

THE PORT AUTHORITY OF NY & NJ
PROCUREMENT DEPARTMENT
4 WORLD TRADE CENTER
150 GREENWICH STREET, 21ST FLOOR
NEW YORK, NY 10007

REQUEST FOR INNOVATION 6000002504

ISSUE DATE: 10/21/2024

**TITLE: ELECTRIC AUTONOMOUS TRANSPORTATION NETWORK REQUEST
FOR INNOVATION**

RFI NUMBER: 6000002504

SUBMIT RESPONSE VIA EMAIL BEFORE THE DUE DATE AND TIME TO

BIDRFPSUBMITTAL@PANYNJ.GOV

QUESTION DUE DATE: 12/20/2024 TIME: 2:00 PM ET

RESPONSE DUE DATE: 01/10/2025 TIME: 2:00 PM ET

**BUYER NAME: KEDAR GOKHALE
PHONE #: 212-435-4643
EMAIL: KGOKHALE@PANYNJ.GOV**

October 21st, 2024

SUBJECT: REQUEST FOR INNOVATION (RFI) FOR ELECTRIC AUTONOMOUS TRANSPORTATION NETWORK

Dear Potential Respondent:

The Port Authority of New York & New Jersey¹ (“**Port Authority**” or “**PA**”) is interested in understanding and exploring the possibilities of safely and efficiently using electric autonomous vehicles at Newark Liberty International Airport (“**EWR**” or “**Newark Airport**”) to move passengers between key transfer locations and airport terminals. To that end, we are interested in vehicles, software, systems, and operators that can operate with L4 autonomy (“**AV System**”) in a dedicated lane or a semi-dedicated lane to move up to 1,000 people per hour per segment.

Therefore, we are seeking a detailed response (“**Responses**”) to this Request for Innovation, (“**RFI**”) from companies (“**Respondents**”) who may be interested in deploying their electric AV System at full scale in 2029. To achieve that goal, qualified Respondents will be asked to pilot their technology in 2026 or sooner at a Port Authority facility for a fixed duration of time (“**Pilot**”). After piloting their electric AV Systems, it is intended that a Request for Proposals will be issued in 2027 (“**RFP**”) to prequalified Respondents for the deployment of the full electric AV System.

Companies must submit Responses to this RFI and be selected for a Pilot in order to be eligible to respond to the RFP. New companies that are formed after the issuance of this RFI may be eligible to respond to the RFP, if they are able to demonstrate, via a Pilot, prior to issuance of an RFP (if any). Notwithstanding the “Due Date” of xxxx, this RFI shall remain open until such time as the Port Authority provides notice that it will cease accepting Responses for consideration to be selected as a pilot. Firms may submit their Responses on an ongoing basis until such time.

A team consisting of PA staff with diverse expertise including traffic engineering, airport operations, engineering, automotive, planning, and safety will evaluate the Responses based on evaluation criteria below. After evaluation, the Port Authority may select one or more Respondents to submit a Pilot Plan (“**Pilot Plan**”) to demonstrate a portion of their electric AV System at a Port Authority facility in 2026 or sooner. When asked to submit a Pilot Plan, the Port Authority will be specific about what system features should be demonstrated and what features must be demonstrated to qualify for the RFP. The Port Authority may ask for the Pilot Plan to be amended, as needed, prior to acceptance. If the Pilot Plan is accepted, the Respondent would enter into an agreement (“**Agreement**”) with the Port Authority to commence the Pilot.

After the Pilots are completed, the Port Authority will determine which Respondents are qualified to respond to an RFP. The PA intends to issue the RFP in or about 2027.

In their Responses to this Request for Innovation, Respondents should provide details of their full-scale electric AV System capabilities including the nature and features of the vehicles to be used,

¹ For details, please refer to: <https://www.panynj.gov/port-authority/en/about.html>

costs of vehicles and system management, customer experience, and specific infrastructure needs. For the purposes of the Response, Respondents should consider two (2) stations located 2,500 feet apart and seek to transport 1,000 people per hour between those points. Responses should explain the full electric AV System capabilities, and not be limited only to the capabilities of a Pilot.

