Mississippi Electric Vehicle Infrastructure Deployment Plan

2023

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Acronyms and Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
AEO	Annual Energy Outlook
AFC	Alternative Fuel Corridor
AFDC	Alternative Fuel Data Center
BEB	Battery Electric Bus
BEV	Battery Electric Vehicle
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMPDD	Central Mississippi Planning & Development District
CTA	Coast Transit Authority
DACs	Disadvantaged Communities
DBE	Disadvantaged Business Enterprise
DC	Direct Current
DCFC	Direct-Current Fast Charging
EEI	Edison Electric Institute
EVs	Electric Vehicles
EVSE	Electric Vehicle Supply Equipment
FAC	Freight Advisory Committee
FHWA	Federal Highway Administration
FY	Fiscal Year
GRPC	Gulf Coast Regional Planning Commission
HPFL MPO	Hattiesburg-Petal-Forrest-Lamar MPO
I-10	Interstate 10
I-20	Interstate 20
I-22	Interstate 22
I-55	Interstate 55
I-59	Interstate 59

I-69	Interstate 69
I-269	Interstate 269
IEI	Institute for Electric Innovation
kW	Kilowatts
LPA	Local Public Agency
LTAP	Local Assistance Training Program
MAMA	Mississippi Automotive Manufacturers Association
MAS	Mississippi Association of Supervisors
MDA	Mississippi Development Authority
MDEQ	Mississippi Department of Environmental Quality
MDOT	Mississippi Department of Transportation
MEI	Mississippi Energy Institute
MML	Mississippi Municipal League
MPSC	Mississippi Public Service Commission
MPUS	Mississippi Public Utilities Staff
MPO	Metropolitan Planning Organization
MTC	Mississippi Transportation Commission
NASEO	National Association of State Energy Officials
NEPA	National Environmental Policy Act
NEVI	National Electric Vehicle Infrastructure
PDCA	Plan Do Check Act
PHEV	Plug-In Hybrid Electric Vehicle
RFI	Requests for Information
RFP	Request for Proposal
STIP	Statewide Transportation Improvement Program
USC	U.S. Code
USDOT	U.S. Department of Transportation
USDOE	U.S. Department of Energy
WAN	Wide-Area Network

1 Introduction

The Mississippi Electric Vehicle Infrastructure Deployment Plan, herein referred to as the Plan, is written in response to the Bipartisan Infrastructure Law's[i] (BIL's) National Electric Vehicle Infrastructure (NEVI) Formula Program. The NEVI Formula Program is providing federal funding to all 50 states to invest in America's electric vehicle (EV) charging infrastructure network in an effort to support convenient, reliable, affordable, and equitable deployment of EV infrastructure for all users. The Plan provides the roadmap the Mississippi Department of Transportation (MDOT) intends to follow in administration of Mississippi's portions of the federal NEVI Formula Program funding.

The NEVI Formula Program Guidance was released on February 10, 2022. The program requested each state to submit Alternative Fuel Corridor (AFC) Nominations by May 13, 2022, followed by an EV infrastructure deployment plan by August 1, 2022, describing how the State intends to use its apportioned funds. Mississippi met both deadlines, and its first Electric Vehicle Infrastructure Deployment Plan was approved by FHWA on September 14, 2022.

On February 28, 2023, FHWA published the National Electric Vehicle Standards and Requirements (23 CFR 680) in the Federal Register, setting the minimum standards and requirements for projects funded under the NEVI Program. In order to continue to receive NEVI Formula Program funds, Mississippi is required to annually develop an FHWA-approved Electric Vehicle Infrastructure Deployment Plan that incorporates and identifies relevant additions and modifications made since the prior year's Plan approval.

Following the guidance, and leading the effort, MDOT developed the Plan in coordination with stakeholders and the public. Stakeholders included surrounding states' departments of transportation, the Mississippi Department of Environmental Quality (MDEQ), the Mississippi Development Authority (MDA), the Mississippi Energy Institute (MEI), the Mississippi Public Service Commission (MPSC), the Mississippi Public Utilities Staff (MPUS), and major electric utilities providers. Additionally, MDOT coordinated with external and internal stakeholders, including the state's three Metropolitan Planning Organizations (MPOs), the Memphis MPO, MDOT's Freight Advisory Committee (FAC), and MDOT's Planning, Public Transit, Maintenance, Civil Rights, and IT Divisions in development of the Plan. MDOT has also taken several steps to engage with the public, including county and city officials in urban, rural, and underserved or disadvantaged communities (DACs), tribal governments, and other interested parties through a variety of means.

Mississippi's Plan is intended to provide reliable, accessible, and equitable access to EV charging infrastructure for travelers across the state and lays out several high-level and outcome-oriented goals that the State will follow in achieving this mission. The Plan discusses existing and future conditions and lays out the state's needs. Although Mississippi currently has a low EV adoption rate, MDOT's implementation of the NEVI Formula Program will serve to support the current and future demands of EV owners and will work to reduce range anxiety. Mississippi's warm climate and flat terrain lend themselves to easily incorporate EVs into the state's existing transportation system, boosting the economy and clean energy usage in Mississippi communities. The Plan highlights the

importance of installing resilient charging stations along evacuation routes, so EV owners have reliable fueling opportunities in emergency weather events like hurricanes, which frequently pose risks to Mississippi.

The Plan includes strategies for contracting that MDOT may use to administer Mississippi's portions of the federal NEVI Formula Program funding. Additionally, the Plan discusses potential deployment and implementation strategies, provides an initial analysis of Mississippi's pending EV AFCs, and summarizes possible program evaluation metrics by which the success of the program may be measured. The Plan also includes sections detailing considerations of equity, civil rights, and labor and work force development, emphasizing the importance of equity and accessibility of EV infrastructure for all Mississippians.

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

MDOT is currently working towards developing a detailed course of action for EV charging station deployment. Table 1-1 provides a project timeline.

Table 1-1: Program Timeline

Year 1	Year 2	Year 3	Year 4	Year 5+

• Identified routes for inclusion as EV AFCs
• Submitted EV AFCs in Round 6 nominations.
• Identified DACs
• Began NEVI outreach efforts and stakeholder involvement.
  ○ Launched Website
  ○ Conducted Surveys
  ○ Engaged EV/EVSE industry, public utilities, and state regulators.
  ○ Engaged with MPOs, municipalities, and Local/State/Federal stakeholders.
  ○ Developed engagement strategies with DACs.
• Submitted initial NEVI Plan
	• Drafting RFI for EV infrastructure industry comment
	• Developing Interactive EV Charging Infrastructure Location Map
	• Begin RFP process for NEVI Program Manager
	• Continued NEVI outreach efforts and stakeholder involvement
	• Refined engagement strategies with DACs
	  ○ Deployed community engagement survey
	  ○ Conducted in person location selection map.
	• Submitted NEVI Plan Year 2 update
		• Issue RFP for a NEVI Program Manager
		• Deploy Interactive EV Charging Infrastructure Location Map
		• Issue RFI for EV infrastructure industry comment
		• Begin RFP process for development of EV infrastructure installation.
		• Issue RFP for EV Infrastructure deployment
		• Continue NEVI outreach efforts and stakeholder involvement.
		• Refine Engagement strategies with DACs.
		• Update NEVI plan
			• Select and award EV infrastructure contract.
			• Continue NEVI outreach efforts and stakeholder involvement.
			• Refine Engagement strategies with DACs.
			• Update NEVI plan
				• Reevaluate MDOT NEVI Program and AFCs
				• Identify gaps and continue to meet program vision and goals.
				• Continue NEVI outreach efforts and stakeholder involvement.
				• Refine Engagement strategies with DACs.
				• Update NEVI plan

1.1 Updated from Prior Plan

The below list identifies sections of the Plan which have been updated from the prior fiscal year's Plan, along with a summary of the nature of the update. All sections were updated to reflect the NEVI Formula Plan Guidance and the National Electric Vehicle Infrastructure Standards and Requirements (23 CFR 680). Additionally, each of the sections were updated to be Section 508 Compliant.

Introduction

- Made minor edits for clarity and updated verbiage to reflect current year status.
- Updated Program Timeline in Table 1-1 on Page 2.
- Replaced Figure 1-1 with Table 1-1 for Section 508 Compliance on Page 2.

State Agency Coordination

- Made minor edits for clarity and updated timeline on Page 6, last paragraph.
- Added two sections to follow the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf]. They are Memoranda of Understanding with Other Agencies and Interagency Working Group(s) on Page 6.

Public Engagement

- Made minor edits for clarity.
- Updated Table 3-1 on Page 8.
- Updated the survey data in Figure 3-1 through 3-4 on Pages 10-11.
- Updated the map in Figure 3-5 on Page 14.
- Added four sections to follow the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] They are Community Engagement Outcomes Report on Page 7, Tribal Engagement on Page 15, Utility Engagement on Page 16, and Site-Specific Engagement on Page 16.
- Updated the Tribal Engagement, Utility Engagement, and Site-Specific Engagement sections to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] on Pages 15 and 16.

Plan Vision and Goals

- Made minor edits for clarity on Page 17.
- Made edits to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] on Pages 17 - 19.
- Added an *Evaluation* goal on Page 19, Table 4-1, *Overall Program Goals*.
- Beginning on Page 17 and ending on Page 19, Table 4-1 was color coded to show what goals have been accomplished and the status of the ongoing goals.
- Added a Charging Infrastructure goal and an Economy Goal on Pages 17 and 18, Table 4-1, *Year 3-5 Goals*.

Contracting

- Made minor edits for clarity on Page 20.
- Made edits to meet 23 CFR 680.
- Updated from passage of senate bill 2562 on Page 20.
- Updated from community engagement on Page 20.
- Added four sections to follow the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf]. They are Status of Contracting Process, Awarded Contracts, Scoring Methodologies Utilized, and Plan for Compliance with Federal Requirements on Page 21.
- Made edits to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] on Pages 20 - 22.

Civil Rights

- Made minor edits for clarity on Page 23 Paragraph 1, 2, and 4.
- Referenced *Access Board Design Recommendations for Accessible Electric Vehicle Charging Stations*, July 2022 on Page 23 Paragraph 4.
- Added that MDOT plans to follow the “use last” model until further guidance is issued by the Access Board on Page 23 Paragraph 4.

Existing and Future Conditions

- Made minor edits for clarity.
- Added two sections from the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf]: AFC Designation on Page 25 and Existing Charging Stations on Page 26.
- Updated Figure 7-2 map on Page 27.
- Added a new table, now Table 7-1: Charging Station Criteria on Page 26, renumbering Table 7-1 to Table 7-2: Charging Station Locations. Table 7-2 now reflects what criteria is met in column 6 and other minor updates on Page 28-29.
- The ‘Current EV Ownership/Availability’ graphic was updated to reflect the most recent data on Page 35.
- Replaced Information Dissemination graphic with bullet list for Section 508 compliance on Page 37.
- Under Known Risks and Challenges, the ‘Electric Charge’ and ‘Public/Private Partnership Law’ sections were removed on Page 38 due to the passage of House Bill 1060 and the Senate Bill 2562 in the 2023 MS Legislative Session

EV Charging Infrastructure Deployment

- Made minor edits for clarity.
- Replaced figure on Page 39 with Table 8-1 for Section 508 Compliance.
- An additional step was added to Table 8-1: NEVI Action Steps on Page 39.
- Replaced *EV Charging Infrastructure Deployment/Upgrades* heading with *Planned Charging Stations* on Page 40.
- Updated Table 8-2 *Minimum Number of EV Charging Stations per Interstate* to reflect station locations within 25 miles of EV AFC termini on Page 40.

- Replaced *Increases of Capacity/Redundancy Along Existing AFC* heading with *Planning Towards a Fully Built Out Determination* on Page 42.
- Added two sections to follow the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf]: Planned Charging Stations on Page 40 and Planning Toward a Fully Built Out Determination on Page 42, along with two tables: Table 8-3 on Page 42 and Table 8-4 on Page 43.
- Update Electric Vehicle Freight Considerations section on Page 46.

Implementation

- Added "current prices" to list of information that must be readily available on Page 48, 3rd bullet in the Strategies for EVSE Data Collection & Sharing bullet list.
- Added a section stating that all signage must follow MUTCD on Page 49, last paragraph.
- Minor edits for clarity.

Equity Considerations

- Made minor edits for clarity.
- Added bulleted list explaining how we will engage with stakeholders, the public, and those working and living within DACS under Section 10.1 on Page 52.
- Updates to meet Justice 40 and Executive Order 14008 on end of Page 52 2nd paragraph.
- Added table listing potential NEVI benefits and measures. Table 10-1, Page 53 after last paragraph.

Labor and Workforce Considerations

- Made minor edits for clarity.
- Electricians must be EVITP certified on Page 54, Paragraph 2.
- Added paragraph describing Mississippi's workforce of electricians. It includes a discussion of how the State will ensure that the workforce installing, maintaining, and operating chargers has appropriate licenses, certifications, and trainings in compliance with 23 CFR 680.106(j) on Page 54 Paragraph 2.

Physical Security and Cybersecurity

- Made minor edits for clarity.
- Added paragraph describing the physical security aspects of the charging stations on Page 56 paragraph 2.

Program Evaluation

- Made minor grammatical edits for clarity.

Discretionary Exemptions (if any)

- Made edits to comply with the NEVI Guidance Formula Program (Update).

2 State Agency Coordination

Updates from 2022 Plan:

- *Made minor edits for clarity and updated timeline on Page 6, last paragraph.*
- *Added two sections to follow the NEVI Guidance Formula Program (Update):*
  - *2.1 Memoranda of Understanding with Other Agencies [Page 6]*
  - *2.2 Interagency Working Group(s) [Page 6]*

2.1 Memoranda of Understanding with other agencies

There are currently no Memoranda of Understanding (MOUs) with other State agencies to help administer the NEVI program. As this program progresses MOUs will be implemented as needed.

2.2 Interagency Working Group(s)

Once the NEVI Formula Program was announced, MDOT began coordinating and initiating discussions with Mississippi's state agencies. To date, this has included several calls and meetings between MDOT staff, various state agencies, including MDEQ, MDA, MPUS, and MPSC, FHWA, all three state MPOs (Central Mississippi Planning & Development District [CMPDD], Hattiesburg-Petal-Forrest-Lamar MPO [HPFL MPO], and Gulf Coast Regional Planning Commission [GRPC]), and the Memphis MPO. MDOT has continued coordination with these agencies to discuss MDOT's plans for the NEVI Formula Program, agency goals and needs to support EV infrastructure, and has elicited feedback regarding implementation, operation, and maintenance of the EV network. As a part of this plan update, MDOT held a state agency coordination meeting on May 18, 2023. The meeting held was with MDOT, MDEQ, MDA, MPUS, and MPSC, and FHWA. The meeting agenda included a recap of the 2022 Plan, current and upcoming timeline for the program, the CFI Discretionary Grant opportunity, plans for EVITP training, Justice40 engagement, and solicitation of feedback.

A critical part of the Plan development is ongoing collaboration within MDOT, including coordination with the Planning, Civil Rights, Public Transit, Maintenance, and IT Divisions, along with the Mississippi Statewide Freight Plan and the Mississippi Unified Long-Range Transportation Infrastructure Plan. MDOT also provided an update of the Plan to the Freight Advisory Committee (FAC) to gather additional feedback. Moving forward, MDOT will continue to collaborate with the agencies referenced above, along with any additional state agencies (as needed), to determine how best to maximize opportunities to utilize EVSE compliant with Buy America during EV infrastructure deployment. Additionally, MDOT intends to continue coordinating with state agencies during each subsequent yearly update to the Plan.

