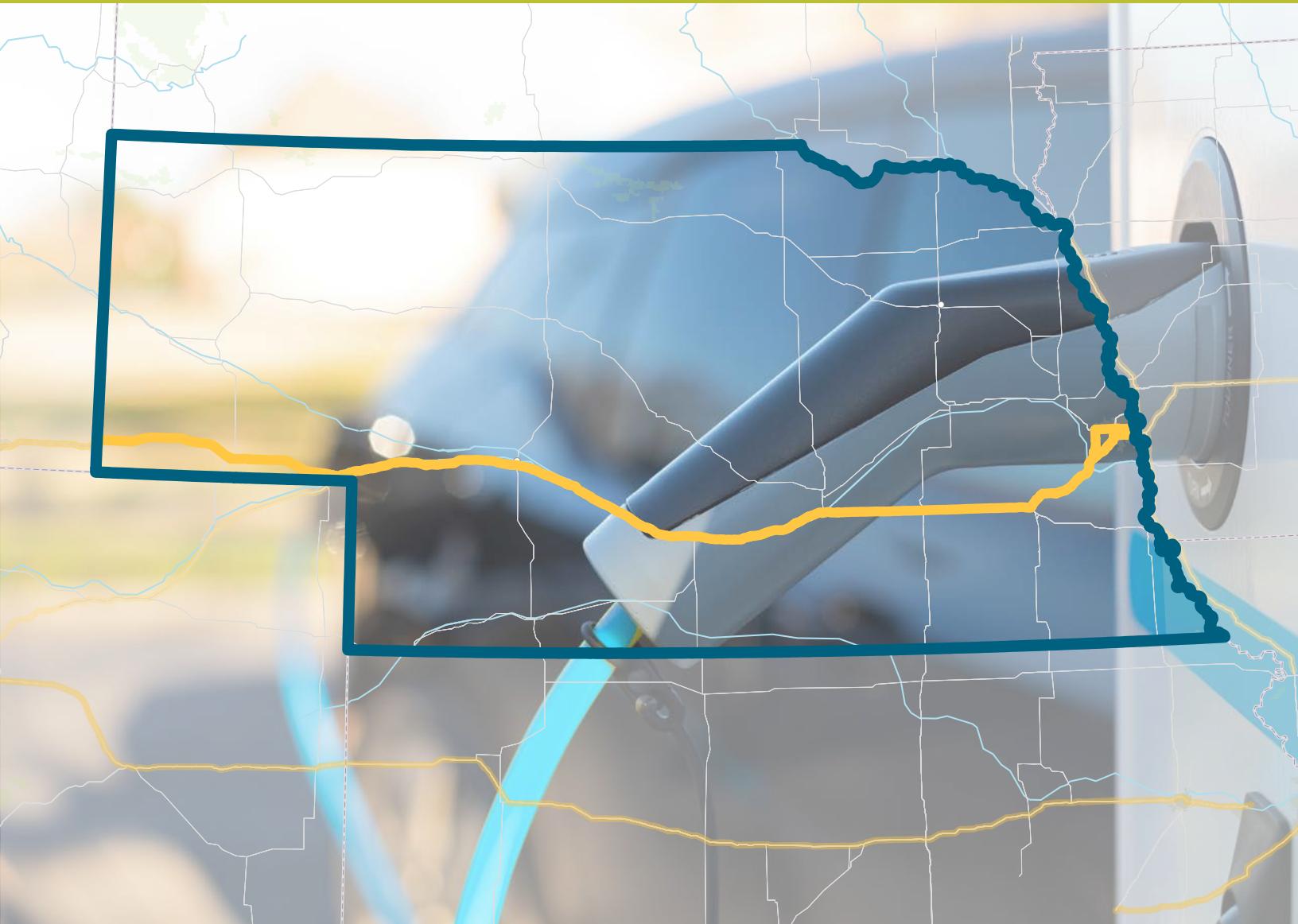


# Nebraska

# State Plan for Electric Vehicle Infrastructure Deployment

08.01.2022 National Electric Vehicle Infrastructure (NEVI) Formula Program



**NEBRASKA**

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

**CHARGING FORWARD**

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## List of Acronyms

Acronym	Definition
AADT	Annual Average Daily Traffic
AFC	Alternative Fuel Corridors
AFF	Alternative Fuel Fee
AFV	Alternative Fuel Vehicle
BIL	Bipartisan Infrastructure Law
BEV	Battery Electric Vehicles
CCS	Combined Charging System
CFR	Code of Federal Regulations
CNG	Compressed Natural Gas
DAC	Disadvantaged Community
DCFC	Direct Current Fast Charger
DOE	Department of Energy
PHEV	Plug-in Hybrid Electric Vehicles
EPA	Environmental Protection Agency
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
FCV	Fuel Cell Vehicles
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
ICE	Internal Combustion Engine
LB 1016	Legislative Bill 1016
LNG	Liquified Natural Gas
LPG	Liquified Petroleum Gas
NCEA	Nebraska Community Energy Alliance
NDEE	Nebraska Department of Environment and Energy
NEPA	National Environmental Policy Act
NEVI	National Electric Vehicle Infrastructure
NRTL	Nationally Recognized Testing Laboratory
MAPA	Metropolitan Area Planning Agency (Omaha-Council Bluffs)
MPO	Metropolitan Planning Organization
NDOT	Nebraska Department of Transportation
OCPP	Open Charge Point Protocol
OEM	Original Equipment Manufacturer
P3	Public-Private Partnership
RFP	Request for Proposals
STIP	Statewide Transportation Improvement Program
TIP	Transportation Improvement Program
USDOE	United States Department of Energy
USDOT	United States Department of Transportation

## Introduction

On November 15, 2021, the President signed the Bipartisan Infrastructure Law (BIL), which included a new funding program for electric vehicle (EV) infrastructure. The National Electric Vehicle Infrastructure (NEVI) Formula Program authorized under Paragraph 2 allocates \$5 billion in formula funding and an additional \$2.5 billion in enhancements to a range of discretionary grant programs. These funds are to expand the EV charging stations already established and to host new charging infrastructure. Through the formula element of the program, Nebraska will have access to \$30.2 million over the five-year program span, or approximately \$6 million per year.

The Nebraska State Plan for Electric Vehicle Infrastructure Deployment lays a foundation for the State to support greater EV travel opportunities and the economic activities encouraged by establishing EV charging stations statewide. The plan encourages the expanded use of EVs by providing drivers greater peace of mind knowing they will have access to charging stations outside their homes or places of work.

The initial focus of program funding (Year One of the six years) will be I-80 from east of Pine Bluff, Wyoming to the Missouri River at the Iowa border. This corridor has been designated an Alternative Fuel Corridor (AFC). In addition to I-80, designated AFCs in Nebraska include:

- US 6 from US 6/N-31 (204<sup>th</sup> Street) to the Missouri River
- US 6/N-31 from I-80 at Exit 432 to US 6 (West Dodge Expressway)

Alternative Fuel Corridors (AFCs) represent a network of national highway corridors designated by USDOT (following nomination by state DOTs) for priority implementation of expanded plug-in electric vehicle (EV) charging and hydrogen, propane, and natural gas fueling. AFCs in the state include a combination of "corridor-ready" and "corridor-pending" segments. As included in the NEVI Program guidance, corridor-ready segments currently contain a sufficient number of fueling facilities to allow for corridor travel with the designated alternative fuel. Approved AFC corridors that do not have sufficient fueling facilities to support alternative fuel vehicle travel are designated as corridor-pending. Mapping included in the Existing and Future Conditions – AFC Corridors section identify the applicable corridor-ready or corridor-pending designation.

Following build-out of the AFC corridors, NDOT will have freedom in establishing other locations/corridor for supporting EV charging station investment.

Figure 1 outlines the steps NDOT employed to prepare and approve the plan.

## Infrastructure Funding Paths (5 Years)

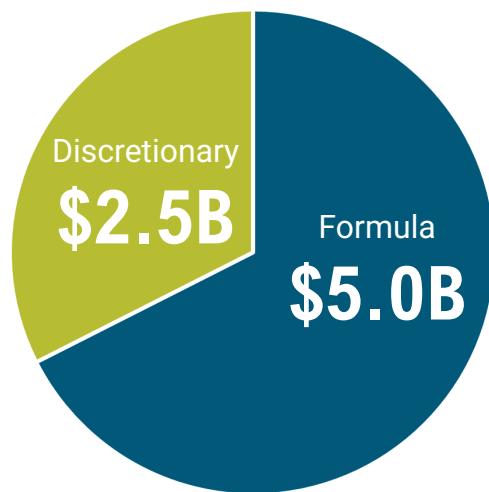
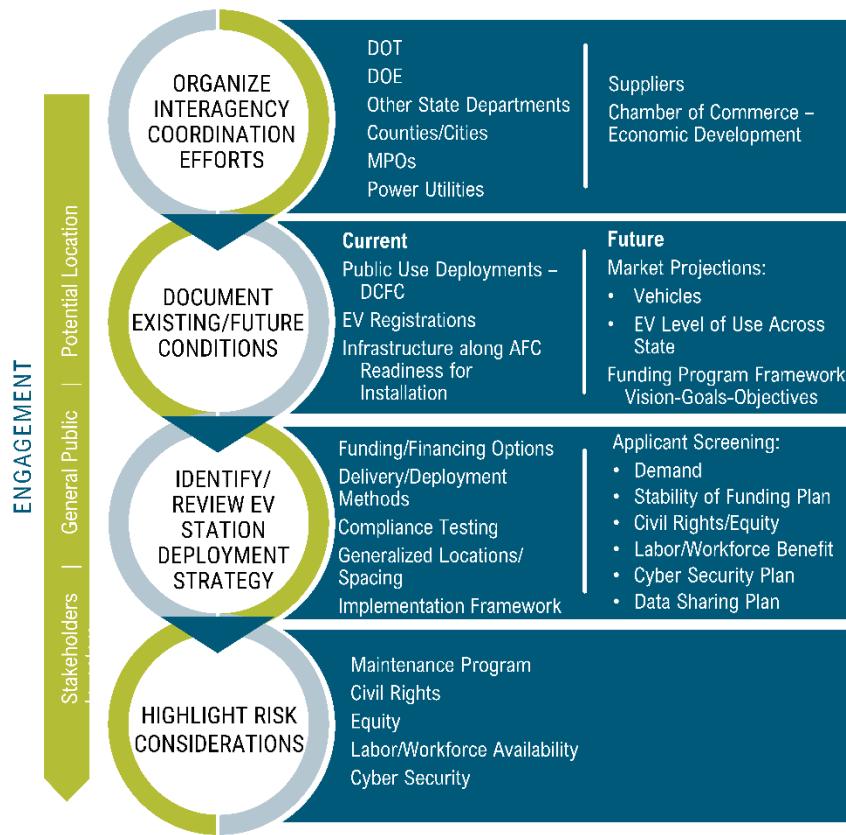


Figure 1. Nebraska Statewide EV Plan Preparation Steps



Including a wider variety of perspectives was a priority in the planning process. To engage with stakeholders, NDOT actively sought out both those who would be involved in deploying EV charging services and those who would use them. Industry and public outreach conducted as part of the plan development included:

- NDOT hosted informational meetings with stakeholders from counties and municipalities along the AFC, public power districts, charging station vendors, chamber of commerce representatives, representatives from the Nebraska Community Energy Alliance (NCEA) public transit providers, and others. Workshops focused on providing background on the NEVI program, general guidelines of the program being developed by NDOT, and opportunities for gathering more information.
- Public surveys to gather information about whether people are considering purchasing an electric vehicle and factors they are balancing in their decision, role the availability of non-home charging plays in their decision, and willingness to pay for charging. A second round of surveying was conducted to gather input/reaction to the draft plan.
- Information dissemination and feedback collection through an NDOT-administered, NEVI-focused webpage on the NDOT site (Charging Forward). The site includes information regarding the funding program, the state's electric vehicle charging infrastructure plan, access to program guidelines (once they are developed), opportunities to provide input to the state, and frequently asked questions. The NDOT webpage also links to a map featuring current electric vehicle charging stations and fuel corridors.

- Internal virtual meetings with NDOT District and Divisions staff to provide an overview of the new funding pass-through program and gather input from District Engineers and from each of the pertinent DOT divisions. Follow-up sessions were conducted with a range of divisions and select districts to gather more information regarding the program concept.

## Support of the Justice40 Initiative

The NEVI program will support the Justice40 Initiative, which establishes a goal that at least 40 percent of the benefits of federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities. Locating public charging stations in or near designated Justice40 areas provides benefits to the communities in several ways, including:

- Providing additional, and faster, vehicle charging opportunities outside the owner's home.
- Reducing mobile source emissions in multiple areas, including those designated as disadvantaged by the Justice40 Initiative.
- Expanding alternative fuel services has the potential to create additional jobs in Justice40 Initiative areas, including:
  - Jobs at point-of-sale businesses, as charging stations are expected to draw additional customers.
  - Charger maintenance technicians to service equipment.
  - Short-term construction jobs during installation.

## Justice40 Initiative

The NEVI program will support the Justice40 Initiative guidance that

**40%**

of the **benefits** of government investments will be distributed to **disadvantaged** communities.

## Dates of State Plan for Electric Vehicle Infrastructure Deployment Development and Adoption

Table 1 documents the milestone dates associated with preparation of the inaugural State Plan for Electric Vehicle Infrastructure Deployment and the annual updated schedule.

Table 1. Electric Vehicle Charging Infrastructure Plan Milestone Dates

Dates	Milestone
February 2022	FHWA releases NEVI formula program guidance for state plan
May-July 2022	Public participation Draft EV plan NDOT approval of draft plan
August 1, 2022	Submit inaugural year plan to FHWA
August 2022 – August 2023	Target dates for buildout on I-80
August 2023 Onward	Identify corridors beyond I-80
August 1, 2023	Submit Year One update to FHWA

## **State Agency Coordination**

NDOT has consulted with the transportation specialist at the Nebraska Attorney General's office to ensure that the Plan is consistent with state law. Among other topics, NDOT and the state counsel are working together to understand the implications of a recently passed law (Legislative Bill 1016) allowing NDOT to create public-private partnerships and progressive design-build contracts.

NDOT also consulted the Nebraska Department of Environment and Energy (NDEE), which is responsible for administering funds from the Volkswagen Diesel Emissions Environmental Mitigation Trust for State Beneficiaries, Puerto Rico, and the District of Columbia. NDEE has distributed \$1.8 million of its Volkswagen trust fund allocation to electric vehicle charging stations in a competitive grant process anticipated to result in a total of 35 new electric vehicle charging locations.

NDOT has also coordinated with counterpart agencies in neighboring states. Nebraska shares highway corridors with Colorado, Iowa, South Dakota, Kansas, Missouri, and Wyoming. NDOT provided a summary of the key foundational components of the plan to representatives in each state and requested input from each regarding how neighboring states have addressed each element. Table 2 documents the elements shared and responses from representatives in each state providing feedback.

## **Public Engagement**

Throughout plan development, NDOT completed several public engagement activities, including an online survey, development and distribution of two informational newsletters, stakeholder group meetings, numerous social media posts regarding the NEVI program and plan development, and one-on-one conversations with industry professionals. Public engagement objectives are outlined in the section below.

Ongoing public engagement will continue through the five-year plan implementation at minimum. NDOT will consider annual online surveys to assess customer satisfaction with the program and to identify potential program enhancements. Annual updates will provide opportunities to develop a more focused engagement process expanding opportunities for involving rural, disadvantaged populations and areas with limited electric grid capabilities.

The plan's public engagement approach, including strategies to reach underserved populations, align with NDOT's Public Involvement Procedures. Following adoption of the inaugural plan, NDOT will refine the engagement process to promote input by disadvantaged and rural communities.