I. PILOT PHASE

In seeking to deploy such an innovative autonomous transportation network in 2029, the Port Authority would like to pilot components of the systems in 2026 or sooner to validate their functionality and aid in developing the best system. If invited to submit a Pilot Plan, the Respondent will be given detailed information about potential facilities for testing and a fixed duration of time. The Respondent would include which components of their electric AV System can be tested at such facilities in 2026, what their infrastructure needs, costs, duration, and other requirements may be. A safety and risk mitigation plan will be required as part of the Pilot Plan, which will be included in the Pilot Agreement.

If the Pilot Plan is accepted, the Respondent will enter into a Pilot Agreement with the Port Authority to cover the execution of a paid Pilot, for which costs will be agreed-upon.

II. RFP PHASE

It is anticipated that after the Pilot Phase the Port Authority will issue an RFP in or about Q1 2027 for the final construction and delivery of an electric AV System to be online by 2029. Only Respondents that were selected to pilot their technology will be qualified to respond to the RFP. However, companies established after the release of this solicitation, along with those presenting fundamentally new or innovative technologies, may submit their qualifications within a designated qualification period, and if selected to conduct a Pilot, and such Pilot is successful, such firms may be added to the list of pre-qualified suppliers for the RFP phase. This helps to ensure that the list of potential suppliers remains current and includes the latest advancements and innovations in the industry. All criteria and requirements in this RFI apply only to this RFI and the Pilot phase and are not to be construed as obligating the Port Authority to any elements of the anticipated RFP.

III. EVALUATION CRITERIA

To determine which, if any, of the Respondents will receive an invitation to submit a Pilot Plan, all electric AV Systems will be evaluated on the criteria set forth below. Each criterion includes specific requirements the Port Authority intends to use as the basis for evaluation. Respondents may submit additional material above what is requested as relevant to each criterion:

- A. **Safety:** Demonstration of successful pilots or deployments in a live environment serving the public in a safe manner.

Respondents should include a detailed explanation of the electric AV System's safety features for positioning and object detection, including fail-safe systems if those primary

systems are inoperable (such as remote driving capabilities or manual interventions). Respondents should have a sense of continuity of operations for the full electric AV System. Respondents should also include certifications, identifying the certifying authority and locations to prove that their vehicles have been approved and are up to safety requirements set by, but not limited to, the National Highway Traffic Safety Administration (NHTSA), the Federal Motor Carrier Safety Administration (FMCSA), the Federal Motor Carrier Safety Regulations (FMCSR), and the Federal Motor Vehicle Safety Standards (FMVSS).

Respondents should include mention of any wayside infrastructure such as hard barriers or canopies that may be required for their systems to safely operate in winter weather or would enhance system performance. Wayside infrastructure can include cameras, integration with traffic lights, or other technologies.

Respondents should outline their cybersecurity measures, including technologies used, compliance with industry standards, threat monitoring, and response protocols. They should also mention regular security audits, penetration testing, and staff training to prevent cyber-attacks and hacking.

Respondents should also include their US and global experiences in obtaining permits and approvals for autonomous driving pilots and deployments on both private and public roads with various traffic conditions.

Respondents should respond with details as to how they would interact with National Highway Transportation Safety Administration (NHTSA), the New Jersey Motor Vehicle Commission (MVC), or other related and relevant state and government agencies to obtain required approvals for this Pilot and the potential final electric AV System.

Respondents will be responsible for providing and maintaining proper insurance coverage as determined by the Port Authority throughout the duration of the Pilot.

- B. **Cost and Timeline:** The proposed cost and timeline to deploy an electric AV System that can transport 1,000 people per hour between two (2) stations spaced 2,500 feet apart for a 5-year period. We anticipate that no safety or other attendant will be required during the use of the proposed electric AV System. We also expect that the entire proposed electric AV System will be monitored and operated where necessary remotely 24-hour a day and 7-days a week.

Respondents should assume that the Port Authority can provide an at-grade semi-dedicated lane but should include other needed infrastructure elements in their proposed costs. Respondents should include an estimated timeline for building out such a system, taking any unique needs into account (e.g., the production lead time and availability timeline of their autonomous vehicles if they are not available at this time). Respondents should include major set up costs, ongoing annual operations and maintenance (specifying if the maintenance will be done on/off-site), and any other costs that would contribute to the proper working of their electric AV System for a 5-year period.

Respondents should assume they will be solely responsible for the electric AV System operation including fleet management.

