



REQUEST FOR INFORMATION

Kentucky Transportation Cabinet Electric Vehicle Infrastructure Deployment

RFI Issue Date: August 24, 2022

RFI Due Date: September 30, 2022



200 Mero Street
Frankfort, Kentucky
40601



REQUEST FOR INFORMATION

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INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) has issued this Request for Information (RFI) to solicit input from potential market participants across varying sectors regarding the planning, deployment, operation, and maintenance of Direct Current Fast Charging (DCFC) Electric Vehicle Supply Equipment (EVSE) in the State of Kentucky. KYTC recently submitted *Kentucky's Electric Vehicle Infrastructure Deployment Plan* (EVIDP or Plan) for approval by the Joint Office of the U.S. Department of Transportation and U.S. Department of Energy (Joint Office). The EVIDP was developed in response to the National Electric Vehicle Infrastructure (NEVI) Formula Program Guidance authorized under the Bipartisan Infrastructure Law (BIL).

This RFI is intended to help KYTC develop an implementation strategy for deploying DCFC stations using NEVI formula funding. KYTC expects the feedback from this RFI to inform a process of solicitation and contracting that will commence shortly after responses to the RFI are received and reviewed. The next step will be issuance of a request for proposals (RFP). In parallel with this effort, KYTC is continuing to engage with stakeholders across the state. KYTC is also assessing National Environmental Policy Act (NEPA) compliance. At this time, KYTC anticipates the necessary level of clearance to be a categorical exclusion.

Respondents should only provide one response per entity and should not provide proposals or marketing materials in response to this RFI; rather, they should instead focus on providing detailed answers to as many questions as possible. Respondents may choose to abstain from answering questions that may not be relevant to them. Furthermore, this RFI is being issued for information-gathering purposes only; KYTC will not select a vendor for DCFC EVSE deployment based on responses to this RFI. No contracts will result from this RFI. All responses must be submitted to the address set forth in the Submission Instructions below no later than 5:00pm EDT on September 30, 2022.

BACKGROUND

The Commonwealth of Kentucky (Commonwealth or State) will receive \$69.5 million in NEVI formula program funding between 2022-2026. The first two years of these funds (approximately \$25 million) are expected to become available later this year upon the Joint Office's approval of Kentucky's EVIDP. Kentucky plans to put these funds to use as quickly as is practical to expand the State's electric vehicle (EV) charging infrastructure on the State's Interstates and Parkways, which are the designated Alternative Fuel Corridors (AFCs), as more fully described on the [AFC Website](#). Once that is complete, the State can expand the network further to other high priority EV corridors and to support community level charging.

Kentucky is a centrally located state with several high-volume interstates that serve a substantial amount of long-distance travel – to, through, and inside the State. This makes the expansion of EV charging infrastructure important to thousands of drivers who use the State's Interstates and Parkways on a daily basis. In addition, Kentucky is positioned to become the EV battery production capital of the nation with \$7.8 billion in auto manufacturing investments in this field coming on-line in the State over the next few years.

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM

The initial Federal Highway Administration (FHWA) guidance for the NEVI Formula Program (NEVI Guidance) was issued on February 10, 2022, and is available here for reference: [NEVI Guidance](#). Subsequently, the FHWA issued a Notice of Proposed Rule Making (NPRM) on June 9, 2022, which is available here: [NPRM](#). The Joint Office also issued Frequently asked Questions (FAQs) which is available here: [NEVI FAQ](#). The Joint Office main website is here: [Joint Office](#). Respondents to this RFI should be familiar with and refer to these documents and websites in their responses.