3 Public Engagement

Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Updated Table 3-1 on Page 8.*
- *Updated the survey data in Figure 3-1 through 3-4 on Pages 10-11.*
- *Updated the map in Figure 3-5 on Page 14.*
- *Added four sections to follow the NEVI Guidance Formula Program (Update)*
  - *3.1 Community Engagement Outcomes Report [Page 7]*
  - *3.2 Tribal Engagement [Page 15]*
  - *3.3 Utility Engagement [Page 16]*
  - *3.4 Site-Specific Engagement [Page 16]*
- *Updated the Tribal Engagement, Utility Engagement, and Site-Specific Engagement sections to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] [Pages 15 and 17]*

Initial public engagement and outreach efforts were geared toward increasing awareness of the program, learning about industry needs and gaps, and identifying existing and potential risks and barriers to EV charging infrastructure installation. The public engagement for the year 2 Plan update focused on engagement of disadvantaged communities (DACs), updates from Final rules (National Electric Vehicle Standards and Requirements (23 CFR 680)), and state policy changes. MDOT has taken several steps to engage with the public, including private-sector companies, freight representatives, utilities, MPOs, county and city officials in urban, rural, and underserved or disadvantaged communities (DACs), tribal governments, and other interested parties. This has included both informal calls and more formal meetings that were both in person and virtual. MDOT has considered the input received from last year's (2022) public online survey. The results from last year's (2022) public online survey can be found in Appendix C.

In 2022, MDOT identified seven corridor-pending EV AFCs. All AFCs traverse or serve DACs in some capacity. Last year, MDOT has worked to inform DACs of the program. This year the intent was to expand engagement efforts to include DACs and other relevant stakeholders to make informed decisions regarding the program.

3.1 Community Engagement Outcomes Report

Through this year's (2023) engagement, MDOT is working to identify key topics through discussion with each of the various stakeholder groups, DACs, and the public to efficiently gather input as the Plan is updated annually. MDOT plans to solicit Requests for Information (RFIs) to obtain additional information from industry professionals and the public. MDOT also intends to create and deploy an interactive location map next year to collect additional input on potential site locations and gather public comments, further improving the engagement process.

This year (2023) MDOT released a second survey specifically geared toward input from DACs titled "Community Engagement Survey". Information from the "Community Engagement

Survey," along with conversation with disadvantaged communities and leaders has provided information to assist in making informed decisions going forward specifically geared toward location, scoring criteria, and program evaluation.

Table 3-1 lists the engagements where MDOT has informed stakeholders, groups, and organizations about the state's NEVI program and solicited feedback through the "Community Engagement Survey." (Shown in **bold** are groups or coordination efforts that support the goal of the Justice40 Initiative.) More details regarding these engagements are described later in this section.

Note: The Justice40 Initiative establishes a goal that at least 40 percent of the benefits of federal investments in climate and clean-energy infrastructure are distributed to DACs.

Table 3-1: Stakeholder Engagement

Engagement	Forum	Date	Stakeholders/Participants*
Freight Advisory Committee (FAC)	Meeting: In Person and Virtual	Continued	FAC faciliatory
Mississippi Public Service Commission (MPSC) Work Session	Meeting: In Person	September 2022	MPSC, MPUS, MEI, and state utility representatives
Mississippi Native American Consultation	Webinar: In Person and Virtual	December 2022	Federally-recognized Tribal Nation with land interest in Mississippi-FHWA, MDOT, MDEQ, and MDAH
Utility Meeting	Meeting: In Person	January 2023	MPSC, MPUS, MEI, and state utility representatives
Mississippi Automotive Manufacturers Association (MAMA)	Webinar: In Person and Virtual	March 2023	Mississippi Automotive Manufacturers Association (MAMA)
State Agencies Coordination	Meeting: In Person	May 2023	FHWA, MPSC, MPUS, MDA, and MDEQ
Memphis Metropolitan Planning Organization	Meeting: In Person	May 2023	Memphis MPO, FHWA, MDOT Planning, MDOT District 2, MDOT LPA, local representatives from municipalities within the MPO boundaries, representatives from Shelby, Desoto, Marshall, and Fayette Counties
Gulf Coast Regional Planning Commission (GRPC)	Meeting: In Person and Virtual	June 2023	GRPC, FHWA, MDOT Planning, MDOT District 6, MDOT LPAs, local representatives from municipalities within the MPO boundaries, county representatives from Hancock, Harrison, and Jackson Counties
Mississippi Association of Supervisors (MAS)	Exhibit: In Person	June 2023	County Supervisors statewide
Mississippi Municipal League (MML)	Exhibit: In Person	June 2023	Mayors, aldermen, and county officials statewide

Engagement	Forum	Date	Stakeholders/Participants*
DBE Support Services - MDOT	Pre-Bid Letting Presentation	July 2023	DBE Contractors Statewide
Hattiesburg Petal-Forrest-Lamar Metropolitan Planning Organization (HPFL)	Meeting: In Person	July 2023	HPFL MPO, FHWA, MDOT Planning, MDOT District 6, MDOT Local Public Agency (LPA), local representatives from municipalities within the MPO boundaries, and county representatives from Forrest and Lamar Counties.

*List includes those invited or typical attendees.

Community Engagement Survey Results

As previously discussed, MDOT opened a survey and has solicited stakeholder and public participation. Evidenced in the survey results and engagement feedback, most of the reactions to the Plan have been positive, and many Mississippians have been interested in learning more and are supportive of MDOTs EV infrastructure deployment efforts. As discussed in the EV Industry Ownership/Availability section of this report (Section 7, Page 28), the proliferation of EV ownership in the state of Mississippi is less than surrounding states. As such, survey results did show that there is some hesitancy and concern regarding EVs in the state. This was reflected in some comments and in many of the cases where respondents selected “other.” However, both the survey and the website were published in early May 2022, and through MDOT’s outreach efforts, the department has received 2,780 responses. These results can be found in Appendix C.

In 2023, MDOT conducted a second survey, a Community Engagement Survey, geared specifically at gaining input from DACs. The survey was presented at all meetings and engagements where people who live or represent a DAC maybe in attendance. The intent of the survey was to assist MDOT in its decision-making processes, refine goals and program targets, and identify program benefits and measures specially towards Justice40 communities. In looking at the survey results, key metrics, including what benefits do the public see the EV infrastructure program providing most to the community, what valuable measure would benefit the community, locations of where the public would like charging stations to be placed, and the ranking of program benefits, have provided MDOT with additional insight and helped to shape some of the strategies in this Plan. Figures 3-1 through 3-4 illustrate these results. Complete survey results are provided in Appendix A.

Figure 3-1: What benefit(s) do you see the Electric Vehicle Infrastructure program providing most to your community?

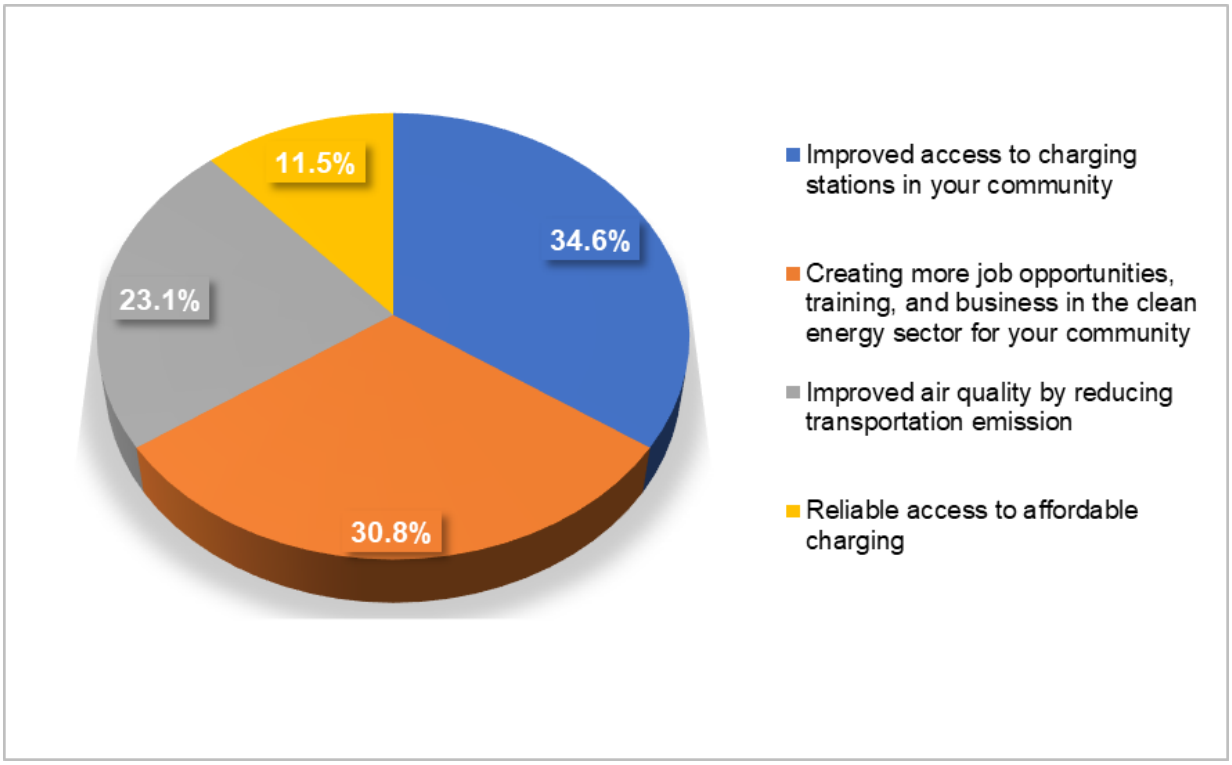


Figure 3-2: What would you see as a valuable measure to show the Electric Vehicle Infrastructure program has benefitted your community?

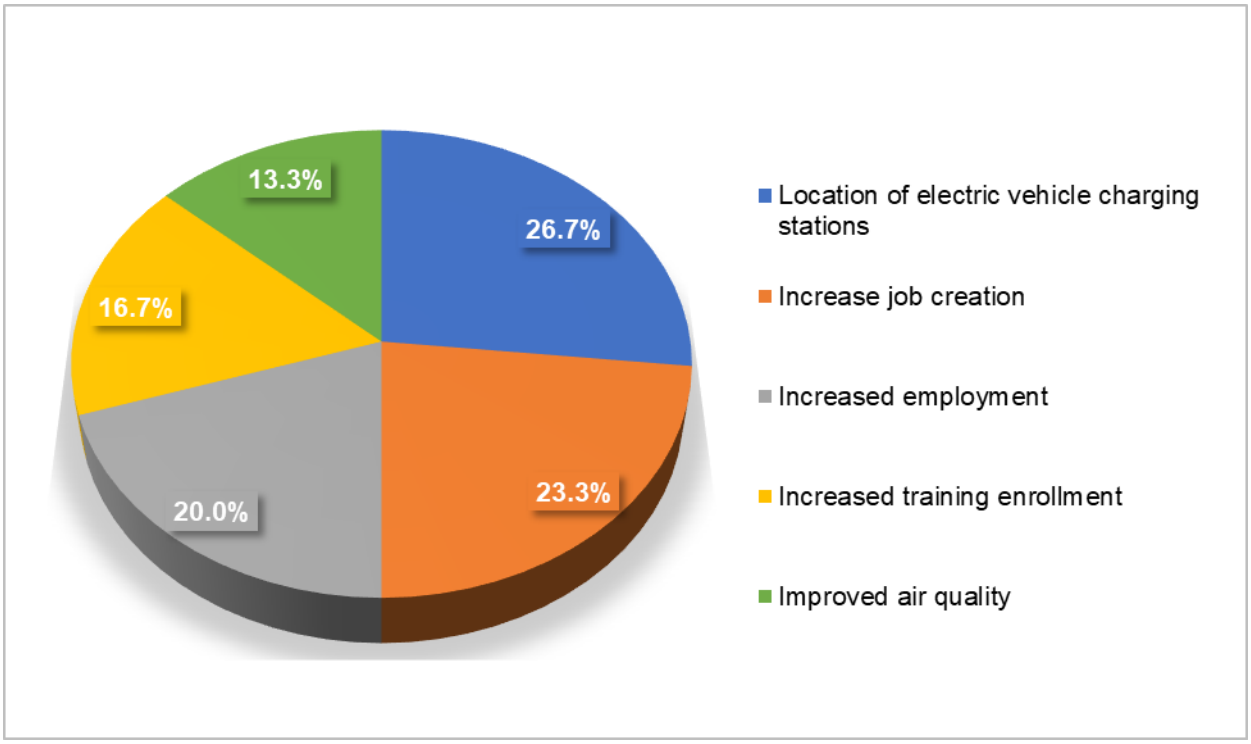


Figure 3-3: Where would you like to see electric vehicle charging stations in your community?

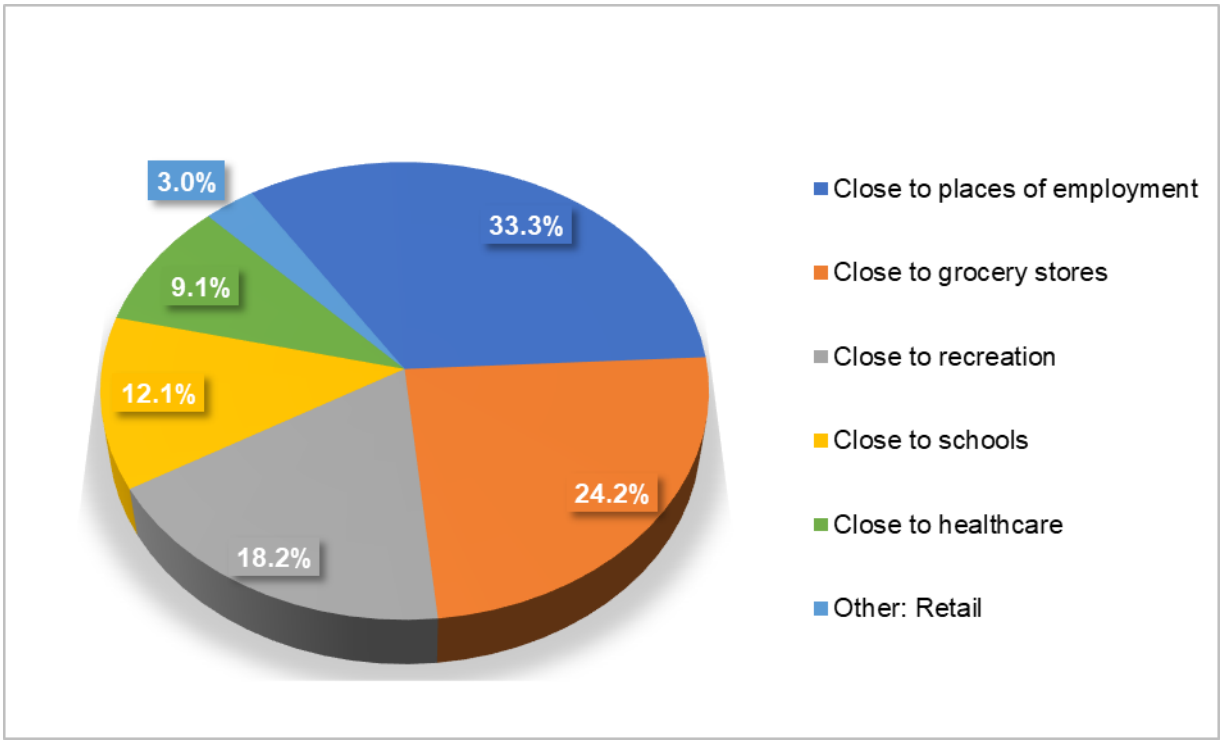
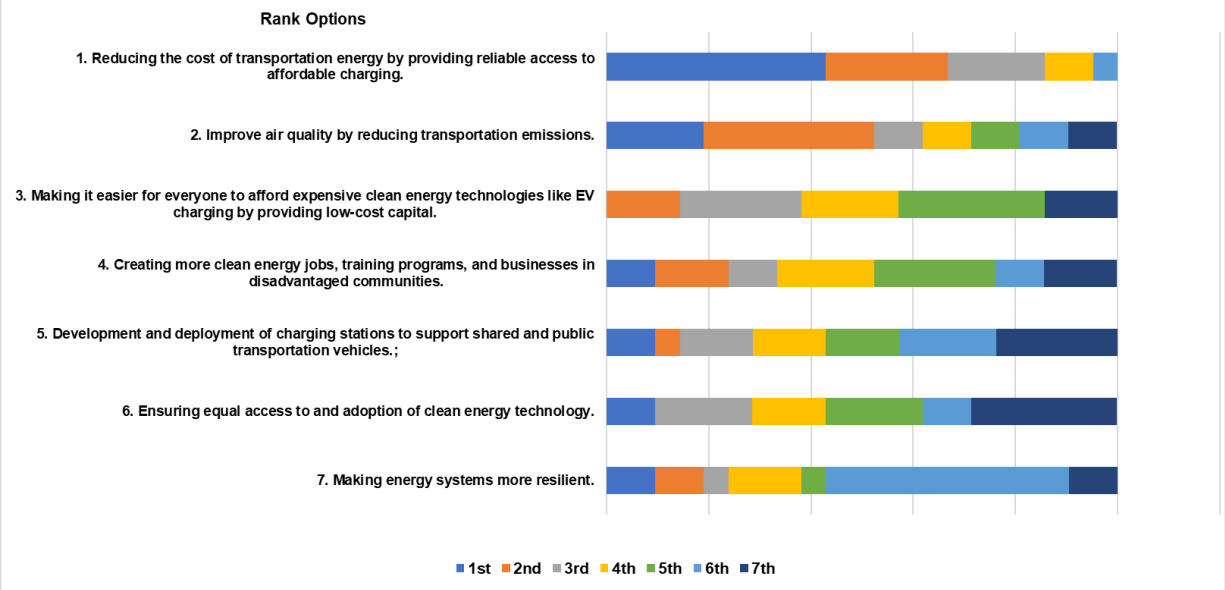


Figure 3-4: Rank the below benefits from the Electric Vehicle Infrastructure program?