Table 2. Nebraska EV Plan Proposed Elements and Feedback from Neighboring State DOTs

Program Element	Nebraska Plan	Responses from Adjacent State DOT Representatives						
		South Dakota	Iowa	Colorado	Wyoming	Missouri	Kansas	
Infrastructure Supported through Program Funding	Capital construction/acquisition including: <ul style="list-style-type: none"><li>• Property acquisition (by owner/operator)</li><li>• Charging stations and adjacent pad</li><li>• Extending electrical infrastructure to site</li><li>• Traffic control devices</li><li>• Access control construction</li></ul>	Anything allowed by NEVI Program rules			Anything allowed by NEVI program rules			Anything allowed by NEVI program rules.
Station Operations/Maintenance (Up to 5-Years) Funding	No	Assuming charger purchase cost includes a 5-year warranty (that includes operations and maintenance), will be included as reimbursable installation costs.		May be merited in certain locations or time periods – final program guidelines will be included in application process.	Yes – only way the big stations will remain solvent in Wyoming			Yes – it will be an option for sponsors to request. Reason being with 50-mile rule to develop a “built out” network, we will have stations along corridors with little activity to offset costs to operate.
Cost of Required Data Sharing	Yes – As long as the recipient can provide the on-going cost as part of the construction/capital request. The NDOT is intending to limit financial obligations to construction period payment/reimbursement while retaining the recipients' obligation to share data.	Anticipate making it a requirement of acceptance of the installation grant that the owner is responsible for data sharing.	INPUT FROM IOWA DOT HAS BEEN REQUESTED, HOWEVER RESPONSES NOT AVAILABLE AS PLAN WAS STILL BEING DEVELOPED  WILL UPDATE AS INFORMATION IS AVAILABLE		Our comments to NOPR is that the state should not be responsible for any operational reporting unless the state owns and operates a station which Wyoming will not. If this is an operational cost to the owner / operator, our plan is to support this cost.			Yes, anything allowed by NEVI program rules. We also feel we have a reporting model we can utilize from our dept. of Health & Environments air quality monitoring system, which is what we're using for the required reporting for VW-funded EV charging stations in KS.
State Funding to Supplement Federal Program Funds	No	No funds from SDDOT are expected to be utilized as matching funds. Other state agencies may choose to support deployment at one or more locations.		No state funding to match NEVI program, however there are similar programs where state funding is used.	No	No		Potentially, however none currently identified. Throughout the public engagement process participants identified that providing 20% match for EV charging infrastructure would be a program barrier.
Transit Agency Facilities	Future consideration – not in first year	Anticipate that smaller transit vehicles, such as those typically used for rural transit as well as school buses are compatible with the charging equipment and could be users. South Dakota is further anticipating to require that locations include the ability to accommodate vehicles with trailers, which would also therefore be suitable for smaller transit vehicles and/or school buses.		Some potential considered for long-route buses and/or school buses. Public transit advancement is through other funding programs that support access control.	Not with NEVI funds			Yes, but currently not an identified need to fund with NEVI funds.

Program Element	Nebraska Plan	South Dakota	Responses from Adjacent State DOT Representatives				
			Iowa	Colorado	Wyoming	Missouri	Kansas
		However, SD DOT's plan does not include development or deployment at transit or school facilities with NEVI funds.					
Year One Focus (2022)	I-80 Corridor – Designated AFC. Fill gaps in 50-mile spacing guideline.	SDDOT does not anticipate the deployment of any charging equipment as part of this program in FY22.			Corridors (I-80, I-90, I-25) – we asked for 11 exceptions and have no intention of building stations in a place that already has them.	Development of the Plan – No distribution of funding for construction is anticipated.	Year 1 priority to fill 50-mile gaps on designated Electric AFCs: I-70, I-35, I-135, I-335, US-400, US-81.
2023 through 2026 Efforts	Focus funding across state to support two themes: <ul style="list-style-type: none"> <li>Support EV Demand – Review/Prioritize proposals for locations with higher adjacent traffic volume</li> <li>Sustainability – Review/Prioritize proposals for locations supporting GHG emission reduction and/or Justice40 Initiative</li> </ul>	First installation not likely until 2024. I-90 and I-29 (Official AFCs) US 83 and US 385 are desired routes to get from Rapid City area to either Lincoln, NE or Denver, CO. (Note: NDOT may consider US 385, but US 83 is unlikely). Future alternatives for placement focus on supporting tourism and/or supporting population centers.			Fund follow on routes identified in the plan that get folks from the corridors (interstates) to the national / state parks.	No funding distribution is anticipated until Year 3.	Anything allowed by NEVI program rules.

## Stakeholders Involved in Plan Development

The Nebraska Electric Vehicle Infrastructure Plan is being led by NDOT's Strategic Planning Division in coordination with numerous partners and stakeholders. Plan development and input partners include MPOs, cities, counties, public power districts, manufacturers and numerous public stakeholders representing the majority of the USDOT recommended stakeholder groups. This chapter reflects input NDOT received to date and anticipates continued engagement that will be captured in annual plan updates.

Table 3 documents groups/organizations NDOT has included in the initial plan outreach program or will actively involve in program refinement and implementation, and may include as part of updating the plan annually. The organizations identified in **Bold** provide direct access to groups that address the goal of the Justice40 Initiative identified in Executive Order 14008.

Table 3. Groups Included in NDOT Outreach

MAPA (Omaha-Council Bluffs MPO)	Nebraska Community Energy Alliance
Lincoln MPO	Nebraska Tourism Commission
Grand Island Metropolitan Planning Organization	Nebraska Highway Commission District 1
<b>Siouxland Interstate Metropolitan Planning Council</b>	<b>Nebraska Highway Commission District 4</b>
Nebraska Association of County Officials (NACO)	Nebraska Highway Commission District 5
<b>League of Nebraska Municipalities</b>	Nebraska Highway Commission District 6
City of Omaha	Love's
<b>City of Lincoln</b>	<b>ChargePoint</b>
City of Grand Island	Tesla
<b>City of Kearney</b>	Electrify America
City of North Platte	Ryde Transit (Kearney, NE)
<b>City of Sidney</b>	<b>Nebraska Rural Review Board</b>
<b>City of South Sioux City</b>	Western Area Power Administration
Nebraska Public Service Commission	Nebraska Commission on Indian Affairs
Nebraska Department of Agriculture	Ponca Tribe of Nebraska Districts 2 and 3
<b>Nebraska Department of Motor Vehicles</b>	State Fire Marshal
<b>Nebraska Department of Environment &amp; Energy</b>	Bureau of Land Management
<b>Lincoln Electric System</b>	Nebraska Power Review Board
<b>Omaha Public Power District</b>	<b>BD (manufacturer)</b>
Nebraska Public Power District	University of Nebraska Manufacturing Extension Partnership

**Bold** - Coordination efforts/participating groups that address the goal of the Justice40 Initiative identified in Executive Order 14008.

NDOT reached out to key stakeholders for one-on-one discussions to learn more about their operating context and needs. These included Francis Energy and ChargePoint, two leading electric vehicle charging station operators.

## Public Outreach

Outreach to the public began early in the planning process. A webpage on NDOT's website

provided an overview of the process and linked to opportunities for input, which included a Zoom-based public meeting and two online surveys. The website, and the surveys in particular, were advertised in the press and on social media. A comment form allowed open-ended input to be directed to NDOT throughout the planning process.

### **Survey Response**

The NEVI planning team constructed a survey to gauge the public interest and perception of EVs, likeliness for EV adoption, and the current EV infrastructure. The survey consisted of 10 questions, was open for just under one month, opening May 25th and closing June 14th, 2022, and received 1094 responses in total. A vast majority of the responses were from residents of Nebraska, and while major cities had higher response rates, responses were collected from 217 different zip codes in Nebraska.

Given the subject matter of the survey, there was a disproportionate number of responses from EV owners, with about 18 percent citing that they own a fully electric vehicle, while only about 0.3 percent of total Nebraskan vehicle registrations are EVs. Of those respondents who owned gas-powered vehicles or no vehicle at all, around half were either open to or planning on purchasing an EV in the next five years. Those who said they owned a gas-powered vehicle were found to mostly be willing to pay for an EV 'fill-up', with many stating that around \$20 to \$30 was a reasonable price. Other respondents stated the cost of a 'fill-up' would need to be lower than that of gas. There were very few who said they would not be willing to pay for an EV charge, and many of these respondents also stated that they were not interested in purchasing an EV at all.

Nearly two thirds of non-EV owners were found to hold EV charger infrastructure in high regard when deciding whether to purchase an EV, and nearly 90 percent did not think that there were enough chargers to make EV ownership feasible in Nebraska. When it came to the features and amenities around charging stations, the most important were found to be 24-hour access, restrooms, shade/shelter, and good lighting. Over half of respondents also chose restaurants as an option. Regarding EV owners, a vast majority said that they do nearly all their charging at home and drive anywhere from 10 to over 50 miles per day.

## **Plan Vision and Goals**

NDOT supports the development of a statewide EV network that creates a safe, reliable, and accessible transportation system for the movement of people and goods; accommodates mobility needs in urban and rural areas; and ensures fiscal and environmental stewardship of transportation improvements.

NDOT will coordinate with public and private partners to efficiently and effectively administer a program to distribute federal NEVI program funds to support Nebraskans' and visitors' ability to use an EV through having convenient, affordable and accessible fast-charging stations. The state will initiate this effort through focusing on designated AFCs.

The NEVI plan goals are structured to support the existing NDOT Long Range Transportation Plan goals. NDOT's goals are listed below, together with their corresponding EV goals and objectives.

## **Asset Preservation**

*Keep Nebraska's multimodal transportation assets in a state of good repair*

**EV Goal** – Keep Nebraska's Alternative Fuel Corridors in a state of good repair

**EV Objectives** –

- Optimize road and bridge preservation investments on AFCs.
- Invest in the preservation of EV charging infrastructure along AFCs
- Develop criteria for evaluating the condition of EV charging infrastructure.

## **Mobility Choices for People and Freight**

*Provide efficient, affordable, and equitable options across all modes for moving people and goods throughout Nebraska and beyond*

**EV Goal** – Provide efficient, affordable, and equitable access to EV charging infrastructure.

**EV Objectives** –

- Make AFCs in the state compliant with NEVI Program maximum spacing of 50 miles or obtain exemptions when meeting the guideline is not feasible.
- Optimize locating publicly accessible EV charging infrastructure to support urban and rural mobility.
- Provide support for freight and transit electrification across Nebraska.

## **Secure & Resilient Transportation**

*Manage the risk and magnitude of major disruptions to Nebraska's transportation systems*

**EV Goal** – Provide a charging network throughout Nebraska that provides redundancy and addresses cybersecurity, interoperability, and network reliability.

**EV Objectives** –

- Consider roadway network, and in particular I-80, alternate route plans when developing a program of device placement.
- Minimize risk to EV charging assets from cyber-attacks.
- Ensure EV charging network support all user.
- Coordinate with public power districts to address electrical grid capacity limitations for EV charging infrastructure to provide reliable charging for vehicles.

## **Safety**

*Provide a transportation system in Nebraska that is safe for all users*

**EV Goal** – Provide safe locations for all users to access EV charging infrastructure

**EV Objectives** –

- Minimize risk to EV charging users from inclement weather through providing storm shelter areas.
- Create safe charging locations through lighting, parking access, etc.

## **Support for Economic and Community Vitality**

*Choose investments in Nebraska's transportation system that best support the vitality of Nebraska's economy and all of its communities*

**EV Goal** – Provide a charging network that activates Nebraska's economy, communities, and utilities.

**EV Objective** –

- Ensure installation, maintenance, and operations of EV charging network is supported by local employment.

## **Contracting**

### **Preliminary Contracting Process**

Participation in the Nebraska NEVI Program will be open to all eligible vendor and business model types. Applicants will need to demonstrate how their project best meets the NEVI Program and the NDOT program goals. Procurement will be structured to encourage broad participation and competition from the private sector and contract terms and requirements will comply with federal rulemaking and state laws. Potential evaluation criteria for application review are discussed in the Evaluation Criteria section.

Contractual terms with the private vendors will include all federal rulemaking provisions to ensure performance and monitoring of EVSE operations and compliance. The conceptual contracting process discussed during plan development has two related but separate elements:

- The selection process, which identifies the applicants that will receive reimbursement
- Contract execution

The selection process evaluates the application for a charging site against a set of pre-determined criteria. Each project will differ based on the number of proposed charging ports, physical layout, available amenities, and other site characteristics.

The contracting process will combine the site characteristics described in the application with a set of standard terms and conditions that define liability, payment, and documentation requirements for all applicants. NDOT has suitable models for agreements similar to these from the Local Authority Economic Opportunity Agreement. These agreements allow for flexibility in defining the project, but establish eligibility boundaries, quantification of outcomes, and terms for receiving grant payments.

An alternate contracting process may emerge from the passage of Legislative Bill 1016 in 2022. This state law has the potential to expand NDOT's project delivery toolbox by:

- Allowing NDOT to deliver projects through public-private partnerships (P3s). The legislation defines a private partner as an entity other than a government agency.
- Allowing NDOT to use progressive design-build contracts (increasingly an element of P3s).

LB 1016 tasks NDOT to develop and report to the legislature by July 1, 2023, the criteria to be used in determining when a public-private partnership is to be used for a particular project.

## Proposal Evaluation Criteria

Through discussions conducted as the inaugural plan was developed, a set of preliminary application review criteria were identified. Criteria reflect NEVI program goals, the financial plan for the project, qualifications of the project applicant to complete the project, whether the project includes complementary amenities for station customer use during a charging session (as included in the Federal NEVI Program overview), and whether all application guidelines are addressed. Following adoption of the inaugural plan, NDOT will refine the contracting and application review process, including the criteria used to select projects for funding. Table 4 documents a preliminary set of evaluation criteria discussed during plan development; these will be used as a starting point for discussion of the final criteria.

Table 4. Preliminary Project/Application Review Criteria

Criteria	Preliminary Importance Scale /Points
<b>Project Location</b>	
Within a defined gap in the NEVI Plan	50
Distance from AFC interchange	
Proposed total number of ports (min 4)	
Distance to nearest Justice40 area <10 miles	
<b>Cost</b>	
Total proposed project cost (within 25% average of all)	15
Proposed ports requesting reimbursement	
Cost per port reimbursed (within 25% average of all)	
<b>Amenities With Proposed Site</b>	
Publicly accessible restrooms	Bold are MOST important
Lighting	
Sheltered seating	
Food and drink onsite	
24-hour access	
Trash cans	
Public Wi-Fi	
Canopy over charger parking	
Restaurant (within 1/8 mile)	
Convenience store (within 1/8 mile)	
Visitor center/tourism point of interest (within 1/8 mile)	
Walking trail	
<b>Emergency Preparedness</b>	
On an evacuation route	5
Emergency notification system	
Storm shelter	
Located outside of floodplain	

As shown in the table, various criteria could weigh more or less heavily in the selection process. Those reflecting what NDOT sees as most important to meeting program goals, demonstrating a sound financial plan, and being cost competitive would be weighted most heavily.

## Contracting Goals

The plan has several goals that are described in the previous section. To advance these more general goals, several specific goals have been identified for the contracting process:

- Rapid AFC build out
- Accountability and adherence to the deployment plan submitted by the applicant
- Non-discrimination and labor practice equity (see Nebraska Fair Employment Act)
- Engagement with and benefits to local communities (see Nebraska Fair Employment Act 48-1112)

## Alternate Contracting Processes

Passage of LB 1016 creates new opportunities for contractor selection and contracting models. As the rules for activating LB 1016 opportunities could be finalized up to a year after the inaugural state electric vehicle infrastructure charging plan is adopted, NDOT is including two potential contracting methods that will be refined as the plan and LB 1016 guidelines mature:

- Option 1: A contracting process similar to the [Economic Opportunity Agreement](#) currently used by NDOT to direct discretionary funding to communities requesting funds for projects that show a clear need for transportation improvements to fulfill the goal of an economic development project.
- Option 2: Use of the process to be established by NDOT before July 1, 2023 for LB 1016, which is anticipated to provide guidance regarding direct funding for construction of projects such as publicly accessible electric vehicle charging stations.

### Option 1 – Similar to Economic Opportunity Program Agreement Process

NDOT intends to establish a simple stepwise process for reimbursements to contracting owners to deliver charging stations, as ease of participating will allow the greatest number of potential applicants. Details of the process will be developed by the NDOT in coordination with Nebraska Attorney General's Office. As a starting point, a general concept for contracting steps is outlined below.

- a. Application Submittal – Applicants will be responsible for obtaining, completing and submitting an application proposing installation of a NEVI compliant station. Details regarding the content and application methods will be developed in Year One of plan implementation. The application will include information pertaining to program funding elements, evaluation criteria applied to assess each application, and information regarding notification of selection. Table 5 outlines the currently proposed cost sharing elements for the Nebraska program.
- b. Review and Selection – Once an application is determined to be valid in terms of deployment details and requested reimbursements, it will be evaluated based on pre-determined criteria. The evaluation will provide an input into the final project selection during the upcoming annual program period.