KENTUCKY'S ELECTRIC VEHICLE INFRASTRUCTURE DEPLOYMENT PLAN

In July, Kentucky submitted its EVIDP to the Joint Office. The Plan is available here for reference: [EVIDP](#). The Plan was developed by KYTC in close coordination with Kentucky's Energy and Environment Cabinet (EEC). Other state agencies, as well as neighboring state Departments of Transportation were also consulted. The plan was prepared in accordance with the NEVI Guidance. The Plan development process included over 100 large and small stakeholder meetings and events, which involved over 1,000 different people. The Plan is expected to be approved no later than the end of September 2022. This approval will allow KYTC to begin utilizing the federal funds.

Plan Vision and Goals

The Plan outlines Kentucky's vision and goals for the NEVI Formula Program. Kentucky's EV infrastructure vision is to create:

A reliable, accessible, convenient, and affordable EV charging network that supports transportation choices, energy diversification, economic development, and environmental sustainability for all Kentuckians.

Kentucky's five EV infrastructure goals are to develop:

1. A corridor-based EV charging system that supports interstate and regional travel
2. A local EV ecosystem that serves Kentucky's communities and travelers
3. A comprehensive system that supports transportation choices for all of Kentucky's residents
4. An interconnected, reliable, and resilient vehicle fueling system that can adapt to changes in market conditions and transportation technologies
5. A transportation system that reduces tailpipe emissions and promotes clean air in Kentucky

High Priority EV Network

The initial focus of the NEVI funding, as required by the BIL and by the NEVI Guidance is to assist participating states with the build-out of EV infrastructure on AFCs to facilitate long-distance travel utilizing EVs. As all Interstates and Parkways in Kentucky are AFCs, the initial focus of the EVIDP is to provide EV charging in compliance with the NEVI requirements, including placing stations every 50 miles or less on the AFCs. Once this initial effort is complete and FHWA certifies that the AFCs are built-out, the State will look to expand the network further to cover other high priority highways as illustrated by **Figure 1**.

