



CHARGE UP KANSAS

KANSAS NEVI PLAN
FY2024 UPDATE



Charge Up Kansas NEVI Plan

- 1. Introduction..... 3
 - Updates from 2022 Plan..... 3
- 2. State Agency Coordination 4
 - Clean Transportation Council 4
- 3. Public Engagement 6
 - Community Engagement Outcomes Report 6
 - Utility Engagement 7
- 4. Plan Vision and Goals..... 9
 - Vision and Goals..... 9
 - Performance Measures 9
 - Strategy Post Corridor Build Out 11
- 5. Contracting 13
 - Status of Contracting Process..... 13
 - Awarded Contracts 15
 - Scoring Methodologies Utilized 15
 - Plan for Compliance with Federal Requirements 16
- 6. Civil Rights..... 17
- 7. Existing and Future Conditions Analysis 18
 - EV Ownership, Availability, and Industry Landscape 18
 - Grid Capacity 20
 - Alternative Fuel Corridor (AFC) Designations 21
 - Existing Charging Stations..... 22
 - Known Risks and Challenges..... 24
- 8. EV Charging Infrastructure Deployment 25
 - Planned Charging Stations 25
 - Planning Towards a Fully Built Out Determination 26
- 9. Implementation 28
 - Operations & Maintenance Requirements..... 28
 - Labor & Workforce Requirements..... 28

10.	Equity Considerations	29
	Identification and Outreach to Disadvantaged Communities (DACs) in the State	29
	Process to Identify, Quantify, and Measure Benefits to DACs	29
11.	Labor and Workforce Considerations	32
12.	Physical Security & Cybersecurity	33
	Physical Security.....	33
	Cybersecurity	33
13.	Program Evaluation.....	34

1. Introduction

The National EV Infrastructure (NEVI) Program, part of the Infrastructure Investment and Jobs Act (IIJA), provides an opportunity for historic investment in the next generation of transportation throughout Kansas and the nation. The State of Kansas will benefit from an estimated \$40 million over the five years of the NEVI Program.

As required by the NEVI Program, Kansas developed and adopted the *Charge Up Kansas NEVI Plan* in 2022, including tactical efforts to drive equity, support disadvantaged communities, and encourage workforce development to enable electric vehicle supply equipment installation.

The *Charge Up Kansas NEVI Plan* is required to be updated each year to reflect the progress from the previous year. Kansas will identify new challenges and opportunities as it works through plan implementation activities and will incorporate those into annual plan adjustments. Kansas is committed to enhancing the access and convenience of EV users through leveraging the federal match in growing a robust, connected, and sustainable EV charging network.

Updates from 2022 Plan

This 2023 update to the *Charge Up Kansas NEVI Plan* describes the work completed since the 2022 plan was submitted to the Joint Office of Energy and Transportation, the challenges and opportunities identified in the past year, and the strategies undertaken by the Kansas Department of Transportation (KDOT) and its partners to support EV infrastructure deployment.

This streamlined plan update focuses on plan sections where KDOT has updated its approach or may provide updated information. Updated plan sections include:

- State Agency Coordination
- Public Engagement
- Plan Vision and Goals
- Contracting
- Existing and Future Conditions Analysis
- EV Charging Infrastructure Deployment
- Equity Considerations

Other plan sections are included to provide context to the full system for development and deployment of EV charging statewide.

2. State Agency Coordination

KDOT continues to coordinate with other Kansas departments and agencies, with local governments, utilities, and other stakeholders and with agencies in other states to effectively carry out the requirements of the NEVI program.

KDOT is coordinating with our surrounding states to ensure that the *Charge Up Kansas NEVI Plan* continues across state lines into a cohesive regional network. KDOT representatives participate as part of the MAASTO (Mid-America Association of State Transportation Officials) EV Infrastructure Committee which includes 10 regional states to the northeast of Kansas. KDOT held interviews with DOT representatives from Colorado, Missouri, Oklahoma, and Oregon to gather information on EV planning in their states and get input on EV corridor development for the 2022 *Charge Up Kansas NEVI Plan*. The Colorado Department of Transportation and the Missouri Department of Natural Resources sent letters in support of KDOT's Round 6 Alternative Fuel Corridor nominations. A Nebraska DOT contact has been identified and KDOT has coordinated with the Nebraska DOT for EV charging on corridors that will cross into Nebraska from Kansas. KDOT staff participates in the AASHTO EV Work Group as well as the Midcontinent Transportation Electrification Collaborative (MTEC).

KDOT has not entered into any memoranda of understanding (MOUs) or other agreements with another State agency to help administer the NEVI Program.

Clean Transportation Council

As part of preparing the 2022 *Charge Up Kansas NEVI Plan*, KDOT assembled an EV Working Group composed of multiple state agencies. This group met regularly to discuss various aspects of the *Charge Up Kansas NEVI Plan* and advise KDOT on state transportation electrification issues. Participants in the group included representatives from the Kansas Corporation Commission, the Kansas Turnpike Authority (KTA) and the Kansas Departments of Agriculture, Commerce, Health and Environment, Transportation, and Wildlife and Parks.

In November 2022, the EV Working Group held a workshop that resulted in the re-organization of the EV Working Group into a Clean Transportation Council and development of a charter to guide the group's ongoing activity. The Council's vision is to lead the clean transportation transition in Kansas, including electrification as well as deployment of hydrogen, compressed natural gas, and other alternative fuels. The membership of the Council was expanded to include additional state agencies that had not been involved in the EV Working Group, recognizing the importance of cross-sector collaboration. The membership of the Council currently includes members from the following state agencies and departments:

- Department of Administration
- Department of Agriculture
- Department of Commerce
- Department of Health and Environment
- Department of Revenue
- Department of Transportation

- Department of Wildlife and Parks
- Kansas Corporations Commission
- Kansas Highway Patrol
- Kansas Turnpike Authority

In 2023, the Clean Transportation Council has met bi-monthly to share information and contribute to clean transportation efforts throughout State departments.

Figure 1: Clean Transportation Council Charter Overview



3. Public Engagement

The Charge Up Kansas NEVI Plan was developed on a foundation of public outreach and engagement to ensure that the plan incorporated a wide range of perspectives and addressed charging infrastructure needs faced by Kansans and Kansas communities. Engagement since the completion of the 2022 Charge Up Kansas NEVI Plan has focused on education regarding EV Charging and information about the NEVI Program and Call for Projects/Request for Proposals process.

Community Engagement Outcomes Report

KDOT staff have spoken about the NEVI plan with a variety of community and professional organizations throughout the state in the past year, as described below.

Figure 2: Community Engagement

Date(s)	Event/Organization	Location	Included DAC Stakeholders?
Monday, August 1, 2022	Kansas Electric Cooperatives Summer Meeting	Overland Park	Yes
September 15-16, 2022	Kansas Legislative Policy Group	Garden City	Yes
Saturday, September 24, 2022	National Drive Electric Week ICT	Wichita	Yes
Thursday, September 29, 2022	Kansas Municipal Energy Agency Conference	Wichita	Yes
October 3-4, 2022	Kansas Renewable Energy Conference, Kansas Department of Commerce	Manhattan	Yes
Tuesday, November 15, 2022	KS Municipal Utilities/KS Power Pool/KS Municipal Energy Agency Joint EV Charging Taskforce	Virtual	Yes
Monday, January 23, 2023	Wichita Area MPO Technical Advisory Committee	Wichita	Yes
Thursday, January 26, 2023	Economic Lifelines	Virtual	Yes
Saturday, January 28, 2023	EV Lunch & Learn / Society of Alternative Resources	Wichita	Yes
Thursday, February 9, 2023	Fuel True (formerly Petroleum Marketers of KS) / Tri-state meeting	Kansas City, MO	
Tuesday, February 14, 2023	Wichita Area MPO Transportation Policy Board	Wichita	Yes

Date(s)	Event/Organization	Location	Included DAC Stakeholders?
Tuesday, March 14, 2023	Kansas Sierra Club	Virtual	Yes
Thursday, March 30, 2023	KDOT Utilities Workshop	Wichita	Yes
Wednesday, April 12, 2023	KS Transportation Engineering Conference	Manhattan	
Thursday, April 13 and Friday, April 14, 2023	EV Charging Infrastructure Call for Projects Webinars	Virtual	Yes
Thursday, April 27, 2023	Kansas Municipal Utilities Conference	Wichita	Yes
Tuesday, June 13, 2023	West Wichita Rotary Club	Wichita	Yes
Monday, July 31, 2023	Kansas Electric Cooperatives Summer Meeting	Overland Park	Yes
August 1-2, 2023	KDOT Innovative Technology Summit	Salina	
Saturday, September 30, 2023	Drive Electric ICT National Drive Electric Week Event	Wichita	
Thursday, October 26, 2023	ACES/KDOT Partnering Conference	Topeka	

Utility Engagement

KDOT held a workshop for municipal utilities, co-ops and other utility stakeholders providing service along Kansas AFCs on Thursday, March 30, 2023, at the KDOT Wichita offices. Participants included 25 people representing utility stakeholders, including IOUs, municipal agencies, co-ops, and others. Workshop topics included EV funding made available in the Bipartisan Infrastructure Law (BIL), KDOT’s vision for EVs, and NEVI program goals.