**Table 5. Grant Funding Inclusion by Program Element**

Program Element	Grant Funding Inclusion	
	Yes	No
Charging Stations and Adjacent Pad (Autos)	●	
Charging Stations and Adjacent Pad (Freight)	●	
Extending Electrical Infrastructure	●	
Station Operations and Maintenance (Up to 5-Years) (Assumes device warranty is integrated into capital cost)		●
Traffic Control/Signage	●	
State Funding to Supplement Federal		●
Transit Services (Future Consideration)	●	
Administrative Cost of Data Sharing (Must Provide Data)		●

- c. Notification of Awardees – Each applicant selected for award will be formally notified using the contact information supplied on their application. Awards will be published on NDOT's website, and written lists will be made available upon request.
- d. Development of Contract
  - i. General Terms – The general terms of the contract (Terms and Conditions) are proposed to be modeled from existing NDOT contracts and follow as closely as possible the form and terms of existing documents.
  - ii. Inspection and Payment Terms - Sites will be inspected prior to disbursing payment for cost reimbursement. Details regarding the review items will be developed as part of the plan implementation to be completed after the inaugural plan is adopted.
  - iii. Site Specific/Plan Specific Items – Site and plan items to include as part of the application and contracting should include:
    - 1. A site layout and construction plan
    - 2. Statement describing charger service availability
    - 3. A plan to maintain site conditions and accessibility
- e. Contract Execution – Signatures by both the applicant's authorized representative and NDOT are needed before the contract is formally executed.
- f. Documentation and Inspection for Site Validation – Guidance for program implementation should identify milestones for NDOT inspection/review of the site to validate substantial completion. Physical aspects of the site (number of ports, accessibility, amenity presence, etc.) will be included in items to confirm, along with proper charging operation at the site.
- g. Payment – At this time, the program is anticipated to be a reimbursement program, which means federal funding payment will not be made until all aspects of the contract are confirmed as complete.

- h. Data Availability – The application guidance and/or contract document content will specify key data items that the applicant will be required to submit to NDOT on a quarterly or more frequent basis. Charger utilization and availability (“uptime”) will be among the required data.

### **Option 2 – Public-Private Partnership Agreement Process**

Guidelines to be developed will address alternate partner selection processes, including the following elements required by LB 1016 for progressive design-build contracts:

**Request for Qualifications (RFQ):** The RFQ will be used to identify a minimum of two qualified organizations to complete the identified work proposed by the agency. Those organizations meeting the qualifications required will be provided the opportunity to respond to the project Request for Proposals.

**Request for Proposals (RFP):** Contracting agencies shall prepare a request for proposals for each design-build or progressive design-build contract. The request for proposals shall contain, at a minimum, the following key elements:

1. Proposed terms and conditions of the design-build or progressive design-build contract.
2. Project statement which contains information about the scope and nature of the project.
3. Statement regarding alternative technical concepts including the process and time period in which such concepts may be submitted.
4. Project performance criteria.
5. Budget parameters for the project.
6. Bonding and insurance required.
7. Criteria for evaluation of proposals.
8. Written statement of the design-builder's or progressive design builder's proposed approach to design and construction of the project.
9. Conditions of the particular project.

The NEVI program is a potential immediate use of the newly allowed P3 concept. Thus, as guidance is developed, lessons learned in using or attempting to use Option 1 will be reviewed. Shortcomings, barriers, and/or difficulties identified to effectively and efficiently solicit, receive, review and implement projects through Option 1 contracting will be considered in preparing the P3 program guidance. The goal will be to use this opportunity to create new procedures that ensure a streamlined process for deployment.

## **Existing and Future Conditions Analysis**

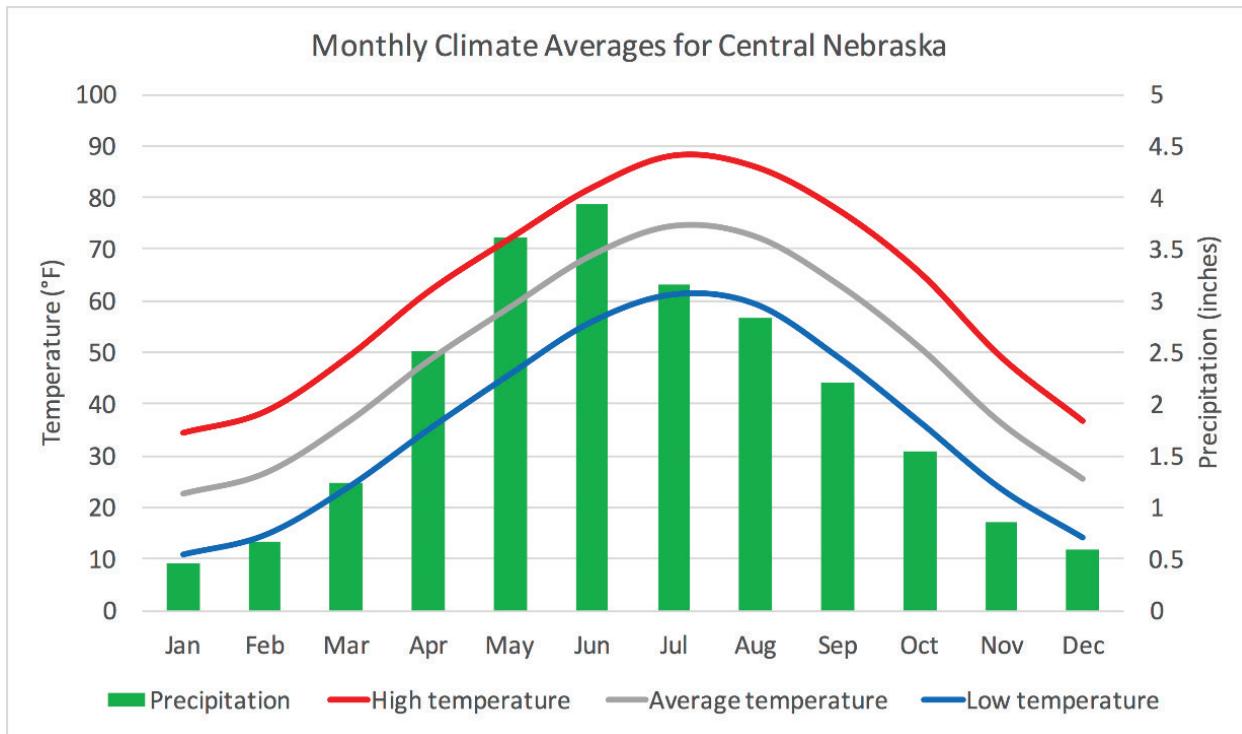
### **State Geography, Terrain, Climate and Land Use Patterns**

Nebraska is located on the western limits of the Great Plains region, between the Missouri River basin and the Platte River. The native landscape is primarily grass-covered prairie. Relative to many other states in the heartland – and belying Nebraska's reputation as a uniformly flat state – the range of elevation extremes is broad. The highest point in the state sits at 5,424 ft (1,653 m) above

sea level in Johnson Township near Kimball and the lowest point is 840 ft (256 m) above sea level at the Missouri River in Richardson County.

Nebraska's average temperatures range from the mid-20s (F) in the coldest months (December–February) to the upper 80s (F) in the warmest months (May–August). Figure 2 displays the average monthly temperature by month for the state. The state has a continental climate characterized by cold winters and warm summers.

Figure 2. Monthly Climate Averages for Central Nebraska



Source: [Nebraska State Climate Office](#)

Figure 3 displays the average annual temperature across the state. Generally, average temperatures increase from north to south and from west to east, with the southeastern portion of the state being, on average, the warmest. Lower average temperatures in the west reflect the higher elevations relative to the east portion of the state.

Based on climate model projections, by the 2050s, Nebraska is projected to have 30 to 50 more days above 90 degrees, 20 to 30 days warmer than 32 degrees, and an eight to 12 percent increase in precipitation.

Figure 2 also documents the average monthly precipitation over the year. The state receives most of its precipitation between May and August. Consistent with temperatures increasing from west to east, precipitation increases from the western more arid panhandle to the eastern border (Figure 4).

Figure 3. Twelve-Month Average Temperatures Across Nebraska – June 2021 through May 2022

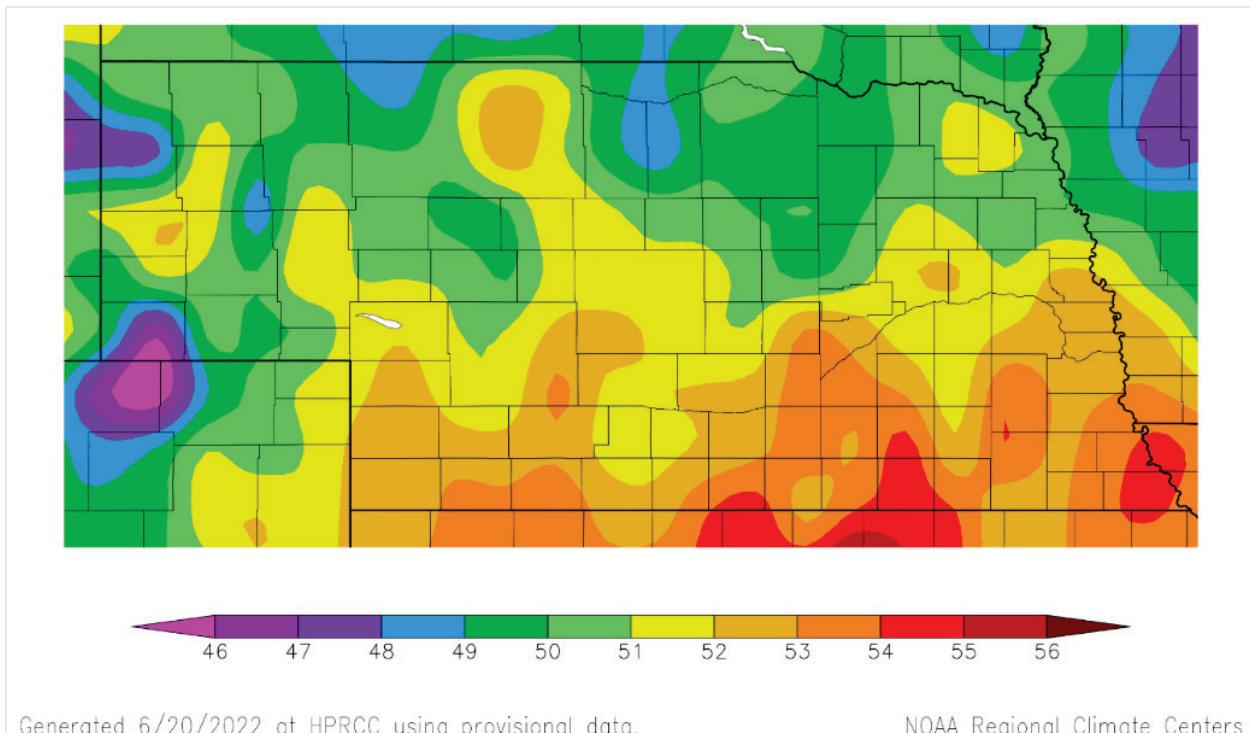
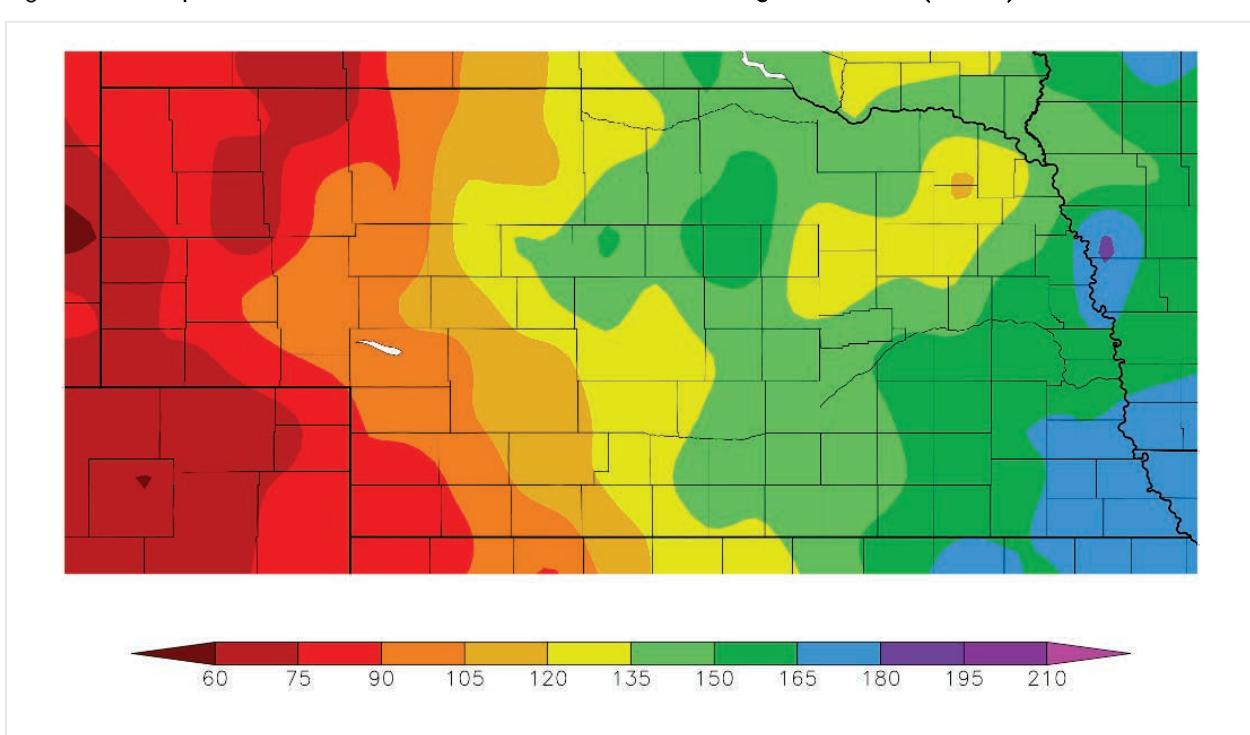


Figure 4. Precipitation Levels Across Nebraska June 2017 through June 2022 (Inches)

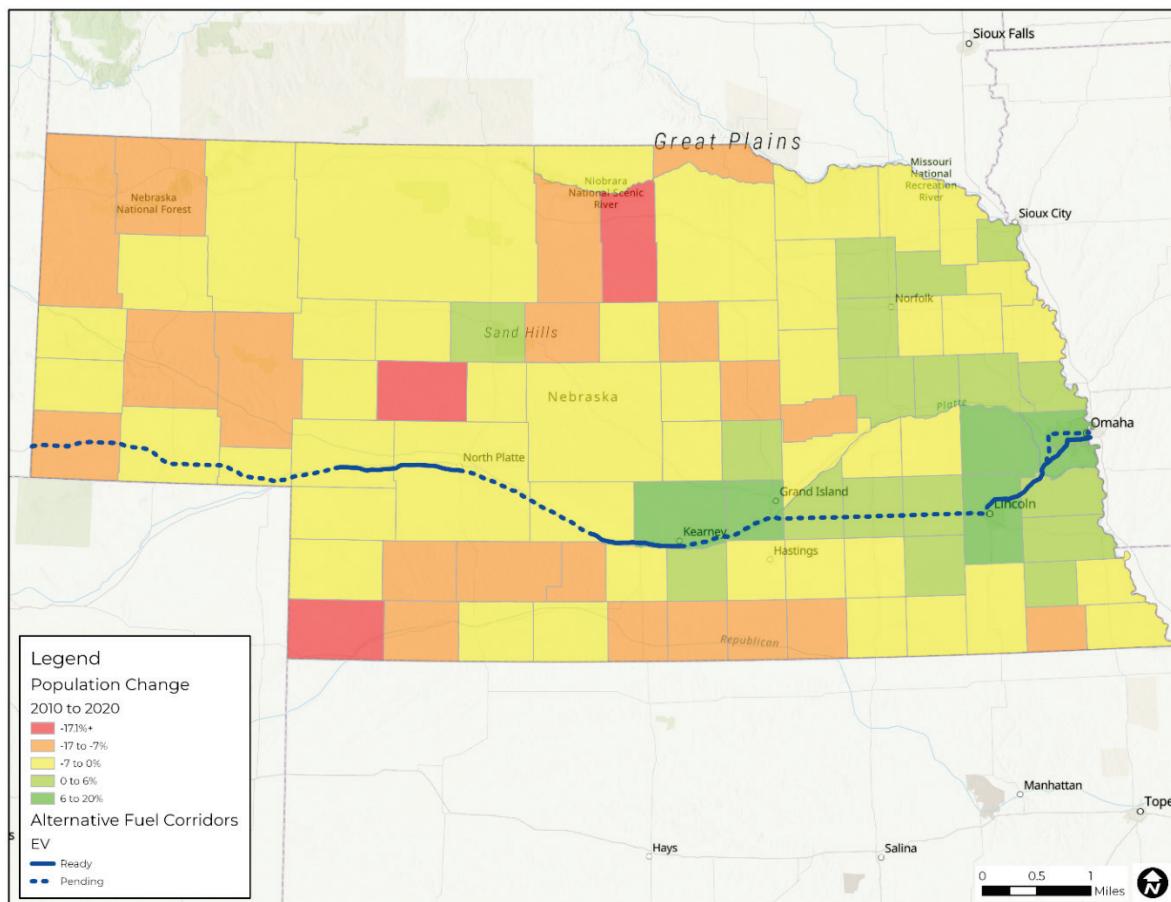


The 2020 Census established a statewide population of 1.94 million people, with well over half of the population located in the Omaha and Lincoln metropolitan areas. Omaha is the largest city (487,300) in the state, followed by Lincoln (292,700) and Bellevue (63,700). While the population of the state increased modestly at 7.4 percent between 2010 and 2020, most of the growth occurred in six counties representing:

- Omaha and its metropolitan area
- Lincoln and its metropolitan area
- Grand Island
- Kearney

Between the 2010 and 2020 census periods, 25 of the state's 93 counties experienced some level of population growth, while the remaining 68 (73 percent of all counties) lost some amount of population. The most extreme losses occurred in Rock, McPherson, and Dundy Counties. Figure 5 displays population change by county for the 2010 to 2020 census periods.