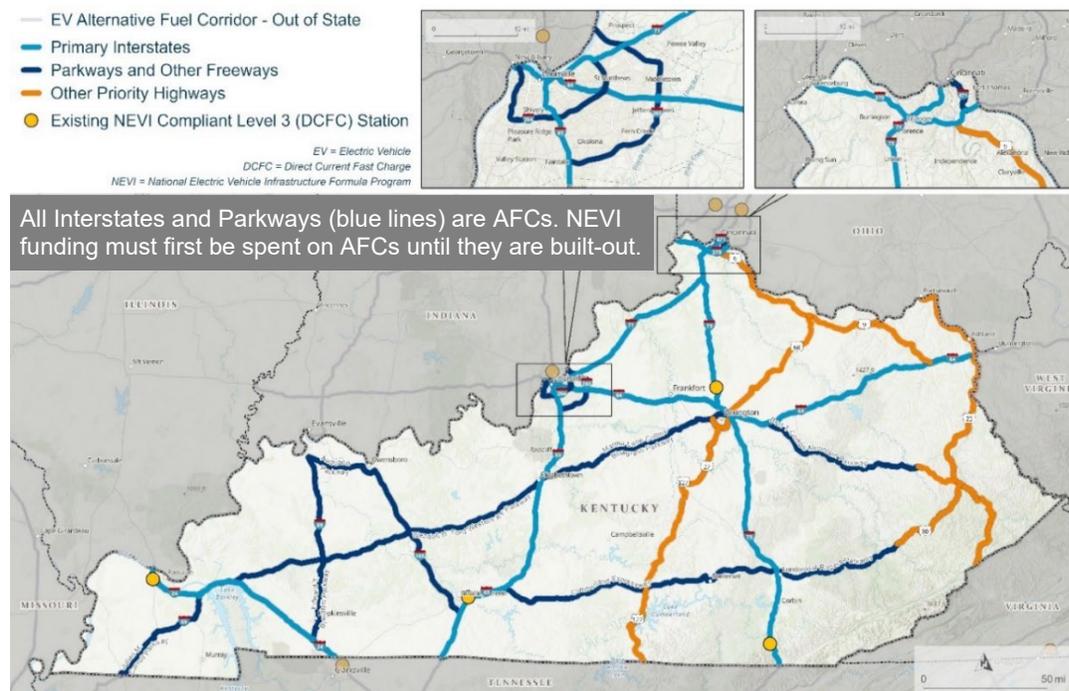


Figure 1: Kentucky's Priority EV Corridors

Demand and Need for Service

Kentucky's EVIDP projects the demand for NEVI-compliant DCFC stations (NEVI Sites) based on forecasted daily long-distance traffic volumes and EV adoption projections. The 2030 and 2035 planning level demand maps are provided in **Figure 2** and **Figure 3** for reference. These maps show the estimated demand for NEVI Stations (and ports) every 50 miles. As illustrated, by 2030 some AFCs are projected to have demand that will exceed the NEVI standard of four ports every 50 miles (e.g., the AFCs in yellow which are projected to have a demand for eight ports and the AFCs in red that are projected to have a demand for 9+ ports). Other AFCs are expected to have more limited demand in the 2030 timeframe (e.g., the AFCs shown in blue and green). These demand estimates will be revised as the market evolves, but they provide a reasonable picture of the opportunities and challenges related to higher and lower demand corridors.

While demand may be lower on several AFC corridors, that does not mean that these AFCs are lower priorities for the State. To serve all residents across the State and to comply with NEVI Guidance, it is necessary to provide EV charging infrastructure on all AFCs regardless of projected demand.