Workshop discussions included feedback on gaps in service, cost concerns, extension policies, and rates and tariffs. Breakout groups discussed lessons learned thus far about transportation electrification, the role a utility plays in this program, and hopes or concerns related to EV adoption in Kansas. Utilities participating in the workshop were generally supportive of EV deployment in Kansas and identified their role as partners, facilitators, and consultants to EV charging developers and site hosts. Lessons learned and key concerns shared by utilities included:

- Charging locations need to be attractive and seen as a destination/necessity to support usage.
- All partners in charging stations need to be sensitive to changes in technology.

- Education will be needed to help customers use the correct charge.
- There is a concern about the current lack of charging infrastructure on US 400.

Ongoing Community Outreach

KDOT intends to continue community outreach to share information about the Charge Up Kansas NEVI plan and other transportation electrification efforts and to gather feedback from the various groups of stakeholders across the state. As part of the planning for transportation projects, KDOT holds biennial meetings in multiple locations around the state to gather feedback from the public. The 2023 meetings will include specific opportunities for public engagement on EV charging and other transportation electrification projects. More information about the Local Consult process can be found at <https://ike.ksdot.gov/projects/local-consult-process>.

Figure 3: Planned Local Consult Meetings

Region/KDOT District	Date	Location
Northeast / District 1	Tuesday, October 3	Manhattan
Southwest / District 6	Wednesday, October 4	Garden City
Southcentral / District 5	Thursday, October 5	Newton
Northwest / District 3	Tuesday, October 10	Hays
Northcentral / District 2	Wednesday, October 11	Salina
Southeast / District 4	Thursday, October 12	Iola
Kansas City Metro Area	Tuesday, October 17	Lenexa
Wichita Metro Area	Wednesday, October 18	Wichita

Over the past year, Transportation Electrification staff were invited to present on the NEVI plan at 1 to 2 events per month. KDOT anticipates continued public interest in transportation electrification and requests for updates on the NEVI plan and progress on EV charging projects will continue to offer opportunities to engage with the public. Additionally, KDOT has identified areas of outreach and coordination that are needed to address the expansion of EV charging and issues around transportation electrification. Staff plans to organize meetings with the necessary partners to facilitate discussion on such issues as EV charging utility rate design and state standards and requirements for EV charging equipment.

4. Plan Vision and Goals

The *Charge Up Kansas NEVI Plan*'s Vision and Goals are unchanged from the 2022 Plan.

Vision and Goals

Establish Kansas as a leader in the development of a convenient, affordable, reliable and equitable EV charging network that supports:

- the sustainable movement of goods and people throughout the state and nation,
- the modernization of transportation infrastructure, and
- the promotion of investments in Kansas communities and places.

Sustainable movement of goods and people throughout the state and nation

Goal 1: Collaborate with partner states to provide a seamless charging experience for EV drivers

Goal 2: Facilitate the adoption of EVs

Goal 3: Support improved air quality and reduction of greenhouse gas emissions

Modernization of transportation infrastructure

Goal 4: Build out electric Alternative Fuel Corridors (AFCs)

Goal 5: Integrate EV infrastructure planning into other modal planning efforts

Goal 6: Leverage other electrification funding opportunities such as fleet modernization and EV workforce development

Promote investments in Kansas communities and places

Goal 7: Provide equitable access/investments in Disadvantaged Communities (as defined by the joint interim guidance from the US Department of Energy and Department of Transportation for Disadvantaged Communities¹)

Goal 8: Modernize the electrical grid (where required to support equitable access)

Goal 9: Facilitate data sharing on EV charging

Performance Measures

The Charge Up Kansas NEVI Plan established five performance measures for tracking progress toward

¹ <https://www.anl.gov/esia/electric-vehicle-charging-equity-considerations>

the Plan’s goals.

Measure 1: Number of registered EVs

The number of registered EVs has grown steadily since 2013, according to vehicle registration data from the Kansas Department of Revenue. Given that the availability of charging facilities is a key concern for drivers, increased charging infrastructure will indirectly support EV adoption. While no NEVI-funded charging stations have been built since the 2022 plan was completed, other charging stations, including DCFC stations supported by Kansas’s VW Settlement Funds, have been completed.

Figure 4: Number of Registered EVs

Year	Goal	Performance Measurement
2022 (Baseline)		4,046 registered EVs (2021)
2023 (Year 1)	5,260 registered EVs	4,398 registered EVs (2022)
2027 (Year 5)	15,022 registered EVs	

Measure 2: Charging Station Uptime

Uptime will be measured based on the formula set by 23 CFR 680.116, establishing that “a charging port is considered ‘up’ when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.” At the time of this plan’s development, comprehensive data on uptime for charging stations in Kansas is not available.

Figure 5: Charging Station Uptime

Year	Goal	Performance Measurement
2022 (Baseline)		n/a
2023 (Year 1)	97% uptime by the end of the first year of service	n/a
2027 (Year 5)	97% total uptimes	

Measure 3 Percentage of total mileage designated as EV Corridor Ready AFCs (Rounds 1-6)

Designated Electric Vehicle AFCs in Kansas include I-70 from the Missouri border to the Colorado border, US-400 from the Missouri border to the Colorado border, I-35 from the state line in Kansas City to the Oklahoma border, US-81 from the Nebraska border to I-70, I-135 from I-70 to I-35, and I-335 from Topeka to Emporia. In total, these routes span 1,584.76 miles. As of 2022, only 68.61 miles are designated as EV Corridor Ready. The goal of this plan is to have all routes designated EV Corridor Ready for their entire lengths. The year one target was for 140 additional miles to be designated EV Corridor Ready. Without any NEVI charging stations constructed, KDOT did not apply for any changes to corridor status in the past year.

Figure 6: Miles Designated EV Corridor Ready

Year	Goal	Performance Measurement
2022 (Baseline)		68.61 miles EV Corridor Ready
2023 (Year 1)	140 additional miles designated EV Corridor Ready (13%)	68.61 miles EV Corridor Ready
2027 (Year 5)	1,584.76 miles designated EV Corridor Ready (100%)	

Measure 4 Number of charging stations in Disadvantaged Communities

Annual updates of this plan will measure the number of charging stations developed in Disadvantaged Communities, as defined by the joint interim definition of disadvantaged communities (DAC) from the US Department of Transportation and the US Department of Energy for the NEVI program.

Measure 5 Dollar amount leveraged as local match, in Disadvantaged Communities and statewide

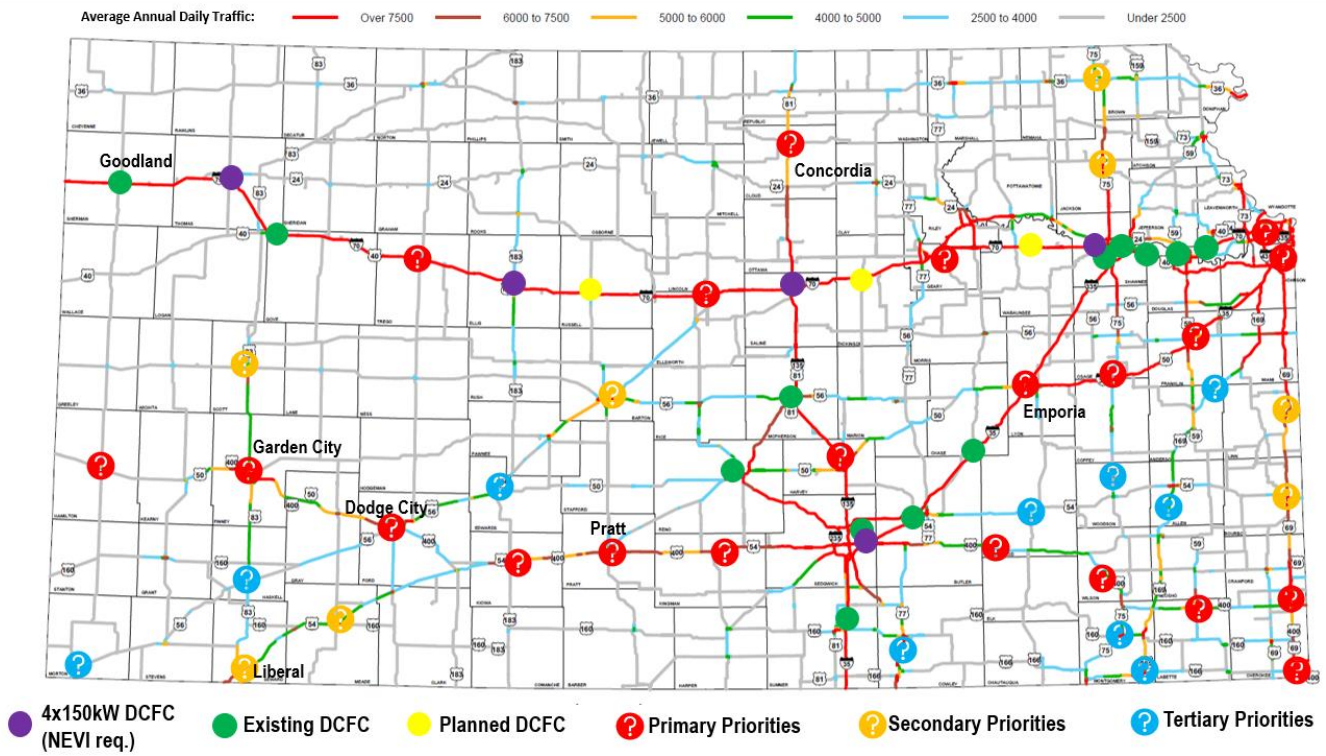
Annual updates of this plan will measure the dollar amount leveraged as local match for the implementation of charging infrastructure and will track this figure in both Disadvantaged Communities and statewide.