Note: This is not to be construed as the final cost of the electric AV System, but it must reflect a reasonable approach to deploying the Respondent's technology. Only firms ultimately awarded an agreement with the Port Authority will be paid as set forth in any such agreement.

C. System Performance: The performance and capabilities of the proposed electric AV System.

Respondents should submit performance information detailing, the following, which shall not be limited to:

- i. Vehicle form, dimension, carrying capacity, seating layout, ADA compatibility and accessibility,
- ii. Minimum safe vehicle headways,
- iii. Platooning or other coordinated movement capabilities
- iv. How the electric AV System would be operated including charging solutions, special infrastructure requirements (e.g., I2V integration),
- v. What technological/infrastructure requirements are needed,
- vi. Vehicle capabilities such as driving bi-directionally, multiple vehicles platooning (i.e., two and more vehicles traveling in same direction at same speed with distance between vehicles at less than half of their vehicle length without physical contact), connected vehicle technology (V2V) and ability,
- vii. Performance in serve weather conditions and in complex and dynamic airport environments with limited space and possible interference under canopy, being surrounded by high-rise and/or giant block buildings and airport communication, and
- viii. Current/previous successful deployments in the US and globally.

Generally, performance information should include but is not limited to capacity, speed, ability to operate in mixed traffic, weather dependencies, precision parking capabilities, reading traffic lights and road signages, and any other pertinent performance information such as charging, remote monitoring and operation, fleet management, and maintenance.

As the PA is interested in procuring a complete electric AV System in the future, please comment on how your system could also operate with multiple stations, including ideal dwell times, passenger boarding conditions, and the need for spare vehicles.

IV. HOW TO RESPOND TO THIS RFI

The Respondent's Submission to this RFI should be no more than 25 pages in PDF format, include all the information requested in Section III, and additionally contain the following:

- A. The name, address, URL and Federal Employer Identification Number of the Respondent.

- B. Contact information (name, title, email, telephone number) of the individual who shall act as the Respondent's contact with the Port Authority for further information requests and future solicitations, if any. In addition, at any time after the opening of the responses to the RFI, the Port Authority may request additional information relating to the Respondent's qualifications and will use this individual as the point of contact for these queries.
- C. A brief description of the company, its lines of business, organization, mission, affiliates, objectives, location, its years in business under its present business name, and a list of previous business names used, if any.
- D. A detailed response to the Evaluation Criteria and Submission Requirements set forth in Section III.
- E. Please describe any obstacles Respondents may have encountered in deploying their electric AV System and describe any obstacles you have identified that should be considered by the Port Authority when contemplating uses for electric AV Systems at its facilities and in the region. This is for informational purposes only and will not be evaluated.
- F. A signed copy of Attachment A (Attachment on Terms of Discussion) hereof.

Responses should be submitted via email only to Bid Custodian at bidrfpsubmittal@panynj.gov. Each electronic submission must include all required information. The Authority may request an original, signed paper submission at any time..

Each email submission should include the Due Date, RFI #, and solicitation title.

If requested by the Port Authority, the paper submission must be identical to the electronic submission that was submitted by the RFI Due Date. In the event of a discrepancy, the electronic submission shall take precedence.

HAND DELIVERIES WILL NOT BE ACCEPTED.

Respondents should anticipate that some emails may take a period to be delivered, and as such, should send them as early as possible to ensure it is received no later than 2:00 P.M. ET in the designated Authority's designated email account.

Respondents should note that there is a limit of 25 pages to their response and the size of email attachments that can be received by the Port Authority is 100MB. Additionally, Respondents must check their files to ensure they have submitted complete documents, i.e. no missing pages.

Respondents' internal networks may have limits on the size of emails they can send. Therefore, it is incumbent upon the Respondent to determine ahead of time that the file(s) being submitted can both be transmitted by their servers and accepted by Port Authority servers. If the files are too big, the Port Authority will accept responses in multiple emails, provided all parts which comprise a complete submission are received by the RFI Due Date and time and all emails should include the RFI # and title. Under this circumstance, Respondents should note in the description of the email

that the response will be arriving in multiple parts and include in the subject line the total number of components and which component, of the total, the particular transmission represents.