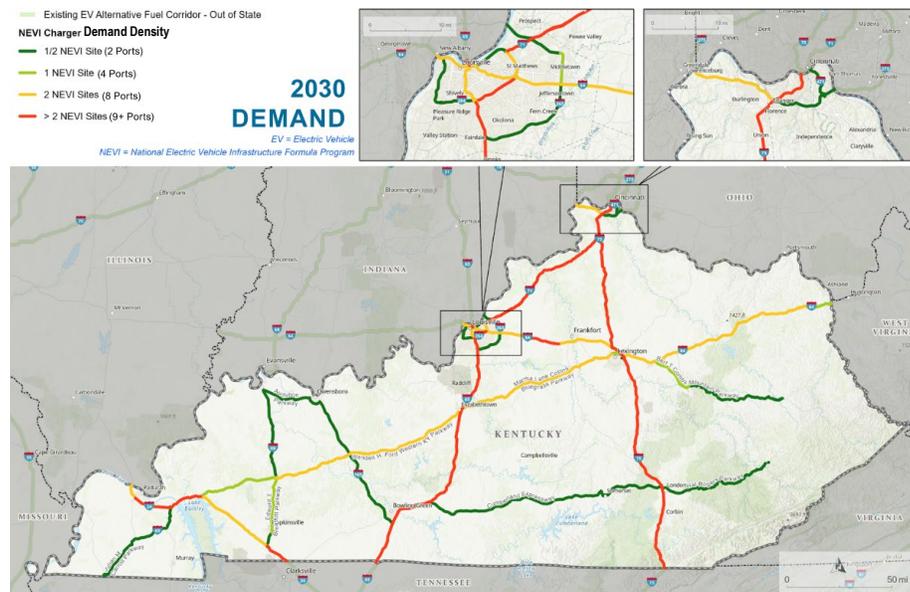


Figure 2: 2030 Planning Level EV Charging Demand Projections

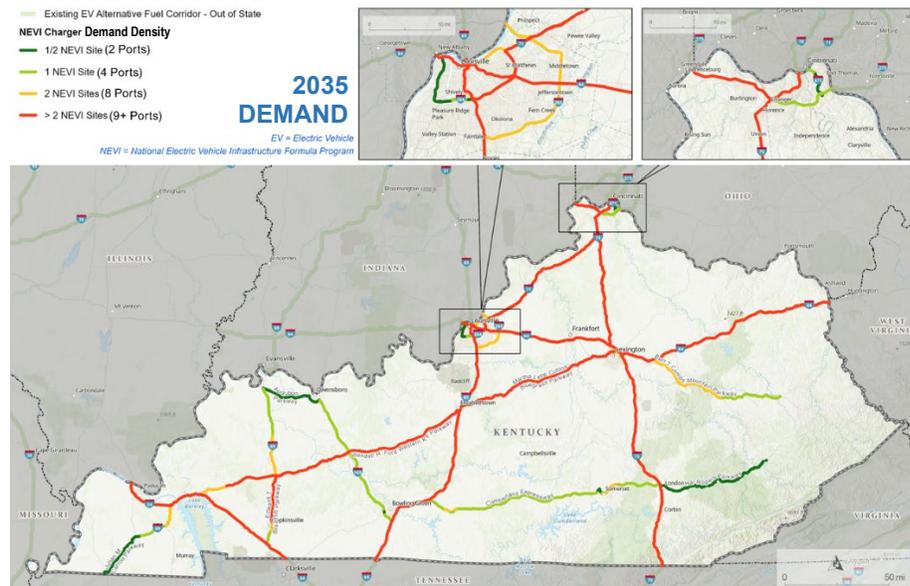


Figure 3: 2035 Planning Level EV Charging Demand Projections

Suitability and Prioritization

Kentucky's EVIDP includes a planning level assessment of the interchanges along the AFC network to determine which are most suitable for NEVI-funded DCFC stations, and which interchanges are considered high priority DCFC stations. The evaluation criteria for those two assessments are presented in **Table 1**. Additional information for how these criteria were used is available in the [EVIDP](#).

Table 1: AFC Interchange Suitability and Prioritization Criteria

Suitability	Prioritization
Distance to Existing NEVI Compliant DCFC Stations	Distance to Existing DCFC Stations
Predicted Long-Distance Trips in 2026	Justice40 Designation
Power Availability and Reliability	Rural Designation
3-Phase Power Availability	Predicted Long-Distance Trips in 2026
Maximum Voltage	Miles of Corridor Coverage
Number of Substations	Power Availability and Reliability
Miles of Corridor Coverage	3-Phase Power Availability
Presence of Amenities	Maximum Voltage
Intersecting Road Traffic	Number of Substations
	Presence of Amenities
	Intersecting Road Traffic

The suitability considerations focused on the elements necessary for the successful and cost-effective installation and operation of a DCFC station. The prioritization criteria consider those same factors, but added additional considerations related to accomplishing the program goals. The prioritization criteria were also weighted differently than the suitability criteria. These two sets provide different results and perspectives on where DCFC stations could be constructed to build out each corridor. The prioritization criteria are particularly important as they reflect Kentucky's and the Joint Office's goals. **Figure 4** shows the planning level prioritization of the interchanges on Kentucky's AFC network. As outlined in the [EVIDP](#), the criteria that most influenced the interchange prioritization were the distance to existing DCFC stations and the rural and [Justice40](#) designations, resulting in the **Figure 4** heat map (bright yellow/red are high priority and purple/blue are low priority).