Figure 5. Population Change by County, 2010-2020



Source: [U.S. Decennial Census](#)

## State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs

### Travel Patterns

Travel within the state is characterized by summarizing traffic count data collected at the 70 continuous count stations located on a range of urban and rural highways and select city streets across the state. The make-up of the 70 locations is outlined below:

- 42 on rural state and federal highways
- Nine on low volume rural roads
- Three on city streets in Grand Island
- Three on city streets and highways in Lincoln
- Eight on city streets and highways in Omaha
- One on the Interstate in South Sioux City
- One on a city street in Scottsbluff
- One on a city street in Holdrege
- One on a city street in Seward
- One on a city street in York

Most stations collect data on vehicle type in addition to volume. As a result, continuous classification data is available at most stations. Table 6 documents monthly variation in travel across the range of stations by location type. Across all systems, June represents the highest travel month, followed closely by July. For the rural interstate system, the initial focus of the NEVI Program funding, the highest recorded travel month is July.

Table 6. Percent Monthly Annual Average Traffic on Various Road Systems (2021)

Month	Rural Interstate (12 Locations)	Urban Interstate (7 Locations)	Other Rural Highways (30 Locations)	Urban Arterials (13 Locations)	Low Volume Rural Roads (9 Locations)	TOTAL ALL SYSTEMS (Estimated)
January	71.3	79.5	80.2	83.7	74.3	80.4
February	69.4	83.7	79.9	87.4	70.3	80.0
March	86.4	97.5	95.3	99.0	84.3	93.6
April	96.3	102.8	103.2	103.5	99.1	112.7
May	107.3	107.5	108.3	104.4	113.7	108.2
June	119.7	111.8	112.0	105.3	121.4	112.7
July	126.3	106.8	109.7	103.6	131.7	111.4
August	119.6	104.3	106.8	105.3	111.6	108.0
September	113.5	104.2	106.2	105.3	107.1	106.7
October	106.2	106.3	106.5	105.3	109.2	106.1
November	97.3	100.2	98.7	99.3	93.8	97.9
December	86.7	95.6	93.2	97.9	83.4	92.5

Source: Nebraska DOT, 2021 Continuous Count Data and Traffic Characteristics on Nebraska Street and Highways

NDOT also summarized data from the continuous recorders by day of the week. Consistently across all systems, Friday is the highest recorded travel day (based on cumulative volume) followed by Thursdays. The lowest overall travel day is Sunday as a majority of commute travel does not occur. Table 7 documents travel by day of the week.

Table 7. Percent of Yearly Traffic by Day of Week (2021)

Day of Week	Rural Interstate (12 Locations)	Urban Interstate (7 Locations)	Other Rural Highways (30 Locations)	Urban Arterials (13 Locations)	Low Volume Rural Roads (9 Locations)
Monday	12.6	14.3	14.1	14.3	14.2
Tuesday	12.8	15.1	14.6	15.0	13.9
Wednesday	13.9	15.4	14.9	15.2	13.9
Thursday	14.5	15.5	15.3	15.3	14.5
Friday	15.9	16.0	16.2	16.1	16.0
Saturday	15.7	13.1	13.4	13.3	14.5
Sunday	14.7	10.7	11.6	10.9	13.1

Source: Nebraska DOT, 2021 Continuous Count Data and Traffic Characteristics on Nebraska Street and Highways

Traffic flow across the state reflects population and population density. Figure 6 displays traffic counts on representative routes across the state. In the I-80 corridor, traffic volume grows from west to east, following population density. Average daily volume in the corridor at the western state line in 2021 was 9,300 vehicles per day, with almost 60 percent of the mix (5,550) being commercial vehicles. In contrast, I-80 volumes through Omaha on the eastern end of the state were over 173,000 vehicles per day and seven percent (12,445) trucks.

## Public Transit

Across the state there are approximately 57 public transit agencies, with most of the agencies providing demand response service within smaller communities and between small communities and regional centers. Figure 7 displays transit coverage across the state. There are two agencies providing flexible or deviated fixed route service (Roadrunner Transit in Scottsbluff-Gering-Terrytown and City of Sidney Transit in Sidney). Fixed route service is provided in Lincoln, Omaha, and South Sioux City (purchased through Sioux City Transit System in Sioux City, Iowa).

The Omaha and Lincoln agencies include electric vehicles as a part of their fleet and report expectations of adding more vehicles in the future. For either agency to substantially add to their electric vehicle fleet, they will need to update/expand their electric service capacity at their garage facilities

## Freight and Other Supply Chain Needs

Freight mode conditions and needs are addressed in the Deployment section.

## AFC - Corridor Networks

Nebraska's AFC network consists of three corridors:

- I-80 throughout the state, which includes both "ready" and "pending" segments
- US 6 from US6/N-31 to the Missouri River ("pending")
- US 6/N-31 from I-80 at Nebraska Crossing to US 6 ("pending")

I-80 is the only AFC with gaps remaining; the other two AFCs already have the 50-mile spacing acceptable in the NEVI program.

Figure 6. Daily Traffic Volume (2021)

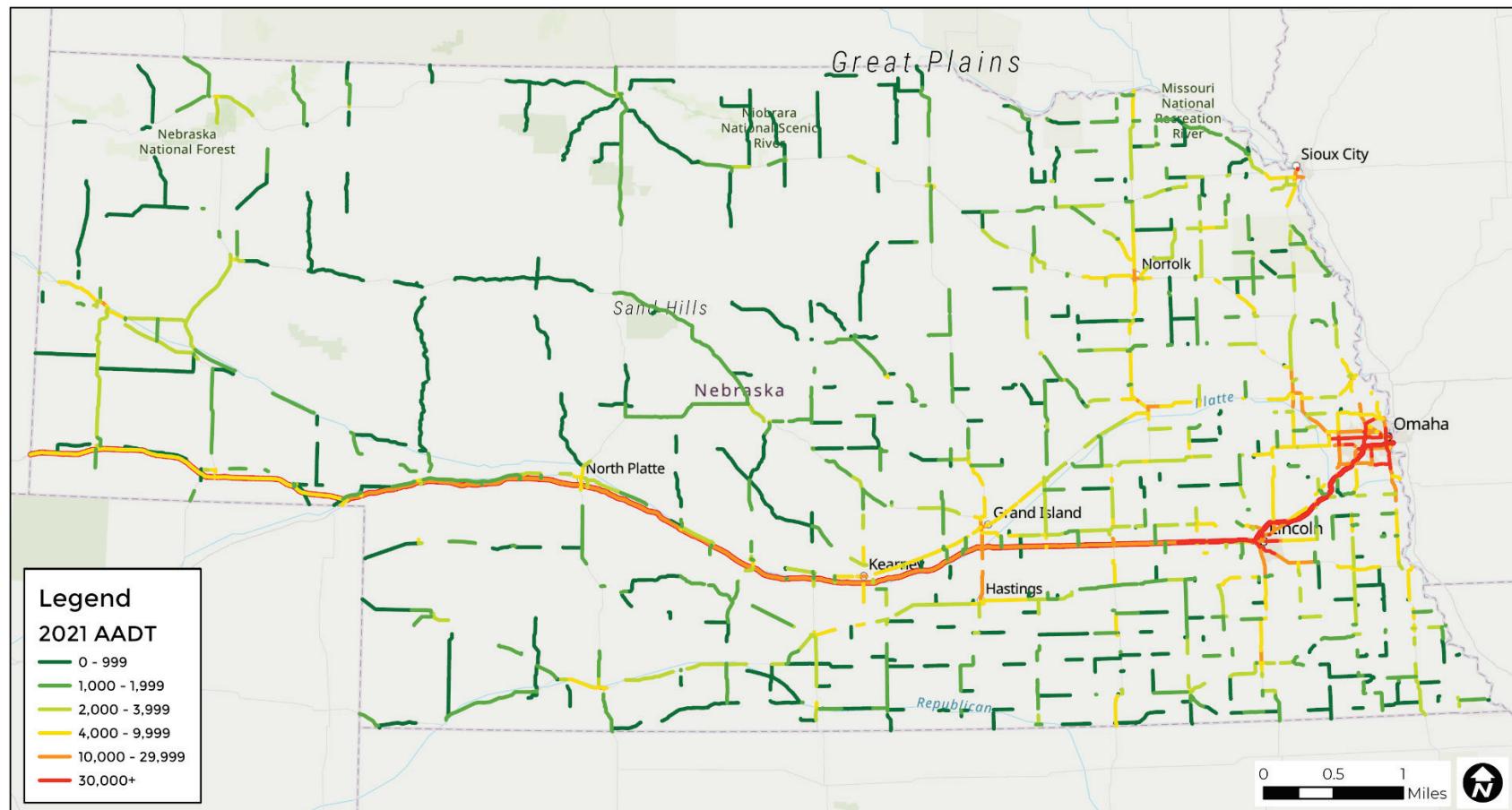
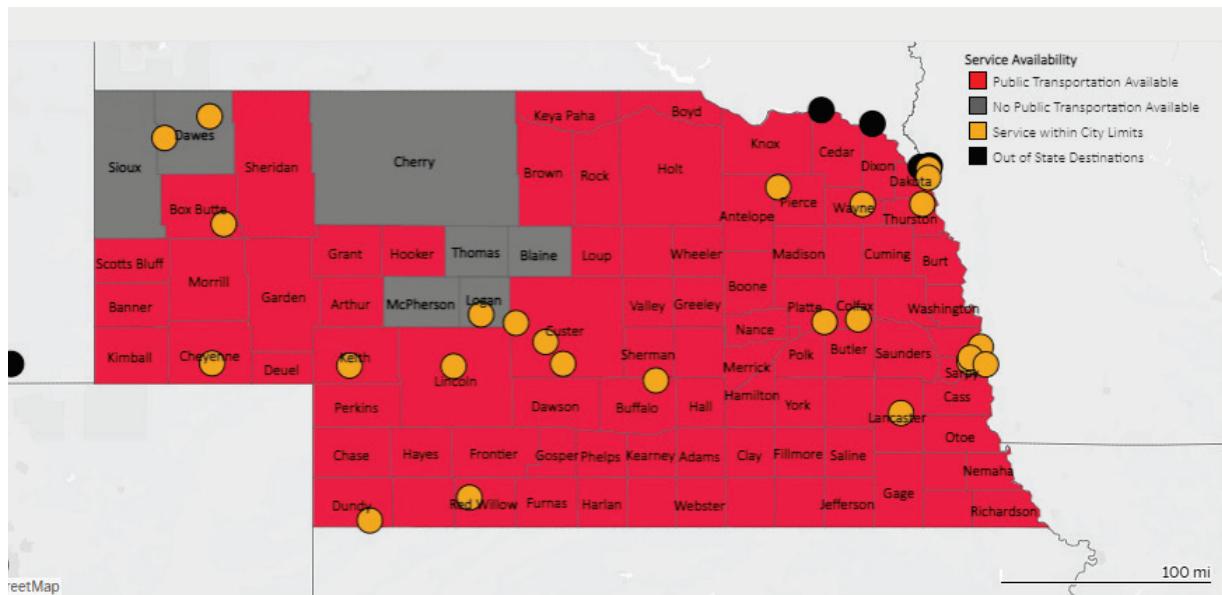


Figure 7. Nebraska Public Transit Coverage



Source: [NDOT](#)

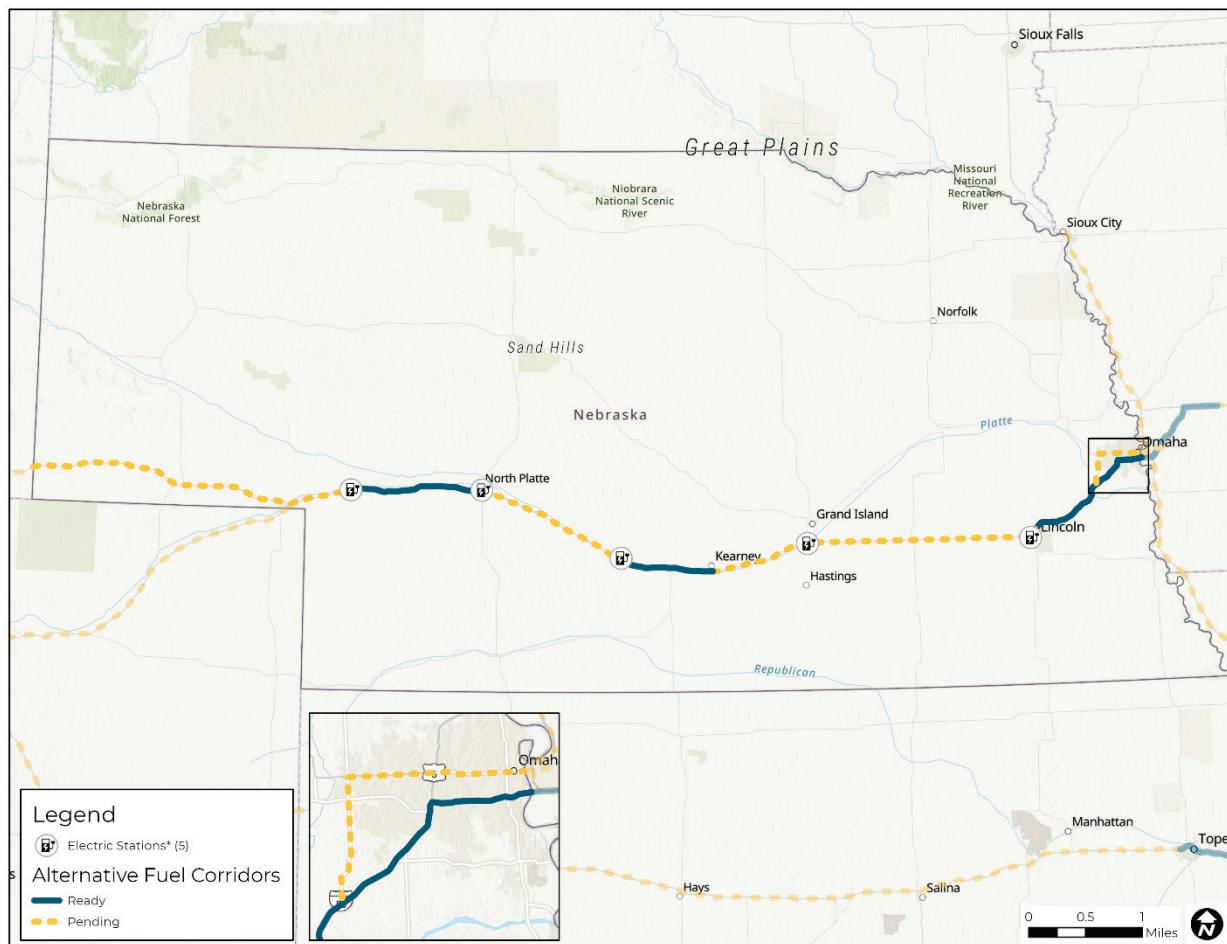
## Existing Locations of Charging Infrastructure Along AFCs

In the I-80 corridor, there are five sites with direct current fast charging stations and the four ports required for NEVI compliance. They are all operated by Electrify America. Their locations are listed in Table 8 and shown in Figure 8. The full list of charging locations in the state, including L2 locations, is available in the appendix.

