

REQUEST FOR PROPOSAL
VOLKSWAGEN MITIGATION TRUST FUND ALLOCATION
EV DIRECT CURRENT FAST-CHARGING (DCFC) STATION INSTALLATION PROGRAM

ATTENTION: Interested Firms

BACKGROUND AND SCOPE OF PROJECT

1. Background

The Kansas Department of Transportation (KDOT) is administering approximately \$2,000,000 available from the Volkswagen Mitigation Trust funds allocated for investment in EV charging infrastructure. KDOT has identified twelve preliminary locations for the installation of DC Fast Charging stations to help advance the state's effort to support publicly accessible charging stations every 50 miles along primary corridors. The twelve preliminary locations have been identified along the I-70, I-35, and I-135/US-81 corridors by the Clean Cities EV Working Group.

2. Eligible Applicants

Eligible applicants may include one or more of the following organization types:

- Businesses/vendors
- Utility Companies
- Federal, State, Local, or Tribal Government Agencies
- Nonprofit Organizations
- Academic institutions/universities

Applicants are strongly encouraged to demonstrate collaboration with local governments including cities, towns, and county governments as well as other local partners such as other public and private stakeholders. Proposals that have strong support from local and regional stakeholders and/or demonstrate linkage or partnership with educational institutions will be evaluated more favorably.

Applicants are required to collaborate with the local electric utility and include appropriate documentation from the utility, such as a letter or service notice, indicating power supply availability for the proposed project. This link provides a map of electric utility service areas in Kansas:

https://kcc.ks.gov/images/PDFs/maps/ks_electric_certified_areas.pdf.

Applicants are strongly encouraged to identify one or more potential charging station location hosts; and must present a plan for five years of ownership, operation and maintenance of the equipment and public access. Proposals that have identified a committed charging station host will be evaluated more favorably.

Applicants are required to provide a description of the business model which includes utility rates, operational costs, cost to charge at the stations, and anticipated revenue. The proposed pricing structures and rates to charge drivers should be fair and reasonable.

3. Funding and Reporting Requirements

KDOT will administer approximately \$2,000,000 to awardees for the installation of DCFC charging stations.

KDOT will reimburse up to 80% of eligible costs for charging stations installation. Total average reimbursable cost per installation is expected to be approximately \$150,000. Acquisition of land, driveway access, or reduced energy charges to the customer are not reimbursable expenses.

In-kind match and non-cash match sources will not be eligible match sources. Only expenses incurred on eligible costs may be considered toward the match.

Eligible Costs

Only costs necessary for and directly connected to the acquisition, installation, operation, and maintenance of the EV charging equipment are eligible for reimbursement. The following items are eligible for reimbursement up to 80%:

- DC fast charging equipment costs
- Charger installation costs

- Equipment shipping costs
- Necessary electric service upgrades and connection of the charger to electric service; including utility upgrades such as transformers and line extensions
- Other hard costs of site preparation (concrete, conduit, cable/wiring)
- Signage and lighting directly associated with on-site charging infrastructure
- Networking costs (up to 5 years)
- Charging equipment extended warranties and service contracts (up to 5 years)
- Other equipment and non-labor project costs including design and engineering and project management
- Permit costs/fees

Ineligible Costs

Costs not directly connected to the acquisition, installation, operation, and maintenance of the EV charging equipment are not eligible for reimbursement. Ineligible costs include but are not limited to the following:

- Purchase or rental of real estate
- Other capital costs (construction of buildings or parking facilities)
- General maintenance (other than that of the EV charging equipment)
- Administrative costs
- Battery storage serving the charging equipment
- Solar photovoltaic panels providing power to the charging equipment
- Cost of electricity to power the EV charging equipment
- Restriping or repaving/resurfacing of parking lots outside of DCFC installation

Award Payment Schedule

Awardees will have the option of submitting invoices for a one-time lump sum reimbursement following the completion of the committed installation(s) or incremental billings will be accepted no more than once monthly and for no less than \$1,000. Invoices will be reviewed and approved by KDOT and must include in-progress photographs of the charging station installation, receipts for equipment, contractor invoices including hours and rates, installation costs, and supplies. If applicant wishes to have any five-year operational and maintenance expenses included, prepaid invoices will need to be provided with invoice. Every effort should be made to complete project work within 12 months from the date the KDOT agreement is signed. If supply chain issues delay installation from proposed schedule, applicant will provide a monthly explanatory report to KDOT until installation is complete. Applicants that demonstrate their capability of completing charging station installations by October 1, 2022, will be evaluated more favorably.