At this time, no NEVI funds have been awarded. As a result, no dollar amount has been leveraged as local match.

Strategy Post Corridor Build Out

Once all EV alternative fuel corridors are certified as “fully built out,” KDOT intends to use remaining NEVI funds to support community charging across Kansas. KDOT has identified primary, secondary, and tertiary priority areas for community charging, shown below.

Figure 7: Community Charging Priority Areas



5. Contracting

Status of Contracting Process

Since the approval of the Charge Up Kansas NEVI Plan, KDOT has been working to deploy NEVI funds in a manner that efficiently supports the development of NEVI-compliant charging stations across Kansas. Originally, KDOT anticipated using a Call for Projects/Request for Proposals process similar to that used to award VW Settlement Funds to support the development of EV charging stations in 2021-22. (See Section 8.2, Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners (Site Hosts), of the 2022 *Charge Up Kansas NEVI Plan*.) In that program, KDOT utilized a competitive grant program to award funds to private entities who had submitted applications to develop charging stations. KDOT developed scoring criteria to evaluate applications in order to award grants competitively to high-scoring applications.

In the process of developing a Call for Projects for the NEVI program that complies with state law and Title 23, KDOT consulted with both its own legal department and the FHWA district office. Both offices advised that competitive grants may be utilized with Local Public Agencies (LPAs) but may not be utilized with private entities seeking to develop charging stations. In addition, KDOT does not have authorization to use design-build procurement methods with projects of this size. Based on that guidance, KDOT has been working to develop a Request for Proposals process in order to make awards to the lowest responsive bidder for each charging station. This work has entailed developing a prioritization list for charging station locations, defining minimum requirements for development of a charging station, and developing a complete Request for Proposals package, including all information required for proposers to respond.

Request for Interest

On March 21, 2023, KDOT issued a Request for Interest (RFI) to provide notice that KDOT intended to issue a Call for Projects in the second quarter of 2023 for National Electric Vehicle Infrastructure (NEVI) Formula Program funds and other potential federal funding opportunities that support installation of electric vehicle (EV) charging equipment. The RFI advised interested parties to indicate their interest by registering at the online Kansas Infrastructure Hub, using the Hub's Partnering Directory.

The Kansas Infrastructure Hub was established under the leadership of then Transportation Secretary Julie Lorenz as a multi-agency, coordinated approach to maximize opportunities from the Bipartisan Infrastructure Legislation (BIL) for Kansas communities. The Partnering Directory allows interested organizations or individuals to register their interest in geographic areas and/or specific types of infrastructure. As of July 2023, 49 entities have registered their interest in EV Charging through the Hub's Partnering Directory. KDOT has distributed information about EV Charging opportunities to registered parties.

Call for EV Charging Projects

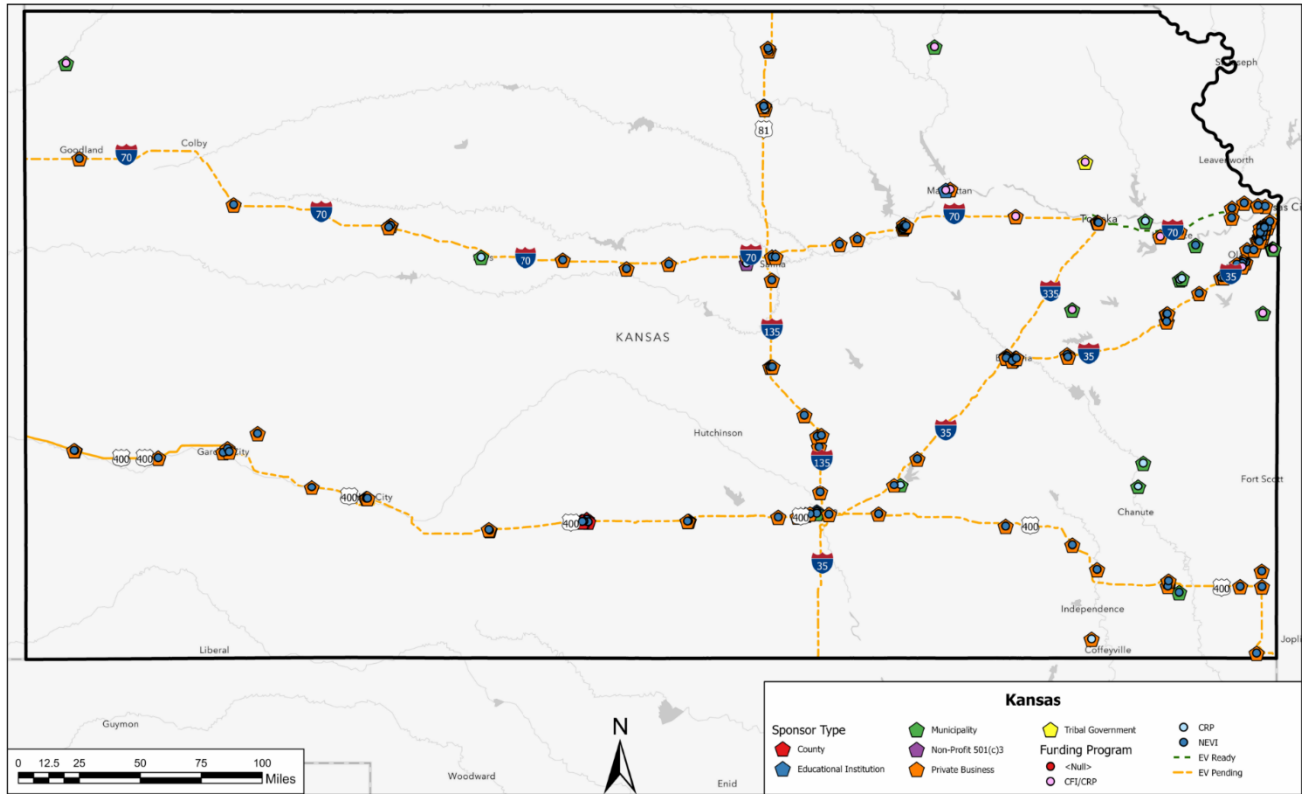
On April 6, 2023, KDOT announced a Call for Projects for EV charging infrastructure projects in advance of applications being accepted for these projects across the state. Project Concept Forms were accepted for EV charging projects including Direct-current (DC) Fast Charging along state highways, community charging, or other public EV charging projects. Each concept form required a potential project sponsor to

provide basic information such as a project location, number of ports, voltage, and estimated costs. Submitting a concept form was required in order for a potential project sponsor to receive the subsequent full Request for Proposals application form.

KDOT held two webinars to present information about EV charging programs, including the NEVI program, Charging & Fueling Infrastructure (CFI) program, and programs with eligibility for EV charging. Over fifty people attended each of the two live webinars. One webinar was recorded and the recording was posted on the Charge Up program website. As of July 2023, the webinar recording had been viewed over 130 times.

The deadline to respond to the Call for Projects was May 5, 2023. A total of 171 submissions were received. Of the total submissions, 144 were determined to be NEVI-eligible with the other 27 determined to be best suited for CFI or other programs due to stated charging levels, number of charging ports, voltage, and/or location.

Figure 7: Map of Concept Forms



Request for Proposals Process

KDOT intends to release a Request for Proposals for an initial six NEVI-funded EV charging stations in mid-August 2023. The RFP will be provided to all entities who submitted a concept form in response to the Call for EV Charging Projects. A webinar to review the RFP and answer questions about the NEVI program and the RFP will be hosted after the RFP is released. KDOT plans that proposals will be due in September with award announcements made in October 2023.

Awarded Contracts

At the time of this Plan’s submission, KDOT has not awarded any contracts.

KDOT expects that almost all NEVI funds will be awarded based on an RFP process to lowest responsive bidders for each priority area, to promote competitive bids and cost containment in addition to conformance to state procurement law and federal requirements.

Scoring Methodologies Utilized

In compliance with state law and Title 23, KDOT plans to award funds for each EV charging station to the lowest responsive bidder for each target location. KDOT has identified additional minimum

requirements for NEVI-funded EV charging stations. Applications will be reviewed to ensure that they meet KDOT's minimum requirements as well as requirements of 23 CFR 680.

