Shared Mobility Inc.
*Advancing Mobility as a Human Right*
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PROJECT MOVER

NEW YORK
Clean Transportation Prizes

*A WINNING PROJECT SUPPORTED BY NYSERDA*

## Project Background

Shared Mobility Inc. (SMI) requests expressions of interest from electric bikeshare vendors to launch an electric bikeshare (hereafter referred to as e-bikeshare) system in Westchester County, New York as part of Project MOVER. The e-bikeshare program will consist of up to 300 e-bikes once the program is fully deployed, with the initial deployment beginning in the Village of Ossining.

Project MOVER was awarded a $7 million grant from the New York State Energy Research and Development Authority's (NYSERDA) Clean Transportation Prize program. The project's mission is to bring affordable, clean, electric micromobility options to the Village and Town of Ossining, and the Villages of Tarrytown, Croton-on-Hudson, and Dobbs Ferry. Project MOVER includes additional program elements beyond e-bikeshare that will be launched later into the grant period: an e-bike ownership pathway, an e-bike library, and potentially a municipal fleet.

SMI is a national nonprofit organization that builds shared transportation solutions in collaboration with local partners nationwide. SMI is leading implementation of these core Project MOVER programs in the Village of Ossining and surrounding Rivertowns: e-bikeshare, e-bike library and e-bike purchase incentives programs.

## About Westchester County Rivertowns and Project MOVER

The Village of Ossining and surrounding Rivertown communities are part of the New York metropolitan area and are located approximately 20 miles north of New York City along the Hudson River. Metro North Railroad provides frequent commuter rail connectivity between the Rivertowns in Westchester County and New York City. The Village of Ossining has a population of roughly 27,000 people and with nearly 8,700 residents per square mile. With 1 in 10 Ossining households lacking access to a car and the average Ossining household spending 55% of its income on housing and transportation, there is a high need for additional affordable transportation options to complement existing public transportation. The combined population of all focus area communities totals approximately 75,000.

For decades, Village of Ossining residents and stakeholders have demonstrated sustained interest in expanding affordable, clean transportation options that can adapt to the area's challenging topography. During engagement for the 2020/2021 Downtown Mobility and Parking Study, community stakeholders advocated for more on-demand, non-driving options and

increased access to Class I pedal-assist bikes. E-bikes were seen as a solution to shift downtown parking demand, provide easy first- and last-mile connections to the Metro North station, ferry terminal, and park-and-ride lots, and to make bicycling a viable option for all residents. Given the challenging topography of the service area, e-bikes used in this project must be capable of adequately assisting riders ascending steep grades

NYSERDA's $7 million investment in Project MOVER allocates significant resources for the launch of e-bikeshare, e-bike libraries, and e-bike ownership incentive programs. The project aims to increase access to clean, affordable mobility options in underserved communities, reduce household transportation costs, and enhance connections to good paying jobs, services, and mass transit and opportunities outside the immediate community. Project MOVER seeks to advance the Village of Ossining's goal of becoming the greenest village in the nation by increasing bike and transit trips and decreasing driving trips and CO2 emissions.

SMI, the Village of Ossining, and other Project MOVER partners seek to establish a station-based or hybrid-docked electric bikeshare program in the Village consisting of up to 300 e-bikes in the Village of Ossining beginning in 2024 and expanding to surrounding Rivertown communities beginning in 2025.

**Information Requested**

SMI and the Project MOVER team are interested in understanding potential bikeshare system providers' hardware and software solutions as well as their technical and operational capabilities. SMI and the Project MOVER team intend to evaluate potential vendors using the following process:

- *Round 1: Vendor's RFEI response will be thoroughly evaluated and reviewed by core project partners. Vendor's will receive notification regarding the status of their proposal by early February 2024.*
- *Round 2: Vendor's selected for Round 2 evaluation will be required to provide hardware and software for local demonstration for testing with local partners. Interviews and further engagement with Round 2 vendors will take place starting in mid-February 2024.*

If interested vendors are not able to provide a comprehensive hardware and software solution for the Project MOVER team, they are encouraged to team with other vendors in order to form joint proposals that would address the need for a fully integrated bikeshare services partnership.

Please provide responses to the following questions:

***Bikeshare Services***

I. **The primary type of shared electric bicycle, including:**
   A. Size and general specifications of vendor's e-bikes, including, but not limited to, frame size, overall weight (with battery), basket size, and other key specifications

B. Details about the locking mechanism
C. Details about the availability of on-board GPS tracking
D. Details and performance on the security of parts from theft (proprietary bolts, etc.)
E. Details about the standard “look” of the bikes
F. Detailed specifications on the motor, and torque/cadence sensor
G. Details on number of gears and gear ratios
H. Typical lifespan of bike

**II. Battery charging, safety, and other technical capabilities**

A. Details on ability for battery swapping including, but not limited to,design specifications, swapping procedures, theft deterrents, and bike security.
B. Details on the battery range, battery lifespan, product safety testing results, and confirmation that batteries are UL certified (battery specs and charging specs)
C. Details related to the vendor's lithium ion battery standard operating procedures.
D. Safe charging and transport procedures
E. Details of related e-bike charging infrastructure (current or in development) and compatibility with other existing battery charging infrastructure
F. Details on “end of life cycle” procedures for vendor’s batteries including recycling or other sustainable outcomes

