Post: 8/7/2023

Georgia Department of Transportation

Request for Information
RFI #: 48400-DOT0002848

for

Hydrogen Refueling Station Deployment

Dated Issued: August 7, 2023

Responses Due: September 7, 2023

Georgia Department of Transportation
One Georgia Center
600 West Peachtree, N.W.
Atlanta, Georgia 30308

Purpose of Request for Information

The Georgia Department of Transportation (GDOT) is issuing this Request for Information (RFI) to seek feedback from private-sector entities – specifically heavy duty truck / fleet owners operating near the Ports of Savannah and Brunswick and potential hydrogen refueling station (HRS) developers (Respondent(s)) regarding the deployment of HRS in the State of Georgia (State) and to inform development of any future solicitation or procurement(s) relating to the same. GDOT will use the feedback generated by this RFI in conjunction with other information available to better understand any opportunities to support the adoption of hydrogen fuel cell-powered (FCEV) heavy trucking in the State.

GDOT requests that parties read the following information and questions carefully and respond with the best information available. GDOT appreciates your participation in this RFI process. Response to this RFI is not a prerequisite for participation in any future solicitation or procurement process, should GDOT offer such an opportunity.

I. Overview

GDOT is interested in better understanding the potential market supply and demand for HRS development within in the State. Through the Bipartisan Infrastructure Law of 2021 (BIL), significant funding has become available to spur the growth of FCEV heavy truck transportation. With this RFI, GDOT is seeking to better understand the feasibility of using these funds to spur the deployment of HRS in the State.

II. RFI Process

a. Overview

This RFI is an information gathering tool and such information gathered may or may not be used by GDOT to develop a competitive solicitation at some future date.

Respondents are not required to respond to all of the questions in the RFI. Failure to respond to this RFI or any specific questions in the RFI will not prohibit the Respondent's participation in any competitive solicitation or procurement that may result from the RFI. GDOT welcomes any and all responsive participation in this RFI that may allow GDOT to better understand the Respondent's interest and capabilities.

b. Schedule of events

The schedule of events set out below represents GDOT's best estimate of the schedule that will be followed for this RFI process. Any changes to the dates up to the closing date of the RFI will be publicly posted prior to the closing date of this RFI. After the close of the RFI, GDOT reserves the right to adjust the remainder of the proposed dates on an as needed basis with or without notice.

Description	Date	Time
Release of RFI	August 7, 2023	N/A
Deadline for Submitting RFI Responses	September 7, 2023	2:00 PM EST

c. Reserved Rights and Disclaimers

This RFI does not constitute a Request for Qualifications (RFQ) or a Request for Proposals (RFP). This RFI is not a competitive solicitation, nor does it satisfy the requirements of a competitive procurement. However, the information gathered may help GDOT to determine best method(s) for procurement, the feasibility of an HRS project, and industry experience and interest in the contemplated method of HRS delivery. This RFI does not commit GDOT to initiate a procurement(s), award a project(s), or enter into an agreement(s). GDOT reserves the right to develop any potential project(s) in any manner that it, in its sole discretion, deems necessary or desirable, including by modifying any date(s) set forth or projected in this RFI, modifying the scope of the project(s) or the procurement or delivery method, or not proceeding with the project(s). In no event shall GDOT be bound by, or be liable for, any obligations regarding a potential HRS project until such time (if at all) as an agreement has been executed, authorized and delivered. Information included in this RFI is for the purpose of providing information to facilitate responses. This RFI and the information herein is not, and is not intended to be, contractual in nature. GDOT makes no representation as to the accuracy, completeness or relevance of the information provided herein, and you should not rely on such information in respect of the potential project(s) or any future agreement(s). GDOT may disclose information submitted to GDOT pursuant to this RFI as permitted by Applicable Law and this RFI.

By submitting its responses in response to this RFI, Respondents specifically acknowledge the disclaimers set forth in this Section II(c) (Reserved Rights and Disclaimers).

d. Open Records Laws and Applicable Law

Respondents are advised that GDOT may, without limitation, disclose the information contained in any response(s) to its consultants and advisors, and to any other State or federal governmental entity, consolidate responses and anonymize the source of responses, for publication or use in connection with the procurement of a potential project.

In addition, Respondents should obtain and familiarize themselves with the Open Records Laws (O.C.G.A. § 50-18-70 et. seq.) applicable to public information.