Plan for Compliance with Federal Requirements

The Request for Proposals incorporates all requirements of 23 U.S.C., 23 CFR 680, and all applicable requirements under 2 CFR 200. Awardees will be required to enter into contracts with KDOT that incorporate these requirements in order to receive reimbursement for developing NEVI-compliant charging stations.

6. Civil Rights

KDOT's strategy to ensure compliance with State and Federal civil rights laws as presented in the 2022 Charge Up Kansas NEVI Plan has not changed. Application of Title VI and other civil rights related policies to the NEVI program will be addressed through all phases of deployment from project development to implementation to monitoring and reporting with adherence to this implementation plan and all other relevant guidance and federal regulations.

7. Existing and Future Conditions Analysis

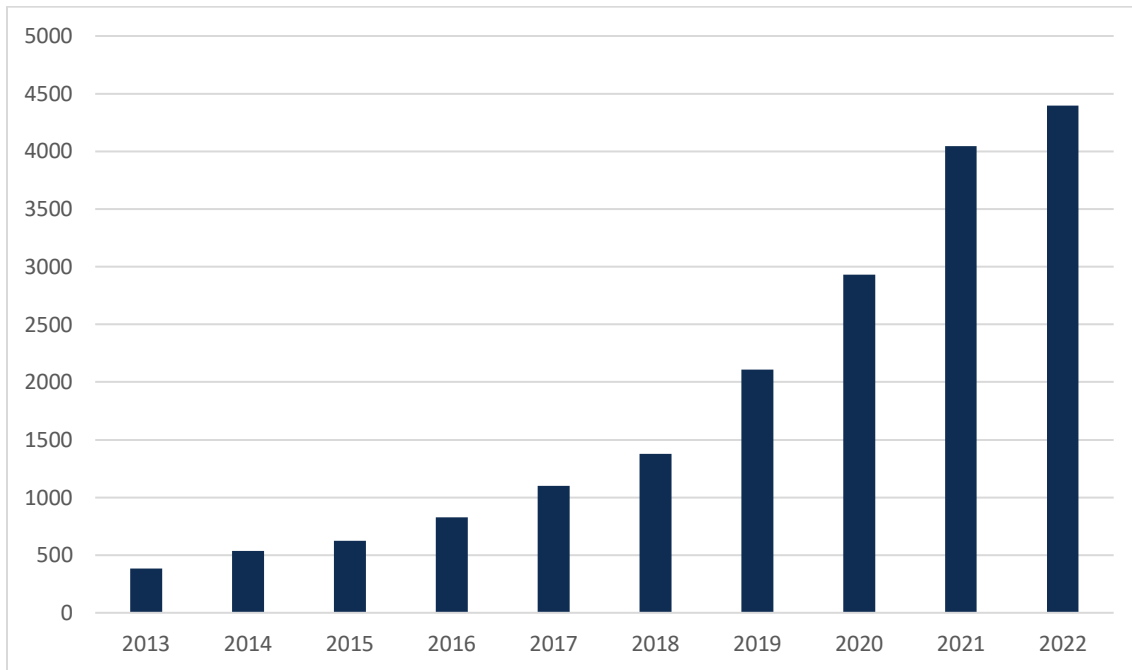
Many of the conditions described in the 2022 Charge Up Kansas NEVI Plan have not changed in the past year. Due to the limited nature of changes to conditions such as state geography and climate, travel patterns, public transportation needs, freight, and supply chain needs, this chapter presents a streamlined update focusing on changes since August 1, 2022.

Based on geography and diverse climate, Kansas experiences a wide range of temperatures and some extreme weather events, including snowstorms, flooding, and tornados. Planning for extreme weather events is important, as it will affect infrastructure such as power and communications. From the experience of other states, we have learned that not all electric grids are fully resilient under some extreme weather conditions like severe cold or heat. Charging stations need to be reliable and available for continued use during evacuations caused by any extreme conditions, especially in remote areas. Choosing locations near easily accessible interchanges and crossroads, with suitable commercial or public sites that have adequate power aligned to grid capabilities, communications, and security are considerations for operational feasibility and for having capable infrastructure available in extreme conditions.

EV Ownership, Availability, and Industry Landscape

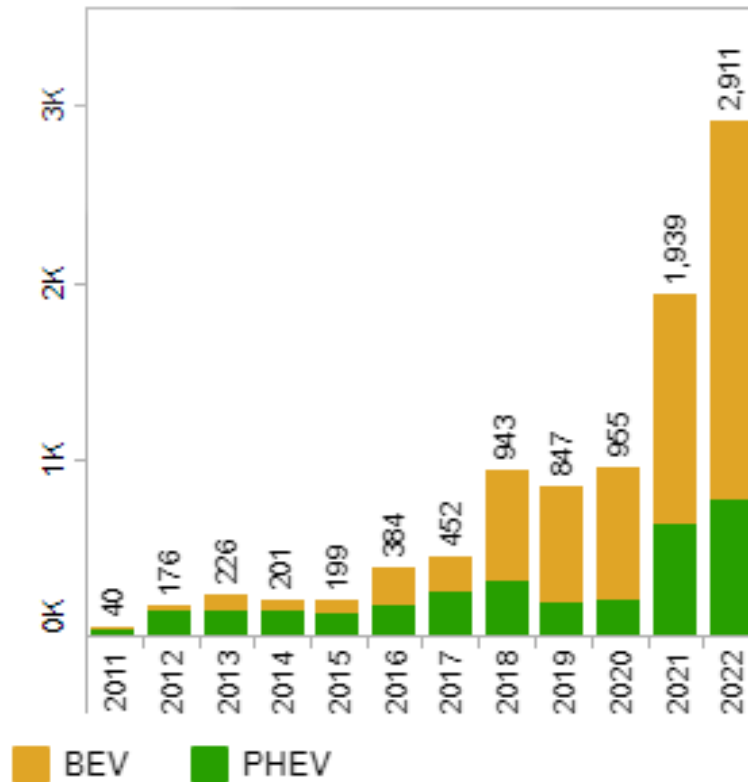
According to Kansas Department of Revenue data, Kansas registered vehicles included 4,926 EVs in 2022. While this data demonstrates a continued trend of increasing EV registrations, the rate of EV adoption has slowed slightly compared to the previous year.

Figure 8: EV Registration, 2013 to 2022



Sales of battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEVs) have been increasing year over year (Figure 9: Yearly sales of PHEV and BEV in Kansas). Companies like Tesla, Rivian, and Lucid Motors are bringing new EVs to the market, and legacy vehicle manufacturers such as Ford and GM are launching electric pick-up trucks, SUVs and sedans to appeal to mass markets. Medium and heavy duty EVs are coming to market to serve school bus needs, transit, airports, last mile delivery, mid and long-haul freight, drayage, and the intermodal freight industry.

Figure 9: Yearly sales of PHEV and BEV in Kansas



Source: <https://www.autosinnovate.org/resources/electric-vehicle-sales-dashboard>

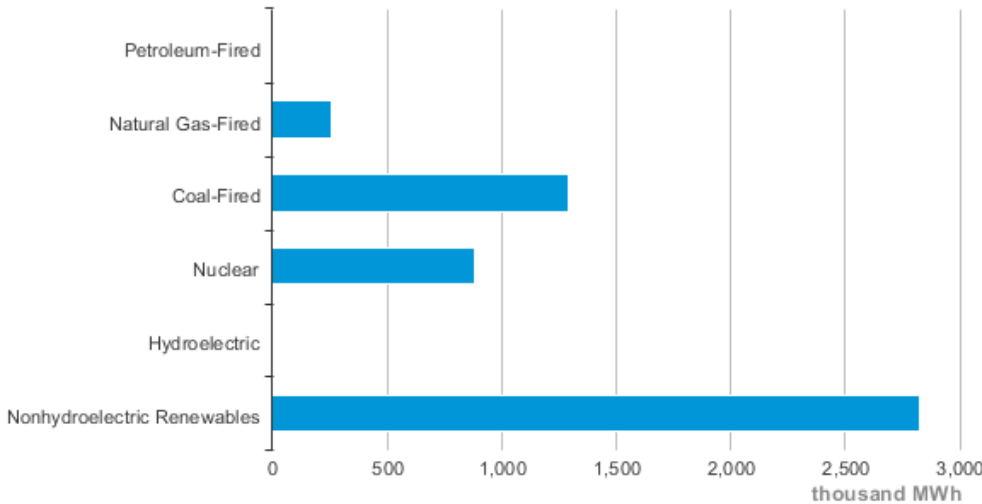
In the past two years, more automakers have announced that they will phase out production of gasoline-powered engines and transition to electric vehicles or other alternative fuels. Production of BEVs is increasing in the US, as well as battery production capacity to electrify vehicle fleets.

In July 2022, Kansas Governor Laura Kelly and other state leaders announced the development of a new Panasonic vehicle manufacturing plant in De Soto. Panasonic plans to start production by the end of March 2025, supporting the growing demand for electric vehicles. In light of EV adoption becoming more and more dependent on the availability of batteries, there is an increasing need to invest in battery development.