Stakeholders Involved in Plan Development

As discussed in the State Agency Coordination section (Section 2), MDOT collaborated with many state agencies in the initial Plan development, including the MDEQ, the MDA, the MPUS, and the MPSC, along with the major utility providers. In addition to these groups, MDOT has met with all three Mississippi MPOs (CMPDD, HPFL MPO, and GRPC) and the Memphis MPO. MDOT has coordinated with these stakeholders to provide an overview of the NEVI Formula Program, MDOT's plans for the NEVI Formula Program, agency goals, efforts toward equitable deployment, EV infrastructure support needs, and operation and maintenance of the EV network. MDOT has held numerous calls and virtual meetings with others, including internal MDOT stakeholders, adjacent-state departments of transportation, private companies including EV charge operators, advocacy groups, non-profit organizations, and other interested parties.

As shown in Table 3-1, specific meetings have been held in which MDOT has presented the Plan and the NEVI Formula Program and solicited feedback regarding NEVI requirements and the Justice40 Initiative. MDOT has coordinated with these specific agencies and groups in the development of the Plan and will continue to coordinate with them in the future.

In addition to the groups listed above, MDOT has coordinated with the Joint Office (the office established with individuals from the US Department of Transportation and the US Department of Energy to oversee the NEVI Formula Program), the American Association of State Highway and Transportation Officials (AASHTO), and the National Association of State Energy Officials (NASEO) throughout the Plan development process.

MDOT intends to continue to engage the public and communities through future meetings and events.

Public Outreach

In an effort to fully engage with the public, MDOT has continued to present about the Plan at numerous public agency meetings, state agency meetings, and professional society meetings. Additionally, MDOT has distributed the "Community Engagement Survey" to obtain feedback specifically from those who live in and represent disadvantaged communities. The results gathered from this survey will also be used to help in the decision-making process for scoring criteria, program evaluation, and future community engagement.

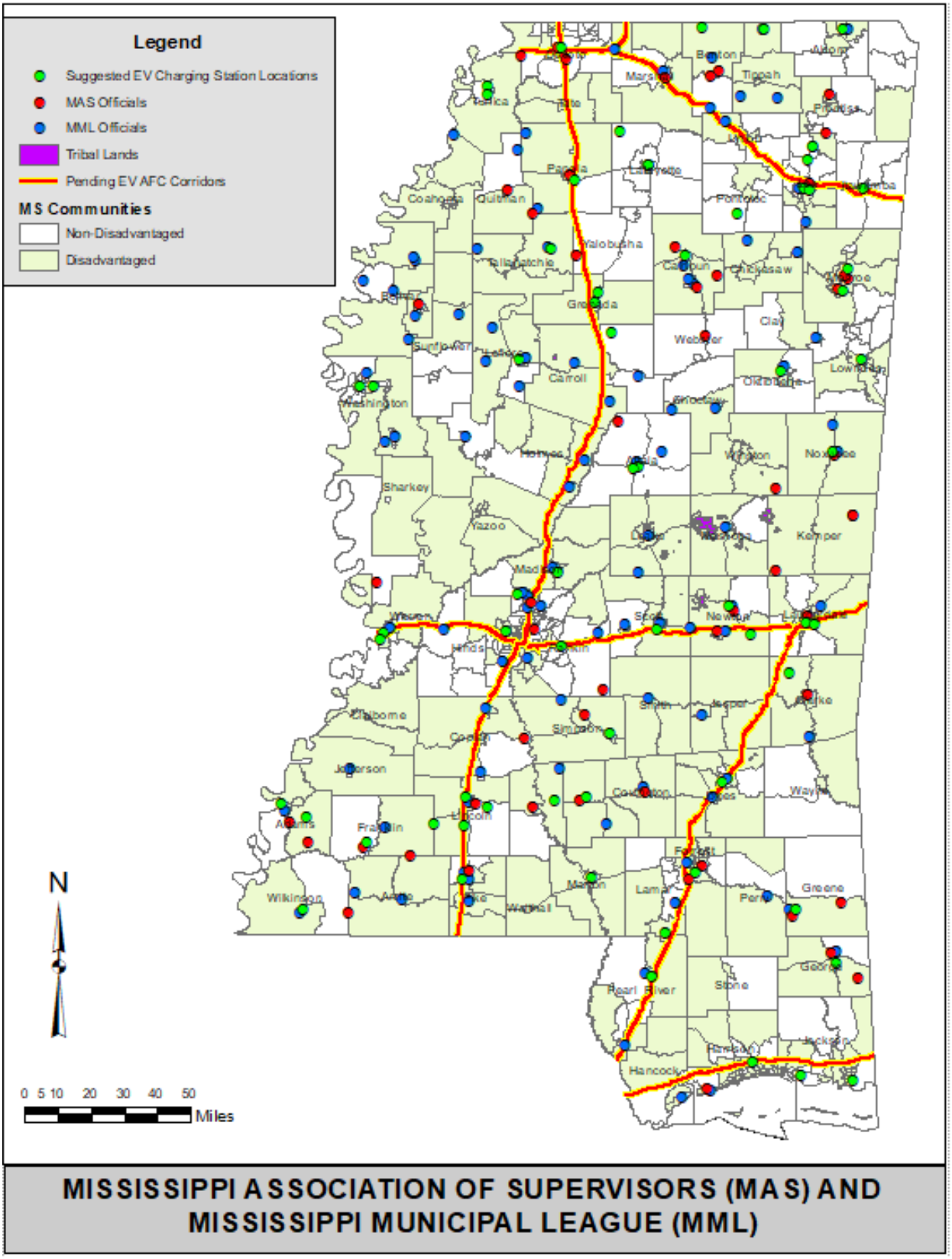
As shown in Table 3-1 above, MDOT has presented information about the Plan and NEVI Formula Program at policy meetings for all three state MPOs (CMPDD, HPFL MPO, and GRPC) and the Memphis MPO. These meetings are open to the public and include mayors, county officials, and city officials from all areas within the MPOs. During these meetings, MDOT provided an overview of the NEVI Formula Program, elicited feedback through survey participation, and discussed the timeline for federal funding and current and future activities to develop this Plan.

In addition to the MPO presentations, statewide engagement was pursued through participation in Mississippi's Native American Tribal Consultation, the Mississippi Automotive Manufacturers Association (MAMA), the Mississippi Municipal League (MML), and the Mississippi Association of Supervisors (MAS). Engagement through these events was intended to educate others and build relationships with DAC leaders, residents of rural areas, and other groups to allow for additional participation in the future and enhance public engagement efforts through the online survey. Details regarding these engagements is provided below.

MML and MAS Exhibit, June 2023

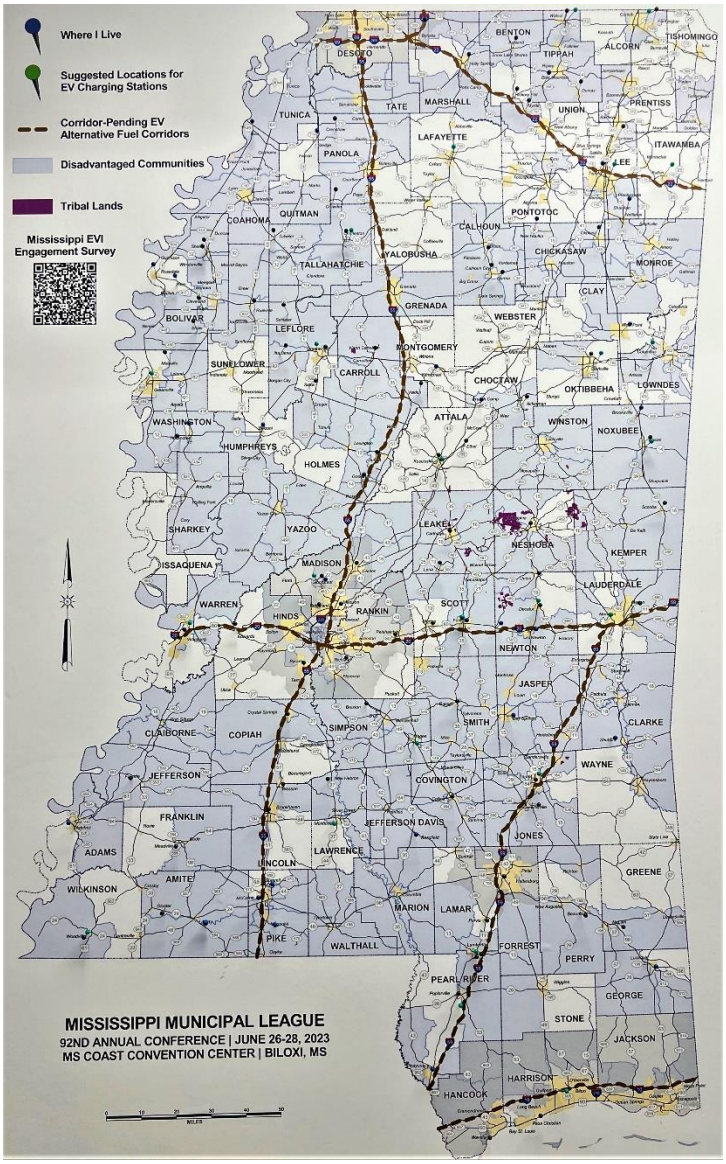
Information about the Plan and "Community Engagement Survey" was included as part of MDOT's exhibit at the MML and MAS annual conferences. Additionally, a formal presentation about the Plan and "Community Engagement Survey" was given at MAS. At the MML and MAS conferences, MDOT connected with over 200 individuals representing supervisors, mayors, and aldermen through the state. Over half of those engaged with represented DACs. In addition to presenting information about the Plan during a speaking session at MAS, a booth was held at both MAS and MML. At the booth visitors were encouraged to take the "Community Engagement Survey" as well as provide feedback on a map board regarding which area they lived or represented and where they would like to see charging stations. The locations of public representatives who were engaged at both conferences are displayed on Figure 3-5. This was a continued effort toward statewide public engagement. MDOT recognizes the importance of these entities and statewide leaders and intends to collaborate with them further to make informed decisions regarding the program in the future.

Figure 3-5: MAS and MML Locations Map



MDOT plans to continue to engage with these groups and the public by hosting both in-person and virtual meetings to gather feedback and present the Plan. Figure 3-6 shows the interactions with the public at MML in 2023. MDOT will continue to update their EV infrastructure deployment website with Plan updates and further solicit feedback from the public via an interactive location map, surveys, and social media.

Figure 3-6: MML Locations Interactive Map



3.2 Tribal Engagement

In December 2022, MDOT presented the Plan at the Mississippi Native American Consultation. The federally-recognized Tribal Nations with land interest in Mississippi were invited and most were in attendance, either in person or virtually. In-person tribal representation included Mississippi's Band of

Choctaw Indians and the Muskogee (Creek) Nation. The Choctaw Nation of Oklahoma, the Chickasaw Nation, and the Quapaw Nation attended virtually. Several tribes were still under Covid travel restrictions. The other Federal and State partners in attendance included FHWA, MDOT, MDEQ, and MDAH. Engagement through these events was intended to educate, obtain feedback, and continue to build relationships with Tribal leaders, residents, and groups for future feedback and engagement. No feedback has been obtained at this time.

3.3 Utility Engagement

The four main electric utility providers for the state of Mississippi are Entergy, Mississippi Power Company, the Tennessee Valley Authority, and Cooperative Energy. In addition to these, many smaller companies and municipalities also provide power within the state, as shown in Appendix B, Figure B1.

On September 26, 2022, MDOT participated in a Mississippi Public Service Commission (MPSC) Work Session. As part of the work session, MDOT provided an update of the NEVI program. The MPSC hosted work session assessed the laws, rules, and regulations pertaining to new and existing electric vehicle (EV) charging infrastructure, both existing and future. On January 5, 2023, MDOT attended a utility engagement meeting which included MPSC, MPUS, MDA, MEI, MDA, and utility companies. The intent of this meeting was to further discuss laws, rules, and regulations pertaining to new and existing electric vehicle (EV) charging infrastructure, both existing and future.

On May 18, 2023, MDOT presented the Plan at the State Agency coordination meeting. The other Federal and State partners in attendance included FHWA, MPSC, MPUS, MDA, and MDEQ. MDOT obtained feedback regarding the state's plan. The Program Engagement through these events was intended to educate, obtain feedback, and continue to build relationships.

3.4 Site-Specific Public Engagement

There currently have been no site-specific public engagements. Once potential sites are selected, the appropriate public engagement strategy will be identified at that time. Public engagements maybe held by MDOT, or 3rd party entities contracted to install EV charging infrastructure. Public engagements will be held within the community impacted by the EV infrastructure and may follow practices similar to those used for other construction projects throughout the state.

4 Plan Vision and Goals

Updates from 2022 Plan:

- *Made minor edits for clarity on Page 17.*
- *Made edits to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] on Pages 17-19.*
- *Added an 'Evaluation' goal on Page 19, Table 4-1, 'Overall Program Goals.'*
- *Beginning on Page 16 and ending on Page 19, Table 4-1 was color coded to show what goals have been accomplished and the status of the ongoing goals.*
- *Added a Charging Infrastructure goal and an Economy Goal on Pages 17 and 18, Table 4-1, Year 3-5 Goals.*

In compliance with the NEVI Formula Program Guidelines, the Mississippi Department of Transportation has collaborated and refined their vision, mission, and goals for this Plan in compliance with the NEVI Formula Program guidelines. The vision statement encapsulates MDOT's objectives regarding EV infrastructure, and the mission statement lists core values that will be adhered to during EV infrastructure deployment. The goals provide overall guidance for developing strategies and deploying projects. These goals will support the establishment of an interconnected network that will facilitate data collection, equitable access, and network reliability. The vision, mission and goals for the program are summarized below:

Vision

"Position Mississippi to be active in the deployment of EV charging infrastructure within the state."

Mission

"Provide reliable, accessible, and equitable EV charging infrastructure across the state of Mississippi."

Goals

The Plan has the overall goal of deploying a comprehensive EV charging network along Mississippi's main interstates. This overall goal has been broken down into six smaller categories: Charging Infrastructure, Economy, Policy, Awareness, Social, and Evaluation. The six categories are outlined in detail by year to show the ongoing progress toward the overall goal. The six goals are displayed in Table 4-1 below. Goals that have been completed are shown in **green**. Goals that are in progress are shown in *blue*. Planned goals are shown in black.

