions of Interest ("RFEI") to solicit proposals from the bike share industry to implement a borough-wide demonstration project of dockless bike share on Staten Island (the "Project").

This RFEI concerns dockless bike share services only defined herein as being a network of publicly available bicycles wherein: technology is employed so that all essential system and locking components are installed in the bicycles; operated over the Internet directly or using an Apple iOS or Google Android Smartphone app, in order to eliminate the need for proprietary docking stations; bicycles are secured by mechanisms that prevent the wheels from turning or otherwise render the bicycle inoperable (i.e., bicycles are "Free-Locking"); and bicycles may be parked and rented from any point within the boundary of the network (together "Dockless").

In summer 2018, NYCDOT launched three small Dockless bike share pilots, of several hundred Dockless bicycles each, including a 400-bicycle pilot on the North Shore of Staten Island. These initial pilots evaluated Dockless bike share services at a small-scale, individual-bicycle level. Based on this experience and feedback received from vendors and general public that participated in the pilots, NYCDOT now wishes to evaluate this Project at the network level, in a careful and controlled fashion, with a larger number of bicycles operating within a larger service area.

This RFEI, and the Project to follow it, will allow NYCDOT to evaluate the safety, orderliness, quality, practicality, utilization, and sustainability of this Dockless service model at a larger scale on NYC's streets.

#### **SECTION 2. ESTIMATED TIMETABLE**

This RFEI and subsequent Project should adhere to the following estimated timetable:

|    | Timetable                               | Dates*                |
|----|---|-----------------------|
| 1. | Release of RFEI                         | April 22, 2019        |
| 2. | Question and answer deadline            | May 6, 2019           |
| 3. | Submission of responses to RFEI         | May 22, 2019          |
| 4. | Commencement of interviews              | Week of June 3, 2019  |
| 5. | Commencement of evaluations             | Week of June 10, 2019 |
| 6. | Approximate commencement of the Project | July 2019             |

<sup>\*</sup>Please note, the above timetable is merely an estimation and may be subject, at the sole discretion of NYCDOT, to change for any reason or no reason whatsoever.

#### **SECTION 3. PROJECT**

The Project will adhere to the following parameters:

- 3.1 Be solely Dockless, as defined in Section 1 above, and will not include proprietary docking stations;
- 3.2 The Project service area will have a boundary consisting of the entire borough of Staten Island see Appendix A: Project Program Area for a visual of the Project service area; cyclists using the Project service will not be permitted to lock or unlock Dockless bicycles outside of the Project service area;
- 3.3 NYCDOT's preference is for multiple vendors to operate within the Project service area, though NYCDOT will set a maximum allowable number of Dockless bicycles that may operate simultaneously within the Project service area.
- 3.4 Physical Standards for Dockless bicycles:
  - 3.4.1 The Dockless service may include conventional and/or pedal-assist bicycles.
  - 3.4.2 Dockless bicycles must allow the vendor to locate its Dockless bicycles at all times using GPS equipped bicycles or Smartphone app or an equivalent technology
  - 3.4.3 Dockless bicycles are required to meet functional specifications in attached Appendix B.
  - 3.4.4 Dockless Bicycle Engineering Specifications:
    - 3.4.4.1 Must be safe for public use and pre-certified safe for public use by a New York State licensed engineering firm for a maximum number of trips; individual Dockless bicycles that reach such maximum number of trips must be removed from Dockless service or refurbished;
    - 3.4.4.2 At a minimum, each bicycle shall adhere to all Federal, New York State and City standards, laws, rules and regulations.
- 3.5 Maintenance Standards for Dockless bicycles:
  - 3.5.1 Each bicycle available for public use must have received a maintenance check and cleaning within the last 15 days. NYCDOT may define minimum standards for maintenance checks in advance of Project launch or during Project;
  - 3.5.2 Damaged, deficient, unclean, or otherwise unusable Dockless bicycles that are permissibly parked must be repaired or removed from the public right of way within 24 hours;

3.5.3 Batteries for pedal-assist Dockless bicycles must be charged and serviced by vendor staff at vendor facilities, and must not be charged by independent contractors or in residences.

# 3.6 Dockless Bicycle Parking:

- 3.6.1 Dockless bicycles may lock to public bicycle racks when available, but service must allow Dockless bicycle trips to end by Free-Locking (i.e., bicycles are secured by mechanisms that prevent the wheels from turning or otherwise render the bicycle inoperable); participating Project vendors should have no expectation of bicycle rack installation by NYCDOT to support the Project;
- 3.6.2 NYCDOT will define Dockless bicycle parking guidelines in advance of the Project and in consideration of responses to this RFEI.