Reporting

Pre-installation

Awardees are required to send a monthly progress report to KDOT to keep the agency informed of key milestones and schedules.

Post-installation

Awardees are required to have their charging stations registered on the following databases for a minimum of 5 years following the date of project completion:

- U.S. Department of Energy's Alternative Fuels Data Center: <https://afdc.energy.gov/stations/#/station/new>
- PlugShare: <https://www.plugshare.com/>

Awardees are required to provide usage reports on a prescribed quarterly schedule that will be established in agreement with KDOT. Such information will help the program better understand the demand for charging and usage trends. Reports will be submitted for a minimum of 5 years after project completion. The following information shall be submitted for each charger installed:

- Connect and disconnect times
- Start and end charge times
- Maximum instantaneous peak power
- Average power

- Number of charging sessions completed
- Number of charging sessions with errors or incompleteness
- Total energy (kWh) per charging session
- Date/time stamp
- Unique ID for charging event
- Unique ID for identifying the EVSE
- Other non-dynamic EVSE information such as GPS ID
- Percentage of station downtime

4. Site Locations

The following provides a list of proposed locations. Applicants can offer alternative locations, but please be mindful that KDOT’s priority is to cover the identified corridors with EV charging available every 50 miles. **In the event the applicant is interested in bidding multiple locations, KDOT reserves the right not to award some proposed locations or eligible items therefore reducing the requested amount.**

Priority locations: Must be within 5 miles of corridor exit.		
Location Number	Priority EV Corridor	Priority EV DCFC Charging Station Locations
1	I-70	Oakley/Grainfield/Grinnell area
2	I-70	WaKeeney
3	I-70	Russell
4	I-70	Ellsworth/US-156 exit
5	I-70	Abilene to Junction City Area
6	I-70	Manhattan to Paxico Area
7	I-35	Ottawa
8	I-35	Emporia
9	I-35	Cassoday to Matfield-Green area
10	I-35	Belle Plaine – Wellington Area
11	I-135	Newton/North Newton
12	US-81	Concordia

Note: The Location Numbers above are in no way representative of KDOT’s priority ranking of these communities. Reference the “Priority Station Location Map” for an illustration of these communities across the State of Kansas (map is available under “EV DCFC Station Installation Program” section of this website: <https://www.ksdot.org/descons.asp>). *In PDF versions of this RFP, this map is included as an Appendix page.*