Table 4-1: Overall Program Goals

Goal Category	Overall Goal	Year 1 Goals	Year 2 Goals	Year 3-5 Goals
Charging Infrastructure	Establish a public charging infrastructure that enables Mississippi residents and visitors to drive and charge an EV as	**Identify routes for inclusion as EV AFCs, either as corridor-pending or corridor-ready corridors.**	*Establish a plan to develop existing corridor-pending routes into corridor-ready routes.*	*Identify potential new locations for EV charging stations that comply with current and future NEVI requirements.*

Goal Category	Overall Goal	Year 1 Goals	Year 2 Goals	Year 3-5 Goals
	they travel, working toward eliminating EV range anxiety.		*Identify potential new locations for EV charging stations that comply with current and future NEVI requirements.*	Implement the master planning schedule to deploy the NEVI Formula Program EV charging infrastructure. Issue RFP(s) for EV charging infrastructure deployment. From RFP award, ensure stations are constructed and operable within a reasonable time frame.
Economy	Consistent with Buy America, support the creation of economic opportunity through the deployment of EV infrastructure.	**Perform industry outreach to EVSE and utility providers to gain cost estimates of NEVI-compliant EV charging infrastructure.**	*Monitor the EVSE industry and other states' deployment costs to ensure MDOT is maximizing efficient use of federal funds.*	Monitor the EVSE industry and other states' deployment costs to ensure MDOT is maximizing efficient use of federal funds. Work with state partners to provide EVITP and other necessary training.
Policy	Identify and evaluate consistent, innovative, and supportive policies across Mississippi at the state, county, city, and utility levels.	**Identify current barriers that may prevent MDOT from meeting NEVI requirements during EV infrastructure deployment.**	*Work to remove barriers that may prevent MDOT from meeting NEVI requirements during EV infrastructure deployment.* *Monitor policies and regulations to ensure MDOT is meeting NEVI Formula Program guidelines and state, federal, local, and industry requirements.*	Reevaluate barriers that may prevent MDOT from meeting NEVI requirements during EV infrastructure deployment. Follow all current and future NEVI Formula Program guidelines and federal, state, and local requirements.
Awareness	Provide awareness of NEVI Formula Program opportunities and Mississippi's implementation efforts.	**Launch a website and conduct a survey.**	*Monitor the website and survey results.* *Deploy an interactive location map.*	Monitor the website and survey results.
Social	Ensure the deployment of EV infrastructure is equitable.	**Identify DACs.** **Engage with MPOs, municipalities, and local/ state/federal stakeholders.** **Perform public engagement, including developing**	*Engage with MPOs, municipalities, and local/ state/federal stakeholders.* *Engage with the EV/EVSE industry, public utilities, and state regulators.*	Engage with MPOs, municipalities, and local/state/federal stakeholders. Engage with the EV/EVSE industry, public utilities, and state regulators.

Goal Category	Overall Goal	Year 1 Goals	Year 2 Goals	Year 3-5 Goals
		engagement strategies with DACs.	*Perform community and public engagement to define measurable benefits of deploying EV charging infrastructure in Mississippi, including the DAC areas.*	Perform community and public engagement to refine the benefits of deploying EV charging infrastructure in Mississippi, including the DAC areas. Adjust deployment strategies according to future NEVI requirements and feedback received from stakeholders, MPOs, DACs, and public outreach.
Evaluation	As required by guidance, MDOT will develop a framework to collect and evaluate station usage information from equipment owners and adjust the network as needed based on the collected data.	**Coordinate with equipment owners to establish a framework of factors that will be evaluated from the EV charging stations.**	*Establish a plan to collect and store relevant factors to be used to evaluate station usage information.* *Based off the equipment owner recommendations, the chosen data factors will begin to be collected and the station usage information will be evaluated for progress and improvements.* *Coordinate with equipment owners to establish a framework of factors that will be evaluated from the EV charging stations.*	Based off the equipment owner recommendations, the chosen data factors will begin to be collected and the station usage information will be evaluated for progress and improvements. Using this data, the EV charging stations will be ever evolving.

KEY: **Completed Goal**
Goal in Progress
Planned Goal

MDOT expects all available NEVI funds to be expended in establishing the charger network along the existing AFCs. If NEVI funds remain after the EV AFCs are fully built out, MDOT will either increase the density of the charging network along EV AFCs or explore opportunities to develop additional EV AFCs.

5 Contracting

Updates from 2022 Plan:

- *Made minor edits for clarity on Page 20.*
- *Made edits to meet 23 CFR 680.*
- *Updated from passage of senate bill 2562 on Page 20.*
- *Updated from community engagement on Page 20.*
- *Added four sections to follow the NEVI Guidance Formula Program (Update)*
  - *5.1 Status of Contracting Process [Page 21]*
  - *5.2 Awarded Contracts [Page 21]*
  - *5.3 Scoring Methodologies Utilized [Page 21]*
  - *5.4 Plan for Compliance with Federal Requirements [Page 21]*
- *Made edits to comply with the NEVI Guidance Formula Program (Update) [https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf] on Pages 20-22.*

MDOT is currently considering various methods for contracting with private entities on a competitive basis for the installation, operation, maintenance, and reporting of EV charging infrastructure funded through the NEVI Formula Program. With the passage of Senate Bill 2562, Mississippi, authorized the use of Public-Private Partnerships (P3's) for state and local transportation projects. With this new legislation, the current project delivery methods under consideration include:

- Design Build
- Public Private Partnerships
- Grant Programs

For MDOT, it is important that potential partners deliver EV charging infrastructure in a manner that leads to an efficient and effective deployment. Additionally, MDOT intends to design their contracting and procurement approach to be in line with the following goals:

- Comply with all existing local, state, and federal laws, as well as NEVI Formula Program requirements, guidelines and program and Plan goals.
- Efficiently maximize the use of federal funding
- Minimize the number of contracts to be maintained, without jeopardizing the number of bidders and competition.
- Ensure that the selected contractors/developers provide all data required by the Final NEVI Rules and appropriate engagement with communities is completed.
- Ensure selected contractors/developers implement the plan in such a way that 40 percent of the benefits are targeted toward DACs in alignment with Justice40 guidance.
- Ensure that the 3rd party entities contracted to install EV charging infrastructure will engage communities in the locations where the EV charging infrastructure will be sited.

To ensure the efficient delivery of on-going operations and maintenance activities, MDOT will establish standards for cost, charger performance, and reliability. MDOT will track performance through scheduled electronic reporting throughout the life of the NEVI program in order to hold vendors accountable.

5.1 Status of Contracting Process

MDOT is actively researching, coordinating, and planning to allow for a competitive procurement process. Next steps to continue advancing future contracting and procurement efforts, include the following:

- Issue a Request for Information (RFI)
- Advance planning related to the procurement and contracting process.
    - Develop documents, procedures, and refine schedule.
- Select a delivery method for procurement.
- Coordinate for necessary Title 23 requirements

As indicated earlier, most RFP publications are anticipated in Year 3.

5.2 Awarded Contracts

At this time MDOT has not solicited any contracts for the state's EVI program.

5.3 Scoring Methodologies Utilized

MDOT is currently conducting community surveys with those who live in and/or represent DACs. These surveys are intended to help inform the department as to which of the NEVI program criteria would be the largest benefit to the communities. In addition to the community surveys, MDOT has engaged with leaders across the state to gain feedback on preferred electric vehicle station locations. Also, the locations where leaders live and areas they represent were also documented. This ensures feedback was received from all areas across the state of Mississippi. MDOT will use the feedback from the community survey and engagements, along with state and federal laws, and standard practices to develop scoring for solicited contracts.

5.4 Plan for Compliance with Federal Requirements

MDOT has reviewed relevant federal and state laws that could potentially impact the contracting and procurement of projects under NEVI Formula Funds. Based on MDOT's review, the federal and state laws include, but are not limited to:

- Build America, Buy America Act (Public Law 117-58, § 70901-52)
- The National Environmental Policy Act (NEPA; 42 U.S. Code [USC] § 4321)
- The Clean Air Act (42 USC § 7401)
- Transportation Improvement Program rules and regulations (23 CFR 450.326)
- STIP rules and regulations (23 CFR 450.218)
- Uniform Relocation Assistance & Real Property Acquisition Policies Act (42 USC § 4601)
- Federal Acquisition Regulations (48 Code of Federal Regulations [CFR] 1)
- Highway Funding Regulations (CFR Title 23 Chapter 1)
- Public Utility and Carriers [Miss. Code Ann.§ 77]
- Authority and Powers of the Commission [Miss. Code Ann. § 65-1-8]

Additionally, MDOT has also reviewed the Final NEVI Rules (23 CFR 680) released by the FHWA on February 28th, 2023, to confirm the current approaches to contracting follow any updated guidance.

6 Civil Rights

Updates from 2022 Plan:

- *Made minor edits for clarity on Page 23 Paragraph 1, 2, and 4.*
- *Referenced Access Board Design Recommendations for Accessible Electric Vehicle Charging Stations, July 2022 on Page 23 Paragraph 4.*
- *Added that MDOT plans to follow the "use last" model until further guidance is issued by the Access Board on Page 23 Paragraph 4.*

MDOT is dedicated to ensuring that EV charging station implementation complies with local, state, and federal civil rights laws, including the *Americans with Disabilities Act* of 1990 (ADA)[ii], Section 504 of the *Rehabilitation Act*[iii], Title VI of the *Civil Rights Act*[iv], and accompanying USDOT regulations. Additionally, MDOT will follow USDOT's final rule establishing minimum standards and requirements for projects funded under the NEVI Formula Program.

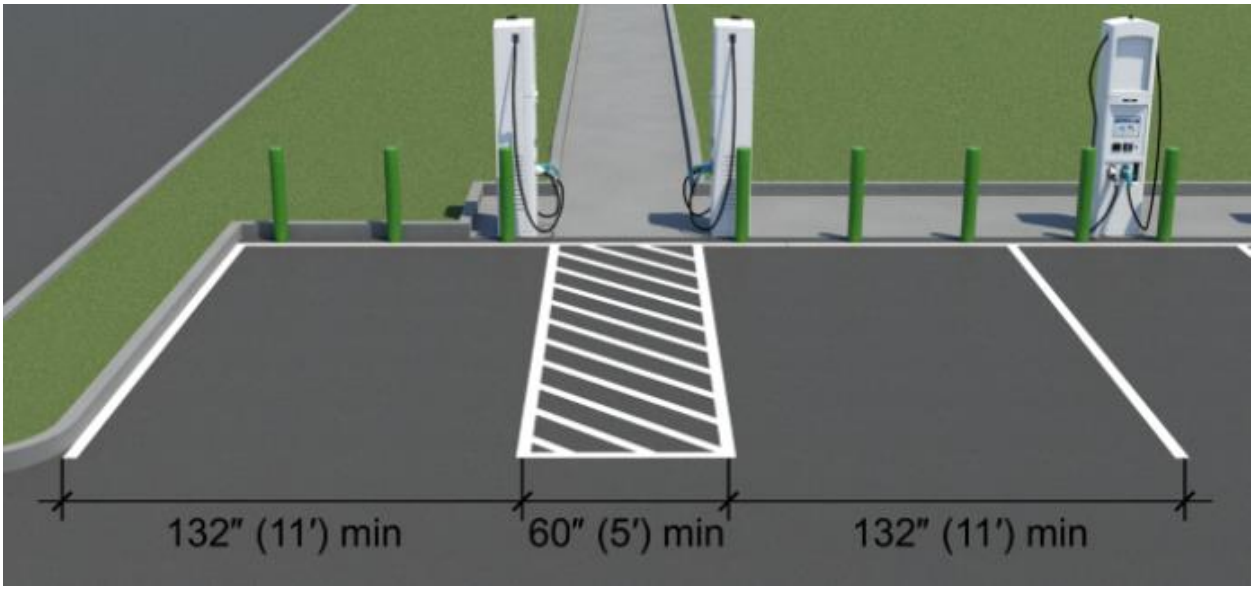
To ensure the EV charging infrastructure will comply with Title VI of the Civil Rights Act, MDOT plans to:

- Support public and stakeholder outreach to all, especially underrepresented groups. Each meeting location will comply with all mandates established in the ADA. Individuals with questions or special needs may contact the MDOT Planning Division Public Participation Process and Plan coordinator at least 5 days prior to the meeting.
- Support the distribution of NEVI Formula Program funds to benefit rural communities, underserved communities, and DACs in Mississippi.
- Verify that the hired contractors are being audited in respect to the NEVI Formula Program's existing and future requirements regarding Title VI compliance.

To support ADA compliance and Section 504 of the Rehabilitation Act, which includes ensuring that state and local entities responsible for roadways and pedestrian facilities and recipients of federal aid do not discriminate based on disability in highway transportation programs or activities, MDOT will ensure that ADA guidelines are met when developing contracts with potential station owners and EV equipment providers.

MDOT will follow the guidance set forth in the *Design Recommendations for Accessible Electric Vehicle Charging Stations*[v], published by the U.S. Access Board in July 2022. The Access Board recommends providing a reasonable number of handicap-accessible spaces at each EV charging station to ensure that equal access is provided to all users. The Access Board plans to issue a Notice of Proposed Rule Making to solicit comments from the public on the minimum number of chargers that must be accessible at EV charging stations. Until the Access Board issues further guidance, Mississippi will follow the "use last" model that will allow able bodied people to use accessible charging spaces only when all other spaces are taken. Figure 6-1 shows an example EV parking space layout from the Access Board that may be used to accommodate persons with disabilities.

Figure 6-1: Accessible EV Charging Stations



7 Existing and Future Conditions Analysis

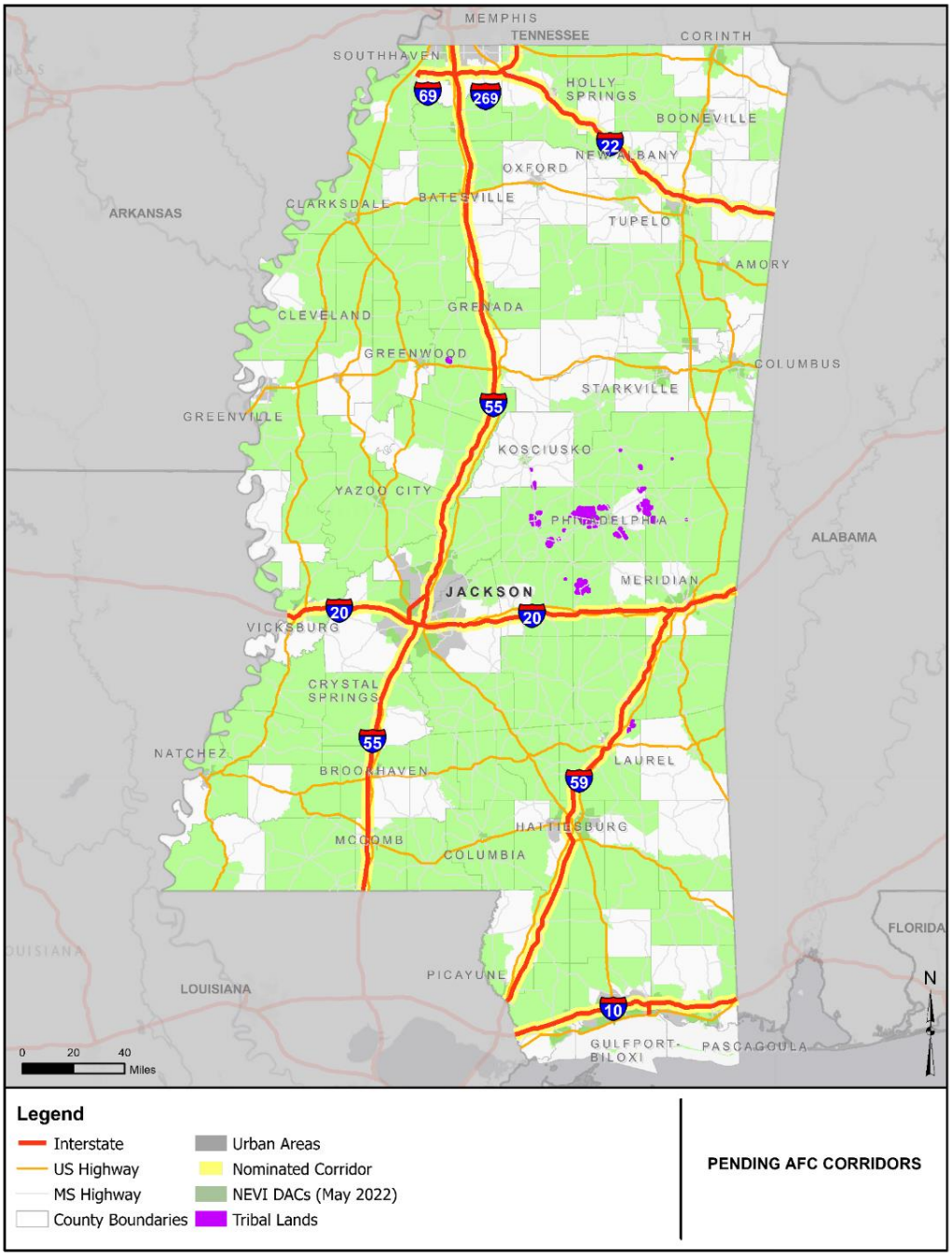
Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Added two sections from the NEVI Guidance Formula Program (Update)*
  - *7.1 AFC Designation [Page 25]*
  - *7.2 Existing Charging Stations [Page 26]*
- *Updated Figure 7-2 map on Page 27.*
- *Added a new table, now Table 7-1: Charging Station Criteria on Page 26, renumbering Table 7-1 to Table 7-2: Charging Station Locations. Table 7-2 now reflects what criteria is met in column 6 and other minor updates on Page 28-29.*
- *The 'Current EV Ownership/Availability' graphic was updated to reflect the most recent data on Page 35.*
- *Replaced Information Dissemination graphic with bullet list for Section 508 compliance on Page 37.*
- *Under Known Risks and Challenges, the 'Electric Charge' and 'Public/Private Partnership Law' sections were removed on Page 38 due to the passage of House Bill 1060 and the Senate Bill 2562 in the 2023 MS Legislative Session*