Table 8. DCFC Charging Locations on I-80 Corridor as of May 4, 2022

Alternative Fuels Data Center ID	Charger Level	Route	Location	NEVI Compliant for ports?	EV Network
190416	DCFC	I-80	Grand Island	Yes	Electrify America
190422	DCFC	I-80	Ogallala	Yes	Electrify America
190443	DCFC	I-80	North Platte	Yes	Electrify America
190444	DCFC	I-80	Lexington	Yes	Electrify America
190446	DCFC	I-80	Lincoln	Yes	Electrify America

Figure 8. AFC Locations and DC Fast Chargers



## Known Risks and Challenges

NDOT identified several challenges associated with expanding EV deployment in the statewide Long-Range Transportation Plan. Two potential transportation challenges from additional EVs in Nebraska are:

- Financial: Widespread migration from internal combustion engine (ICE) vehicles to electric vehicles has the potential to reduce revenue collection due to lower fuel use that would result in less gas tax.
- Electrical infrastructure: Widespread migration to electric vehicles would bring with it increased demand for electricity and has the potential to create location-specific need for added infrastructure investment.

The state has addressed, at least partially, gas taxes not be collected from electric vehicle fueling through implementation of an Alternative Fuel Fee of \$75 annually assessed to all vehicles powered by any fuel other than those covered by the state/federal fuel taxes. The Alternative Fuel Fee current charged represents approximately the fuel tax generated from 175 gallons of fuel. For a typical vehicle getting 25 miles per gallon, the fee reflects an annual average miles traveled of 4,340 miles. On average in the US 10,100 miles are driven in autos and light trucks<sup>1</sup>. Thus, the \$75 fee reflects less than half the annual average miles traveled for the typical vehicle in class with EV models.

Additional challenges that NDOT and stakeholders will likely need to address as the program continues include:

- Lower adoption rate of EVs across the state. In 2022 there are approximately 2,600 electric vehicles registered in the state, which represents 0.2 percent of all vehicles registered. Nationally, electric vehicles represent approximately 11 percent of new car sales and leases. Thus, Nebraska likely trails the nation, which may impact the argument for investing in infrastructure in select low population areas.
- During the NEVI planning process, stakeholders identified the inability of non-utility operators to charge a per kilowatt hour fee at a station location as a challenge in Nebraska. It was noted that other states allow providers to charge by the kilowatt hour, which makes for a more efficient marketplace transaction. The Nebraska legislature is considering a bill that would change this.
- Electricity demand charges: A practice in Nebraska by electric power suppliers is to impose demand charges (tariffs) on power that vary between peak use periods and lower use periods. The intent is to balance use and/or provide revenue to be able to fund infrastructure expansion to address demand in higher use periods. Demand charges are calculated by the electric provider for a set period (generally monthly) and are determined based on when power was used. For the public electric vehicle charging industry, demand charges are problematic in that they are calculated well after the charging event is closed out and the customer's bill is calculated. As the charges are based on the amount of electricity used and when it is used, they will likely vary period to period. Thus, it will be difficult for station owners to budget for the cost as it will likely vary substantially, especially in the early stages of operation. If items are difficult to budget for, they may be difficult to continuously recoup by including the cost on the customer's bill.

Other risks and challenges NDOT recognizes include:

- Limited number of Build America, Buy America (BABA) certified charging station OEMs
- On-going supply chain impacts on vehicle manufacturers
- Current inflationary impacts on construction materials
- Labor shortage impacts on construction and manufacturing

## Alternative Fuel Fee (AFF)

**\$75** – Annual Fee charged for vehicles not using fuels covered by fuel taxes.

**175 Gallons** – Fuel equivalent of AFF charged.

**4,340 Miles** – Annual miles traveled on 175 gallons at 25 MPG.

<sup>1</sup> Bureau of Transportation Statistics, tables 01\_35\_021522 01\_11\_021122 for 2020.

NDOT recognizes the difficulties that these challenges can introduce into the delivery of EV infrastructure across the state and will work with private parties, stakeholders, and planning partners to mitigate them as efficiently as possible.

## **EV Charging Infrastructure Deployment**

The overarching strategy for building out Nebraska's EV charging infrastructure consists of three themes.

### **Theme 1: Filling AFC Gaps**

In the first year of grant applications, funding will be directed toward installations that help to fill in gaps longer than 50 miles between existing EV charging stations. It is NDOT's intention to address existing gaps in the 50-mile spacing in the first year of accepting applications, assuming there is adequate funding available to do so. NDOT also understands for some period into the future, use of stations located in some areas along the I-80 AFC could experience a low level of use. Thus, as solicitations are prepared, NDOT will also consider requests for exemptions to the 50-mile spacing requirement for AFC segments that cannot reasonably be filled.

### **Theme 2: Supporting EV Demand**

After the initial requirements for AFC corridors have been met and a cross-state infrastructure spine has been established along I-80, the State's attention will turn to locations that promise the highest charging use levels. Defining these areas may include use of criteria such as:

- Adjacent route traffic volumes
- Higher density land uses
- Population and population density
- Other travel demand-predictive factors

Areas meeting the demand-predictive criteria are anticipated to be metropolitan areas and select smaller cities.

While the theme's location selection criteria listed above focus on travel and population characteristics, locations meeting key selection criteria may also support the freight and economic development goals established by NDOT for transportation improvements. Routes identified as Priority Commercial System and Key Freight Corridors are represented by some of the highest volume rural routes outside I-80. Thus, criteria that focus on addressing the Supporting EV Demand theme may also support future freight opportunities.

### **Theme 3: Sustainability**

A foundational purpose of the NEVI funding program is to advance transportation technologies with the potential to reduce the sector's carbon footprint by slowing the growth, or even reducing production, of mobile source greenhouse gases. The concepts of sustainability and equity are closely aligned in the NEVI Program, which goes beyond addressing considering opportunities in Justice40 Initiative areas. In Nebraska, the equity focus includes consideration of how the program can support needs in rural areas, where demand for charging events will be lower

relative to metro areas of Omaha and Lincoln.

Given this and the other challenges highlighted in the Known Risks and Challenges section, the feasibility of locations in rural areas being economically viable without federal program support will be more challenging. As details of the program implementation continue to be developed as additional guidance is available from USDOT, needs and opportunities to direct funding to rural areas will be evaluated.

Theme 2 and Theme 3 are closely aligned, as higher population and population density are typically required to create recurring congestion that contributes to elevated greenhouse gas (GHG) emissions. Additionally, while the focus of the Sustainability theme is on reducing GHG emissions, the investment will not likely reduce congestion as it does not actively focus on removing vehicles. Rather, it focuses on replacing the number of ICE vehicles with EVs.

Theme 3 additionally supports the Justice40 initiative by focusing program funding into higher population, low-income areas of Lincoln and Omaha. While there are geographically larger Justice40 Initiative areas in more rural areas of the state, funding directed to higher population areas of the metros could reach more people more efficiently than in Justice40 Initiative areas in smaller communities and rural areas in western and central areas of the state.

This will not be a focus in the first year of the plan, but it is an important consideration, especially in light of the full range of EV adoption benefits. Areas in Lincoln and Omaha designated as disadvantaged tend to be those containing arterial routes with higher congestion. Using federal funding in these areas to expand public charging opportunities may reduce apprehension to purchase electric vehicles, which has the potential to lead to more people choosing an electric vehicle over a gas-powered vehicle in their buying. This in turn creates the greatest opportunity for air quality improvements by replacing GHG-emitting vehicles with lower-emission EVs.

## **Deployment Solicitation Process**

For the initial plan development, NDOT has prepared for internal review and refinement five-step deployment process to address advancing project development from concept design to performance evaluation of a station during operations. Table 9 displays the proposed linear process. Elements of each step may evolve as the program completes several iterations of project selection, construction and operation of additional sites. NDOT anticipates reviewing the process during each of the annual updates to ensure the process incorporates lessons learned in the period.

Following adoption of the inaugural plan, which will confirm the process is compliant with USDOT guidance, NDOT staff will expand each element of the administration process by adding the level of detail required for potential organizations to participate in deployment based on the three themes of the overall program.

Table 9. Nebraska Electric Vehicle Charging Infrastructure Deployment Process

Step	Description
<b>1</b> Application	<ul style="list-style-type: none"> <li>• Solicitation Period           <ul style="list-style-type: none"> <li>– Define Open Period</li> <li>– Advertising Sources</li> <li>– Informational Webinar (at least Years One and Two)</li> </ul> </li> <li>• Solicitation Requirements           <ul style="list-style-type: none"> <li>– Project Description Content               <ul style="list-style-type: none"> <li>– Site Locations/Characteristics</li> <li>– Equipment Requirements</li> <li>– Maintenance Plan</li> <li>– Funding and Financing Plan</li> <li>– Construction Plan</li> </ul> </li> <li>– Compliance:               <ul style="list-style-type: none"> <li>– Buy America</li> </ul> </li> <li>– Project Review/Selection Content</li> </ul> </li> </ul>
<b>2</b> Evaluation/Selection	<ul style="list-style-type: none"> <li>• Proposal/Solicitation Review           <ul style="list-style-type: none"> <li>– Complete/Incomplete Proposal</li> <li>– Merit Criteria Review/Scoring</li> </ul> </li> <li>• Respond to Solicitors (Approved/Not Approved)</li> </ul>
<b>3</b> Reconciliation/Refinement of Selected Solicitations	<ul style="list-style-type: none"> <li>• Final Plans/Local Approvals/Permits</li> <li>• Environmental Approval</li> <li>• Contracting between the DOT and Project Group</li> <li>• Provide Construction Schedule</li> </ul>
<b>4</b> Construction	<ul style="list-style-type: none"> <li>• Milestone Reviews/Updates</li> <li>• Reimbursement Schedule (if a more pay as you go process consistent with other construction projects)</li> <li>• Close Out Check List</li> </ul>
<b>5</b> Operations	<ul style="list-style-type: none"> <li>• Reporting Requirements</li> <li>• Evaluation (Justice40 and others)</li> </ul>

## Funding Sources

NDOT is committed to supporting up to 80 percent of project capital costs, with program applicants expected to furnish the remaining 20 percent. Project evaluation criteria for construction capital costs will include assessing the applicant's ability to provide the 20 percent match for capital costs and their plan for addressing operations and maintenance costs for at least a five-year period.

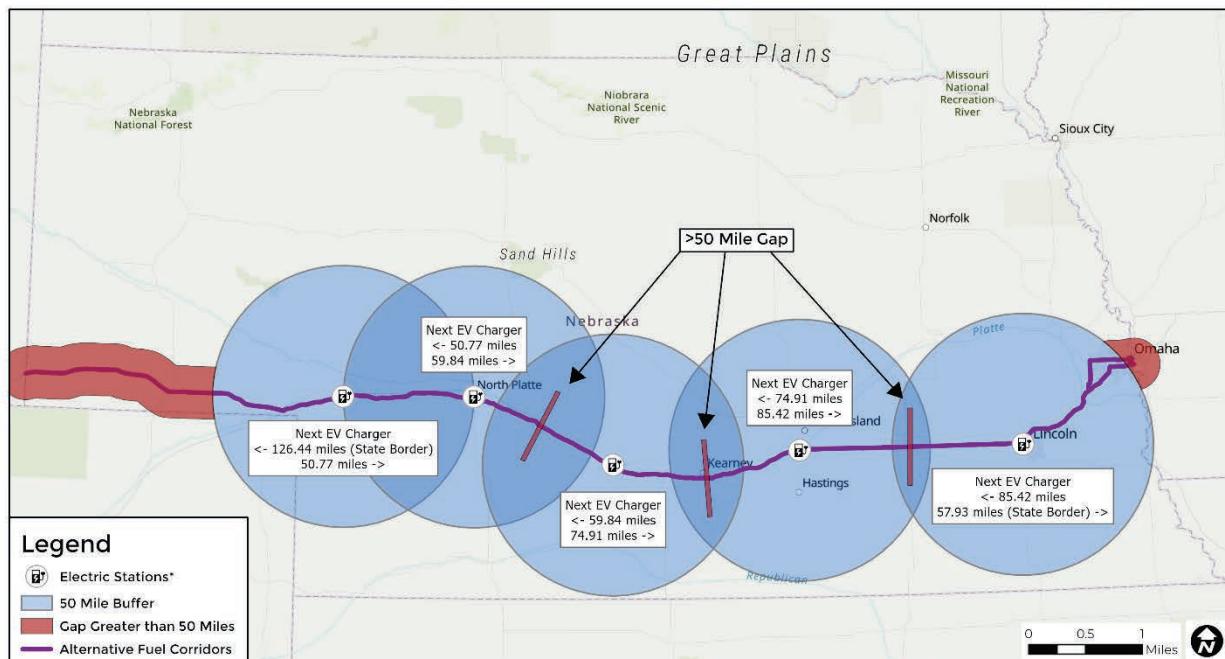
Understanding the EV market is developing in Nebraska and electric vehicles presently make up less than one percent of the 1.6 million registered vehicles in the state, NDOT will continue to evaluate how its decision to not included operations and maintenance as a cost-sharing element of the program may impact successful deployment. The plan will be updated each year, which provides NDOT an opportunity to adjust the content and assumptions presented in this inaugural plan.

## 2022 Infrastructure Deployments/Upgrades

As discussed earlier, the NDOT NEVI Program Year One focus is on building out designated AFCs across the state before allocating NEVI program funding to other corridors. Gaps, shown in Figure 9, have been identified working from west to east across the I-80 corridor from Pine Bluff, WY to Council Bluffs, IA. The initial year of the program will address Theme 1: Closing the AFC Gaps, which will focus program dollars on the I-80 corridor and segments of US 6 in the Omaha metro area. The NDOT program will provide funding for new installations of four-port DCFCs that support providing devices spaced at most 50 miles apart along the corridor.

A preliminary analysis completed as part of the Statewide Plan development concluded approximately seven installation locations are needed to satisfy the build-out requirement of the Nebraska designated AFCs. This analysis considered the existing five locations listed in Table 8. Assuming a four-port installation cost of \$1 million of which the program would fund \$800,000, the expectation is the AFC could achieve build-out in the first year.

Figure 9. NEVI Compliant Station Spacing on I-80 and Identified Gaps



1Note: A gap is defined as station-to-station spacing of greater than 50 miles.

Table 10 lists the most promising installation locations identified in this analysis, moving in a west-to-east direction along I-80. For the sake of completeness, the table also includes the existing compliant charging stations, shown as shaded rows.

While AFCs also include a 12-mile segment of US 6/N-31 from I-80 to Elkhorn and 16 miles of US 6 from Elkhorn to the Missouri River adjacent to downtown Omaha, these road segments are within the 50-mile maximum acceptable spacing. Thus, the build-out assessment is focused on I-80.

Table 10. 2022 Infrastructure Deployments – Build-out the Nebraska AFCs and Fill the I-80 Gaps

City/Town	Route	Location	Port Configuration if In Place	Utility Territories	Anticipated Station Ownership (P – Private Ownership)	2022 Funding Amount
Kimball	I-80	US 71	TBD	Kimball Power District or High West Energy	P	\$800,000
Sidney	I-80	US 385	TBD	Sidney Public Power District/ Wheatbelt Public Power District	P	\$800,000
Big Springs	I-80	N-258	TBD	Big Springs (NPPD)	P	\$800,000
Ogallala	I-80		Electrify America - 7 DCFC CHAdeMO CCS	Ogallala (NPPD)	P	NA
North Platte	I-80		Electrify America - 7 DCFC CHAdeMO CCS	North Platte PPD	P	NA
Lexington	I-80		Electrify America – 7 DCFC CHAdeMO CCS	Lexington PPD or Dawson PPD if on south	P	NA
Gothenburg	I-80	N-47	TBD	Gothenburg PPD	P	\$800,000
Kearney	I-80	Kearney N-44	TBD – Current charger installations do not meet NEVI guidelines	Kearney NPPD	P	\$800,000
Grand Island	I-80		Electrify America - 7 DCFC CHAdeMO CCS	Southern PPD	P	NA
York	I-80	US 81	TBD	York (NPPD)	P	\$800,000
Lincoln	I-80		Electrify America - 7 DCFC CHAdeMO CCS	LES	P	NA
Omaha	I-80	TBD	TBD	OPPD	P	\$800,000

Note: Shaded cells represent locations where NEVI compliant chargers are presently in place.