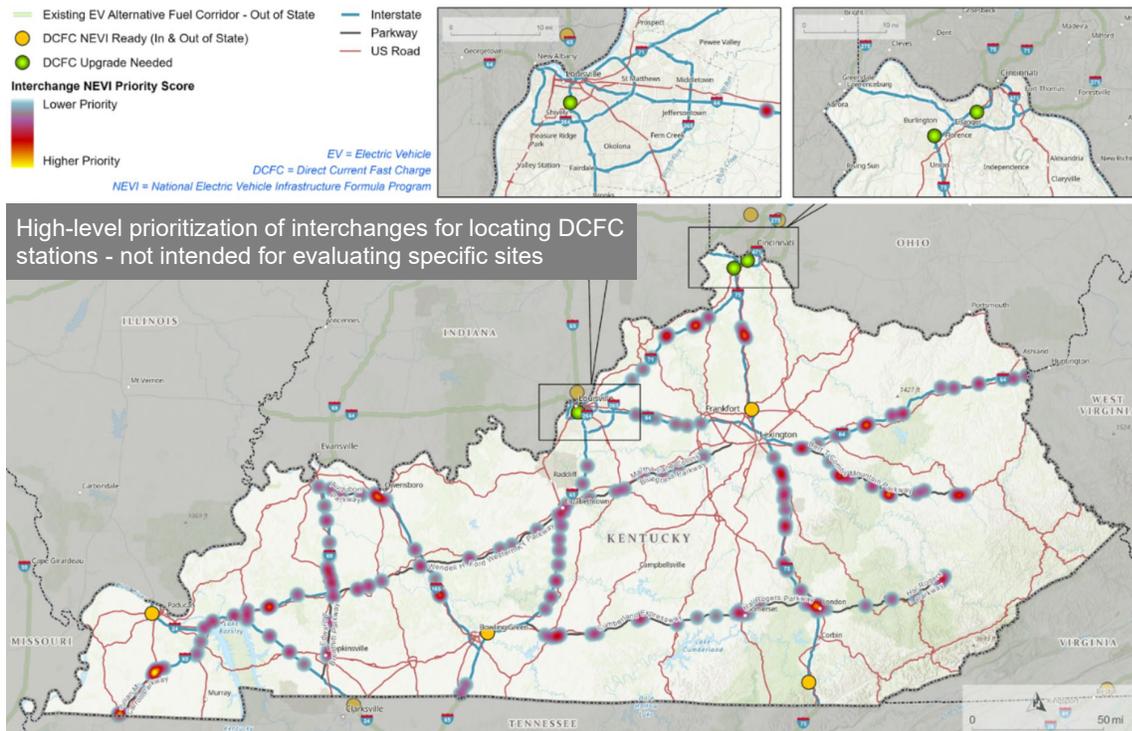


Figure 4: Planning Level Prioritization of Interchanges for NEVI Funded DCFC Stations*

* Please see the [AFC Website](#) for the most up-to-date information on Kentucky's AFC network.

Contracting

Several contracting approaches were considered in the development of the EVIDP including, but not limited to, design-build-operate-maintain (DBOM); Design-Build-Finance-Operate-Maintain (DBFOM); and grant applications (grants). Several forms of DBFOM were explored including “Traditional”, “Master Developer”, and “Franchise Operator” options. These DBFOM options could cover one or more corridors or areas in a single request for proposals. Progressive contracting was also considered, which could include the use of pre-development agreements (PDAs) to accelerate the project and mitigate risks. The grant application approach could include bundling one or more corridors or areas into a single request for proposals. The above contracting method possibilities are not exhaustive, and no final decisions have been made regarding contracting methods or any corridor or area bundling options. KYTC is assessing contracting approaches to ensure best alignment with the priority outcomes as set forth in the [EVIDP](#) and outlined in Attachment A.

STAKEHOLDER ENGAGEMENT

KYTC and its partner state agencies implemented an extensive stakeholder engagement program as part of planning for the deployment of EV charging infrastructure across Kentucky. This began with a thoughtful communication and outreach program designed to reach the many agencies, organizations, companies, and other stakeholders in Kentucky’s EV ecosystem. KYTC reached out to over 100 different agencies, organizations, and stakeholder groups across the state. KYTC also set up a Steering Committee and two representative Advisory Committees to ensure robust and productive engagement. The input and feedback received from these stakeholders helped inform many aspects of KYTC’s planning. Information gathered from these entities has been essential, particularly with respect to the technical and policy planning tasks and identifying risks, challenges, and barriers.