7.1 Alternative Fuel Corridor (AFC) Designation

MDOT nominated the following interstate highways in Mississippi for designation as corridor-pending EV AFCs under the NEVI Formula Program in response to the FHWA's Request for Nominations[vi] on May 13, 2022 – Alternative Fuel Corridors (2022/Round 6): I-10, I-20, I-22, I-55, I-59, Interstate 69 (I-69), and Interstate 269 (I-269), as shown on Figure 7-1.

Figure 7-1: Pending EV AFCs in the State

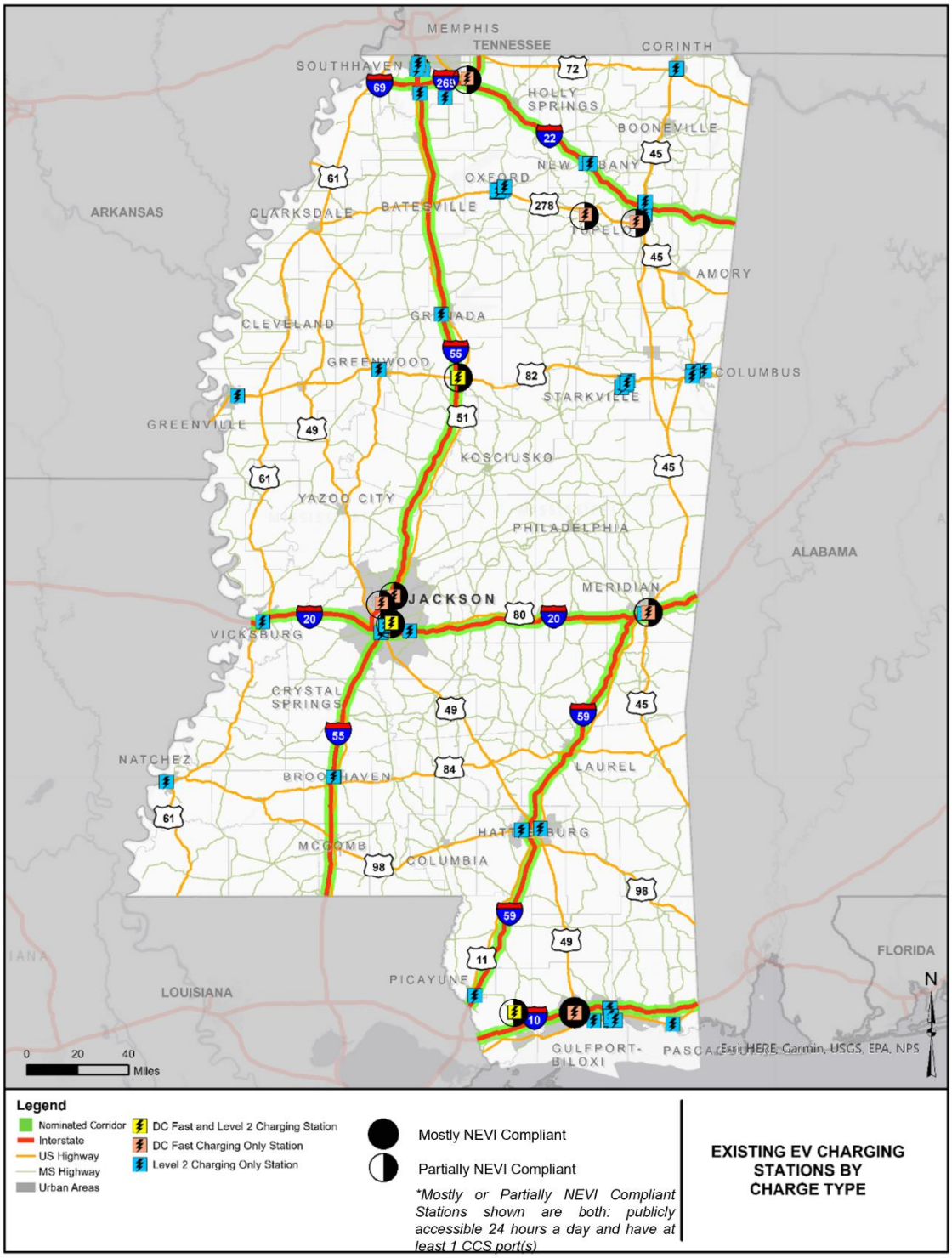


7.2 Existing Charging Stations

While the State has not deployed DCFC stations widely, DCFC stations are needed to: (1) support long-distance interregional travel to create a national network of EV charging; and (2) provide an opportunity for further EV penetration because DCFC can reduce charge time. One station in Mississippi is believed to meet most NEVI standards, but further review is needed. This station is marked as “Mostly Compliant” in

the map and table that follow. Figure 7-2 shows the location of existing public Level 2 and DCFC EV charging stations. Detailed information of existing charging locations can be found in Table 7-2 and in Appendix B, Table B-2.

Figure 7-2: Existing DCFC Locations



While the State has not deployed DCFC stations widely, DCFC stations are needed to: (1) support long-distance interregional travel to create a national network of EV charging; and (2) provide an opportunity for further EV penetration because DCFC can reduce charge time.

The NEVI Formula Program Guidance (Update) stations state that for stations to be considered creditable NEVI stations they must meet the below requirements:

Table 7-1: Charging Station Criteria

Requirement #	Criteria
1	Publicly Accessible – 24 hours per day, 7 days per week, year-around
2	Include at least four 150kW Direct Current Fast Chargers with CCS ports
3	Be capable of simultaneously charging four EVs at 150kW or above at each port, with a minimum station power capability at or above 600kW
4	Meet the minimum standards and requirements as described in 23 CFR 680.104, 23 CFR 106(b), 23 CFR 680.106(c), 23 CFR 680.106(d), 23 CFR 680.106(e), 23 CFR 680.106(f), 23 CFR 680.106(g), 23 CFR 680.106(h), 23 CFR 680.106(i), 23 CFR 680.106(k), 23 CFR 680.106(l), 23 CFR 680.108, 23 CFR 680.110, 23 CFR 680.114, and 23 CFR 680.116

Figure 7-2 shows the location of existing public EV charging, and detailed information of existing charging locations can be found in Table 7-2 and in Appendix B, Table B-2. The required criteria each station shows to meet is listed in Table 7-2 in column 6. In column 5, a 'Non-Networked' designation is for EV charging stations that are not part of an EVSE network, but still provides power. Only stations that report to be publicly available 24/7 above are shown in Table 7-2.

Table 7-2: Charging Station Locations

State EV Charging Location/ Unique ID	Route	Location Street Address	Number of Charging Ports	EV Network	Meets all Relevant Requirements in 23 CFR 680?	Intent to Count Towards Fully Built-Out Determination?
170338	I-10	10000 Factory Shops Blvd. Gulfport, MS	6	Electrify America	1, 2, 3 (4 unknown)	Not Known
102256	I-55	2030 Sunset Dr, Grenada, MS	8	Tesla	1, 3 (4 unknown)	Not Known
102257	I-20, I-59	1210 Bonita Lakes Drive Meridian, MS	8	Tesla	1, 3 (4 unknown)	Not Known

102258	I-20	200 Bass Pro Drive Pearl, MS	8	Tesla	1, 3 (4 unknown)	Not Known
153420	I-55	1432 Delaware Avenue McComb, MS	8	Tesla	1, 3 (4 unknown)	Not Known
261460	I-55	150 Goodman Rd Southaven, MS	8	Tesla	1, 3 (4 unknown)	Not Known
187281	I-10	3586 Sangani Boulevard D'Iberville, MS	12	Tesla	1, 3 (4 unknown)	Not Known
225839	I-20	4116 Washington Street Vicksburg, MS	12	Tesla	1, 3 (4 unknown)	Not Known
257705	I-55	1685 High St Jackson, MS	2	Non-Networked	1 (4 unknown)	Not Known
167278	I-55	318 Hwy 82 Winona, MS	1	SHELL_RECHARGE	1 (4 unknown)	Not Known
207935	I-20, I-59	1217 MS-39 Meridian, MS	1	ChargePoint Network	1 (4 unknown)	Not Known
237331	I-55	1016 Highland Colony Pkwy Ridgeland, MS	1	ChargePoint Network	1 (4 unknown)	Not Known

State Geography, Terrain, Climate, and Land-Use Patterns

Winter driving has always had unique requirements in the automotive industry. Vehicles must deal with navigating through snow and ice, but there is also an important requirement to maintain customer comfort by heating the vehicle interior. For more than a century, the heating requirement had never been a problem due to the abundance of waste heat that was available from the internal combustion engine. With the advent of 100 percent electric propulsion, this necessary resource to heat the vehicle interior must now be obtained utilizing systems and components that need to consume electrical energy to maintain the vehicle interior temperature. This results in a substantial decrease in range of the vehicle when compared to summertime operations. Driving uphill is another factor that could reduce the range of EVs, and driving downhill helps the vehicle generate energy with the regenerative braking system that is available in all EVs. Therefore, studying the temperature and terrain parameters is important when deploying EVs and EV infrastructure.

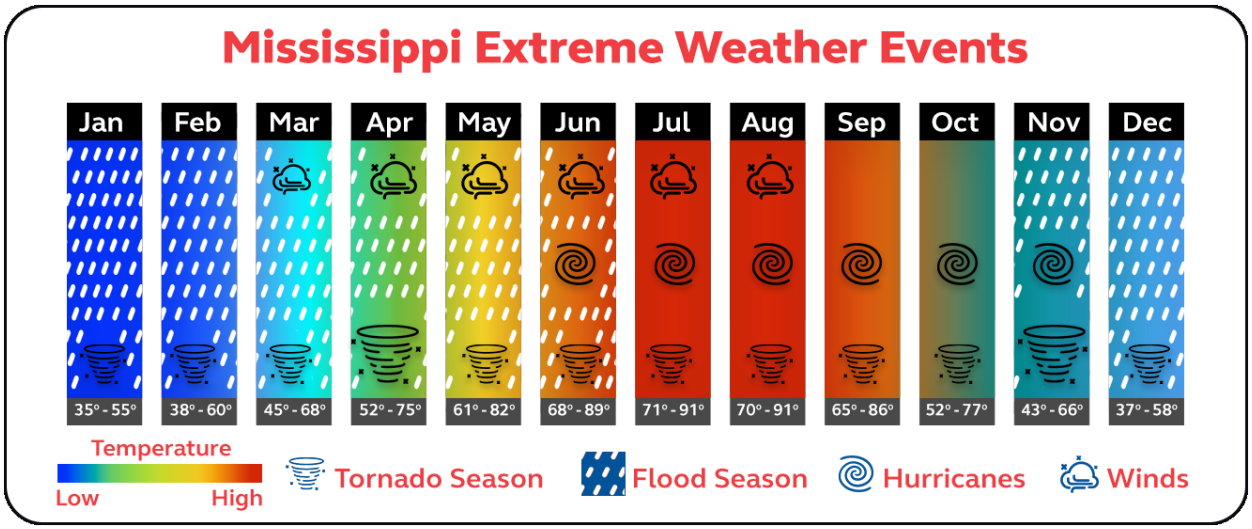
Mississippi displays relatively flat landscapes, with elevations in coastal regions dropping down to sea level and heights up to 700 feet near the Tupelo region. The southern half of the state features salt basins and scattered oil and/or gas fields, while the northern half of the state showcases a mildly hilly landscape with more variable elevations and condensed fault lines[vii]. According to the National Climatic Data Center, Mississippi's annual average temperature is around 64°F[viii]. In the summer months of June to August, the temperatures linger between 70°F and 90°F or more, with moisture circulating from the Gulf of Mexico and causing high humidity. Winter months of December to February in Mississippi are mild to cold, with average temperatures between 40°F and 60°F. Precipitation is common year-round, but very rarely does the state get any significant snow precipitation.

Recent studies on climate change show that Mississippi's average temperature has seen, and will continue to see, warming rates lower than the global and national averages. The state's temperature showed great variability in the first half of the 20th century, followed by a 10-year cool period that ended in the 1970s. Since then, the average temperature has steadily increased and is expected to continue at the same rate of warming over the next several decades[ix].

Mississippi's warm environment and flat surface offer good conditions for an EV market, as EVs operate at maximum efficiency in warmer, temperate climates, on flat terrain, and in high-density urban areas.

Extreme Weather Events

Mississippi is susceptible to many extreme weather events. These include tornados, occasional winter storms, extreme heat, hailstorms, thunderstorms, hurricanes, and tropical storms that come with damaging and significant winds, all of which are described on the following page. The figure below shows the high-activity seasons for each of these extreme weather events that appear more frequently in Mississippi.



With hurricanes and tropical storms expected to become more intense with rising sea temperatures, consideration should be given to potential damage to EV charging stations along the Gulf Coast of Mississippi and to providing a greater concentration of EV charging stations on state-established evacuation routes. Additionally, it should be noted that hurricanes can cause widespread and long-lasting power outages in Mississippi. In such events, EV owners with at-home charging equipment and interstate EV travelers will rely on public charging stations to power their vehicles. As backup power, MDOT may consider charging stations designed and installed under the NEVI Formula Program to be equipped with alternative energy sources (e.g., battery storage, diesel generator, and solar arrays) that are ready to be activated in an emergency situation like a power outage. Preference for the alternative energy sources would be given to a clean and sustainable solution whenever possible. Consideration might be made to design the EV charging infrastructure with backup power that can at least provide the appropriate lighting required in the NEVI Formula Program during a power outage for safety reasons.

MDOT has established evacuation routes and released evacuation guides for dangerous hurricane events. Interstate 10 (I-10), I-20, I-55, and Interstate 59 (I-59) were identified as primary hurricane evacuation routes and established as proposed EV AFCs, which ensures EV owners have reliable transportation in such emergency events. Special consideration will be given to the state's contraflow plan and Hattiesburg-specific traffic control procedures so that EV charging stations are not installed at exits that may be closed off to evacuees during a hurricane emergency.

