

RFI EFAA 202400025

Colorado Medium- and Heavy-Duty (M/HD) Electric Vehicle (EV) Charging Corridors Request for Information (RFI) - October 4, 2023

SECTION 1.0 REQUEST FOR INFORMATION

1.1. MARKET RESEARCH ONLY

This is a Request for Information (RFI) and is intended only for market research purposes. In accordance with §24-103-201.5, C.R.S and the associated Colorado Procurement Rules, this is not a solicitation. No award will result from any response to any vendor responding to this RFI. This RFI is considered formal market research for the purposes of §24-37-302(1) (a.5), C.R.S., if applicable.

1.2. CONFIDENTIALITY

- 1.2.1. All responses to this RFI shall be considered confidential until after an award based on a subsequent solicitation has been made or until the procurement official from the issuing agency determines that the State will not pursue a solicitation based on this RFI. After such time, the responses to this RFI shall be open to public inspection in accordance with the provisions of the Colorado Open Records Act. Reference §24-103-201.5(4), C.R.S.
- 1.2.2. The State reserves the right to have information submitted in response to this RFI be reviewed by other entities within the State for purposes of compiling and analyzing possible options.

1.3. INTRODUCTION

On behalf of the State of Colorado, the Colorado Energy Office (CEO) is issuing this RFI to inform the design and development of the State's forthcoming Fleet Zero-Emission Resource Opportunity (Fleet-ZERO) Medium- and Heavy-Duty (M/HD) Charging Corridors funding lane, receive feedback on the draft Colorado M/HD Charging Corridors GIS Map, and gain a better understanding of the prospective business models, scope, design, timelines, anticipated demand, utilization, costs, and other helpful information in relation to successfully deploying M/HD corridor charging throughout Colorado.

The M/HD Charging Ports Per County By 2030 GIS map layer shows the breakdown of home, depot, and en-route charging ports estimated by the State's M/HD charging infrastructure study in each Colorado county, while prospective future long-haul charging is informed by the Long-Haul Corridors and Long-Haul Stations map layers and associated deployment phases. In certain geographic locations, future long-haul truck charging may overlap with en-route charging where M/HD vehicle charging needs will exist for both short- and regional-haul operations, as well as for long-haul. Please see the introduction to the GIS map and study linked above for additional information.

1.4. BACKGROUND, OVERVIEW AND GOALS

A key priority for the State of Colorado is to support the accelerated electrification of M/HD vehicles and to ensure this transition is effective, efficient, equitable, and

accessible. In 2022, Colorado released its <u>Clean Truck Strategy</u>, introducing a series of actions to enable the M/HD zero-emission vehicle (ZEV) transition, including establishing goals of 35,000 M/HD ZEVs on the road by 2030, 100% new M/HD ZEV sales by 2050, and a long-term target of 100% M/HD ZEVs on the road in the state. To achieve these objectives, in addition to the need for comprehensive depot charging, the State's <u>M/HD charging infrastructure study</u> identified the necessity for considerable investment focused on deploying a robust network of high-powered M/HD charging sites along Colorado freight corridors to enable regional- and long-haul electric truck travel, provide en-route fleet charging, and ensure local charging is available to fleets and independent owner-operators without access to private depot charging. In support of the State's M/HD ZEV goals, in April 2023, Colorado adopted the Advanced Clean Trucks (ACT) rule, and in June, the State closed the first funding rounds for the <u>Clean Fleet Vehicle and Technology Grant Program</u> and the <u>Fleet-ZERO</u> grant program. CEO is now developing a funding lane for the Fleet-ZERO program dedicated to M/HD corridor charging.

Note: For the purposes of this RFI, "M/HD corridor charging" is defined as fully- or semi-public (reservation-based) local, short-, and regional-haul en-route M/HD charging, in addition to long-haul charging. Charging-as-a-service is referring to charging with longer-term access and/or use agreements.

For interested parties, please feel free to sign up for the M/HD Charging Corridors Teaming Partner List.