V. RESPONDENT QUESTIONS

All communications concerning this RFI should be directed to the Buyer listed on the cover page. All questions regarding this RFI should be submitted by email to the Buyer at the email address listed, and by the due date and time set forth, on the cover page. Please include in your email's subject line the following: **"ELECTRIC AUTONOMOUS TRANSPORTATION NETWORK – RFI 6000002504"** The Buyer is authorized only to direct the attention of prospective Respondents to various portions of this RFI so that they may read and interpret such portions themselves.

Neither the Buyer nor any other employee of the Port Authority is authorized to interpret the provisions of this RFI or give additional information as to its requirements. If interpretation or other information is required, it will be communicated to Respondents by written addenda and such writing shall form a part of this RFI.

Questions must be submitted no later than **12/20/2024 (Friday) COB**.

VI. MEETINGS WITH RESPONDENTS

At any time after the receipt of Submissions, the Port Authority may ask a Respondent to attend an informal informational meeting with Port Authority staff to discuss the Respondents' responses, and any other matters relating to the potential electric AV System. The intent of these meetings is to promote an open exchange of information that, as noted, may assist the Port Authority with developing future electric AV Systems. These meetings can be virtual or in person at Port Authority's discretion.

VII. GENERAL

- A. The purpose of this RFI is solely to gather Responses from Respondents and may serve as a preliminary step towards the development of an **Electric Autonomous Transportation Network** Pilot and subsequent RFP (if any).
- B. At any time after the opening of the Submissions to this RFI, the Port Authority may request additional information relating to the Respondent's qualifications.
- C. The Port Authority reserves the right to conduct interviews, issue a solicitation for proposals, or to perform none of the above.
- D. The Port Authority reserves the unqualified right in its sole and absolute discretion to choose to accept or reject any and all firms responding to this RFI on the basis of an

evaluation of the responses to the RFI. The Authority also reserves the unqualified right to request further information from any Respondent.

- E. Neither the information submitted from your firm, nor the submission of your Submission to the RFI and any documents or other information supplied by Respondents, nor participation in the delivery of a demonstration, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, will impose any obligation on the Port Authority. The Port Authority shall have no obligation to any Respondent. The Respondent's costs of participation in or information preparation are not compensable, other than any which may be outlined as part of the Pilot phase.
- F. At any time, in its sole discretion, the Port Authority may, by written addenda to this RFI, modify, amend, cancel, and/or reissue this RFI. If an addendum is issued prior to the date a response is due, it will be made available on the following website:
<http://www.panynj.gov/business-opportunities/bid-proposal-advertisements.html>
If an addendum is issued after Submissions have been received, it may, at the Port Authority's discretion, be provided only to those Respondents whose submittals may be impacted by such change/addendum.
- G. The Port Authority reserves all its rights at law and equity with respect to this RFI including, but not limited to, the unqualified right, at any time and in its sole discretion, to change or modify this RFI, to reject any and all Submissions, to waive defects or irregularities in Submissions received, to seek clarification of Submissions, to request additional information, to request any or all Respondents to make a presentation, and/or submit a Pilot Plan, to undertake discussions and modifications with one or more Respondents, who, at any time, subsequent to the deadline for Submissions to this RFI, may express an interest in the subject matter hereof.
- H. No Respondent shall have any rights against the Port Authority arising from the contents of this RFI, the receipt of information, or the incorporation in or rejection of information contained in any Submission or in any other document. The Port Authority makes no representations, warranties, or guarantees that the information contained herein, or in any addenda hereto, is accurate, complete, or timely or that such information accurately represents the conditions that would be encountered during the performance of any subsequent contract, if any. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Respondent, by submitting its Submission, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefore in any manner whatsoever.
- I. Neither the Commissioners of the Port Authority, nor any of them, nor any officer, agent or employee thereof shall be charged personally with any liability by a respondent or another or held liable to a Respondent or another under any term or provision of this RFI or any statements made herein or because of the submission or attempted

submission of a Submission, information, or other response hereto or otherwise.

- J. This RFI is an inquiry only. No contract or agreement will be entered into as a result of this RFI, other than as outlined in the Pilot phase or otherwise at the sole discretion of the Port Authority. There are no guarantees made or implied by the Port Authority that any information provided will result in a public procurement process for the performance of any services contemplated herein, nor that any subsequent procurement will follow the approach described herein.