HAIL AND THUNDERSTORMS

Severe hailstorms, thunderstorms, and high-wind events may become more frequent over the next century, risking property damage and power outages, and posing risks to public EV charging stations.[x]

TORNADOS

Tornados, which pose risks of power outages and damage to EV charging stations, occur year-round, but there is a distinct tornado season with a high peak of events in April and a second, smaller peak in November.[xi]

RISING SEA LEVEL

Over the last century, the sea level along Mississippi's coastline has risen about 50 percent more than the global average of 7 to 8 inches. Rising sea levels in the Gulf of Mexico may contribute to more severe damage in hurricanes.

EXTREME TEMPERATURE

Since 1900, Mississippi summers have seen an annual average of 3.2 extremely hot days, while winters have seen an annual average of 2 freezing days. Extreme temperatures can affect EV range and battery efficiency, which work best in moderate climates of 75°F.[xii]

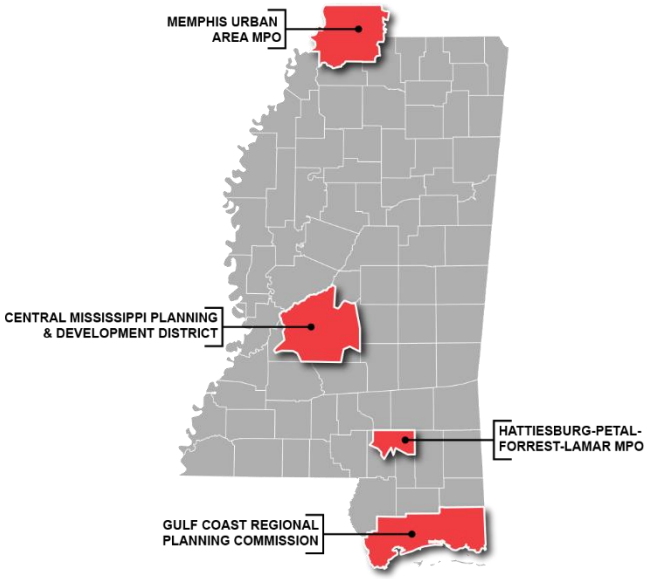
FLOODS

Mississippi can experience flooding when the Mississippi River, which runs along the state's western boundary, is at its peak. Flooding from extreme precipitation or hurricane events is common on smaller rivers in late summer and fall. Widespread flooding can be a catastrophic event, causing significant damage to EV chargers within the flood area.[xiii]

HURRICANE EVENTS

Mississippi is at risk for catastrophic damage from hurricanes. Tropical storms and hurricanes have become more intense over the last few decades and will likely continue to increase in terms of maximum wind speeds, total precipitation, and storm surges.[xiv] However, the frequency of these events may decrease in the future.[xv]

Land-Use Patterns



Mississippi's land use is largely made up of rural areas scattered relatively evenly throughout the state. Mississippi contains three main MPOs: CMPDD, HPFL MPO, and GRPC. Additionally, Mississippi is part of the shared Memphis MPO. Commercial and recreational land use is common around these MPO districts. The highly trafficked Gulf Coast Region brings in tourist revenue with its casinos, beaches, and resorts. There are also various sporting events and gatherings that drastically increase the amount of vehicular traffic and will need to be accounted for as the charging network is deployed. Mississippi also hosts major manufacturing centers for Toyota, Nissan, and Continental Tire. Additionally, Mississippi is home to multiple state parks and tribal regions scattered throughout the state.

As part of the Justice40 Initiative, the U.S. Department of Transportation (USDOT) and U.S. Department of Energy (USDOE) collaborated to define and identify DACs based on several indicators, such as transportation access, socioeconomic disadvantages, resilience disadvantages, health and environmental disadvantages, energy burden, and vulnerability. The results, as seen on Figure 10-1 in the Equity Consideration section (Section 10) of this report, showed that the vast majority of Mississippi is made up of DACs, with all seven proposed AFCs overlapping with several Justice40-identified DACs and rural areas. DACs are especially prevalent in the Mississippi Delta area.

While several counties near urban areas outside of DAC regions experienced significant population growth between 5 and 18 percent in the last decade, Mississippi's overall population decreased by 0.2 percent. This indicates a slow, statewide population shift from rural communities to more urban areas, which may affect some communities' status as a DAC and increase socioeconomic disparity across the state. Deploying EV infrastructure equitably throughout Mississippi may combat this disparity, which could slow down the decreasing population trend in DAC areas.

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

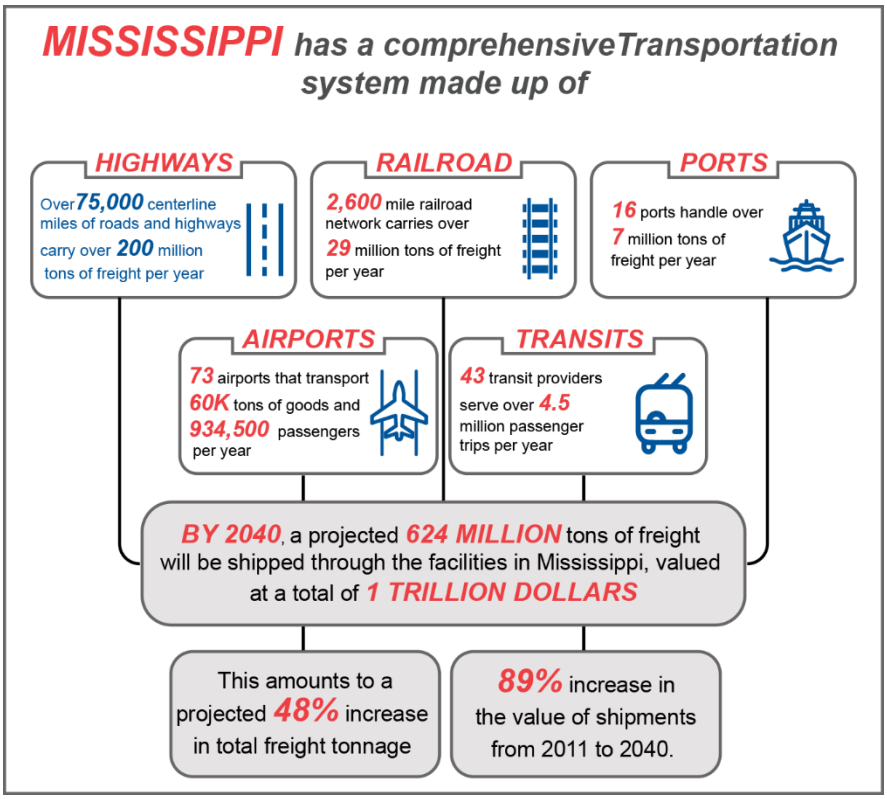
With the increasing adoption of EVs, it is essential to provide these road users with adequate charging opportunities that cater to the state's overall travel patterns. As Mississippi's total daily vehicle miles traveled and vehicle hours traveled increase with national trends, updating and maintaining Mississippi's 77,500 centerline miles of public roads and infrastructure is growing increasingly important. The state's congestion is projected to worsen over the next few decades, especially among MPO areas where traffic levels of service are commonly rated E or F during peak hours.[xvi]

94.3% of Mississippi's daily commuters drive or ride in a passenger vehicle.

5.4% of Mississippi households do not have access to a vehicle

While this Plan focuses on light-duty passenger vehicles, the state's public transportation system deserves equal attention when developing the EV charging network and grid as the adoption of battery electric buses (BEBs) is becoming more common nationwide. In fact, Coast Transit Authority (CTA) recently unveiled the first public transit BEB in Mississippi in April of 2022[xvii]. Out of Mississippi's 1,330,867 occupied housing units (2020 estimate), an estimated 71,226 housing units, or 5.4 percent, do not have access to a vehicle.[xviii] Mississippi residents without vehicle access rely on the public transportation system to make long-distance commutes. With guidance from the NEVI Formula Program, the Plan may consider EV infrastructure for rural transit, which is also an important part of the state's public transportation network.

Mississippi's robust freight network will also be considered in future plans when designing the EV charging network with NEVI Formula Program guidance. Of the seven interstate highways nominated as corridor-pending EV AFCs, five are Tier I Mississippi Freight Network corridors in the Mississippi Statewide Freight Plan[xix]: I-10, I-20, Interstate 22 (I-22), I-55, and I-59.



The 2017 Mississippi Statewide Freight Plan includes a corridor needs assessment with an emphasis on the modes that facilitate the highest volume of freight. Highway-related needs revolved around infrastructure preservations and improvements to continue the facilitation of freight movement and connections on the multimodal freight system. [xx]

EV Industry Ownership/Availability

Current EV Ownership/Availability

Currently, EV adoption is minimal in most parts of the U.S. including Mississippi. The EV adoption rate for each state in the southeast region of the U.S. is calculated to better understand the pattern and trend of EV adoption in neighboring states, as shown on the figure to the right. The top 3 states in the southeast region are Florida, Georgia, and Virginia. The state of Mississippi is ranked No. 11 of 12 for the states in the southeast region. See Table B1 in Appendix B for more details on the ranking of EV adoption rates in the southeast region.

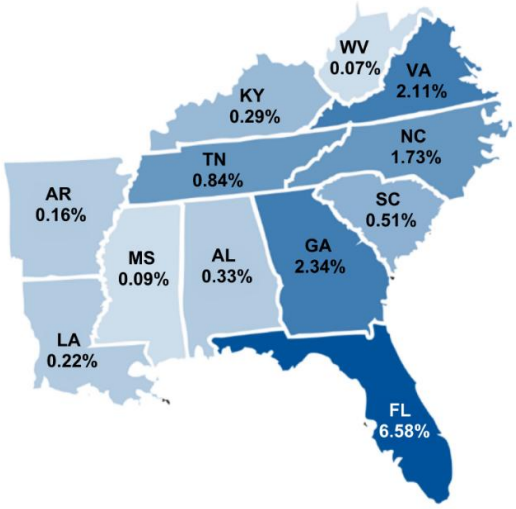
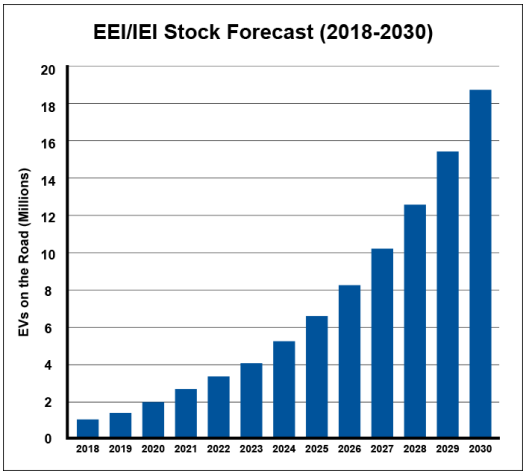


Figure 7-3: EE/EI Stock Forecast



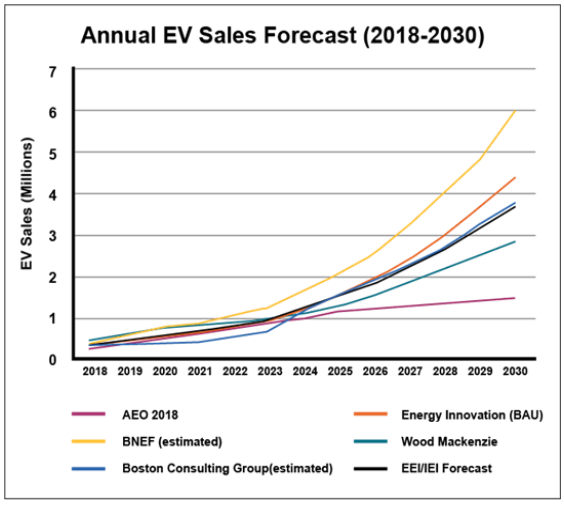
Projected EV Ownership/Availability

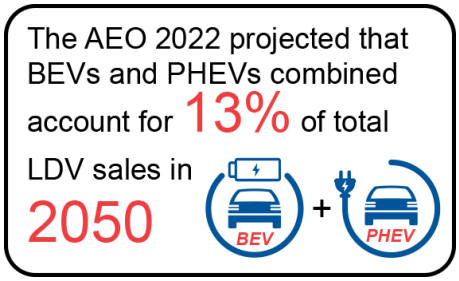
Despite low EV adoption rates in most parts of the U.S. and in Mississippi, the nationwide EV adoption rate has been increasing in recent years. This adoption rate is expected to continue to increase as more EV models become available and as public direct-current (DC) fast-charging (DCFC) stations reduce charge time. The following factors are also expected to increase the adoption rate of EVs: (1) increases in EV battery capacity, (2) options to lease the battery package instead of purchasing, (3) technology advancement allowing batteries to last longer, and (4) design standardization to allow battery swaps.

Current trends indicate that EV sales growth will continue to increase in the upcoming decade. As shown in Figure 7-3, the Edison Electric Institute (EEI)/Institute for Electric Innovation (IEI)[xxi] predicted that the number of EVs on the road is projected to grow from slightly more than 4 million at the end of 2023 to 18.7 million by 2030, which will account for approximately 7 percent of the 259 million vehicles (cars and light-duty trucks) expected to be on U.S. roads in 2030.

Figure 7-4 illustrates U.S. market sales projections for EVs from 2018 to 2030, summarizing six different market projection models[xxii]. EEI/IEI forecasts 3.5 million EV sales in 2030. Although different market projection models show different EV sale growth trends, EV sales are predicted to significantly grow in Year 2023 through Year 2030.

Figure 7-4: Annual EV Sales Forecast from Different Market Projection Models





The U.S. Energy Information Administration published the 2022 annual energy outlook (AEO)[xxiii]. Through the projection period (2021-2050), 200- and 300-mile battery-EV (BEV) sales are both projected to grow significantly. In Mississippi, the adoption rate of both BEVs and plug-in hybrid EVs (PHEVs) will increase rapidly in the future.

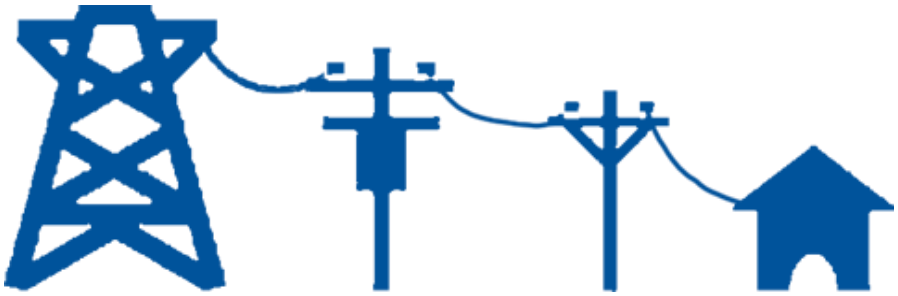
Grid Capacity Necessary to Support Additional EV Charging Infrastructure

Due to rapid proliferation of the EV industry, grid capacity has become a major concern for the electrical utility providers and the customers deploying EVs. EV charging infrastructure deployment will increase the demand for electricity, and proper planning will be critical to meet the increasing charge demand. According to Mississippi Power and Southern Company[xxiv], partnerships with major vehicle manufacturers and the Electric Power Research Institute will be important to understand the impacts of the vehicle charging on our nation's electricity grid. In other words, finding ways to supply customers with reliable electricity is one of the most important priorities for electric utility providers.

For the purpose of evaluating electricity needs within the next 5 years, if all the DCFC stations supporting 150 kilowatts (kW) per port in this Plan were utilized at the same time at their maximum rate, they would consume an additional 12 to 18 megawatts of electricity from the grid with 80 to 120 EV charging ports utilized at the same time across the state. (The number of ports is roughly estimated based on the 5-year NEVI funding allocated to the state.) MDOT will take into consideration the area providers that can supply sufficient power to meet additional electricity for EV stations.