1.5. SCHEDULE OF ACTIVITIES

1.5.1. This Schedule of Activities is for information and planning purposes only. Schedules for Activities listed as "Estimated" may be subject to change depending on the needs of the State. All times are stated in Mountain Time (MT), as adjusted for daylight savings.

1.5.2.

	Activity	Date
1	RFI published via Colorado VSS	October 4, 2023
2	Response Submission Deadline	December 1, 2023 5:00 PM MT
	Responses must be submitted in the method described below	

1.6. SOLE POINT OF CONTACT

1.6.1. The Procurement Contact for this RFI is:

Sara Graf

Procurement Director, Office of the Governor

sara.graf@state.co.us

SECTION 2.0 REQUESTED INFORMATION

2.1. The Colorado Energy Office is requesting responses to the questions listed below.

Questions for fleets / end-users are listed at the bottom of each section:

Company Profile

- 1. Company name
- 2. Address of headquarters
- 3. Local address(es) (if applicable)
- 4. Local contact person full name and title (if applicable; if not include best contact)
- 5. Local contact phone number (if applicable; if not include best phone number)
- 6. Local contact email (if applicable; if not include best email)
- 7. Company website (if applicable)
- 8. Please describe your organization, its qualifications, number of years in business, and interest in responding to this RFI
- 9. Please outline the services offered by your organization and note the role of your organization in the market (e.g. fleet, independent owner-operator, manufacturer, hardware / software provider, truck- / charging-as-a-service provider, site host, etc.)

Business Model & Market Dynamics

Site Hosts / Charging Providers:

- Please describe your organization's approach and general business model with respect
 to planning for and deploying M/HD corridor charging and/or charging-as-a-service
 offerings and explain the general scope of service that would be provided to customers.
- 2. Please describe your organization's current, and near- to mid-term plans, if any, for investment in M/HD corridor charging and/or charging-as-a-service in Colorado.
- 3. Please describe your organization's engagement with electric utilities in Colorado to-date, if any, with respect to M/HD charging.
- 4. Please describe the following referencing your organization's likely M/HD charging site deployment structure (if a combination of entities, please explain how each would interact):
 - a. Who would own or lease the property(s)?
 - i. If lease, what would be the typical duration of the lease agreement?

- b. Does your organization currently own or lease any applicable site(s) in Colorado, or is your organization currently exploring prospective site options in the state?
- c. Who would own the charging equipment?
- d. Who would be responsible for operation and maintenance of the charging equipment?
- 5. Would your organization plan to incorporate other fueling services, such as hydrogen? If yes, what additional details should the State consider with regards to program design, site identification, planning, layout, minimum requirements, or future-proofing? Are there synergies that would be gained from combining charging with hydrogen fueling?
 - a. Note: The Colorado Energy Office will be issuing an additional RFI focused on a study CEO will be conducting in 2024 to inform the future design and development of a hydrogen fueling infrastructure program for M/HD vehicles tentatively planned for 2025. Please indicate whether your organization would like to receive information on the upcoming hydrogen fueling infrastructure study RFI when it is released.
- 6. Would your organization plan to participate in the Fleet-ZERO M/HD Charging Corridors funding lane if offered in 2024? Please provide any feedback in consideration of such participation.
 - a. If not, when would you suggest the State launch the funding lane and why?

Fleets / End-Users:

- 1. Please describe your organization's current, and near- to mid-term plans / approach, if any, to the prospective utilization of M/HD corridor charging in Colorado (once available).
 - a. What would lead your company to, or prevent your company from, utilizing M/HD corridor charging in Colorado?
- 2. Please describe your organization's engagement with electric utilities in Colorado to-date, if any, with respect to M/HD charging.
- 3. Please describe the type and weight class of vehicles your organization is considering transitioning to zero-emission and the generally estimated time horizon.
 - a. Is your organization solely planning to deploy M/HD electric vehicles, or is your organization also considering hydrogen vehicles?
 - b. Note: The Colorado Energy Office will be issuing an additional RFI focused on a study CEO will be conducting in 2024 to inform the future design and development of a hydrogen fueling infrastructure program for M/HD vehicles tentatively planned for 2025. Please indicate whether your organization would like to receive information on the upcoming hydrogen fueling infrastructure study RFI when it is released.
- 4. Is your organization planning to apply to the <u>Fleet-ZERO</u> program in the near- or mid- to long-term? Please explain and provide any feedback in consideration of such participation.