Grid Capacity

Based on the Kansas electricity profile 2021 from the US Energy Information Administration, net summer capacity is 18,432 MW. As of March 2023, total net electricity generation in Kansas is 5,254,000 MWh.

Figure 10: Kansas Net Electricity Generation by Source



Source: Energy Information Administration, Electric Power Monthly

For charger deployment locations, total grid capacity is not as important as the availability of power at specific locations including parameters such as 3-phase power and proximity to transmission lines. Other key considerations are available amenities, proximity to freeway exits, good lighting, and more. Transmission and availability of required power will be discussed with the local utility.

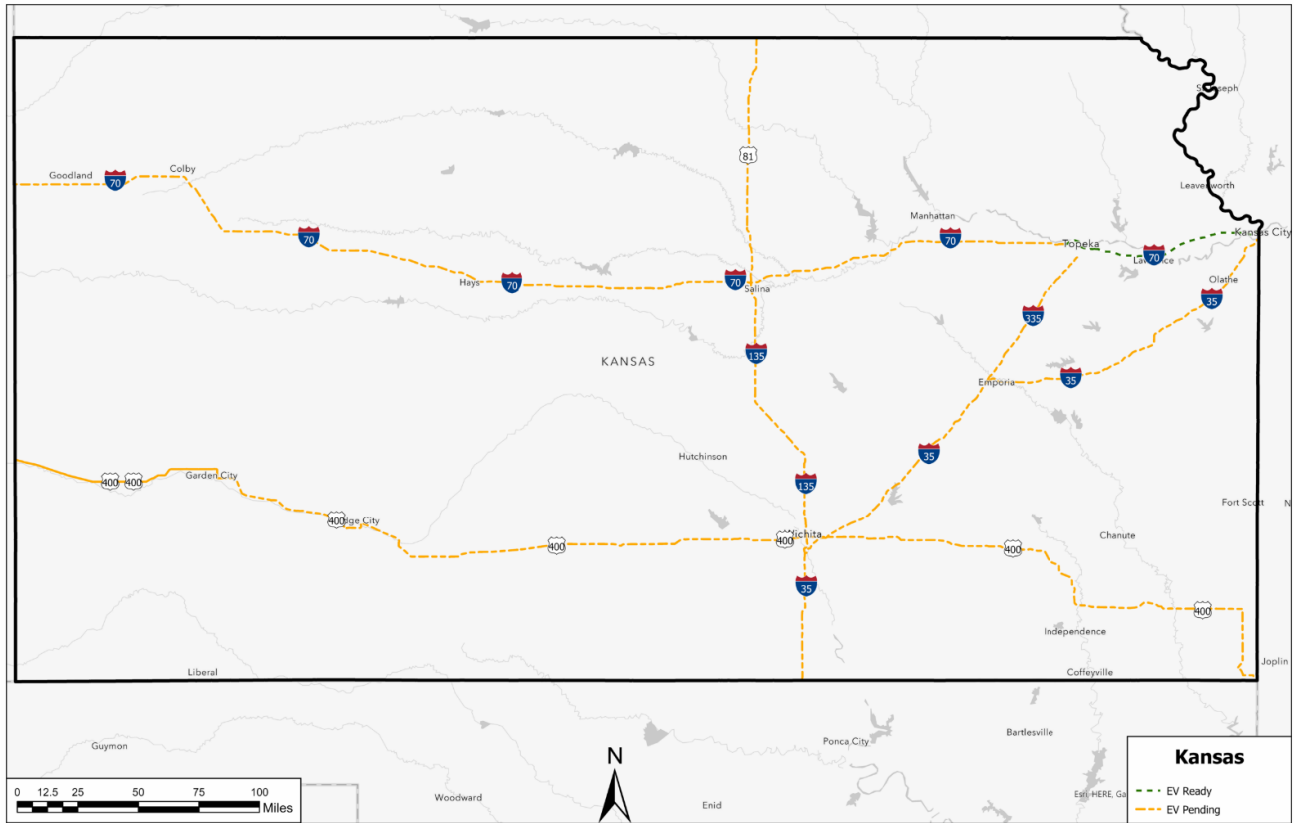
All major utilities in Kansas are members of the Southwest Power Pool (SPP), which operates as the Regional Transmission Organization (RTO). SPP oversees the bulk electric grid and wholesale power market in the central United States on behalf of a diverse group of utilities and transmission companies in 14 states (Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming).

As an RTO, SPP does not own the power grid; it independently operates the grid minute-by-minute to ensure that power gets to customers and to eliminate power shortages. The role of SPP is to ensure the reliable supply of power, adequate transmission infrastructure, and competitive wholesale electricity prices for a 575,000-square-mile region including more than 60,000 miles of high-voltage transmission lines.

Alternative Fuel Corridor (AFC) Designations

Kansas has nominated multiple alternative fuel corridors in several rounds of nominations. Designated EV corridors in Kansas include I-70, I-35, I-135, I-335, US-400 and US-81 from I-70 north to the Nebraska border (Figure 11). These corridors were targeted for charging in the Kansas EV Corridor Plan created in 2019. Additional infrastructure is needed for these corridors to achieve certification as fully built out. AFC designations have not changed since the 2022 *Charge Up Kansas NEVI Plan* was completed.

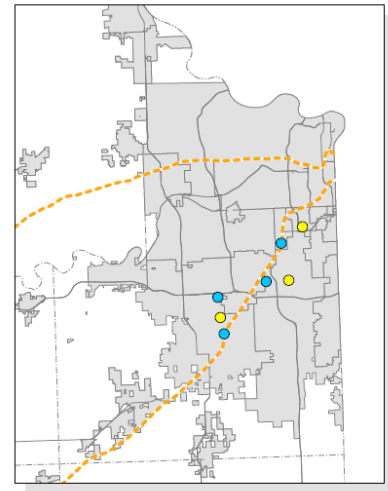
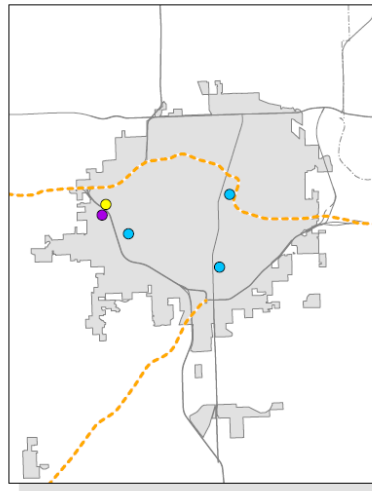
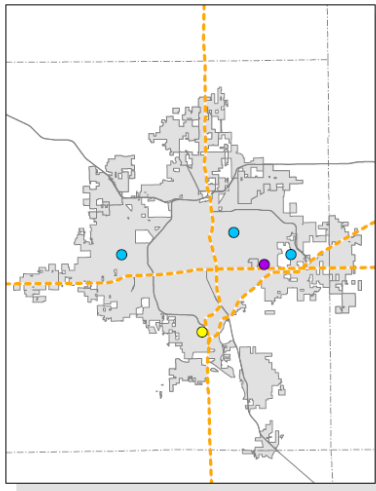
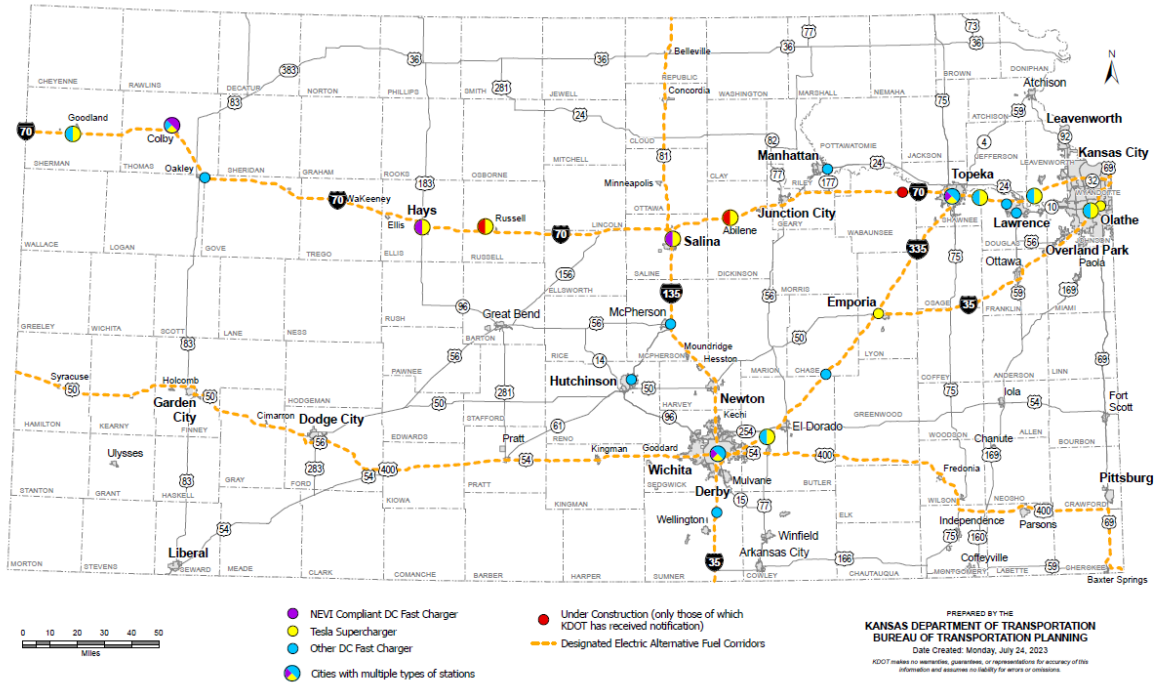
Figure 11: Alternative Fuel Corridors



Existing Charging Stations

As of July 2023, there are seventeen DC fast charging stations in Kansas that serve the AFCs; five of these stations meet current NEVI guidance for power, number of charging ports, and Combined Charging System (CCS) connectors. A comprehensive list of charging stations is provided in Appendix A.