# 3.6.3 Corral Parking:

- 3.6.3.1 The Project may create non-proprietary stations or other designated parking places (collectively, "Corrals") in portions of the Project service area where demand is expected or demonstrated to be high;
- 3.6.3.2 Dockless service must include mechanisms to ensure that Dockless bicycles can only be locked or unlocked within Corrals in portions of the Project service area where Corrals are present;
- 3.6.3.3 Standards for Corral design, sizing, and siting will be developed, solely by NYCDOT, in consideration of responses to this RFEI; and
- 3.6.4 NYCDOT will define requirements for participating Project vendors to rectify improperly parked or misplaced Dockless bicycles.

## 3.7 Bicycle Rebalancing and Obstruction:

- 3.7.1 NYCDOT will require vendors to engage in bicycle rebalancing to mitigate the over concentration of Dockless bicycles in some portions of the Project service area and unavailability of Dockless bicycles in others; and
- 3.7.2 NYCDOT will require vendors to immediately rectify obstruction of the public right-of-way, whether due to individual, improperly parked Dockless Bicycles or an excessive accumulation of Dockless bicycles in a specific location, such as an intersection or a single block.
- 3.8 Software and Data Accessibility standards for Dockless service:

- 3.8.1 All Dockless service data, less customer personally identifying information, must be made available 24/7 to NYCDOT on a real-time and historical basis;
- 3.8.2 Dockless service must include an open application architecture via an Application Programming Interface (API) or other integrated data feed that allows the general public or interested parties to receive the Dockless service's real-time data as needed to replicate the bicycle location and availability information on the Dockless service's own Smartphone and computer apps; and
- 3.8.3 In addition to Section 3.8.1 and Section 3.8.2 above, a Dockless service API shall be provided that complies with the Mobility Data Specification (MDS) "Provider API" as detailed at: <a href="https://github.com/CityOfLosAngeles/mobility-data-specification">https://github.com/CityOfLosAngeles/mobility-data-specification</a>. The participating Project vendors must keep current with minor version alterations of MDS within six weeks of release or to a specific lesser minor version, as specified by NYCDOT. Vendors must inform NYCDOT when version alteration transition will occur at least 72 hours in advance.
- 3.9 Vendors may be required to participate in an equipment demonstration in advance of Project launch.
- 3.10 Dockless bicycle fleet size and implementation of Dockless service:
  - 3.10.1 The Project will roll out in tranches of Dockless bicycles to ensure a safe and orderly Dockless service that does not cause significant negative impacts to Staten Island communities. The size, timing, and number of tranches will be determined, solely by NYCDOT, in advance of the Project and in consideration of responses to this RFEI; and
  - 3.10.2 If, at its sole discretion, NYCDOT determines the Project to be performing poorly, a vendor or vendors may be required to reduce its fleet(s). NYCDOT will evaluate Project performance based on a number of factors that include, but are not limited to, orderliness (e.g., do parked Dockless bicycles cause undue clutter and/or obstruction?) maintenance (e.g., do vendors safely maintain their fleets in good repair and promptly remove damaged Dockless bicycles from Dockless service?) and usage (e.g., do the number of rides per Dockless bicycle per day indicate a demand for additional Dockless service?).

## 3.11 Reporting:

- 3.11.1 The Vendor shall on a monthly basis throughout the Project shall provide a monthly report as determined solely by NYCDOT; and
- 3.11.2 Upon termination of the Project, the Vendor shall provide a final report, as determined solely by NYCDOT, including but not limited to a self-evaluation and recommendations.

# **SECTION 4 QUESTIONS FOR RESPONDENTS**

## 4.1 General

- 4.1.1 What is the technology model for your Dockless service? Provide, at a minimum, descriptions of how Dockless bicycles are rented and returned, how and where Dockless bicycles are parked, how Dockless bicycles are secured when not in use, and how the system monitors the locations, number in use, and conditions of the deployed Dockless bicycles.
- 4.1.2 Where are your Dockless services currently in operation? List the cities in which you operate, the number of Dockless bicycles and size of area covered in each city, and how long the Dockless services have been in operation.
- 4.1.3 Estimate the number of Dockless bicycles that would be required to provide a robust and reliable borough-wide Dockless bike share service on Staten Island. In addition, recommend the size, timing, and number of tranches to best reach this number of Dockless bicycles.