Site Considerations

Site Hosts / Charging Providers:

1. Siting

- a. Please reference the draft <u>Colorado M/HD Charging Corridors GIS Map</u> and provide feedback to help the State better understand where and in what timeframe M/HD corridor charging investments may be needed and most beneficial to your organization's current or prospective customers. Please detail what geographies you feel the State should focus on in the near- versus the mid- to long-term.
- b. What specific site requirements, characteristics, and/or minimum specifications would be necessary to consider a location a strong candidate for deploying M/HD corridor charging in Colorado?
 - i. This could include, but is not limited to: Land area, number of parking spaces, configuration (i.e. pull-through charging, short- versus long-term parking and/or charging, modularity for future MW+ charging and/or hydrogen fueling), utility offerings, utility rates, access to electric capacity, cell / wireless service, amenities, adjacent locations and/or services, etc.

2. Size, Scale, and Design

- a. What would be the total anticipated size and scale (physical and power capability) of a M/HD corridor charging site to meet the needs of your organization?
- b. What would be the anticipated number of total charging ports deployed and the distribution of charging port power levels?
 - a. Would your organization plan to offer solely fully- or semi-public charging? Or, plan to incorporate a charging-as-a-service and/or overnight charging component? i.e. Only 350 kW or higher DCFC? Only 150 kW+? A combination of different power levels, etc? Please explain.
- c. How would your organization plan to balance right-sizing for current market conditions with future-proofing and site upgrades in a rapidly evolving market? Would your organization plan a phased approach to charging deployment or build out a site to its full scale in anticipation of future utilization? Please explain.
- d. Would your organization plan to future-proof for MW+ charging? If yes, is there anything the State should consider to account for such plans?
- e. To the best of your ability, please detail the estimated cost for the build out of a Colorado M/HD corridor charging site, including cost of charging infrastructure, hardware, construction, and 5 years of networking and equipment warranty in total and on a per kW (or per charging port) basis (excluding property costs).
 - a. Please specify the number of charging ports and distribution of charging port power levels being referenced and note whether these costs include pull-through charging and/or distributed energy resources (DERs).
- f. Please describe how the benefit of incentives from the State provided for M/HD corridor charging would be passed through to fleets / end-users.

3. Technology

- a. Would your organization plan to incorporate DERs (i.e. onsite solar, storage, microgrid, etc) into a Colorado M/HD corridor charging project? Please explain.
 - i. What are the key considerations that would factor into DER incorporation?
- b. Please describe any details regarding how your organization would handle queue management and structure access to / availability of charging stations.
 - i. If considering a reservation- or membership-based system, please describe any details you could share on how the system would operate.
- c. Please describe any additional technical details the State should consider.

Fleets / End-Users:

1. Siting

a. Please reference the draft <u>Colorado M/HD Charging Corridors GIS Map</u> and provide feedback to help the State better understand where and in what timeframe M/HD corridor charging investments may be needed and most beneficial to support electrifying your vehicle(s). Please note what geographies you feel the State should focus on in the near- versus the mid- to long-term.

2. Size, Scale, and Design

- a. What would be the anticipated charging power level(s) and site configuration(s) desired or required at a M/HD corridor charging site to meet the needs of your organization?
 - i. Would your organization plan to utilize solely fully- or semi-public (reservation-based) charging? Or, plan to utilize a charging-as-a-service (longer-term access / use agreement) and/or overnight charging component at such a site? i.e. Only 350 kW or higher DCFC? Only 150 kW+? A combination of different power levels, etc? Please explain.
- b. Would having such charging available result in your organization more rapidly transitioning to electric trucks?