5. Equipment and Installation Requirements

Equipment	<p>Stations with two DCFC ports must be capable of providing at least 100 kW charging for a single vehicle and at least 50 kW simultaneous charging for two vehicles.</p> <p>Stations with four DCFC ports must be capable of providing at least 100 kW simultaneous charging for two vehicles and at least 50 kW simultaneous charging for four vehicles.</p> <p>Regardless of whether applicant is submitting for 2 or 4 port charging, favorable evaluation will be awarded to charging stations with higher capacity than 100kW.</p> <p>Stations must be backward compatible to CHAdeMO v0.9 and SAE J1772 Oct2012 or other similar standard to allow model year 2010 or newer DC charging equipped vehicles to charge at lower kW.</p> <p>The DCFC and supporting equipment must comply with NEC (2020edition) Article 625 and related articles and tables.</p>
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	<p>DCFC and supporting electrical components, enclosures, and mounting systems must be built to UL 2202 and UL2594 standards or equivalent.</p> <p>DCFC and supporting equipment shall be listed by a Nationally Recognized Testing Laboratory (NRTL).</p> <p>DCFC and supporting equipment shall comply with state and local codes and electrification requirements including, but not limited to, third party certification as appropriate (documentation to be included for each unit).</p> <p>Payment methods shall operate on equipment, software, and networks using publicly available open standard(s), such as Open Charge Point Protocol (OCPP) v1.6. The DCFC should have back-end capabilities to collect payment or provide reporting mechanisms such that another system, through secure re-programming of back-end server location and credentials, would be able to collect payment and provide access control.</p> <p>DCFC shall be type evaluated through the National Type Evaluation Program (NTEP) and the installation and use shall comply with all requirements of the National Institute of Standards and Technology (NIST) Handbook 44 Section 3.40. Electric Vehicle Fueling Systems - Tentative Code and shall have received safety certification by a nationally recognized testing laboratory (NRTL). DCFC shall be indicated and recorded in kilowatt-hours (kWh) and decimal subdivisions thereof, with the value of the smallest unit of indicated delivery by a DCFC, and recorded delivery if the DCFC is equipped to record, shall be 0.001 kWh.</p> <p>Physical Appearance, Function, and Design</p> <ol style="list-style-type: none"> i. DCFC and supporting equipment must utilize tamper-resistant screws and design but provide a locked or easy opening mechanism for service work. ii. DCFC enclosure must be constructed for use outdoors in accordance with UL50, Standard for Enclosures for Electrical Equipment, NEMA, Type 3R, or better to protect against blown dust or rain. Equivalent standards may be used if it is in accordance with or otherwise meeting the requirements of UL50. iii. Display screens must be protected from malfunctions due to condensation and normal local weather conditions. iv. Equipment and display screens should be sturdy enough to withstand most types of vandalism v. DCFC and supporting equipment must be capable of operating over beyond an ambient temperature range of minus 22 to 122 degrees Fahrenheit. Applicants should provide a derating curve for their equipment within this temperature range. vi. DCFC shall include barriers to prevent damage from equipment used for snow removal. vii. DCFC must incorporate a cord management system or method to minimize the potential for cable entanglement, user injury, or connector damage from lying on the ground, and comply with NEC articles 625 as it applies to cord management systems. viii. Additional preferred specs (also NEC compliant) include: <ol style="list-style-type: none"> 1. Adequate surge protection for proposed equipment. 2. Operating humidity at up to 95% at +50C non-condensing. 3. Power conversion efficiency of 90%, though higher is encouraged. 4. Total Harmonic Distortion (iTHD) of <5% or whatever is required to be compliant with local utility policy. 5. A power factor of 90% or better.
Networking	DCFC must connect to a network via cellular connection capable of using multiple carriers; modems must be included as applicable by bidders. Applicants must

	<p>clearly state how possible network security concerns will be prevented, addressed, and managed.</p> <p>Network must be PCI (Payment Card Industry) compliant to allow for credit card payment.</p> <p>Network must provide the option for remote management and access control.</p> <p>Stations shall collect usage data for required annual data reporting to KDOT (see Reporting section).</p> <p>The operator must have remote diagnostics and the ability to “remote start” the equipment.</p> <p>Warranties must include repair and replacement and be valid for a minimum of five years.</p>
Location	<p>Within 5 miles of the corridor, favorable evaluations will be given for closer installations.</p> <p>Charging stations must be ADA compliant. Guidance on equipment specifications like installation reach, accessible controls, and payment systems is available from US Department of Energy ADA workplace charger guides at ADA Requirements for Workspace Charging Installation – Guidance in Complying with Americans with Disability Act Requirements. https://afdc.energy.gov/files/u/publication/WPCC_complyingwithADArequirements_1114.pdf</p>
Amenities	<p>Station site shall have 24-hour access to the chargers and well-maintained, illuminated restrooms. The restrooms should be supplied with potable water.</p> <p>At a minimum, the sites shall supply basic amenities such as vending machines or fast food.</p> <p>Stations shall have access to Wi-Fi and/or cellular service for customers while they charge.</p> <p>Access to full-service amenities within a short walking distance is preferred, such as local restaurants, retail shopping, or tourist attractions.</p> <p>Each station site shall have adequate parking to allow for the maximum number of vehicles that can be charged simultaneously (at least two or four vehicles per site).</p> <p>Station sites shall have dusk-to-dawn area lighting to meet ANSI/IES RP-8-18 standards.</p> <p>The sites must provide or have access to shelter for inclement weather.</p> <p>Applicants shall clearly describe safety precautions implemented on site for EV drivers charging their vehicles with the installed equipment.</p>
Payment	<p>The charging equipment must be capable of supporting multiple point-of-sale methods including credit or debit cards without incurring any additional fees, inconvenience, or delays versus other payment or access control methods. Other payment options may include pay per use subscription methods, RFID or smart cards, and smart phone applications.</p> <p>Real-time pricing and fee information shall be displayed on the charging station equipment or payment screen. Applicants may charge an idle fee for users remaining connected to the charger after the charging session is completed if the fee is disclosed in advance with the displayed fee information.</p>