Figure 12: Existing DC Fast Charging Stations



- NEVI Compliant DC Fast Charger
- Tesla Supercharger
- Other DC Fast Charger
- Designated Electric Alternative Fuel Corridors



PREPARED BY THE
 KANSAS DEPARTMENT OF TRANSPORTATION
 BUREAU OF TRANSPORTATION PLANNING
 Date Created: Monday, July 24, 2023
KDOT makes no warranties, guarantees, or representations for accuracy of this information and assumes no liability for errors or omissions.

Known Risks and Challenges

The State of Kansas identified three major risks for the deployment of EV charging stations in its 2022 Charge Up Kansas NEVI Plan. These risks included addressing power needs in some isolated areas of the state, mitigating supply chain issues, and addressing the availability of a qualified installation workforce.

As noted in the 2022 plan, it is anticipated that KDOT will be able to meet requirements for DCFC station spacing and power ratings in most parts of the state. However, based on the analysis, KDOT has identified that there are not enough substations less than one mile from EV corridors in the southeast part of the state. KDOT continues to engage with local utilities in those areas of the state to educate them about the NEVI program and EV infrastructure, as well as to identify their plans to install electrical infrastructure needed to support the EV charging infrastructure.

8. EV Charging Infrastructure Deployment

To establish Kansas as a leader in the development of a convenient, affordable, reliable, and equitable EV charging network, it is important to have a strategy in place for deploying EVSE. The planned approach consists of analyzing the status of Alternative Fuel Corridors, identifying charging needs and EVSE gaps, and working with state agencies to study the feasibility of location recommendations. It will be important to understand the funding structure and requirements outlined in the NEVI Guidance along with the local, state, and federal policies for installing, implementing, operating, and maintaining EVSE. Outlined below is a high-level approach to most of these topics.

Planned Charging Stations

KDOT has identified priority areas for the construction of new charging stations to support the designation of corridors as EV Ready. KDOT intends to issue Requests for Proposals to solicit bids from private development entities for construction of one charging station in each of these target areas. Groups of RFPs will be issued until KDOT has awarded all of its available funds. RFPs planned for 2023 include:

PRIORITY A BID LOCATIONS

1. Emporia (I-35 between MM126-133 or KTA Emporia Service Area on I-335)
2. Garden City (US 400)
3. Pittsburg/Cherokee/Baxter Springs (US 400)
4. Fredonia/Parsons/Neodesha/Severy (US 400)
5. Concordia/Belleville (US 81)
6. Pratt (US 400)

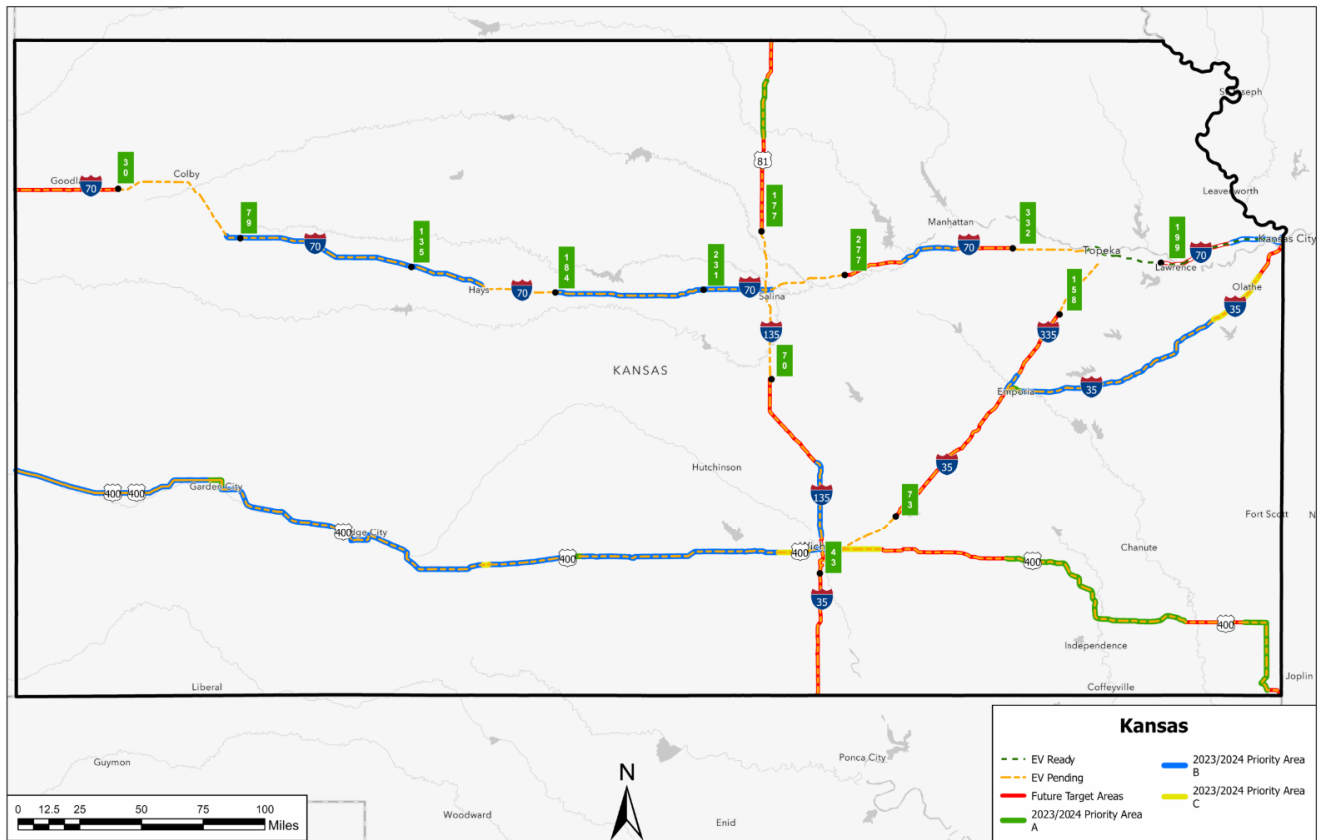
PRIORITY B BID LOCATIONS

- Kansas City/Wyandotte County (I-70)
- North Wichita/Newton/North Newton (I-135)
- Kingman (US 400)
- Syracuse (US 400)
- Dodge City (US 400)
- Ellsworth (I-70)
- WaKeeney (I-70)
- Ottawa/Beto Junction/Lebo (I-35)
- Junction City/Manhattan (I-70)

PRIORITY C BID LOCATIONS

- Greensburg (US 400)
- Goddard/West Wichita (US 400)
- Augusta/East Wichita (US 400)
- Southeast Johnson County (I-35)