NEVI COMPLIANCE

Kentucky’s EVIDP was developed in response to, and in compliance with, the NEVI Guidance. The EVIDP includes sections on equity, workforce, civil rights, cybersecurity, program evaluation. All contracts to deploy NEVI funded EV infrastructure in Kentucky will comply with NEVI Formula Program requirements. Respondents should be very familiar with the current guidance and any future guidance that is issued for the NEVI Formula Program.

INFORMATION REQUESTED

In responding to the items below, use cross-referencing as appropriate and skip questions that do not apply to your organization.

A EXPERIENCE AND CAPABILITIES

- A-1 Provide your name, contact information, and the company or organization you represent.
- A-2 Describe your organization's involvement and experience with EVSE and DCFC infrastructure.
- A-3 Provide details on where you have installed and/or currently operate and/or host DCFC stations, including locations in Kentucky if applicable, and the number and type of stations in your network.
- A-4 What are your short and long-term EV plans? How many chargers and/or charging stations are you able to build, install, and/or maintain (or host) on an annual basis?
- A-5 Please describe any experience contracting with public (government) entities for installation of and/or extended operations and maintenance of EV chargers.

B EV INFRASTRUCTURE/NETWORK DEPLOYMENT

- B-1 Please describe your full development process, including market research, land use requirements, and business development activities used to determine DCFC site locations, as well as the process for designing and implementing DCFC stations. Please also provide a high-level schedule or timeline for these activities. How could the State assist with achieving and/or accelerating your process? (*Note: In the Plan, the State identified possible areas/interchanges for locating DCFC stations to meet federal requirements, however, specific sites were not identified.*)
- B-2 Please provide initial comments and suggestions regarding the potential EV network deployment based on the priority EV network, charging demand projections, and interchange suitability and prioritization information provided above and in the [EVIDP](#). How would you potentially bundle assets, taking into account higher and lower demand corridors?
- B-3 Are you currently able to meet the requirements of Buy America for DCFC infrastructure projects? If not, please explain your plans and timelines to meet the requirements and any potential issues.
- B-4 Does your organization provide local workforce training and employment opportunities on general installation and maintenance of DC fast charging stations? Does your organization provide training opportunities specific to the charging stations it provides? Please describe.

C EQUITY CONSIDERATIONS

- C-1 KYTC is looking to provide DCFC in rural and disadvantaged communities that may have a lower return on investment and is interested in how to make these projects more desirable to potential EV infrastructure developers. What strategies can KYTC utilize to encourage deployment of DCFC EVSE into rural, underserved, or disadvantaged communities?
- C-2 What strategies or innovative solutions should KYTC consider to increase EV utilization rates in rural, underserved, or disadvantaged communities?
- C-3 How can Kentucky ensure that the EV network continues to meet NEVI performance standards beyond the minimum five-year minimum that states are required to ensure compliance with these standards, particularly for rural and underserved areas?

D RISKS, CHALLENGES AND OPPORTUNITIES

- D-1 Provide an overview of the risks, challenges, and barriers to the implementation of EV in Kentucky, as well as potential mitigation strategies that the State should consider. How would you rank the relative importance of these risks?
- D-2 Noting that supply chain, labor availability, and utility coordination issues are clear risks in the current market environment, how would you specifically address these risks?
- D-3 Where does your organization see the biggest opportunities for the utilization of NEVI funds? This could be in terms of innovative technology solutions, partnerships, and/or targeting geographic locations.

E CONTRACTING/DELIVERY METHODS

- E-1 Describe your organization's preferred business model or contracting method to engage with KYTC on this project.
- E-2 Provide your organization's view of the opportunities and constraints offered by the contracting methods and structures referenced in the [EVIDP](#) and summarized in the Contracting section above.
- E-3 Provide an overview of your organization's approach to installing and operating EVSE on private land. Are you considering establishing corporate partnerships for EV charging? If so, would you likely establish partnerships across a variety of brands and sectors or would you seek to have a smaller circle of corporate partners across the network?
- E-4 Describe the potential teaming arrangements you would consider to design, construct/install, operate, and maintain EV infrastructure in Kentucky, including the potential utilization of Local Business Enterprises (LBEs) and Disadvantaged Business Enterprises (DBEs).
- E-5 What are your current or planned fee structures (time-based, energy-based, power-based, etc.) and what payment types do you accept from retail customers for service? Please explain any issues you have encountered or identified.
- E-6 Provide an overview of your organization's methodology to develop pricing for EV charging, both initial rates and adjustments to those rates over time.