	<p>Equipment shall allow for flexible pricing including, but not limited to, per minute or per hour, by kWh, by time of day.</p> <p>Equipment and software shall be futureproofed to allow for alternative forms of payment as payment technology evolves.</p>
Operation & Maintenance	<p>24/7 customer service availability. 5-year service guarantee. Must register with the Alternative Fuels Data Center and PlugShare.</p> <p>Favorable evaluations will be given to applicants bringing innovation that may include battery storage, renewable energy and other benefits to the charging station user.</p> <p>The applicant will be responsible for ensuring payment of all operating and maintenance costs including, but not limited to, payment of leases, rents, royalties, licenses, fees, taxes, revenue sharing, utilities, and electric power supply for the charging equipment and supporting elements, such as area lighting.</p> <p>The applicant is responsible for ensuring the maintenance of the chargers including cables, ancillary equipment, and any awnings, canopies, shelters, and information display kiosks for signage associated with the charging station. “Maintain” as used in this RFP shall mean “to provide all needed repairs or desired and approved alteration, as well as regular maintenance needed to ensure optimal performance and minimize downtime. Equipment shall be kept safe and presentable.”</p> <p>The applicant must address any issues such as, but not limited to, malfunctions and repairs. The applicant must propose a plan to ensure that the equipment is operational at least 95% of the time based on a week of 24 hours a day and 7 days (no more than 5 hours cumulative downtime in a 7-day period). It is the applicant’s responsibility to ensure the 95% uptime requirement is met. For significant or complex issues leading to extended downtime (such as vandalism), applicants shall notify appropriate sources so drivers are aware, including, but not limited to, website and application hosts, as appropriate.</p> <p>Applicants shall include snow removal plan to ensure access during/after inclement weather.</p> <p>The applicant must provide customer support service that is accessible 24/7. This may include an onsite station operator or a toll-free telephone number clearly posted near the charging equipment that is available to EV drivers accessing the charging equipment.</p>
Upgradability	<p>Applicants shall include future-proofing strategies such as larger or additional concrete pads, transformers, and other utility-related equipment, and larger and/or additional conduit to avoid having additional construction and conduit costs in the future.</p> <p>Applicants are strongly encouraged to consider opportunities for current or future use of onsite storage, dispatchable load, and renewable energy.</p>

6. Procurement Schedule

Milestone	Date
RFP issued	October 28, 2021
Pre-Proposal meeting	November 2, 2021
Written questions deadline	November 10, 2021
Q/A published to website	November 16, 2021
RFP responses due to KDOT	December 15, 2021
Project Selection	January 14, 2022

7. Preliminary Proposal Evaluation Criteria

All proposals will be reviewed and scored by a Scoring Committee. Late proposals, ineligible applicants and projects, and incomplete proposals will not be considered for scoring. A 100-point scale with the following criteria will be used in scoring:

Criterion	Possible Points
Location, Amenities & ADA	30
Equipment	10
Upgradability & Future Proofing	10
Innovation	10
Demonstrated Experience	10
Business Model & Budget	20
Partnerships/Support	3
Exceeding matching fund requirements	5
Accelerated Schedule	2

8. Instructions to RFP respondents:

A preproposal call will be held on November 2, 2021, 1:30pm-2:30pm CDT. Register in advance for this meeting: [https://zoom.us/meeting/register/tJErfuyvrDsJEtJ-MaWluYzh-wd61JBefkmR](https://zoom.us/join/joinMeeting?meetingRef=7396517912&meetingRef=7396517912). After registering, you will receive a confirmation email containing information about joining the meeting.

All applicants must download and complete the application form titled “EV DCFC Station Application” available under “EV DCFC Station Installation Program” section of this website: <https://www.ksdot.org/descons.asp>

Please return completed application forms, proof of utility support, site host letter(s) of support, and other partner support letters in a single pdf file, no larger than 35 MB, by email to kdot.designcontracts@ks.gov. The subject line of the reply email and the pdf file name must read “EV Charging Lead Applicant Name”. Applications and supporting materials must be received no later than December 15, 2021 at 5:00pm CDT.

Questions about this Request for Proposal shall be sent via email to kdot.designcontracts@ks.gov. Questions are due by November 10, 2021 and responses will be posted by November 16, 2021, at a link entitled “RFP Questions and Answers” available under “EV DCFC Station Installation Program” section of this website: <https://www.ksdot.org/descons.asp>.

Sincerely,
Michael J. Moriarty
Chief of Transportation Planning
Kansas Department of Transportation