Figure 13: Priority Areas for NEVI Charging Station Development

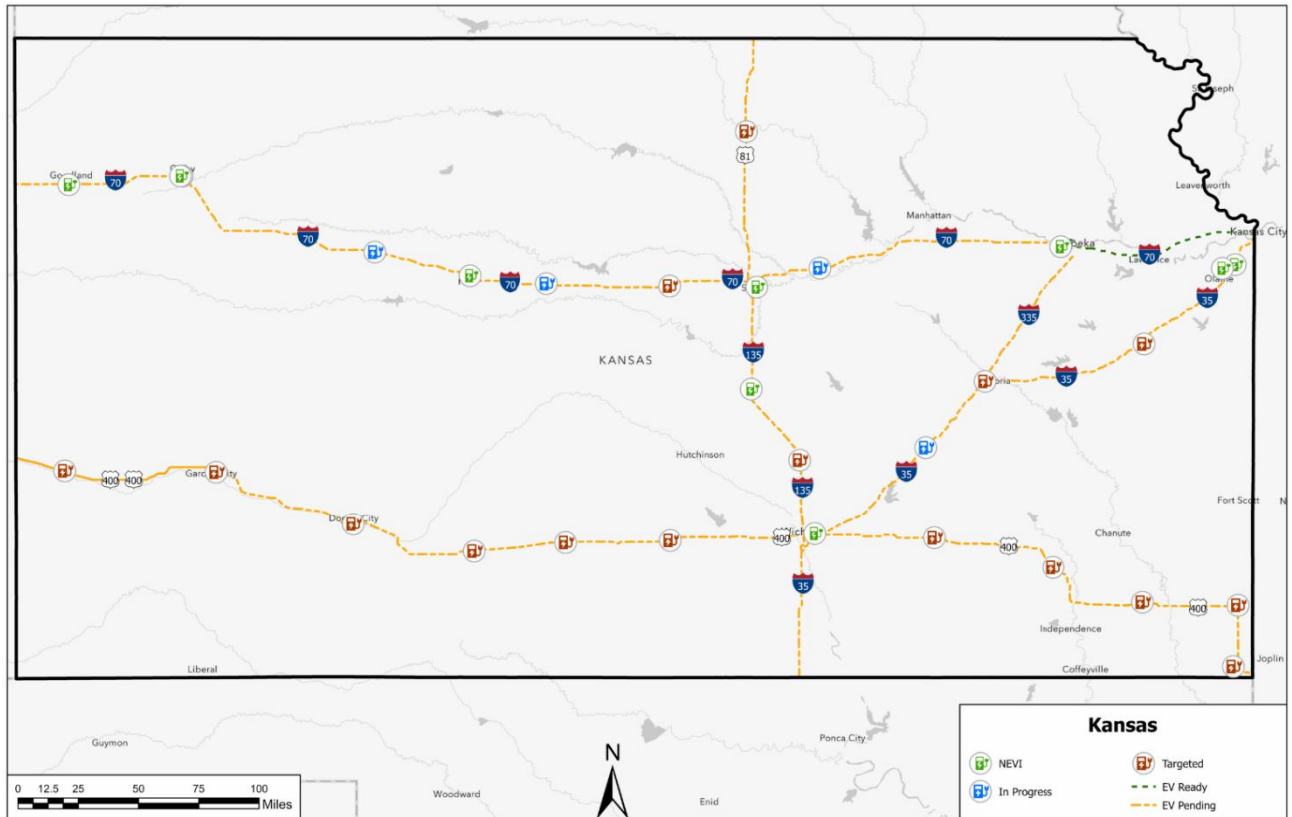


The Request for Proposals process described in Section 5, Contracting, will include minimum requirements that are further described in Section 9, Implementation, to ensure that charging stations are located and operated to provide maximum utility and benefit to travelers as well as local communities.

Planning Towards a Fully Built Out Determination

KDOT intends to issue RFPs in smaller groups, targeting locations where NEVI-compliant stations are needed to reach EV Ready status for all AFCs. Each RFP will be issued for a specific location. At this time, KDOT estimates that at least 15 new charging stations as well as some upgraded stations are needed to reach fully built out status, although this number could change based on exact locations of charging stations and the status of charging stations across state lines from AFC termini. Locations of expected charging stations needed to reach fully built out determinations are shown in Figure 14.

Figure 14: Planned Charging Stations



9. Implementation

Once KDOT and its selected partners/vendors complete the procurement and installation process of the Electric Vehicle Supply Equipment (EVSE), it is very important that the EVSE is operated and maintained so that it can be used by EV drivers. Both the RFP and the contract will stipulate that funding recipients will be responsible for maintenance and operations of the EVSE for a minimum of five years after installation.

Operations & Maintenance Requirements

KDOT has identified minimum requirements for the Request for Proposals to ensure that charging stations are located and operated to provide maximum utility and benefit to travelers as well as local communities. The following minimum requirements must be met for a site to be considered eligible for an application to develop a NEVI-funded charging station:

- Illuminated, ADA accessible on-site restrooms supplied with potable water, available 24 hours a day, 7 days a week
- Hot prepared and/or packaged food available for sale on-site, available a minimum of 16 hours per day
- Access to free Wi-Fi and/or cellular service for charging station customers
- Access to shelter during inclement weather

The following minimum requirements must be included in the development of a charging station:

- Each Charging Port must have at least one permanently attached CCS Type 1 connector and have the ability to add additional connectors at a future date. Charging Stations must provide at least one CHAdeMO connector per location. NACS connectors are allowed if they are fully integrated into the Charging Port.
- Dusk-to-dawn area lighting at Charging Ports and along a path to the associated building providing restrooms, hot packaged/prepared foods or emergency shelter.
- Charging Ports must have an ADA accessible route to the associated building.
- Charging Station must be visible from a street or visible from the associated building interior.
- Charging stations must provide on-site signage directing customers to the Charging Ports.

KDOT will require all awardees to provide a performance bond to ensure charging stations funded through the NEVI Program operate in compliance with program requirements for five years.

Labor & Workforce Requirements

Based on currently available guidance and regulations related to the NEVI program, KDOT will require, as part of contracting with site hosts/contractors, that the construction of charging sites and installation, operations, and maintenance of EVSE comply with Section 680.106(j) regarding the use of Qualified Technicians for the installation, maintenance, and operations of EVSE under the NEVI program. This section requires that electricians installing, operating, or maintaining EVSE be certified by the Electric Vehicle Infrastructure Training Program (EVITP) or be a graduate of a Registered Apprenticeship Program that includes EVSE-specific training.

10. Equity Considerations

The Charge Up Kansas NEVI Plan recognizes the importance of achieving Justice40 Initiative goals as a part of the NEVI Formula Program. NEVI program investments offer an opportunity to invest in Disadvantaged Communities (DACs) to ensure that they benefit from the historical investment represented by this program.

Identification and Outreach to Disadvantaged Communities (DACs) in the State

Outreach to Disadvantaged Communities (DACs) has primarily focused on education regarding EV Charging and information about the NEVI Program and Call for Projects/Request for Proposals process. A list of organizations that include DAC stakeholders who have been part of KDOT’s outreach associated with the NEVI Program is found in Section 3, Public Engagement.

Process to Identify, Quantify, and Measure Benefits to DACs

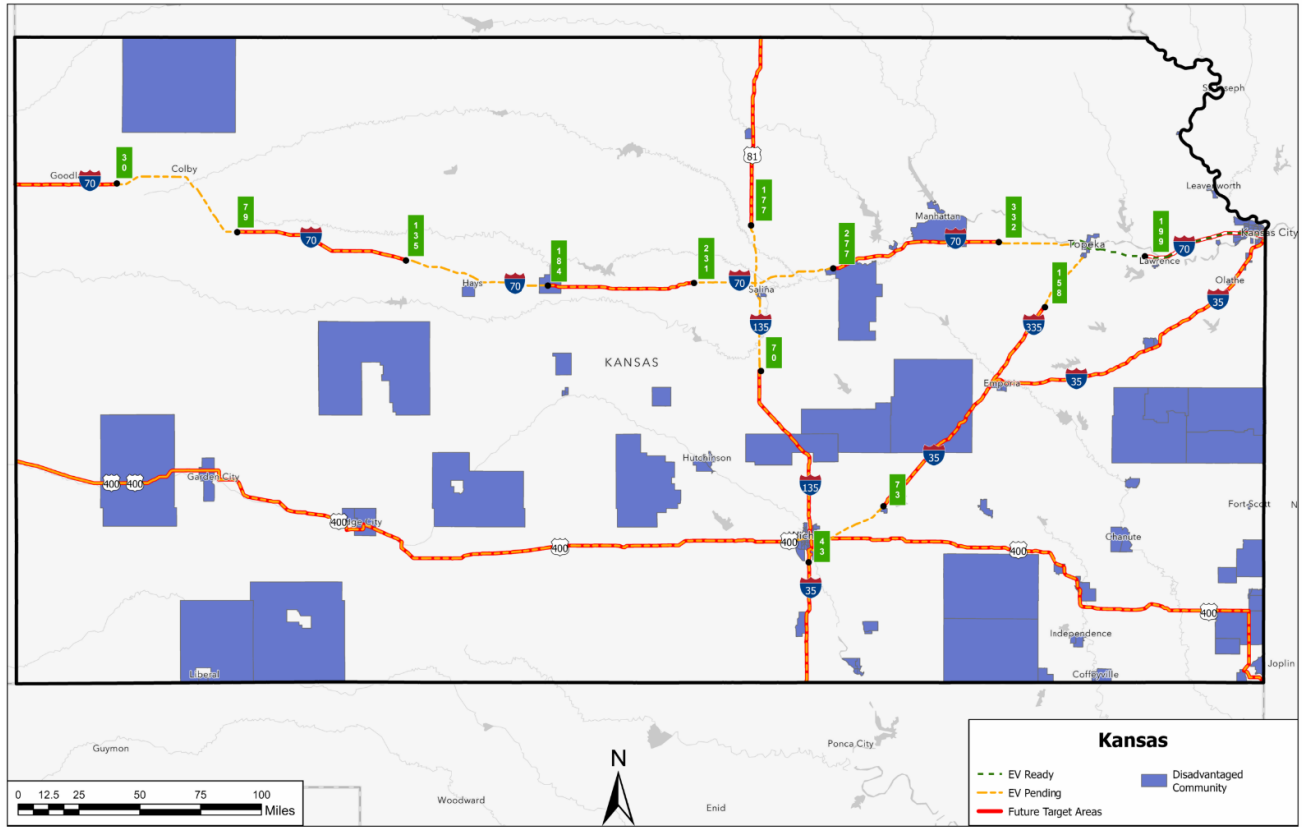
KDOT will use the following metrics to quantify and measure potential benefits to DACs from NEVI Program Funding.