# 4.2 Equipment and Technology

- 4.2.1 What are the safety standards for the service's Dockless bicycles? Describe the Dockless bicycles' features and design, engineering specifications, and any structural testing Dockless bicycles would undergo prior to public use.
- 4.2.2 Does the service include adaptive Dockless bicycles or any other mechanisms to accommodate disabled populations?
- 4.2.3 What technologies would be implemented to ensure the safety and success of the Dockless service? At a minimum, describe mechanisms intended to:
  - 4.2.3.1 Allow riders and members of the general public to report damaged Dockless bicycles/equipment;
  - 4.2.3.2 Recognize and/or disable damaged Dockless bicycles/equipment;
  - 4.2.3.3 Allow riders and members of the general public to report improperly parked Dockless bicycles;
  - 4.2.3.4 Recognize improperly parked Dockless bicycles;
  - 4.2.3.5 Locate Dockless bicycles;

- 4.2.3.6 Assist with rebalancing (e.g., by encouraging effective distribution and availability of Dockless bicycles throughout Staten Island through user incentives/disincentives, gamification, or other means);
- 4.2.3.7 Ensure Dockless bicycles cannot be locked or unlocked outside of Staten Island;
- 4.2.3.8 Ensure rider anonymity while complying with section 3.8.2 of this RFEI; and
- 4.2.3.9 Monitor the performance, condition, and safety of batteries in pedal-assist Dockless bicycles (if applicable).
- 4.3 Bicycle Parking and Placement
  - 4.3.1 How would the Dockless service detect and redress inappropriately parked Dockless bicycles? Describe technical and operational plans for improperly parked Dockless bicycles within a designated Project service area.
  - 4.3.2 How would the Dockless service detect and redress parked Dockless bicycles that have fallen?
  - 4.3.3 How will the Dockless service recognize when Dockless bicycles are parked within Corrals and compel users to park only in Corrals (in such areas where Corrals are implemented)?
    - 4.3.3.1 Does this technology require any equipment to be installed at or in the Corral?
      - 4.3.3.1.1 If yes, please describe such equipment and indicate whether it is proprietary or open standard. If proprietary, would its installation preclude the installation of other vendors' equipment into a coextensive Corral?
      - 4.3.3.1.2 If no, please describe the technology on Dockless bicycles that will detect Corrals and the accuracy with which it can enforce Corral boundaries.
    - 4.3.3.2 If your Dockless service does not currently include this functionality, what is your timeline for implementing it? Describe plans to use staff or other interventions to manage Dockless bicycles at major transportation hubs in the interim.
    - 4.3.3.3 NYCDOT invites vendor comments on how high-capacity bike parking—for Dockless bicycles and/or privately-owned bicycles—might best be developed quickly and responsively to meet high demand especially near public transportation nodes or major activity centers.
    - 4.3.3.4 NYCDOT invites any additional vendor comments on strategies to reduce and manage issues related to Dockless bicycle parking and obstruction.

# 4.4 Operations

- 4.4.1 What are the Dockless service's standards for maintaining its Dockless bicycles? Describe, at a minimum, the maintenance schedule for publicly deployed Dockless bicycles and list items that would be checked by maintenance personnel.
- 4.4.2 How will the Dockless service implement Dockless bicycle rebalancing to mitigate the over-concentration of Dockless bicycles in some areas and unavailability of Dockless bicycles in others, while encouraging productive use of Dockless bicycles? Describe both physical operations and technological interventions.
- 4.4.3 What specific actions would the vendor take to alleviate safety hazards or roadway/sidewalk blockage resulting from excessive Dockless bicycle accumulation in a specific area?
- 4.4.4 How will you measure and manage dispersion of Dockless bicycles across the Project service area to support the availability of the Dockless service in all areas at all times of day?
- 4.4.5 If the Dockless service includes pedal-assist Dockless bicycles, how will you replace and/or recharge batteries?

# 4.5 Pricing and Business Model

- 4.5.1 How much will users pay to rent a Dockless bicycle? Describe anticipated pricing and/or fare structure(s).
- 4.5.2 What are the anticipated revenue sources for the Dockless service? Indicate the percentage of revenues expected from user fares and describe any other revenue streams included in the Dockless service's business model.
- 4.5.3 Would advertising or sponsorship funding be part of the Dockless service's business model? If yes, describe the nature and extent of proposed sponsorship.
- 4.5.4 What is the business model's timetable for a Staten Island Dockless service to be self-sustaining? Explain when and under what conditions the Dockless service would be profitable, and indicate whether or not the Dockless service can operate sustainably in a competitive, multi-vendor market over the long term.
- 4.6 Outreach, Engagement, and Customer Dockless service
  - 4.6.1 What community outreach efforts would precede and accompany the launch of the Dockless service in Staten Island?
  - 4.6.2 How would the Dockless service encourage equity in mobility by serving underrepresented populations, including those living in public housing?

4.6.3 How would customers contact the company regarding billing disputes or problems with bicycle rental? How would (non-customer) members of the community contact the company to report damaged or misplaced Dockless bicycles?