### Upgrades of Corridor Pending Designations to Corridor Ready Designations

NDOT does not anticipate nominating additional corridors as Alternative Fuel Corridors.

### Increases of Capacity/Redundancy along Existing AFC

In the first program year, the emphasis will be on filling out the gaps in the existing AFCs on I-80.

Once that critical task has been completed, building capacity and providing redundancy will become more realistic.

## Electric Vehicle Freight Considerations

The National Highway Freight Network (NHFN) was established as part of the Fixing America's Surface Transportation (FAST) Act with the purpose of strategically directing federal resources and policies toward improved performance of highway portions of the U.S. freight transportation system. The NHFN consists of four subsystems of roadways:

1. Primary Highway Freight System (PHFS). A network of highways identified as the most critical highway portions of the U.S. freight system according to national data. I-80, the primary AFC across Nebraska, is included as part of the Primary Highway Freight System.
2. Other Non-PHFS Interstate Highways. These are the remainder of the interstate highway system not included in the PHFS.
3. Critical Rural Freight Corridors (CRFCs). These are roadways not in an urbanized area which provide access to the PHFS and the interstate highway system with other important freight or public transportation facilities. Each state is to define its CRFCs for inclusion on the NHFN.
4. Critical Urban Freight Corridors (CUFCs). These are roadways in urbanized areas which provide access to the PHFS and the interstate highway system with other important freight or public uses.

Different modes of transportation are used within Nebraska's freight system. In 2015, over 882 million tons of freight worth \$615 billion were transported to, from, within, or through Nebraska. While rail is the dominant mode, carrying 60 percent of the total weight and approximately 57 percent of the total value of goods, trucks accounted for the second highest modal share measured by weight, carrying 29 percent of the total weight.

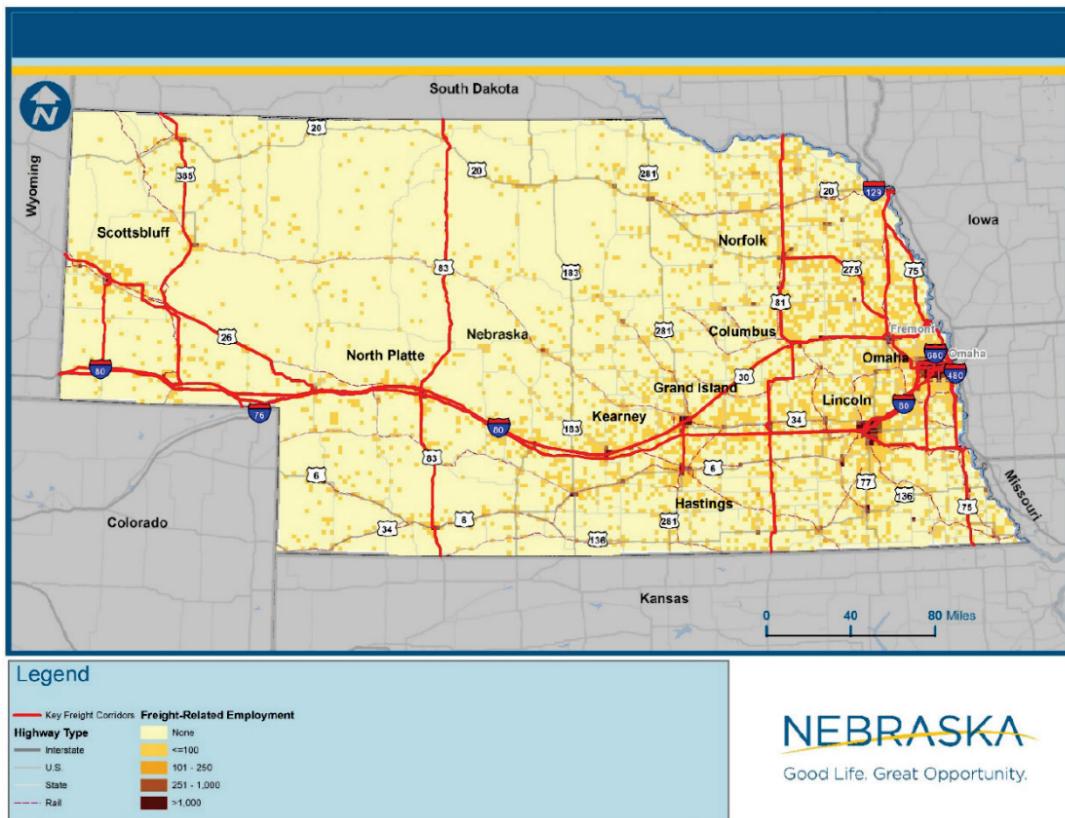
Separately from federal classifications, the State of Nebraska has identified a Key Freight Corridor: a network of roadways that facilitate statewide and interregional truck travel. These roadways were identified by examining current daily truck volumes and growth in truck volumes as indicated by an analysis of 2045 commodity flows. In total, 18 routes representing nearly 2,364 centerline miles were identified as Key Freight Corridors. I-80 makes up approximately 20 percent of the Key Freight Corridor mileage. Figure 10 displays routes across the state designated as part of the Key Freight Corridor network.

In 1988 the State established the Priority Commercial System (PCS) to provide a continuous network of routes designed to carry higher traffic volumes, especially commercial vehicles. The PCS includes the rural expressway system and directly serves all first class (5,001 to 100,000 in population) and larger cities – providing key connections to major commercial centers. The PCS directly serves 80 of the 115 second class cities (800 to 5,000 population) and comes within 10 miles of 18 second class cities. Most of the priority system, displayed in Figure 11, is composed of the U.S. Highways.

In combination, I-80, Key Freight Corridors, and the PCS provide the potential to greatly enhance opportunities for charging commercial vehicles as:

- The routes with these designations generally carry a higher percentage of heavy commercial vehicles.

Figure 10. Key Freight Corridors



Source: NDOT – Nebraska Freight Plan, Updated 2021

- The corridors that make up the networks also represent those serving more longer distance travel.
- The combined corridors serve higher total vehicle volumes.

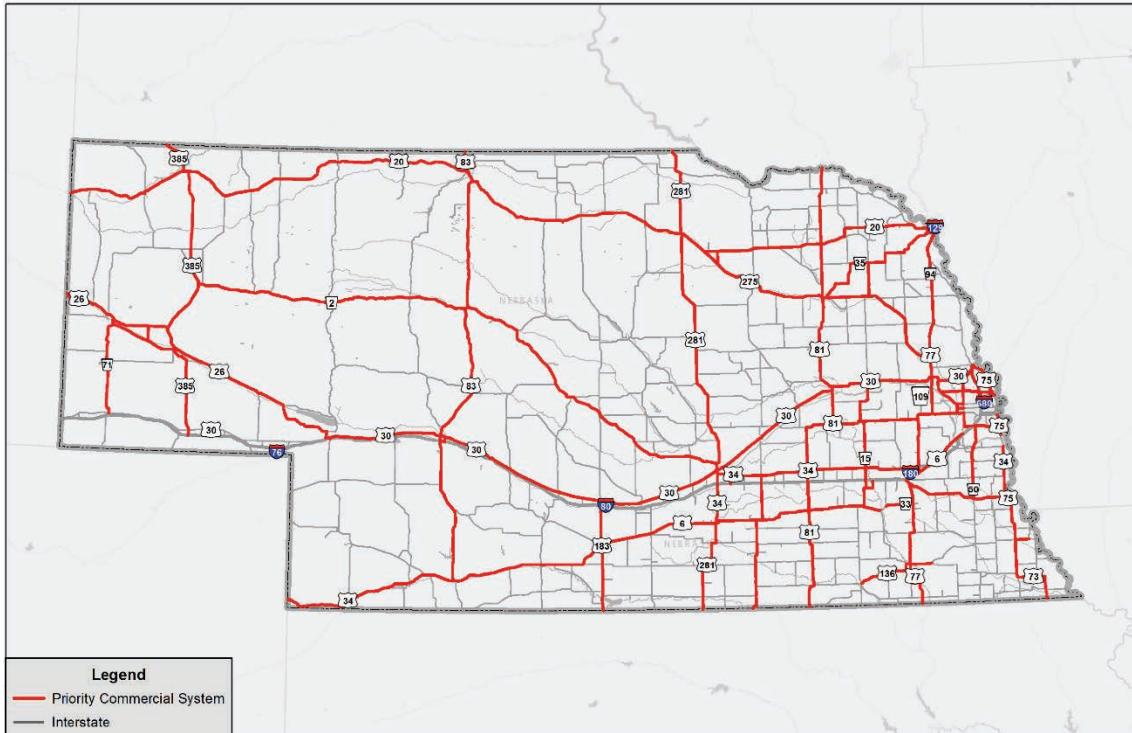
Thus, from the commercial vehicle support perspective, the Key Freight Corridor and Priority Commercial Corridor designated routes provide a means of identifying higher truck use corridors. Additionally, corridors carrying these designations also generally carry higher total traffic volume. Thus, investing NEVI program funding into these corridors could serve a dual function of providing funding for commercial vehicles and corridors of higher demand outside urban areas.

### Public Transportation Considerations

The two primary fixed route agencies in the state, Lincoln StarTran and Omaha Metro Transit have made investments into electric vehicles and in-house charging stations. Additionally, both agencies have included electric fleet expansion in their strategic planning. Stations along I-80 would likely provide little utility as bus charging opportunities; however, following build-out of the I-80 corridor, there are potential sites along the fixed route networks in each area that could serve the dual purpose of general public and public transit vehicle charging.

Building out the I-80 corridor will require the majority of first year funding. Thus, including consideration for public transit electric vehicle funding would be incorporated into 2023 through 2026 updates.

Figure 11. Nebraska Priority Commercial System



Source: NDOT, 2022

## **2023 through 2026 Infrastructure Deployments**

The process of applying for and installing EVSE during 2023 through 2026 will follow the themes described above. It will be developed in more detail as the first year of implementation reveals additional information about the applicant pool, feasibility of locations, and USDOT guidance.

## **State, Regional, and Local Policy**

Program applicants will be required to affirm that their proposed project conforms to the local regulations of the applicable city and/or county. It will be applicants' responsibility to ensure compliance; however, the public outreach has included and will continue to include guidance on the steps involved in applying.

# Implementation

The overall NEVI program in Nebraska will evolve over the course of its initial five-year horizon. As experience with the reimbursement program accumulates, the strategies used will adapt to maximize the program's success.

Implementation is delineated in five distinct strategies. For each of the implementation strategies described in this section, the approach will vary by year. It is anticipated that the strategies will evolve based on experience, feedback from customers, and interactions with providers.

## **Strategies for EVSE Operations & Maintenance**

Although subsidizing up to five years of operations and maintenance costs is eligible under the NEVI funding program, NDOT has elected to limit cost sharing to investment in the capital construction phase of project development.

Beyond deploying electric vehicle supply equipment (EVSE) infrastructure throughout the state, the NDOT Electric Vehicle Charging Infrastructure Plan seeks assurance that program-supported infrastructure will be operated and maintained to acceptable minimum standards. The overarching expectation is that charging stations be available for use and physically accessible to the public 24 hours per day, seven days per week, year-round. To provide assurance to NDOT, respondents will be required to include an Operations and Maintenance Agreement (O/M Agreement) detailing how the deployed EVSE infrastructure will be supported for at least five years<sup>2</sup> following system commissioning.

As of the time this inaugural plan was prepared, the minimum standards and requirements associated with maintenance of EV charging infrastructure have not been developed by the Joint Office. As NDOT has experience with infrastructure deployments such as dynamic message boards, traffic data collection equipment, camera systems, etc., the Department has extensive experience in preparing guidelines for maintaining equipment in a state of good repair. Thus, being good stewards of public funding. Based on historical knowledge of a broad array of equipment, a general concept for O/M agreement content has been developed. This concept will be updated as guidance is provided.

The O/M agreement must also specify the types of EVSE use data that will be made available to the public and/or to NDOT. A successful applicant is required to provide the EVSE data in support of NEVI and NDOT program objectives. The metrics generated by this data are needed to support public adoption of EVSE. The specific format, reporting frequency and recipient of the data will be identified at a later date and appended to the contract prior to award.

An initial proposal for minimum operations and maintenance requirements are summarized below. The guidelines listed, along with a process for applicants reimbursing the state in the event sites are not maintained consistent with the O/M agreement, will be refined over the period following adoption of the inaugural plan.

### **Operation Requirements Included in Operations and Maintenance (O/M) Reporting**

- Maintain summary records of the following information for transactions<sup>3</sup>:
  - Time of day use to understand peak and off-peak use periods.
  - Average duration of charger bay occupancy and charge time (minutes)
  - Total charge (kWh)

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<sup>2</sup> Five years is the time period specified in FHWA [Notice of Proposed Rulemaking](#) (see p. 36).

<sup>3</sup> Suggested recordkeeping follows FHWA [Notice of Proposed Rulemaking](#) (see pp. 43-46).

- Cost of charge (electricity price and any fees)

NDOT will continue to refine the level of detail for the reporting period. To report information for each transaction would exceed the level needed and create customer privacy concerns. Whether daily, weekly, or monthly reporting summaries are appropriate will be determined as part of program refinement before deployment.

- Provide 97 percent uptime for each EVSE charging facility, requires all hardware and software be online and the station be available for use.
- Remotely monitor system operations (daily).
- Investigate and resolve operational issues within two business days of notification.

### **Maintenance Requirements**

- Verify proper charging function across all charging ports. A process for testing will be developed by NDOT and incorporated into the application process.
- Verify all forms of payment are successfully processed by each charger station (monthly).
- Maintain site access:
  - Snow and ice removal service to maintain site access within eight hours of major weather events
  - Miscellaneous upkeep to maintain access to site, including maintaining the following in good repair: pavement, striping, signage, and lighting.
- Maintain site amenities:
  - Maintenance of restroom facilities, if applicable (daily)
  - Upkeep of grounds including mowing, litter pickup, etc. (daily)
  - Maintenance of food service equipment and supplies, if applicable (weekly)
  - Trash collection service (weekly)
- Investigate and resolve maintenance issues within 2 business days of notification.

Applicants will provide an O/M agreement as a part of the submittal package. The O/M agreement will be scored in accordance with the selection criteria section of this document and must contain the following sections:

- Statement of commitment to proper operation and maintenance of EVSE facilities
- Detailed description of how minimum operation requirements will be met
- Detailed description of how minimum maintenance requirements will be met
- Detailed description of how minimum data reporting requirements will be met

### **Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners**

NDOT identified existing electric vehicle charging station providers using maps available online from sources such as the Alternative Fuels Data Center. Organizations that operate charging

stations in Nebraska include Blink, ChargePoint, Electrify America, EV Connect, and SemaCharge.

Charger service providers and potential station owners/operators are expected to take the initiative to apply for funding if they believe they can meet the minimum eligibility requirements. NDOT has developed a NEVI specific webpage and used social media platforms managed by NDOT and other state partners to advertise the webpage. Additionally, the webpage availability was promoted as part of the public survey completed by approximately 1,100 people.

The potential applicants were informed of the planning process and draft versions of the NEVI program that will eventually be implemented. Notification of application opportunities will be published through NDOT's existing Business Opportunities web portal. However, the State will not be reaching out individually to potential applicants to avoid any conflicts of interest and ensure fairness in the application process.

## Strategies for EVSE Data Collection & Sharing

Data collection is a key element in the operations and maintenance strategy for EVSE deployment. While the Joint Office is expected to issue additional guidance on data collection and sharing, NDOT has prepared preliminary proposals for consideration as the program is implemented. These guidelines will be revised as needed based on federal guidance received. Two potential sources of data for the program:

- Required data from EVSE providers
- NDOT inspections of charging sites

Of these, the EVSE required data is expected to be the primary source of operational information. As a starting point, the following proposed data reporting requirements have been drafted:

- Provide utilization data to NDOT (quarterly):
  - Number and location of EVSE charging facility uses per day
  - Total charge (kWh) per location per day
  - Percent uptime of each EVSE charging facility, calculated quarterly basis for the previous 12 months<sup>4</sup>
  - Mean time between failure (MTBF) of each charging facility
- Provide real-time data to be made available publicly through third-party data sharing/mapping applications.<sup>5</sup>
  - Base price charged to consumers, also made available on-site
  - Additional fees, if applicable, also made available on-site
  - Additional information on site location, availability, etc.