References to “Applicable Law” shall mean any statute, law, code, regulation, ordinance, rule, common law, judgment, judicial or administrative order, decree, directive, or other requirement having the force of law or other governmental restriction (including those resulting from the initiative or referendum process) or any similar form of decision of or determination by, or any interpretation or administration of any of the foregoing by, any governmental entity which is applicable to the project(s) or work, whether taking effect before or after the date of this RFI.

III. Instructions to RFI Respondents

By submitting a response to this RFI, the Respondent is acknowledging that the Respondent has read, and agrees to comply with, the information and instructions contained in this RFI.

a. General information and instructions

Submitting Written Questions

All questions concerning this RFI must be submitted in writing via email to: ContractsOGC@dot.ga.gov

Costs for Preparing Responses

The cost for developing the response and participating in this RFI process is the sole responsibility of each Respondent. GDOT will not provide reimbursement for such costs.

Additional Information

GDOT may, in its sole discretion, ask one or more Respondents to provide additional information and/or meet with GDOT to further discuss the Respondent's information. However, nothing in this RFI shall obligate GDOT to conduct any one-on-one meetings, nor to conduct one-on-one meetings with all Respondents.

b. Response and submission instructions

Listed below are key action items related to this RFI. This portion of the RFI provides instructions regarding the process for reviewing the RFI, preparing a response to the RFI and submitting a response to the RFI.

RFI Released

The release of this RFI is formally communicated through the posting on the Georgia Procurement Registry (GPR).

RFI Review

The RFI consists of this document, entitled “RFI 48400-DOT0002848”.

Please carefully review all information contained in the RFI, including all documents available as attachments or available through links. Any difficulty accessing the RFI or any links or documents provided by GDOT should be reported immediately to: ContractsOGC@dot.ga.gov

Preparing a Response

When preparing a response, each Respondent should ensure its response is accurate and readily understandable. Each Respondent should include all relevant information, including the company name and key contact information (name, email and phone), as well as a brief description of your company’s relevant product and/or service offerings and value proposition in the hydrogen market.

Electronic Copies

1. Use caution in creating electronic files (i.e., make sure files do not contain viruses, etc.). If GDOT is unable to open an electronic file due to a virus or because the file has become corrupted, the Respondent's feedback cannot be considered.

2. Use commonly accepted software programs to create electronic files. GDOT has the capability of viewing documents submitted in the following format: Microsoft Word or WordPad, Microsoft Excel, portable document format file (PDF), and plain text files with the file extension noted in parentheses (.txt).

3. Ensure that the total file size of the RFI response and all attachments is equal to, or less than 10 megabytes.

Submitting a Response

Submit RFI responses by no later than the deadline set forth in Section II(b) (Schedule of Events) via email to: ContractsOGC@dot.ga.gov. Mark the subject line of the email with "RFI 48400-DOT0002848".

IV. Information Requested

GDOT requests information on Hydrogen Refueling Station Deployment. This information will help guide GDOT to determine the most viable procurement and critical contract items approach. The requested information is organized from two perspectives – heavy duty truck / fleet owners operating near the Ports of Savannah and Brunswick and potential HRS developers.

Heavy duty truck / fleet owners

a. FCEV Adoption

Q1. If HRS were prevalent, would you consider purchasing FCEV trucks? If so, what factors drive the decision and the timing of execution?

Q2. Is cost parity with diesel required to incentivize the fleet transition to FCEVs? At what percentage of the cost of diesel would it be competitive to operate FCEV trucks (e.g. 50% cost of diesel, 100% cost of diesel, 150% cost of diesel)?

Q3. What is a likely time horizon to transition from diesel to FCEV in the Southeastern U.S.?

Q4. What sort of routes would be most attractive for FCEV trucks, especially around the Ports of Savannah and Brunswick?

Q5. What other general locations within the State would be most beneficial for HRS?

Q6. Would a single site HRS be adequate to advance market adoption of hydrogen fuel for commercial vehicles, or is it important to have multiple sites available initially?

b. HRS needs

Q7. What pressure (350bar/700bar) would you need at the HRS? Would dual pressure sites be preferable?

Q8. What minimum refuel rate (kg/minute) or maximum time to refuel would you need or would seek to provide to your fleet?

Q9. What other amenities and services would you expect to be at the HRS site (e.g., bathrooms, amenities, etc.)?