**III. The user experience, including:**

A. Options for bespoke branding and color schemes on e-bike, charging/docking station, and other physical hardware
B. Branding and look of user-facing software or apps, and customization options (if you do not own and make available a customer-facing app, please indicate your app partners and any associated integration, development and maintenance costs)
C. Standard method of registration and potential alternative methods
D. Standard method to borrow and return bikes and potential alternative methods
E. What payment methods are accepted and details on holds placed on credit or debit cards
F. Low-income related payment methods and programs, including non-credit and non-debit options
G. Accessibility options for non-English speaking populations

**IV. Software/hardware details, including:**

A. Required infrastructure: proprietary docking stations and/or lock-to technology on bikes (dock-based or hybrid-docking)
B. Software ability to geo-locate and “ping” stolen or missing bikes
C. GPS accuracy and reliability
D. General specifications of vendor’s fleet management software system

V. **Operations Models**
   A. Provide an estimated range of yearly operational cost for up to 300 e-bikeshare systems (turnkey) in the project's focus area based on vendor's prior experience.
   B. What sort of backend software access points can your vendor provide internal partners for monitoring system health, and overall project management?
   C. Ability to perform small demonstration and education activities prior to launch.
   D. Information on vendor's ability to partner directly with nonprofits for operations.
   E. Experience of vendor with corporate programs or partnering with a business to offer e-bikes at a discount.
   F. Ability of vendor to work with or transfer ownership of assets to nonprofit for bikeshare system operations
   G. Opportunities to monetize the system apart from user fees (e.g. sponsorships)
   H. Details of product warranties provided by your company
   I. Details of liability coverage provided by your company

VI. **Availability and granularity of data to Project MOVER team and NYSERDA, including:**
   A. Does the vendor utilize GBFS data standards? If not, what data standards are utilized?
   B. Real-time and past bicycle availability data such as number and locations of bikes in/out of service
   C. Does the vendor collect user data such as names, email addresses, and income levels? If so, what protections are in place to ensure end user privacy?
   D. Potential to survey users or members at least once a year
   E. Availability of custom reports for municipal and state partners and information regarding the legal ownership of data collected through bikeshare services

***Additional E-Bike Programs (OPTIONAL)***

In addition to bikeshare programming, Project MOVER will deploy two additional e-bike access programs: an e-bike ownership pathway and an e-bike library program. These programs will complement Project MOVER's core bikeshare services. SMI seeks input from potential partners as the development of these two additional programs is ongoing.

If applicable, please provide responses to the following questions.

I. **Experience (if any) supporting hardware/software and operations for additional e-bike programs:**
   A. Details and vendor's outlook on supplying e-bikes for long-term borrowing projects that allows users to take bikes home and charge.
   B. Details and vendor's outlook on supplying e-bikes for personal ownership
   C. Please provide any examples of long-term borrowing projects and how they operated.

D. Please provide any examples of direct purchases of e-bikes for private ownership, estimated cost per unit, and product availability timelines.

***Vendor Information***

**II. Vendor Experience and Qualifications**

A. **Supply chain:** From which country do you source your key components and/or assembly/production capabilities? How do you mitigate supply chain disruptions to guarantee on-time delivery?
B. **Financials**: How is your company funded and what are the mix of investors? What's your runway? If not, is your company cash flow positive/EBIDTA+? (Supporting documentation may be requested - e.g. financial statements).
C. **Legal**: Please indicate if your company has ongoing and past litigation.
D. **Business model(s):** Please describe your business model(s) and any secondary revenue sources that might contribute to the long-term sustainability of the electric bikeshare system.
E. **Innovations:** Please describe specific "innovations" developed or advanced by the vendor as well as their overall approach to advancing micromobility in the next 3-5 years.

**III. Product Pricing and Availability Timelines**

A. Please provide cost specifications and product availability timelines for the following items (both for program operations and local demonstrations and testing in early 2024):
    1. Vendor's e-bike
    2. Associated parking infrastructure
    3. Fleet management software
    4. E-bike batteries and related charging equipment
    5. Any other hardware or software offered by the vendor that are essential to the operation of bikeshare services

**IV. References**

A. Please provide a list of three (3) references, including, but not limited to public agencies, local municipalities, universities, community outreach partners, and local non-profit organizations.
B. Ability of vendor to provide e-bike and other technology for SMI and project partners to test and ride in Quarter 1 2024

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**Structure of Response**

For all answers related to topics **I** through **X (**noting that **VII** is optional) please clearly respond to each of the following using the below structure. Be sure to respond to each item within each topic area with no more than 250 words per item. Please see the example response structure below.

*EXAMPLE RESPONSE STRUCTURE*

**I) The primary type of electric bicycle, including:**

A) Size and general specifications of vendor's e-bikes
(250 word maximum)

*Vendor's response of 250 words maximum*

B) Details about the locking mechanism, and availability of on-board GPS tracking
(250 word maximum)

*Vendor's response of 250 words maximum*

Vendor's are encouraged to include other materials in addition to the formal responses either as attachments or links in the body of the email. Please mark any confidential documents clearly as such.

Please send letters of interest and any additional materials by ***January 26, 2024, 5pm eastern*** to SMI's Chief Development Officer, Mitch LaRosa, at mitch@sharedmobility.org, either as email attachments or as a link to download.