F FUNDING/FINANCING

- F-1 Indicate if your organization is able and willing to provide the non-federal match required by NEVI Formula Program.
- F-2 Indicate whether your organization is able and willing to provide either short or long-term financing, if required.

G INSTALLATION AND OPERATIONS AND MAINTENANCE (O&M)

- G-1 Provide an overview of the EVSE technology, including hardware and software and user interfaces, your organization would likely employ in Kentucky and the reasons behind these selections.
- G-2 Comment on the minimum standards and requirements related to EVSE installation and O&M included in NEVI Guidance and/or NPRM, including any issues/risks that these standards may pose to the O&M provider and/or the State.
- G-3 Describe performance requirements that your organization considers to be important that are not covered, or adequately covered, by NEVI Guidance and/or NPRM.
- G-4 Provide an overview of your organization's approach to O&M, including the utilization of both remote monitoring and on-site preventative and failure maintenance activities.
- G-5 Describe your organization's approach to providing hardware and software updates and generally ensuring that EV drivers in Kentucky have access to the latest technological advances in the industry.
- G-6 Please describe measures your organization uses to ensure end-users of EVSE infrastructure have access to high-performing and reliable charging infrastructure even during power outages and other emergency situations.
- G-7 Please describe your organization's approach to data collection, data ownership and/or sharing, and historical reporting to assist Kentucky with its oversight responsibilities as required by NEVI Guidance and NPRM. Would your EVSE be able share data with the State via a central data repository? If so, what type(s) of data can you provide?

H FOLLOW-UP MEETINGS AND OPEN RESPONSE

- H-1 Confirm if your organization is interested in participating in virtual one-on-one meetings to further explore and explain your responses to this RFI.
- H-2 Confirm if your organization is interested in participating in virtual networking to further explore potential partnerships and/or teaming arrangements, including networking with potential LBEs and DBEs.
- H-3 Please provide any additional information that would be beneficial for KYTC to consider in developing a request for proposals for deploying NEVI compliant EVSE infrastructure in the state.

I ADDITIONAL OPTIONAL INFORMATION

Interested organizations may respond to some or all the following topics, based on their proposed role in the creation of a DCFC EVSE network:

- I-1 **System Block Diagram** - KYTC is interested in a high-level system block diagram that illustrates all components and connections required to create the proposed system.
- I-2 **Hardware Information** - KYTC is interested in datasheets and technical specifications for components included and required to create a typical DCFC system.
- I-3 **Software Information** - KYTC is interested in information on software components included and needed to create a typical DCFC system.
- I-4 **Maintenance Plan** - KYTC is interested to know about the maintenance services and typical maintenance schedule for DCFC infrastructure.

SUBMISSION INSTRUCTIONS

Please Email Responses to: EVPlan@ky.gov

Subject Line: [KY EVSE RFI – FIRM NAME](#)

Please note there is a 25MB limit on emails received by KYTC. If larger files need to be transferred, please send an email in advance of the deadline to coordinate the file transfer.

Contact for Questions or clarification:

Please email KYTC staff at [Justin Harrod](#) with any questions.