Potential HRS developers

c. Demand

Q10. What conditions and factors are considered when creating and evaluating the business case for investment in one or more HRS?

d. Federal funding considerations

Q11. How familiar is the HRS industry with USC / CFR Title 23 requirements for use of Federal Highway Administration (FHWA) funds?

Q12. Would compliance with FHWA federal aid requirements be challenging and/or be impracticable for a public-private partnership arrangement to procure HRS with FHWA funds? If so, how?

Q13. If federal funds were used to develop HRS, could your company comply with Build America Buy America Act requirements? If not, would your company need to apply for Build America Buy America Act waivers and how long would you estimate your company could comply?

Q14. Have you ever dealt with National Environmental Policy Act (NEPA) compliance for an HRS? If so, can you share your experience?

For the following sections, please assume market demand in the metro Savannah area to be any or all of the following: (a) 1,000 kg of hydrogen per day, (b) 3,000 kg of hydrogen per day, (c) 10,000 kg of hydrogen per day.

e. Site considerations

Q15. How much area would you expect to need for an HRS site (in acres)?

Q16. How many pumps would you expect are needed to meet initial demand levels? What about future demand?

Q17. What pressure (350bar/700bar) would you need? Would dual pressure sites be preferable?

Q18. How much daily capacity (kg/day) should a site be able to serve?

Q19. Are you able to locate an HRS near the Port of Savannah or in the greater metro Savannah area?

Q20. Are there specific concerns you would need to address if locating an HRS near the Port of Savannah or in the greater metro Savannah area?

Q21. What other locations within the State of Georgia would be attractive for an HRS?

Q22. Are there modular or mobile solutions available that could allow a station to scale up as demand increases?

f. Construction Schedule

Q23. From notice to proceed, how long would it take to construct a 1,000 kg/day HRS? How would this change for a 3,000kg/day or 10,000kg/day HRS?

Q24. Are there any contractual or financial mechanisms that could speed time for the HRS to open for business?

Q25. What are the main drivers of time to construct?

Q26. What types of permitting would you expect to need to construct an HRS? Are there specific permits that are more onerous than others?

Q27. How would you approach contracting for construction?

g. Capital Costs

Q28. What is a conservative estimate of the capital costs (excluding real estate) of a 1,000kg/day HRS? How would this change for a 3,000kg/day or 10,000kg/day HRS? Can you provide any information of how that cost would scale for a larger capacity station (e.g., 3,000kg/day or 10,000kg/day) or additional stations?

Q29. What are the main drivers of HRS capital costs?

Q30. What are the key risks in HRS construction?

Q31. Are there any equipment supply chain issues in the HRS industry GDOT should be aware of?

Q32. For the same capacity, would a liquefied hydrogen or compressed hydrogen HRS have a lower capital cost?

Q33. Is on-site production of hydrogen a reasonable solution? Is on-site production of zero-carbon and/or low-carbon (<4kg CO2/ kg hydrogen) hydrogen a reasonable solution?

h. Operating and Maintenance Costs

Q34. What is a conservative estimate of the annual operating costs (excluding fuel supply) of a 1,000kg/day HRS? Can you provide any information of how that cost would scale for a larger capacity station (e.g., 3,000kg/day or 10,000kg/day)?

Q35. What are the main drivers of HRS operating and maintenance costs (excluding fuel supply)?

Q36. What would drive you to source liquefied vs. compressed hydrogen supply?

Q37. What would you expect to be the delivered price/kg of hydrogen to an HRS near the Port of Savannah? What would be the drivers of that price?

Q38. Is there adequate hydrogen available produced in Georgia to supply a 1,000kg/day HRS? How about for a 3,000kg/day or 10,000kg/day HRS? What about something larger?

Q39. Are you able to commit to either a fixed or indexed price over 2 years? 5 years? 10 years?

Q40. What is a typical operating margin for an HRS?

Q41. Are you aware of adequate sources of zero-carbon and/or low-carbon hydrogen in or near Georgia that could supply 1,000kg – 10,000kg per day?

Q42. What range of price would you anticipate being able to charge at an HRS in Georgia currently? How would this differ if the hydrogen supply was zero-carbon and/or low-carbon?

i. General

Q43. Please provide any additional feedback that you believe can help GDOT to understand the potential for HRS development in the State.