Electric Utilities that Service the Study Area

The four main electric utility providers for the state of Mississippi are Entergy, Mississippi Power Company, the Tennessee Valley Authority, and Cooperative Energy. In addition to these, many smaller companies and municipalities also provide power within the state, as shown in Appendix B, Figure B1. When planning for the placement of EV stations, consideration will be given to the area providers that can supply reliable energy and the appropriate power to EV stations in a timely and efficient manner.



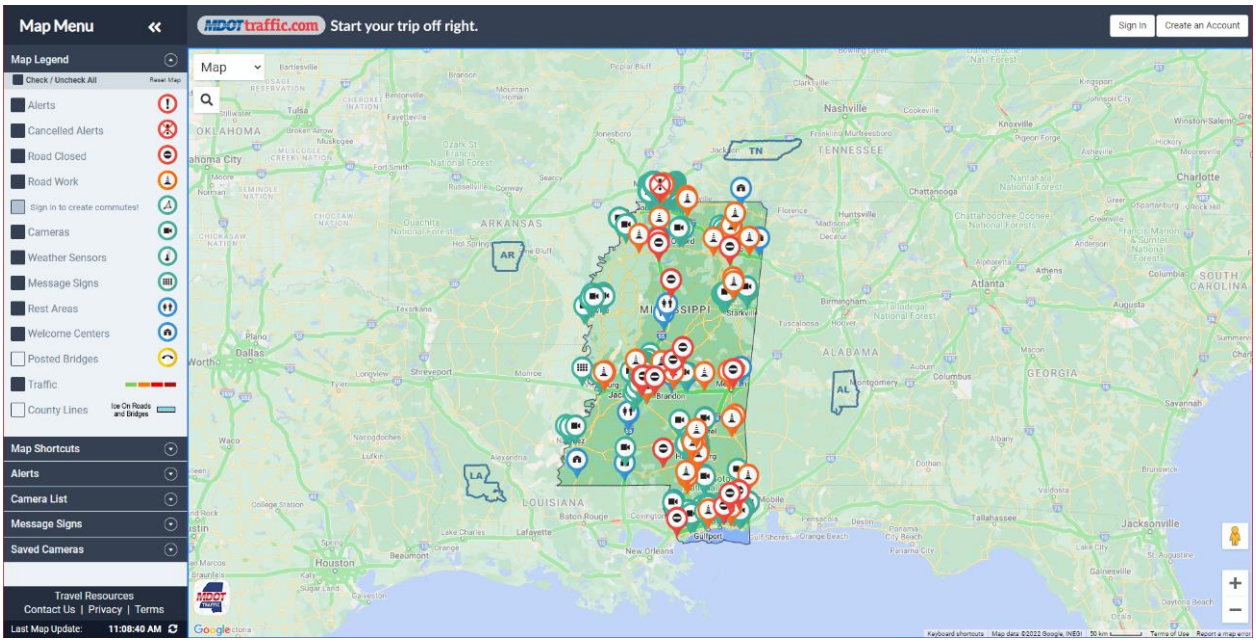
Information Dissemination about EV Charging Station Availability

There are several existing strategies and mechanisms to disseminate information about EV charging station availability to EV users that should be coordinated with charging network providers and EVSE owners to provide up-to-date information and status of EV chargers, as described below:

Use existing platform that could inform the public on available EV charging stations. (See Figure 7.5)

- Update Mississippi's traveler information websites to include publicly available charging locations.
- Promote EV charging station availability through signage, web sites, and
- social media.

Figure 7-5: Example of MDOTTraffic.com Website



Known Risks and Challenges

The following known risks and challenges could add barriers to EV charging infrastructure deployment. Due to the new laws in place, two sections were removed, Electric Charge and Public/Private Partnership Law. Some of the remaining risks and challenges identified are below:

LABOR AND WORKFORCE DEVELOPMENT

It is MDOT's intention to work with partners to ensure that required training is available to all areas of the state, including rural areas and DACs. Ensuring required training is accessible statewide could necessitate additional time to develop and deliver.

CHARGER MANUFACTURERS LEAD TIME

Current and future supply-chain issues may delay charger manufacturing lead time. With all 50 states receiving NEVI Formula Program funding over the next 5 years, the need for DCFC charging stations will skyrocket. Increasing demand and a decrease in supply may cause significant setbacks to charging station construction.

QUALIFIED WORKFORCE

Identifying licenses, certifications, and training will be required for those involved in upgrading the electric utility capabilities of each proposed DCFC site prior to building the EV charging infrastructure. This step may add delays to the overall project timeline and may pose challenges in finding qualified teams to provide these services.

RURAL AREAS

Charging stations are needed in Mississippi's rural areas to meet NEVI spacing and equity requirements; however, electricity may not be readily available at these underpopulated locations. Additionally, preferred conditions for EV charging stations, like close proximity to shopping centers and other infrastructure, may not exist in rural areas.

CHARGER COMPATIBILITY

Three different varieties of DCFCs are used by different auto manufacturers: the combined charging system (CCS) used by most manufacturers; CHAdeMO, used by Nissan and Mitsubishi; and the Tesla Supercharger, only available to Tesla drivers. Unlike universal vehicle access to gas stations, vehicle compatibility with EV chargers could be an obstacle to widespread EV adoption.

GRID CAPACITY

EVs have a much lower chance of overloading grids if charged at off-peak hours of using electricity. Level 2 charging usually happens at off-peak hours. However, the charging-load profile of DCFC differs from that of Level 2. The DCFC aligns with travel peak hours.

AVAILABILITY OF CHARGING STATIONS

When it comes to longer trips, EV drive can experience "range anxiety," the fe that the car will run out of power befor reaching a suitable charging station. While EV charging stations are being deployed across the state, it is possibl there will be gaps in coverage until th network is fully built out.

8 EV Charging Infrastructure Deployment

Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Replaced figure on Page 39 with Table 8-1 for Section 508 Compliance.*
- *An additional step was added to Table 8-1: NEVI Action Steps on Page 39.*
- *Replaced 'EV Charging Infrastructure Deployment/Upgrades' heading with 'Planned Charging Stations' on Page 40.*
- *Updated Table 8-2 Minimum Number of EV Charging Stations per Interstate to reflect station locations within 25 miles of EV AFC termini on Page 40.*
- *Replaced Increases of Capacity/Redundancy Along Existing AFC heading with Planning Towards a Fully Built Out Determination on Page 42.*
- *Added two sections to follow the NEVI Guidance Formula Program (Update)*
  - *8.1 Planned Charging Stations on Page 40 and*
  - *8.2 Planning Toward a Fully Built Out Determination on Page 42,*
    - *along with two tables: Table 8-3 on Page 42 and Table 8-4 on Page 43.*
- *Update Electric Vehicle Freight Considerations section on Page 46.*

MDOT will utilize NEVI Formula Program funding and will likely partner with the private sector to develop the EV charging stations along the AFCs. The first phase will focus on "building out" Mississippi's AFCs. In order to successfully accomplish this, MDOT will focus on providing a seamless customer experience for all users through a convenient, reliable, affordable, and equitable national EV charging network. MDOT intends to make informed decisions when developing selection criteria and deployment areas. MDOT will consider input provided by stakeholders, the public, and communities throughout the state when making these decisions in order to meet the Plan vision and goals. For a corridor to move from pending status to ready status, EV charging stations planned to be upgraded/deployed will be required to comply with the NEVI requirements on page 29 of the NEVI Formula Program BIL Program Guidance. As shown on the Table 8-1, an initial analysis using available desktop tools was conducted to identify potential station locations. An in-depth evaluation of Steps 3 and 5 will be conducted post plan approval to further determine the location of potential DC fast charging stations along AFCs.

Table 8-1: NEVI Action Steps

STEP	ACTION
1	Identify existing public DCFC stations, if any, that meet current AFC-ready requirements.
2	Identify gaps of more than 50 miles between DCFCs.
3	Identify potential interchange locations within 25 miles of EV AFC termini.
4	Identify potential DCFC areas to fill spacing gaps. Determine the following for potential DCFC areas: • Which AFCs have three-phase power within 1 mile of the nearest interstate? • Is parking, the parcel area, or the number of parcels adequate to host charging infrastructure in compliance with ADA requirements?

	Are there adjacent amenities for EV drivers to visit while their vehicles are charging?
5	Identify possible DCFC areas near Justice40 DACs.
6	Allocate a minimum of four charging ports for each charging station.

8.1 Planned Charging Stations

All of the interstates nominated to this point by Mississippi for EV AFCs were approved by FHWA in 2022. No new EV AFCs were proposed in 2023. Based on the requirements of the NEVI Formula Program discussed earlier, MDOT determined the approximate areas of proposed installations as well as the existing EV charging locations that may be upgraded. During the implementation of EV charging infrastructure, EV network providers will work with MDOT, utility companies, and private businesses to finalize the charging infrastructure locations along AFCs. Table 8-2 displays the minimum number of required stations needed along each AFC to meet the NEVI requirement of a station every 50 miles, no more than 25 miles from the EV AFC corridor termini, and at least two along each AFC route.

Table 8-2: Minimum Number of EV Charging Stations per Interstate

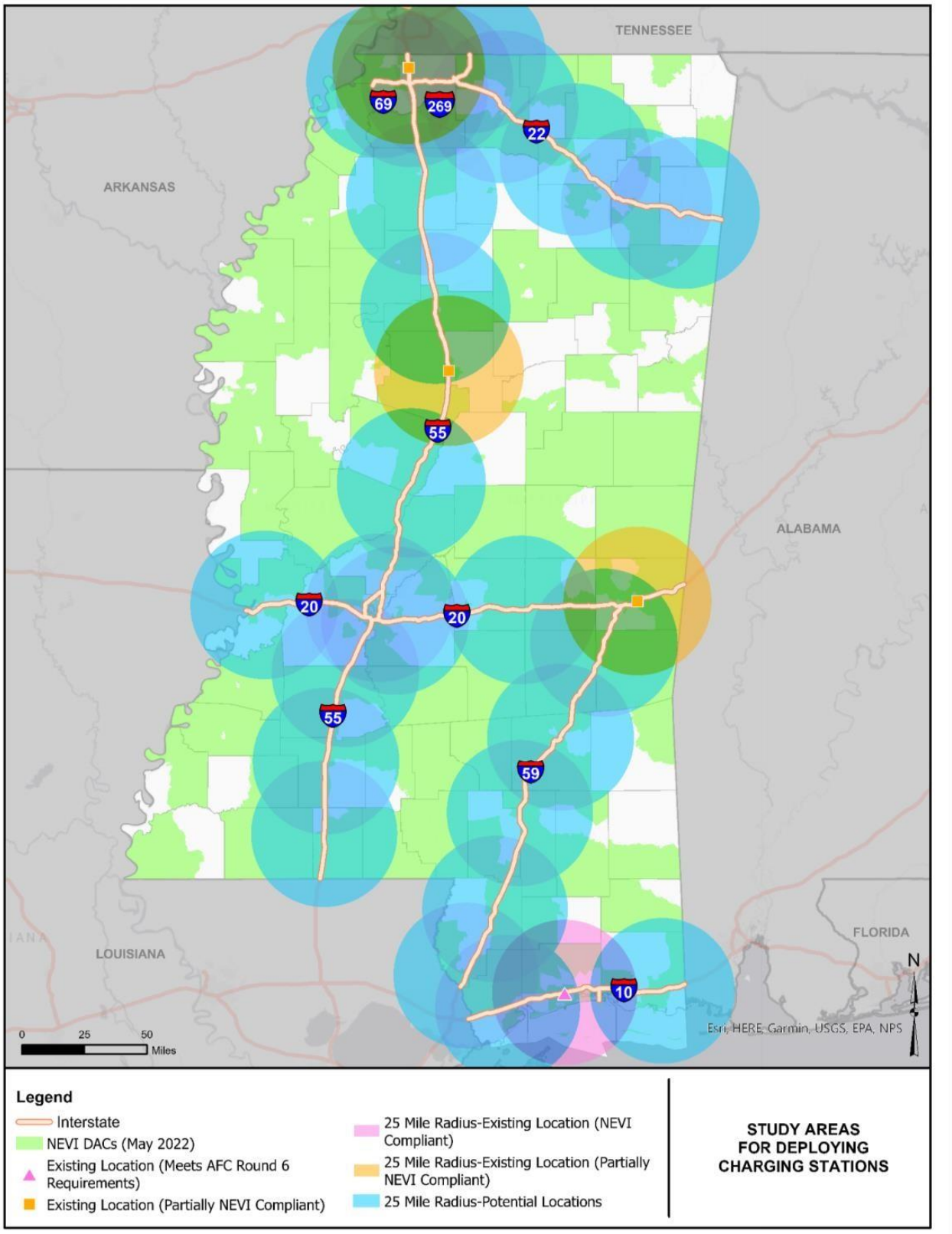
Interstate	Miles	Minimum Number of Locations
I-10	77.676	2
I-20	131.575	4
I-22	106.7	4
I-55	280.572	7
I-59	171.501	5
I-69	22.395	2
I-269	26.03	2
	Total	**26**

In order to achieve corridor-ready status on all pending AFCs, MDOT intends to meet the required minimum number of stations. Based on initial analysis considering location, current EV charging stations, access to infrastructure, available utilities, and distance to adjacent states, additional locations may be needed. Figure 8-1 displays areas within a 50-mile radius where locations are anticipated. Based on initial analysis, 25 to 30 new stations will be needed in order to meet corridor-ready status for all pending AFCs within the state.

Based on industry outreach to EVSE providers, it was assumed that the average cost to build a new NEVI-compliant site would range from $500K to $1.5M. This cost does not include miscellaneous project costs, alternative energy-source deployment, project and program management, reporting, training, and future-proofing the design to increase the stations' charging capability. During the implementation plan, additional charging infrastructure areas will be added in a manner that makes maximal efficient use of federal funding. These additional locations will be selected by taking into

consideration travel patterns and annual average daily traffic, future NEVI requirements and guidelines, high-density areas, evacuation routes/needs, disadvantaged communities, zoning, permitting, and potential future freight and transit EV charging network guidelines, etc.

Figure 8-1: Study Areas for Deploying Charging Stations



Stations Under Construction

MDOT is not aware of any stations under construction. Table 8-3 was included for consistency and will be filled in as stations are constructed.

Table 8-3: Charging Stations Under Construction

State EV Charging Location/ Unique ID	Route (Note if AFC)	Location (Street Address, if Known)	Number of Charging Ports	Estimated Year Operational	Estimated Cost	NEVI Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25, FY26 or FY27+)	New Location or Upgrade?

8.2 Planning Toward a Fully Built-out Determination

The following table, Table 8-4, identifies potential planned stations. This table will be refined over the next year to identify the stations to be deployed first. It is possible some of the existing stations could be upgraded to NEVI standards. That decision will be made between MDOT and the third-party vendors as implementation progresses.

Table 8-4: Charging Planned Stations

State EV Charging Location/ Unique ID [UNIDEN-TIFIED AT THIS TIME]	Route (Note if AFC)	Location (Street Address, if Known)	Number of Charging Ports	Estimated Year Operational [UNKNOWN AT THIS TIME]	Estimated Cost	NEVI Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25, FY26 or FY27+) [FUNDING SOURCES ESTIMATED]	New Location or Upgrade?
	I-10	Within 25 miles of LA border	Min. 4		$500K to $1.5M	FY22/23 & FY24+	New Location
	I-10	Within 25 miles of AL border	Min. 4		$500K to $1.5M	FY22/23 & FY24+	New Location
	I-20	Within 25 miles of LA border	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-20	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-20	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-20	Within 25 miles of AL border	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-22	Within 25 miles of I-269 interchange	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-22	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY26/27+	New Location

	I-22	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-22	Within 25 miles of AL border	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-55	Within 25 miles of LA Border	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-55	Within 25 miles of I-69/I-269 Interchange	Min. 4		$500K to $1.5M	FY24 & FY25+	New Location
	I-59	Within 25 miles of LA border	Min. 4		$500K to $1.5M	FY22/23 & FY24/25+	New Location

	I-59	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY22/23 & FY24/25+	New Location
	I-59	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY22/23 & FY24/25+	New Location
	I-59	Within 50 miles of previous station	Min. 4		$500K to $1.5M	FY22/23 & FY24/25+	New Location
	I-59	Within 25 miles of AL border	Min. 4		$500K to $1.5M	FY22/23 & FY24/25+	New Location
	I-69	Within 25 miles of AFC southern termini	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-69	Within 25 miles of TN border	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-269	Within 25 miles of I-55 interchange	Min. 4		$500K to $1.5M	FY26/27+	New Location
	I-269	Within 25 miles of TN border	Min. 4		$500K to $1.5M	FY26/27+	New Location

Funding Sources

Successful partners selected to participate in this program will contribute a minimum of 20 percent of the NEVI funding and work with MDOT, utility companies, and private businesses to deploy EV charging stations along AFCs. EV network providers will collect fees from station operations and be responsible for maintenance, operations, and reporting going forward. FHWA has released the 5-year NEVI funding by state. The total 5-year funding available for Mississippi to deploy its EV charging infrastructure network is anticipated to be $50,557,563. With this amount of funding available, MDOT can estimate the

amount of charging infrastructure that can be deployed using the worst-case scenario cost provided by charging operators.