The requested information must be received by **5:00 pm (EDT) on September 30, 2022.**

PLEASE NOTE:

1. Responses to this Request for Information (RFI) will be reviewed by KYTC for informational purposes and will not be considered as offers to be accepted by KYTC to form a binding contract. KYTC will review only one response per entity.
2. While KYTC may not be able to meet with all interested parties, KYTC may contact respondents to discuss their responses in further detail or to seek clarification to responses. KYTC may wish to prioritize such discussions with those respondents whose responses most closely align with KYTC's priority outcomes as described in Attachment A.
3. Information obtained from responses to this RFI may be used to develop scope and solicitation documents for future procurements at the discretion of KYTC. Respondents eligible to respond to this RFI will remain eligible for any subsequent related contract with KYTC. Responding to the RFI is not a requirement to respond to any future solicitation.
4. Advertisement of any subsequent competitive solicitation that may relate to the subject matter in this RFI will be posted on the KYTC website.
5. a) Each Respondent to this RFI acknowledges and agrees that any and all documents, technical information, data, specifications, financial information, and other materials submitted to KYTC in connection with this RFI are subject to the provisions of the Kentucky Open Records Act (Kentucky Revised Statutes Section 61.870 - 61.884) and any other applicable public or open records laws and regulations (collectively Public Records Laws). If any specific materials submitted by the Respondent to KYTC are clearly and prominently labeled as trade secret, or confidential or proprietary commercial, technical, or financial data by the Respondent, KYTC shall provide notice to such Respondent of any request for the disclosure of such materials prior to making any such disclosure and give the Respondent an opportunity to assert, in writing and at its sole expense, a bill claimed exception under Public Records Laws within the time period specified in the notice issued by KYTC and allowed under Public Records Laws.
b) Should any materials or information designated by the Respondent as confidential or proprietary be requested for disclosure, the determination of whether information is confidential or proprietary shall be solely at the discretion of KYTC. Under no circumstances will KYTC be responsible or liable to the Respondent or any other person for the disclosure of any such labeled materials, whether the disclosure is required by law, by court order or occurs through inadvertence, mistake, or negligence on the part of KYTC.
c) In the event of litigation concerning the disclosure of any material submitted by the Respondent to KYTC, KYTC's sole involvement will be as a stakeholder retaining the material until otherwise ordered by a court, and the Respondent shall be fully responsible for otherwise prosecuting or defending any action concerning the materials at its sole expense and risk.

ATTACHMENT A

CONTRACTING—PRIORITY OUTCOMES

KYTC intends to contract with outside third-party entities to install, own, operate, and maintain the EV infrastructure for the Commonwealth. KYTC will carefully select private partners that have the proper expertise and experience, can effectively deploy the public sector resources in a manner that maximizes and leverages the federal funding, and who understand Kentucky's priorities regarding the involvement of local communities in rural areas and the need to involve small and local businesses. In addition, the contracting mechanism will facilitate the selection of contractor(s) who have a realistic plan to deploy the charging infrastructure in a manner that will enable KYTC to meet its goals.

KYTC is considering contracting approaches by first considering its priority outcomes for this effort:

- ▶ Maximize leverage of federal dollars while following all federal requirements
- ▶ Select a contracting partner who understands and is fully committed to KYTC's stakeholder outreach, community interaction, equity commitments, and small business development goals
- ▶ Make sure the contracting method is permissible under Kentucky law and that any applicable State legal requirements can be met
- ▶ Select a contracting method that would attract multiple proposers with proven knowledge and experience in the development and implementation of EVSE and supporting infrastructure
- ▶ Minimize KYTC staff time during design and construction while still having robust oversight to guarantee performance
- ▶ Arrange for operations and maintenance (O&M) and charge/energy management services to be handled by experienced contract partners and not be the responsibility of KYTC
- ▶ Arrange for contract partners to own the EVSE, supporting infrastructure, station sites, and site improvements
- ▶ Deliver the project per the requirements of the [NEVI Guidance](#) and the State
- ▶ Facilitate the continual upgrade of technology (both hardware and software) to leverage the latest technologies and improvements in charging speed and efficiency