Technology

- a. If a reservation- or membership-based system were offered for access to charging, versus solely first-come, first-serve, please describe any recommendations for how such a system should operate to confidently meet the needs of your organization i.e. same day reservations, at least 24 hours in advance, weekly, monthly, longer-term, etc.
- b. Please describe any additional technical details the State should consider.

Timelines

Site Hosts / Charging Providers:

- 1. How long do you anticipate it would take to identify a site to propose for a future Fleet-ZERO M/HD Charging Corridors application?
- 2. How long do you anticipate it would take to energize a M/HD corridor charging site in Colorado? Please describe this estimated timeline from the time of award notification to charger energization.

Fleets / End-Users:

- 1. What is your current time horizon for deploying M/HD electric vehicles in Colorado?
- 2. What is your current time horizon for the utilization of M/HD corridor charging in Colorado, if at all, and why?
- 3. What, if anything, would help to accelerate the above timelines?

Other Information

- 1. What could the State and/or electric utilities do in the near- to mid-term to further facilitate the accelerated deployment of M/HD EVs and corridor charging in Colorado?
- 2. Please describe any recommendations your organization would have regarding program design or incentives for the forthcoming M/HD Charging Corridors funding lane.
- 3. Please add any additional information, comments, or feedback you would like to share.

SECTION 3.0 RESPONSE SUBMISSION INFORMATION

- **3.1.** Respondents are asked to submit responses via email to the procurement point of contact identified above. The response submission email should include the subject line: "Response submission from (insert respondent name) for RFI EFAA 202400025 Colorado M/HD EV Charging Corridors.
- **3.2.** Responses should be included as one or more attachments of commonly accessible file types.

SECTION 4.0 GENERAL ADMINISTRATIVE INFORMATION

4.1. COLORADO VENDOR SELF SERVICE

This RFI is being published on the Colorado Vendor Self Service page (Colorado VSS) at www.colorado.gov/vss, so that Respondents who have an interest may submit a response in accordance with the terms of this RFI.

4.2. NEWS RELEASES AND ANNOUNCEMENTS

Respondents shall not issue any news releases, communications or announcements of any kind pertaining to this RFI, without prior written approval by the State.

4.3. RESPONSE MATERIAL OWNERSHIP

All material submitted in response to this RFI becomes the property of the State.

4.4. SUBMISSION OF PRICING INFORMATION

In order to assist the State in gathering information, this RFI may request that Respondents submit pricing information. Submission of pricing information is not mandatory and such information may be voluntarily included in a response.

4.5. SUBMISSION OF CONFIDENTIAL OR PROPRIETARY INFORMATION

- 4.5.1. As per §24-103-201.5, C.R.S, all responses to requests for information are confidential until after an award based on a subsequent solicitation has been made or until the procurement official determines that the State will not pursue a solicitation based on the RFI. After such time, the responses to a RFI shall be open to public inspection in accordance with the provisions of the "Colorado Open Records Act", part 2 of the article 72 of this title 24.
- 4.5.2. A Respondent may submit, as a part of its Response, a written request for classification of certain portions of the response as a trade secret or other confidential or proprietary information. Material for which the Respondent is requesting confidentiality shall be readily identifiable and separated from other portions of the response to facilitate public inspection of the non-confidential portion of the response. Commingling of confidential and non-confidential information is not acceptable. Neither price information nor any information that will be included in a resulting Contract or purchase order will be considered confidential.
- 4.5.3. The Respondent must include the rationale for any request to classify portions as a trade secret or confidential or proprietary, including references to the authority that allows for such treatment.
- 4.5.4. A complete redacted response should also be included along with an unredacted Response and confidentiality justification.
- 4.5.5. Except as provided in Section 1.2 above, in no event shall an entire response be classified as confidential. The Procurement Official or his or her designee shall determine if the information identified in the Respondent's request is exempt from disclosure in accordance with §24-72-204, C.R.S., and shall inform the Respondent in writing of his or her determination. If the Respondent does not agree with the determination, the Respondent may protest the determination in accordance with article 109 of the Colorado Procurement Code and the terms of this RFI. Reference Procurement Rule R-24-101-401-03.