Figure 15: Benefits to Disadvantaged Communities

Benefits Category	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Improve clean transportation access through the location of chargers	<p>Goal- Support development of charging stations located in DACs. KDOT requirements are focused on development of charging stations in high usage locations that will benefit travelers and the community.</p> <p>Metrics – In compliance with the goals of this plan, KDOT intends to measure the number of stations developed within DACs. See Section 4 regarding performance measures.</p> <p>Collecting data – KDOT will collect data on station locations as contracts are awarded.</p> <p>Baseline- KDOT has not awarded any NEVI funds at this time.</p>
Increase transportation investments in Disadvantaged Communities	<p>Goal - Provide equitable access/investments in Disadvantaged Communities and leverage required matching funds.</p> <p>Metrics - Dollar amount leveraged as local match, in Disadvantaged Communities and statewide.</p> <p>Collecting data - Annual updates of this plan will measure the dollar amount leveraged as a local match for the implementation of charging infrastructure and will track this figure in both Disadvantaged Communities and statewide. See Section 4 regarding performance measures.</p> <p>Baseline - KDOT has not awarded any NEVI funds at this time.</p>

Benefits Category	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
<p>Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities</p>	<p>Goal – Support the use of businesses/contractors located within DACs in the development and construction of NEVI charging stations.</p> <p>Metrics – Number of contractors, businesses, and other enterprises located within DACs that are engaged to construct and install NEVI-funded charging stations.</p> <p>Collecting data - As part of its contracting and reimbursement process for NEVI funding awards, KDOT will collect data on businesses and contractors used in the construction of charging stations.</p> <p>Baseline - KDOT has not awarded any NEVI funds at this time.</p>
<p>Support community economic development and commerce in local areas</p>	<p>Goal - Support commerce in local areas through the development of charging stations across Kansas</p> <p>Metrics – Economic development may be measured by sales tax collections or number of business entities</p> <p>Collecting data – Data available from local jurisdictions</p> <p>Baseline – KDOT has not awarded any NEVI funds at this time.</p>
<p>Reduce environmental exposures to transportation emissions;</p>	<p>Goal- Improving air quality and reduction of greenhouse gas emissions by supporting the deployment of charging stations</p> <p>While KDOT is interested in tracking this category of benefits, metrics, data collection, and baseline information is not available at this time. KDOT will further evaluate this benefit category once data from NEVI charging stations is collected.</p>

Figure 16: Disadvantaged Communities



11. Labor and Workforce Considerations

Based on currently available guidance and regulations related to the NEVI program, KDOT will require, as part of contracting with site hosts/contractors, that the construction of charging sites and installation, operations, and maintenance of EVSE comply with Section 680.106(j) regarding the use of Qualified Technicians for the installation, maintenance, and operations of EVSE under the NEVI program. This section requires that electricians installing, operating, or maintaining EVSE be certified by the Electric Vehicle Infrastructure Training Program (EVITP) or be a graduate of a Registered Apprenticeship Program that includes EVSE-specific training. Awardees will be required to provide data on contractors to demonstrate compliance with these requirements.

12. Physical Security & Cybersecurity

Cybersecurity, security of Personal Identification Information (PII), and physical security are very important considerations in deploying electric vehicle charging infrastructure on designated EV corridors. KDOT is committed to setting contractual guidelines to safeguard EV charging networks against cybersecurity and personal privacy risk to the state of Kansas and to EV drivers.

Physical Security

KDOT recognizes that physical security is an important element in ensuring that charging stations are well-used by both travelers on AFCs and local EV drivers. In defining minimum requirements for its planned Request for Proposals, two key requirements include lighting and visibility, in order to ensure safety for charging station users.

Cybersecurity

Cybersecurity strategies such as user identity and access management, selection of appropriate encryption systems, intrusion and malware detection, event logging and reporting, management of software updates, and secure operation during communication outages, as proposed by FHWA, will be included in the solicitation as a requirement.

NEVI funding recipients will become contracted vendors who will own, operate, and maintain the EVSE as well as the data produced. As part of the contract, prior to issuance of the award or other funding, the vendor will be required to provide a cybersecurity plan that demonstrates their cybersecurity maturity and compliance with applicable Kansas, regulatory, and Federal cybersecurity requirements. The State's solicitation will require the applicants to demonstrate methods they will use to maintain and improve cybersecurity throughout the life of the proposed solution. This will include requirements to maintain compliance with current and future cybersecurity requirements as well as alerting KDOT, the Kansas Information Security Office (KISO), and the Cybersecurity and Infrastructure Security Agency (CISA) of any known or suspected network or system compromises.

In July 2021, Kansas Governor Laura Kelly established the bipartisan Governor's Cybersecurity Task Force to protect Kansas' digital infrastructure. The Task Force is comprised of four sub-committees related to Statewide Coordination and Collaboration, Workforce Development and Education, Cyber Incident and Disruption Response, and Strategic Vision and Planning. Since its formation, the Task Force has produced two reports: an interim report with 45 broad recommendations to advance a whole-state approach, and final report which highlighted 17 critical recommendations that were found to be either essential to the implementation of other recommendations or top priorities that if implemented would have the greatest impact on protecting the state from cybersecurity threats.

13. Program Evaluation

Kansas will assess the performance of its NEVI program annually. Annual assessments will include reviewing progress toward the identified performance measures, updating maps to include new charging stations and changes to Alternate Fuel Corridor designations, and establishing the annual funding plan. The annual evaluation efforts will provide an opportunity for public input into the plan update. Kansas uses its ongoing Local Consult process to solicit feedback on infrastructure needs and concerns from stakeholders and to advise them of new projects and program milestones. Local Consult will provide a forum for ongoing public input into the annual plan updates. The next Local Consult process will take place in cities across Kansas in October 2023 and feedback received during this process will be incorporated into the next annual NEVI plan update.

At this time, no data has been submitted to the Joint Office regarding EV charger performance in compliance with NEVI program guidance.

Appendix A: DC Fast Charging Stations Serving Kansas AFCs

State EV Charging Location Unique ID*	Charger Level	Route	Location (Street address)	Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
EZ Go - Philipps 66, Belle Plaine	DCFC	I-35	770 N I-35, Milepost 26 Belle Plaine, KS 67013	2	FCN	-	No
Towne East Square, Wichita	DCFC	U.S. 400	7700 E Kellogg Dr Wichita, KS 67207	4	Electrify America	Yes	Yes
Evergy at KTA SVC -404A, El Dorado	DCFC	I-35	7225 Kansas Turnpike, Towanda El Dorado OCL, KS 67042	2	ChargePoint Network	-	No
Casey's, Salina	DCFC	I-70	500 N Ohio St, Salina, KS 67401	4	Electrify America	Yes	Yes
24/7 Travel Store #10, McPherson	DCFC	I-135	2203 East Kansas Ave McPherson, KS 67460	4	EV Connect	No	No
Midway Motors Supercenter, McPherson	DCFC	I-135	2075 E Kansas Ave McPherson, KS 67460	1	EVGATEWAY	-	No
Walmart 664, Hays	DCFC	I-70	4301 Vine Street Hays, KS 67601	4	Electrify America	Yes	Yes
Oak Park Mall, Overland Park	DCFC	I-35	11149 W 95th St, Overland Park, KS 66214	5	eVgo Network	Yes	No
Reed Hyundai KC Reed Hyundai 1, Merriam	DCFC	I-35	7050 W Frontage Rd, Merriam, KS 66203	1	ChargePoint Network	-	No
Berger Convenience, Olathe	DCFC	I-35	10550 S Ridgeview Rd, Olathe, KS 66061	4	eVgo Network	-	No

State EV Charging Location Unique ID*	Charger Level	Route	Location (Street address)	Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
Walmart 1802, Topeka	DCFC	I-70	1501 SW Wanamaker Rd, Topeka, KS 66604	4	Electrify America	Yes	Yes
Evergy at KTA SVC -408A, Topeka	DCFC	I-70	8000 SE I-70 Hwy @ KS Turnpike - Topeka East Topeka OCL, KS 66542	2	ChargePoint Network	-	No
Evergy at TOPEKA GO-424A	DCFC	I-70	818 S Kansas Ave @ Evergy Topeka General Office Topeka, KS 66612	1	ChargePoint Network	-	No
Mitten INC Mitten 1, Oakley	DCFC	I-70	1001 US-40 Oakley, KS 67748	2	ChargePoint Network	No	No
24/7 Travel Store #9, Goodland	DCFC	I-70	2710 Commerce Rd Goodland, KS 67735	4	EV Connect	No	No
Walmart 1214, Colby	DCFC	I-70	115 W Willow St. Colby, KS 67701	4	Electrify America	Yes	Yes
24/7 Travel Store - #2, Colby	DCFC	I-70	1990 S Range Ave Colby, KS 67701	4	EV Connect	No	No