# SECTION 5 SUBMISSION REQUIREMENT

- 5.1 Responses to the questions listed in Section 4 should be submitted in the order in which they are presented.
- 5.2 Respondents intending to participate in the Project shall:
  - 5.2.1 Respond to all questions in Section 4;
  - 5.2.2 Be on notice that NYCDOT may, at its sole discretion, issue further submission, selection, and/or evaluation criteria;
  - 5.2.3 Provide Dockless bicycles and connectivity to all essential system and locking components, as required by Section 3.9, upon short notice;
  - 5.2.4 Promptly provide the engineers certificate, as required by Section 3.4.4.1;
  - 5.2.5 Promptly endorse a Project agreement, to be provided by NYCDOT, that shall include, but not be limited to:
    - 5.2.5.1 Dockless service requirements;
    - 5.2.5.2 Project Service Area;
    - 5.2.5.3 Dockless Service Level Agreements;
    - 5.2.5.4 Insurance; and
    - 5.2.5.5 Indemnification.
- 5.3 Any inquiries concerning this RFEI should be directed by e-mail, under the subject line "Dockless Bike Share on Staten Island RFEI Q&A", to the email address of the Authorized Agency Contact, David Maco, at <a href="mailto:dmaco@dot.nyc.gov">dmaco@dot.nyc.gov</a>. All questions must be submitted no later than May 6, 2019, at 12:00 PM New York City time. NYCDOT will circulate questions and answers to respondents who provide e-mail addresses.
- 5.4 Responses to this RFEI should be submitted via email to the Authorized Agency Contact's email address indicated above, under the subject line, "Response to the Dockless Bike Share on Staten Island RFEI" by no later than 5:00 PM New York City time on May 22, 2019.

Please keep your response to this REFI as brief as possible. In no event should it be longer than twenty (20) pages, using no smaller than twelve (12) point type, not inclusive of any appended maps and/or images.

#### SECTION 6 ADDITIONAL INFORMATION

- 6.1 This RFEI is not intended as a formal offering for the award of a contract or for participation in any future solicitation.
- 6.2 Other than the short-term Project agreement (Demonstration Contract) NYCDOT does not intend to grant or issue any agreements on the basis of this RFEI.
- 6.3 NYCDOT, the City and their officials, officers, agents and employees make no representation or warranty and assume no responsibility for the accuracy of the information set forth in this RFEI.
- 6.4 No information contained in submitted submissions shall be deemed confidential and such information may be shared with other governmental entities and the public. Therefore, please do not submit any information that may be deemed proprietary in nature as NYCDOT may be required to disclose elements of submissions in response to an information request under the New York State Freedom of Information Law ("FOIL")
- 6.5 Neither NYCDOT nor the City shall be liable for any costs incurred by any respondent in the preparation, submittal, presentation or revision of its submission. Neither NYCDOT nor the City shall be obligated to pay and shall not pay any costs in connection with the preparation of such submissions.
- 6.6 All submissions shall become the property of NYCDOT and the City and shall not be returned.
- 6.7 NYCDOT at its sole discretion reserves, without limitation, the right to:
  - 6.7.1 Withdraw the RFEI at any time;
  - 6.7.2 Discuss various approaches with one or more respondents (including parties not responding to the RFEI);
  - 6.7.3 Use the ideas and/or submissions in any manner deemed to be in the best interests of NYCDOT and the City, including, but not limited to, soliciting competitive submissions relating to such ideas or proposals and/or undertake the prescribed work in a manner other than that which is set forth herein; and
  - 6.7.4 Change any terms of the RFEI.
- 6.8 All costs associated with the Project, including Dockless bicycles, equipment, maintenance, rebalancing, insurance etc. shall be solely borne by the respondents to the REFI.
- 6.9 Respondents to the REFI shall hereby be on notice that NYCDOT, at its sole discretion, may issue further submission, selection and/or evaluation criteria.



#### **APPENDIX B:**

## DOCKLESS BICYCLE FUNCTIONAL SPECIFICATIONS

At a minimum, Dockless bicycles must include the following features:

Step through design

Hold someone up to 240 pounds

Free-Locking capability (i.e., secured by mechanisms that prevent the wheels from turning or otherwise render the bicycle inoperable)

Ability to prevent locking and unlocking outside of the Project service area

Bell

Automatic front and rear flashing lights when bicycle is in motion which remain illuminated for sixty (60) seconds after bicycle is locked

Reflective sidewalls on tires

Within range, an infinitely adjustable seat height with ergonomic lever/tension adjustment and high-contrast height markings

Fenders for front and rear wheels

Front and rear hand brakes

Reflectors on pedals, spokes, and front and rear of bike

Non-slip pedal surface

Clearly displayed customer service contact information, user rules, unique identifying number

If pedal-assist, a clearly displayed label containing the maximum motor-assisted speed and wattage of the bicycle

Chain guard

Kickstand

Integrated location tracking technology, such as Global Positioning System ("GPS")

Compliance with all New York State/City laws