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<sup>4</sup> See FHWA [Notice of Proposed Rulemaking](#), p. 77.

<sup>5</sup> See FHWA [Notice of Proposed Rulemaking](#), pp. 77-78.

## **Strategies to Address Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs**

The primary risks for resilience analysis for the AFCs in Nebraska are weather-related. These can be delineated into climatological and event categories.

For climatological risks, extreme summer and winter temperatures are the primary concerns. Along the AFC, temperatures of over 110 F (43 C) have been recorded in the summer and temperatures below -33 F (-36 C) have been recorded in the winter. All EVSE must be rated to operate between -40 and +60 degrees C and specification sheets submitted during the application process will describe the equipment ratings.

Weather events include severe thunderstorms, tornadoes, hail, and blizzard conditions. Access to amenities such as storm shelters and other weather refuge sites will be included in the evaluation of an application. Snow removal, mowing and other site maintenance items must be included in an Operations and Maintenance Plan submitted by the applicant and will be evaluated for completeness and suitability by NDOT in the selection process.

## **Strategies to Promote Strong Labor, Safety, Training, and Installation Standards**

During the application process, all applicants will be informed that they must comply with relevant State laws and any local building codes. Nebraska has robust legal protections for workers and the public through the Nebraska Fair Employment Practice Act, Age Discrimination in Employment Act, Providing Equal Enjoyment of Public Accommodations law, and the Equal Pay Act of Nebraska. Together these ensure that labor practices are non-discriminatory and that the EVSE stations will be accessible to all travelers as a public accommodation.

Training and installation standards are covered in NDOT construction specifications. During the application process, applicants will be informed of the applicable specification sections. Conformance with specifications will be verified during the inspection of the sites described in the Contracting section of this plan.

## **Civil Rights**

NDOT ensures that no person shall, on the grounds of race, color, religion, national origin, age, disability, sex, or income be excluded in the participation in, denied the benefits or services of, or be otherwise subjected to discrimination in all programs, services or activities administered by NDOT. It does so in accordance with Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act, and FHWA's Environmental Justice Order 6640.23A.

As the NEVI program focuses on investments anticipated to have little to no footprint impact, NDOT's civil rights considerations focus on whether there is a disproportionate benefit to non-minority and non-low income populations and whether sites are accessible to persons with disabilities.

The proposal review process includes criteria supporting active review of critical civil rights programs. These criteria include:

- Site review: Proposals must demonstrate ADA access requirements are met.
- The Supporting EV Demand and Sustainability themed implementation priorities directly focus benefits associated with increasing charging access and reducing mobile source emissions on low-income and minority populations of the state, with emphasis in the highest population areas of Lincoln and Omaha.

The following section on equity considerations further discusses how the implementation themes can benefit low-income and minority populations.

## Equity Considerations

In June of 2022, notice of the proposed rulemaking for the code of regulations was issued, stating that "Providing minimum standards and requirements for the development of each charging station helps to ensure equitable access to clean transportation options and the electric grid across all communities, increasing parity in clean energy technology access and adoption." NDOT completed an assessment of likely societal, community, and household benefits that may be directed to Disadvantaged Communities, which include rural areas of the state. NDOT anticipates further direction will be provided on the specific calculation of benefits. Until such guidance is provided, NDOT agrees with the proposed rulemaking.

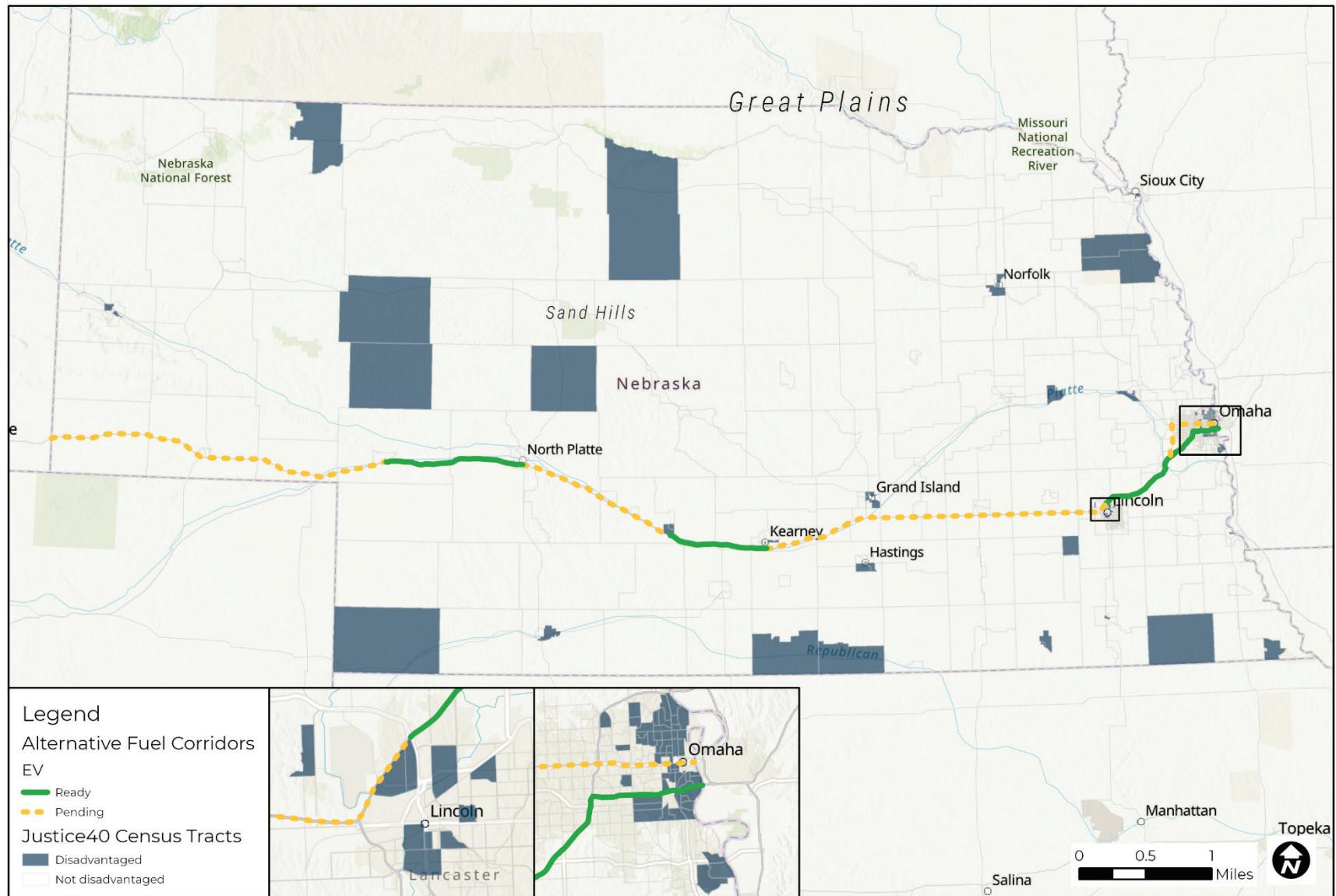
### Identification and Outreach to Disadvantaged Communities in the State

To identify disadvantaged communities, the USDOT and U.S. Department of Energy (USDOE) developed a joint definition of disadvantaged communities (DACs) in the context of the NEVI Formula Program. It was established using publicly available data sets that capture vulnerable populations, health, transportation access and burden, energy burden, fossil dependence, resilience, and environmental and climate hazards (<https://www.anl.gov/es/electric-vehicle-charging-equity-considerations>).

USDOE and USDOT define disadvantaged communities from different perspectives, but they are both equally important in the context of implementing NEVI initiatives. USDOE uses the following indicators to measure DACs: fossil dependence, energy burden, environmental and climate hazards, and vulnerability. From a transportation perspective, USDOT defines DACs by the following indicators: transportation access, health disadvantage, environmental disadvantage, economic disadvantage, and social disadvantage (<https://www.anl.gov/es/electric-vehicle-charging-equity-considerations>).

Using these indicators, USDOT and Argonne National Laboratory created the Electric Vehicle Charging Justice40 Map tool. It is a national map of the United States, which identifies DACs, public EV charging stations, and FHWA designated EV corridors (for rounds 1-5). Using this tool, NDOT mapped the Justice40 census tracts in Nebraska (Figure 12). The map will be used to aid in decision-making when it comes to funding EV charging stations off the I-80 corridor.

Figure 12. Justice40 Census Tracts in Nebraska



## **Benefits to DACs through this Plan**

As detailed earlier, implementation of the plan has three guiding themes:

- Filling AFC Gaps
- Supporting EV Demand
- Sustainability

The implementation themes of Supporting EV Demand and Sustainability have the potential to directly benefit Justice40 designated areas in the following ways:

- Charging demand likely reflects where EVs are located and used regularly. Registered EVs are addressed more in Lincoln and Omaha, where there are also greater Justice40 populations relative to the remainder of the state (Figure 12). Thus, installation of devices to support current and future EV travel demand will also have the potential to benefit Justice40 populations by increasing availability of non-home charging opportunities. By increasing the non-home opportunities, consumer concern of available charging will be at least partially addressed, adding to the probability more people may select an EV over an ICE vehicle when making a purchase.
- Reducing mobile source emissions. The Sustainability theme focuses on device installation in areas with the highest regional congestion, which also reflect elevated levels of mobile source emissions for greenhouse gases (GHG). By adding charging stations in areas of higher congestion, the program will encourage residents to replace ICE vehicles with EVs and, as a result, reduce the emissions associated with vehicles traveling congested corridors and idling at congested intersections. Areas of higher congestion in Omaha and Lincoln are proximate to Justice40 areas. Thus, reducing emissions from mobile sources has the potential to benefit air quality in Justice40 areas.

However, as the Filling AFC Gaps theme is the focus of the first year, the Justice40 areas will not be an initial focus of attention, which is designated AFCs that are primarily areas away from Justice40 designed areas. Although there are several Justice40 census tracts abutting the I-80 corridor, most of Nebraska's Justice40 tracts are counties, parts of counties, areas of communities off the designated AFCs, with the exception of areas in Omaha

The Justice40 communities in more rural parts of the state, whether they are adjacent to the corridor (as in Kearney) or further away (as with counties and communities in the Sandhills), are not likely major markets for electric vehicles. It is highly likely that the travelers with convenient access to charging stations closest to these Justice40 areas will be pass-through traffic from relatively close-by smaller urban areas; meaning that neither the charging opportunity nor the improved air quality associated with EVSE installation is likely to benefit the many rural Justice40 tracts.

## **Process to Identify, Quantify, and Measure Benefits to DACs**

NDOT will be supporting the Justice40 goal by meeting the program requirements for minimum spacing and directing federal funds to applications that expand access to clean transportation options and the electric grid across all communities. Measuring the degree of benefit is not likely to be required in the first few years due to the complexity and lack of specific guidance at this time. Also, measuring benefits in urban and rural areas in the same manner is not recommended as the feasibility of constructing and operating charging stations is unique to each context. All

charging station locations can provide some benefit to disadvantaged communities.

Anticipated measurable benefits that may be considered in the future include:

- Reduced emissions
- Economic growth
- Reduced travel/commute times
- Multimodal transportation
- System maintenance
- Workforce development
- Improved reliability

## **Labor and Workforce Considerations**

As discussed earlier, Nebraska has robust legal protections for workers and the public through the Nebraska Fair Employment Practice Act, Age Discrimination in Employment Act, Providing Equal Enjoyment of Public Accommodations law, and the Equal Pay Act of Nebraska. To the extent that EVSE installation and maintenance generates new jobs, these positions will fall under the protection of state employment law.

The State will also continue existing work relationships and continue to support NDOT's Equal Employment Opportunity (EEO) Statement and Affirmative Action Plan, as well as continue in fulfilling the Disadvantaged Business Enterprise (DBE) requirements.

## **Cybersecurity**

NDOT is committed to making sure the implementation, operation, and maintenance of electrical vehicle charging stations are compliant with the security policy and standards of the Office of the Chief Information Officer (OCIO). NEVI Program applicants and contractors, in coordination with NDOT's IT personnel, will ensure compliance with cyber security standards before, during, and after the construction of EV charging stations.

## **Program Evaluation**

Using tools developed in the implementation of this EV plan, NDOT will comprehensively evaluate the Plan on an annual basis. Progress reports for charging stations will be required on a to-be-determined, regular schedule.

This section of the Plan will be expanded as additional technical guidance from USDOT and other federal sources is received.

## **Discretionary Exceptions**

NDOT will document and notify the FHWA if any discretionary exceptions need to be made should an EV charging station not fulfill the federal requirements set forth.

One potential exception the NDOT has identified occurs between North Platte and Lexington where NEVI compliant stations are currently operating. North Platte and Lexington are located 58 miles apart, exceeding the 50-mile NEVI program guideline. Demand from vehicles along the I-80 corridor may not warrant adding a NEVI compliant station at Gothenburg to fill the greater than 50-mile gap. Adding a location at Gothenburg eliminates the gap; however, it results in a likely less than economically viable spacing of 34 miles (North Platte to Gothenburg) and 25 miles (Gothenburg to Lexington).

## Appendix A: Full list of Electric Vehicle Charging Locations

Station Name	City	Level 2 Count	DCFC Count	EV Network	EV Connector Types
Nissan of Omaha	Omaha	1		Non-Networked	J1772
Nissan of Omaha	Omaha	1		Non-Networked	J1772
Woodhouse Nissan	Bellevue	1		Non-Networked	J1772
Woodhouse Nissan	Bellevue	1		Non-Networked	J1772
SO. SIOUX CITY CITY HALL	South Sioux City	2		ChargePoint Network	J1772
Woodhouse Ford	Omaha	1		Non-Networked	J1772
HAYMKT GREEN 2 LES STATION B	Lincoln	2		ChargePoint Network	J1772
HAYMKT GREEN 2 LES STATION A	Lincoln	2		ChargePoint Network	J1772
NEBRASKA CITY DOWN TOWN LOT	Nebraska City	2		ChargePoint Network	J1772
LEXCHARGE01					
LEXCHARGE02	Lexington	2		ChargePoint Network	J1772
SEWARD DOWNTOWN	Seward	2		ChargePoint Network	J1772
SEWARD COLLEGE	Seward	1		ChargePoint Network	J1772
SEWARD SENIOR HIGH	Seward	1		ChargePoint Network	J1772
3RD AVE PARKING 3RD AVE PARKING	Holdrege	2		ChargePoint Network	J1772
FERGUSON HOUSE					
FERGUSON HOUSE	Lincoln	2		ChargePoint Network	J1772
LEXCHARGE01 LEX CHARGE 0304	Lexington	2		ChargePoint Network	J1772
Orthopedic Massage Therapy	Omaha	4		Non-Networked	J1772
CITY HALL VALLEY	Valley	2		ChargePoint Network	J1772
ALLEN SCHOOLS HWY9	Allen	2		ChargePoint Network	J1772
CITY OF GRETNAA3 GRETNAA DC FAST	Gretna		1	ChargePoint Network	CHADEMO J1772COMBO
CITY OF GRETNAA3 CITY HALL	Gretna	2		ChargePoint Network	J1772
GARAGESTATIONS CENTER	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS HAYMARKET	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS UNIVERSITY SQ	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS CARRIAGE	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS CORNHUSKER	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS COUNTY LOT	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS QUE	Lincoln	2		ChargePoint Network	J1772
GARAGESTATIONS LUMBER	Lincoln	2		ChargePoint Network	J1772

GARAGESTATIONS				
LARSON	Lincoln	2	ChargePoint Network	J1772
DOWNTOWN ACRC			CHADEMO	
QUICK CHAR	Ashland	1	ChargePoint Network	J1772COMBO
MCC FOC NORTH	Omaha	2	ChargePoint Network	J1772
CAPITOL PARKING				
STATION 2	Omaha	2	ChargePoint Network	J1772
GARAGESTATIONS				
MARKET PLACE	Lincoln	2	ChargePoint Network	J1772
CITY OF FREMONT				
FREMONT MALL 1	Fremont	2	ChargePoint Network	J1772
Nebraska Barn and Grill -				
Tesla Supercharger	Gothenburg	8	Tesla	TESLA
Bosselman Travel Center				
- Tesla Supercharger	Grand Island	8	Tesla	TESLA
Lincoln #3 Hy-Vee - Tesla				
Supercharger	Lincoln	8	Tesla	TESLA
Lonesome Dove Lodge				
and Cabins - Tesla				
Supercharger	Ogallala	8	Tesla	TESLA
Best Western Plus Sidney				
Lodge - Tesla				
Supercharger	Sidney	8	Tesla	TESLA
CITY OF FREMONT				
DOWNTOWN 1	Fremont	2	ChargePoint Network	J1772
IBEW Local #265	Lincoln	2	Non-Networked	J1772
CUSTERPPD				
CUSTERPOWER	Broken Bow	2	ChargePoint Network	J1772
Edgerton Explorit Center -				
Tesla Destination	Aurora	3	Tesla Destination	J1772 TESLA
Graduate Lincoln - Tesla				
Destination	Lincoln	2	Tesla Destination	TESLA
Johnny's Italian				
Steakhouse Omaha -				
Tesla Destination	Omaha	4	Tesla Destination	J1772 TESLA
Capitol District Parking				
Garage - Tesla				
Destination	Omaha	2	Tesla Destination	TESLA
Element Omaha Midtown				
Crossing - Tesla				
Destination	Omaha	2	Tesla Destination	J1772 TESLA
MCC EVC	Omaha	2	ChargePoint Network	J1772
ZONE 6 HDR NODDLE 3	Omaha	2	ChargePoint Network	J1772
ZONE 6 HDR NODDLE 2	Omaha	2	ChargePoint Network	J1772
SO. SIOUX CITY LIBRARY	South Sioux City	2	ChargePoint Network	J1772
Fairfield Inn & Suites by				
Marriott Omaha				
Northwest - Tesla				
Destination	Omaha	1	Tesla Destination	TESLA
CPPD WEST POINT NE	West Point	2	ChargePoint Network	J1772
NORTH GARAGE				
STATION 02	Omaha	2	ChargePoint Network	J1772
METRO CAFE STATION 1	Auburn	2	ChargePoint Network	J1772
87DODGE 87 DODGE	Omaha	1	ChargePoint Network	J1772

NPPD STATION 1 NOC 1	Norfolk	2	ChargePoint Network	J1772
NPPD STATION 1 OGALLALA 1	Ogallala	2	ChargePoint Network	J1772
HY VEE KEARNEY WEST	Kearney	2	ChargePoint Network	J1772
HY VEE PLATTSMOUTH	Plattsmouth	2	ChargePoint Network	J1772
Woodhouse Place Nissan	Omaha	1	Non-Networked	J1772
Woodhouse Place Nissan	Omaha	1	Non-Networked	J1772
OMAHA ZOO & AQ.				
OMAHA ZOO STA 2	Omaha	2	ChargePoint Network	J1772
OMAHA 16TH AND HOWARD	Omaha	2	ChargePoint Network	J1772
UNMC MAINPLANT	Omaha	2	ChargePoint Network	J1772
NPPD STATION 1 KOC STATION 1	Kearney	2	ChargePoint Network	J1772
SO. SIOUX CITY LAW ENFORCEMENT	South Sioux City	2	ChargePoint Network	J1772
COK CITY HALL	Kearney	2	ChargePoint Network	J1772
FFI SCOTTSBLUFF A	Scottsbluff	2	ChargePoint Network	J1772
HWY 81-BURG PCRPPD EV1	Stromsburg	2	ChargePoint Network	J1772
NP DODGE 8601	Omaha	2	ChargePoint Network	J1772
CAMBCOBBLESTONE STATION 1	Cambridge	2	ChargePoint Network	J1772
COK LEC	Kearney	2	ChargePoint Network	J1772
AURORANE LEVEL 2	Aurora	2	ChargePoint Network	J1772
CITY OF MINDEN CITY OF MINDEN	Minden	2	ChargePoint Network	J1772
Inphase Car Audio	Omaha	1	Non-Networked	TESLA
Cambria Suites Omaha Downtown - Tesla Destination	Omaha	3	Tesla Destination	J1772 TESLA
Johnnys Italian Steakhouse Omaha - Tesla Destination	Omaha	4	Tesla Destination	J1772 TESLA
CHADRON CHADRON 1	Chadron	2	ChargePoint Network	J1772
SO. SIOUX CITY FC STATION 1	South Sioux City	1	ChargePoint Network	J1772COMBO
NPPD STATION 1 SCOTTSBLUFF 1	Scottsbluff	2	ChargePoint Network	J1772
AIRPORT MOTEL				
AIRPORT MOTEL	Ord	2	ChargePoint Network	J1772
UNMC PARK				
LEAVENWORT	Omaha	2	ChargePoint Network	J1772
METRO CAFE BWP DC CHARGER	Auburn	1	ChargePoint Network	J1772COMBO
DOWNTOWN ACRC PARKING	Ashland	2	ChargePoint Network	J1772
MCC FOC SOUTH	Omaha	2	ChargePoint Network	J1772
ZONE 6 HDR NODDLE1	Omaha	2	ChargePoint Network	J1772
NORTH GARAGE STATION 01	Omaha	2	ChargePoint Network	J1772
HY VEE KEARNEY EAST	Kearney	2	ChargePoint Network	J1772

OMAHA ZOO & AQ. MAIN				
LOT STAT 1	Omaha	2	ChargePoint Network	J1772
AURORANE DC FAST 1	Aurora	1	ChargePoint Network	CHADEMO J1772COMBO
SO. SIOUX CITY STATION 2	South Sioux City	2	ChargePoint Network	J1772
DEFIANCE H-D DCFAST HOG	Omaha	1	ChargePoint Network	J1772COMBO
LPS LPS OPERATIONS	Lincoln	1	ChargePoint Network	J1772
LPS NORTHEAST HS	Lincoln	1	ChargePoint Network	J1772
LPS EAST HS	Lincoln	1	ChargePoint Network	J1772
LPS SOUTHEAST HS	Lincoln	1	ChargePoint Network	J1772
LPS NORTH STAR HS	Lincoln	1	ChargePoint Network	J1772
LPS SOUTHWEST HS	Lincoln	1	ChargePoint Network	J1772
RUSS'S MARKET SUPER SAVER L3	Lincoln	1	ChargePoint Network	CHADEMO J1772COMBO
RUSS'S MARKET SUPER SAVER L2	Lincoln	2	ChargePoint Network	J1772
RUSS'S MARKET RUSS MARKET 1	Lincoln	1	ChargePoint Network	CHADEMO J1772COMBO
RUSS'S MARKET RUSS MARKET 2	Lincoln	2	ChargePoint Network	J1772
TWFHNM STATION 1	Beatrice	2	ChargePoint Network	J1772
University of Nebraska - Lincoln Parking and Transit Services	Lincoln	2	EV Connect	J1772
University of Nebraska - Lincoln Parking and Transit Services	Lincoln	4	EV Connect	J1772
CENTRAL CC CCCKEARNEY CNTR	Kearney	2	ChargePoint Network	J1772
CENTRAL CC CCC GRAND ISL	Grand Island	2	ChargePoint Network	J1772
GARAGESTATIONS FLEET 1	Lincoln	2	ChargePoint Network	J1772
CITY OF NORFOLK ADMINISTRATION	Norfolk	2	ChargePoint Network	J1772
Audi Omaha	Omaha	2	Blink Network	J1772
COK YOUNES SOUTH	Kearney	2	ChargePoint Network	J1772
COK YOUNES NORTH2	Kearney	1	ChargePoint Network	CHADEMO J1772COMBO
COK YOUNES NORTH	Kearney	1	ChargePoint Network	CHADEMO J1772COMBO
METRO CAFE BRNVILLE DEPOT	Brownville	2	ChargePoint Network	J1772
SCHWORER DC WALLBOX	Lincoln	1	ChargePoint Network	J1772COMBO
Grand Island Quality Inn	Grand Island	4	Electrify America	CHADEMO J1772COMBO
Walmart 7129 - Ogallala, NE	Ogallala	4	Electrify America	CHADEMO J1772COMBO
Walmart 1585 North Platte	North Platte	4	Electrify America	CHADEMO J1772COMBO
Walmart 637 Lexington	Lexington	4	Electrify America	CHADEMO

				J1772COMBO
Caseys Lincoln #30	Lincoln	4	Electrify America	CHADEMO J1772COMBO
BAXTEROMAHA NORTH POLE	Omaha	1	ChargePoint Network	J1772
NPPD STATION 1 HUDDLEHOUSE DC1	York	1	ChargePoint Network	CHADEMO J1772COMBO
NPPD STATION 1 HUDDLEHOUSE DC2	York	1	ChargePoint Network	CHADEMO J1772COMBO
NPPD STATION 1 HUDDLE HOUSE	York	2	ChargePoint Network	J1772
NPPD STATION 1 1ST AND NORFOLK	Norfolk	2	ChargePoint Network	J1772
NPPD STATION 1 1ST NORFOLK DC	Norfolk	1	ChargePoint Network	CHADEMO J1772COMBO
OMAHA OMAHA PARK 6	Omaha	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 8	Omaha	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 7	Omaha	2	ChargePoint Network	J1772
NPPD STATION 1 NORTH YOC	York	2	ChargePoint Network	J1772
NPPD STATION 1 SOUTH YOC	York	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 4-2	Omaha	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 4-1	Omaha	2	ChargePoint Network	J1772
LOUPPOWEREV STATION 1	Columbus	2	ChargePoint Network	J1772
BAXTERVW STATION 1	Omaha	1	ChargePoint Network	J1772
OMAHA OMAHA PARK 1-2	Omaha	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 1-1	Omaha	2	ChargePoint Network	J1772
LINDEN1 1ST ON LINDEN	Crete	2	ChargePoint Network	J1772
Chappell Plaza station location	Chappell	1	SemaCharge Network	J1772
FOC 14N - 1	Omaha	8	SemaCharge Network	J1772
GARAGESTATIONS HEALTH DEPT	Lincoln	2	ChargePoint Network	J1772
GARAGESTATIONS HEALTH DEPT ST2	Lincoln	2	ChargePoint Network	J1772
GARAGESTATIONS K ST COMPLEX	Lincoln	2	ChargePoint Network	J1772
GARAGESTATIONS WASTE WATER STA	Lincoln	2	ChargePoint Network	J1772
NEBRASKA CITY STATION 1	Nebraska City	1	ChargePoint Network	CHADEMO J1772COMBO
OMAHA OMAHA PARK 3-1	Omaha	2	ChargePoint Network	J1772
OMAHA OMAHA PARK 3-2	Omaha	2	ChargePoint Network	J1772
NIC NIC CT4000	Lincoln	2	ChargePoint Network	J1772
NIC NIC DC EXPRESS	Lincoln	1	ChargePoint Network	CHADEMO J1772COMBO

CITY OF LAVISTA				CHADEMO
CABELAS 1	Omaha	1	ChargePoint Network	J1772COMBO
CITY OF LAVISTA				
CABELAS 2	Omaha	2	ChargePoint Network	J1772
RUSS'S MARKET RUSS'S				CHADEMO
MARKET 2	Waverly	1	ChargePoint Network	J1772COMBO
RUSS'S MARKET RUSS'S				
MARKET 1	Waverly	2	ChargePoint Network	J1772
OMAHA OMAHA ILOT 3-1	Omaha	2	ChargePoint Network	J1772
LPS LINCOLN HS	Lincoln	1	ChargePoint Network	J1772
				CHADEMO
OMAHA OMAHA ILOT 3-2	Omaha	1	ChargePoint Network	J1772COMBO
MCC MIDDLE LEVEL 2	Omaha	2	ChargePoint Network	J1772
MCC SOUTH LEVEL 2	Omaha	2	ChargePoint Network	J1772
				CHADEMO
MCC NORTH EXPRESS	Omaha	1	ChargePoint Network	J1772COMBO
CASEY'S SYRACUSE L2	Syracuse	2	ChargePoint Network	J1772
Northwest Rural Public				
Power District	Hay Springs	2	Non-Networked	J1772
Woodhouse Buick GMC				
of Omaha	Omaha	1	EV Connect	J1772
NORRIS PPD STATION 1	Beatrice	2	ChargePoint Network	J1772
				CHADEMO
CASEY'S BLAIR DC FAST	Blair	1	ChargePoint Network	J1772COMBO
CASEY'S BLAIR L2	Blair	2	ChargePoint Network	J1772
CASEY'S SYRACUSE				CHADEMO
DCFC	Syracuse	1	ChargePoint Network	J1772COMBO
CASEY'S NORTH BEND				CHADEMO
DCFC	North Bend	1	ChargePoint Network	J1772COMBO
CASEY'S NORTH BEND				
L2	North Bend	2	ChargePoint Network	J1772
LINKEDIN GARAGE 3	Omaha	2	ChargePoint Network	J1772
LINKEDIN EXTERIOR LOT				
7	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 1	Omaha	2	ChargePoint Network	J1772
LINKEDIN EXTERIOR LOT				
8	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 2	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 4	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 5	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 6	Omaha	2	ChargePoint Network	J1772
LINKEDIN SIDEWALK 10	Omaha	2	ChargePoint Network	J1772
LINKEDIN WEST				
SIDEWALK 9	Omaha	2	ChargePoint Network	J1772
LINKEDIN GARAGE 11	Omaha	2	ChargePoint Network	J1772
Arby's	Omaha	2	SemaCharge Network	J1772
OMAHA 9610 F ST - 1	Omaha	2	ChargePoint Network	J1772
WHITE STAR ALBION	Albion	2	ChargePoint Network	J1772
Husker Cadillac	Lincoln	2	Blink Network	J1772
Woodhouse Ford	Blair	1	Blink Network	J1772

LATITUDE 41 LATITUDE				
41	Bellevue	2	ChargePoint Network	J1772
Echo Park Apartments	Omaha	4	SemaCharge Network	J1772
RUSS'S MARKET				
STATION 1	Grand Island	2	ChargePoint Network	J1772
RUSS'S MARKET				CHADEMO
STATION 2	Grand Island	1	ChargePoint Network	J1772COMBO
RUSS'S MARKET RUSS				
MARKET ST2	Hastings	2	ChargePoint Network	J1772
COLUMBUS HOSP				
COLUMBUS HOSP N	Columbus	2	ChargePoint Network	J1772
COLUMBUS HOSP				
COLUMBUS HOSP S	Columbus	2	ChargePoint Network	J1772
WAHOO CHARGER				CHADEMO
WAHOO CHARGER 1	Wahoo	1	ChargePoint Network	J1772COMBO
WAHOO CHARGER				
WAHOO CHARGER 2	Wahoo	1	ChargePoint Network	J1772COMBO
Husker Mercedes Benz	Lincoln	2	Blink Network	J1772

Source: Alternative Fuels Data Center. Current as of June 2022.

## **Appendix B: Survey Questions**

### **Community Survey**

1. What is your main mode of transportation?
2. How likely are you to purchase an electric vehicle (EV) in the next three years?
3. What factors would encourage you toward purchasing an EV?
4. Is the availability of public EV charging stations an important factor in your consideration of purchasing an EV?
5. Are there currently enough public EV charging stations available that would make you feel comfortable purchasing an EV?
6. Are you willing to pay for the electricity to charge your vehicle? If yes, how much are you willing to spend for a "fill-up"?
7. What amenities are of importance when waiting for your electric vehicle to charge?

#### **Questions for Current EV Owners**

8. How many miles do you drive in a typical day?
9. Do you do most of your charging at a public charging station or in your private driveway/garage?

#### **Demographics**

10. How did you hear about this survey?
11. What is your Zip Code?
12. What is your age?
13. What race/ethnicity best describes you?

### **Business Survey**

1. Contact information
2. What is the nearest interstate to your location?
3. How far away is that interstate from your location?
4. What type of facility are you?
5. How do you considered installing electric vehicle charging facilities?

6. If there were business incentives for installing electric vehicle charging, would you be more inclined to support hosting?
7. Is your site accessible 24/7?
8. Do you believe hosting an electric vehicle charging station will bring you more business?
9. Have you noticed an increase in electric vehicle traffic through your business?
10. Would you like to be updated with more information as Nebraska's Electric Vehicle Implementation Plan in the future?
11. Is there any more information regarding EV charging stations you would like to share?