Electric Vehicle Freight Considerations

MDOT's freight coordinator has been involved throughout the development of this Plan. The NEVI Formula Program was presented to the FAC in May 2022. Considerations regarding freight that may be given to locations with potential for medium- to heavy- freight movement are (1) proximity to freight corridors and major distribution hubs (2) future-proofing measures for higher than > 150 kW speeds (3) pull-through site (4) wide ingress and egress and (5) longer cable lengths.

Public Transportation Considerations

MDOT met with their Transit Division to help guide public transportation considerations in the EV Infrastructure deployment plan.

CTA currently operates with a fleet of hybrid electric and dual-fueled buses. CTA unveiled Mississippi's first-ever Battery Electric Bus (BEB) in April 2022. Funding for the BEB was made possible by the USDOT, Mississippi Power, and the CTA. There are other rural transit agencies in Mississippi that will be considered in future updates.

Infrastructure Deployment Strategy & Fiscal Years 24-26 Infrastructure Deployments

For the past two years, MDOT has worked on gathering additional information to make informed decisions on the most efficient, reliable, and equitable deployment of the EV infrastructure. Further information and input are expected to be obtained through an RFI, continuation of stakeholder meetings, and public engagements. Through future engagements, MDOT will begin to develop quantifiable and meaningful metrics for benefits, including those to DACs. Additionally, in an effort to study locations and continue outreach, MDOT is currently working on developing and deploying an interactive location map. MDOT will then begin the RFP process for development of EV charging infrastructure installation using information and input provided by stakeholders and future engagements. During the remaining funding period, MDOT intends to issue the RFP and award contracts totaling up to $15M annually to install EV charging infrastructure.

State, Regional, and Local Policy

MDOT will work to coordinate and connect regionally with other states and adjoining networks. The Plan will rely on third-party entities to coordinate with local property owners and municipalities on zoning and permitting. MDOT will monitor developments at the state and local levels during implementation of this Plan and provide updates to state and local officials when requested.

9 Implementation

Updates from 2022 Plan:

- *Added "current prices" to list of information that must be readily available on Page 48, 3rd bullet in the Strategies for EVSE Data Collection & Sharing bullet list.*
- *Added a section stating that all signage must follow MUTCD on Page 49, last paragraph.*
- *Minor edits for clarity.*

Strategies for EVSE Operations & Maintenance

MDOT plans to set requirements to be followed by vendors and subcontractors for operation and maintenance of the EV charging stations. Monitoring and service-level agreements for station performance will be specified in the contract, and MDOT will monitor station up time through vendor-reported usage data and general user satisfaction on publicly accessible third-party charging websites. MDOT will ensure that the operations and maintenance requirements of the NEVI Formula Program are followed by the contractor responsible for the infrastructure. MDOT plans to regularly monitor implementation of the operations and maintenance procedures to ensure the agreed-upon requirements are being met.

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

MDOT plans to be fully knowledgeable on the different ownership opportunities for the charging stations, the best ways to maximize federal funds, and the most efficient ways to select and collaborate with charging service providers and property owners of potential charging station locations.

MDOT is likely to explore contracting mechanisms, such as design-build and public-private partnerships, to select the potential station owners and EV charging service providers, with consideration given to the level of involvement of MDOT staff for each option.

Considerations for selecting an EV charging service provider may include the following, but are not limited too:

- Compliance with NEVI guidance.
- Cost.
- Product reliability.
- Lead time.
- Adherence to MDOT policies and procedures.
- Service provider experience with EV operations, qualifications, trainings, certifications, etc.
- Maintenance and warranty package.
- System redundancy.
- Cybersecurity.
- Buy America Compliance.

Considerations for selecting a station owner may include the following, but are not limited too:

- Ability to provide enough space and power for at least four 150kW charging stations without extensive utility upgrade needs.

- Ability to meet ADA requirements.
- Proximity to other proposed stations and distance to interstate.
- Ability to meet existing and future NEVI Formula Program requirements, including Justice40 goals.
- Ability to prove that the station will be located in a safe and convenient location.
- Financial reliability of the business owner to support the infrastructure, operations, and maintenance.

Strategies for EVSE Data Collection & Sharing

MDOT will seek to ensure that all local, state, federal, and NEVI Formula Program existing and future requirements and guidelines regarding data collection and sharing are met. Additionally, all third-party entities who own, operate, and maintain EV stations will follow the guidelines described in the Physical Security and Cybersecurity section of this report (Section 12).

Some potential types of data MDOT may require from vendors include:

- Charging station location.
- Charging station type.
- Current prices, operational status, and availability to the public.
- Usage stats, such as charging station uptime, power dispensed, and $/kWh, required by FHWA's final regulation of minimum standards and requirements for the NEVI Formula Program.

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

Installing easily accessible charging stations near interchanges, interstates, and commercial sites with robust physical and cybersecurity is key to creating a useful and resilient EV charging network in Mississippi. Prioritizing resiliency through reliable communication systems and connection to the power grid will help build a long-lasting charging network that maximizes federal funding. MDOT will evaluate alternative energy source plans (e.g., battery storage, diesel generators, solar arrays) ready to activate in emergency power outage events. MDOT may also add requirements to this effect during the procurement process to ensure that the EV infrastructure stations are meeting at least the minimum lighting requirement during a power outage. Consideration will also be given to strategies to provide redundant communication solutions in the event of a natural disaster.

Hurricanes are the biggest natural disaster threat to Mississippi's charging station infrastructure. To mitigate risks posed to EV owners in Mississippi by devastating storms, consideration will be given to propose EV charging locations on hurricane evacuation routes. MDOT may investigate strategies used by companies like Tesla, AAA, and Ample Technologies to ensure charging stations are fully functional during disasters to create a safe and reliable fuel network for EV-owning evacuees.

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

MDOT will ensure all third-party entities who own, operate, and maintain EV stations provide and implement quality labor and workforce consideration plans that discuss methodologies for strong labor, safety, training, and installation standards (see Labor and Workforce Considerations (See Section 11 for details). MDOT plans to follow local, state, and federal guidelines regarding awarding contracts to small businesses as vendors and charging station owners. Similarly, MDOT will follow FHWA's final regulations of minimum standards and requirements for the NEVI Formula Program.

Traffic Control Devices

MDOT will ensure that all traffic control devices related to NEVI charging stations will follow the MUTCD and the Highway Beautification regulation at 23 CFR 750.

10 Equity Considerations

Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Added bulleted list explaining how we will engage with stakeholders, the public, and those working and living within DACS under Section 10.1 on Page 52.*
- *Updates to meet Justice 40 and Executive Order 14008 on end of Page 52 2nd paragraph.*
- *Added table listing potential NEVI benefits and measures. Table 10-1, Page 53 after last paragraph.*

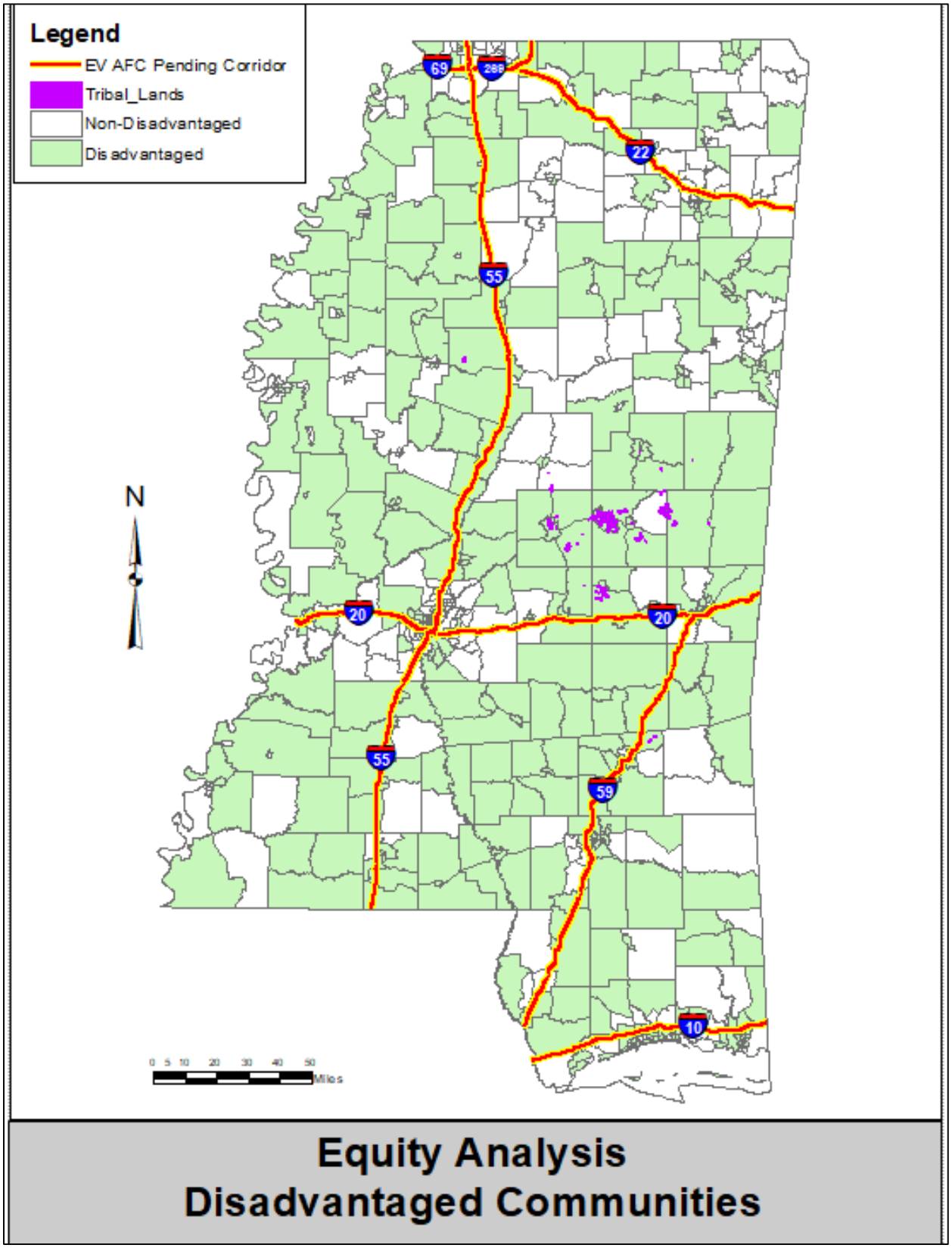
MDOT will follow the NEVI Formula Program guidance regarding equity considerations. The program will support the Justice40 Initiative as a part of Executive Order 14008, which establishes a goal that at least 40 percent of the benefits of federal investments in climate and clean-energy infrastructure are distributed to DACs.

MDOT's strategy to adhere to the Justice40 goal includes three main components:

- Supporting and facilitating public outreach with rural communities, underserved communities, DACs, and stakeholders, including suppliers and contractors.
- Identifying and investigating EV charging station benefits to ensure that at least 40 percent of the investment benefits DACs.
- Ensuring all potential contractors/workers have equal opportunity to access adequate training. MDOT may utilize its in-house Local Assistance Training Program (LTAP) to provide the necessary training for charging center contractors and districts/division personnel regarding EV charging stations and charge-management software.

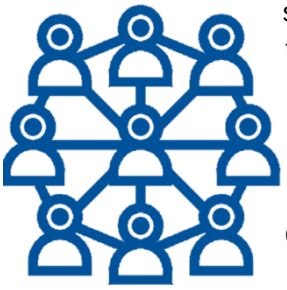
According to data from the Argonne National Laboratory (ANL) EV Charging Justice40 Mapping Tool, DACs cover 75% of Mississippi's land area, and 55% of Mississippi's proposed AFC mileage will traverse DACs. MDOT intends to place at least 40% of the NEVI charging stations within DACs. Placement of stations within DAC areas will ensure that the benefits of this program provide a significant boost to the disadvantaged communities in the state. Figure 10-1 presents a map of DACs in Mississippi (ANL).

Figure 10-1: Argonne National Laboratory (ANL) EV Charging Justice40 Mapping Tool Justice40 DACs



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

MDOT will continue to identify DAC stakeholders and refine survey questions and methods to ensure a meaningful community engagement process. The Justice40 Interim Guidance suggests using existing data sources and indicators, (e.g., poverty high energy/housing/transportation burden), to define DACs in the context of this Plan. To comply with this guidance, MDOT plans to continue to consult with identified DAC stakeholders to ensure public participation in the Plan. Diverse views should be heard and considered throughout the planning process, and the deployment, installation, operation, and use of EV charging infrastructure should achieve equitable and fair distribution of benefits and services.



MDOT has and intends to continue to use the following methods to engage with stakeholders and the public, including those residing or working in DACs:

- Publicize the NEVI program on social media platforms and encourage interested parties to complete the survey.
- Present the NEVI Program to each of the three Mississippi MPOs (Jackson, Hattiesburg, and the Gulf Coast) and the Memphis MPO. At each meeting, MDOT will invite the participants to complete the online survey, and also ask them to encourage others to complete the survey after the meeting.
- Present the NEVI program at the Annual Conferences for the Mississippi Municipal League and the Mississippi Association of Supervisors. Attendees will be encouraged to complete the survey and to provide any additional information that will benefit the NEVI Program or improve its impact on DACs.

MDOT will continue to gather public input throughout the lifespan of the NEVI Formula Program by collecting public surveys and engaging with MPOs and locals to ensure equitable delivery of EV infrastructure. MDOT will continually review and refine its community engagement to enable a more inclusive, accessible, and transparent process.

10.2 Process to Identify, Quantify, and Measure Benefits to DACs

MDOT will ensure that at least 40 percent of the targeted EV infrastructure benefits flow toward DACs in accordance with Justice40 and Executive Order 14008.

MDOT's initial engagements were focused on learning about the industry, bringing awareness to the program, developing relationships, gaining input through the online survey, and identifying barriers to deploying EV charging infrastructure within Mississippi. Going forward, through community engagement with DAC representatives and residents, MDOT will make informed decisions on the best ways to deliver program benefits to these areas. One example will be to include consideration for the installation of charging stations within DACs in the criteria for charger locations in the RFPs.

It is expected that the USDOE/USDOT Joint Office will establish national standards to measure program benefits at some point. Once established, MDOT will use those standards, rules, and guidelines, along with other measures specific to Mississippi, to help identify and measure the benefits to DACs. MDOT will also incorporate the Justice40 language in the EV infrastructure program management scope of services to ensure compliance with all current and future NEVI Formula Program requirements.

In 2023, MDOT conducted a second survey, a Community Engagement Survey, geared specifically at gaining input from DACs. The survey was presented at all meetings and engagements where people who live or represent a DAC maybe in attendance. The intent of the survey was to assist MDOT in its decision-making processes to identify, prioritize, and measure benefits specially towards Justice40 communities. In looking at the survey results, key metrics, including what benefits do the public see the EV infrastructure program providing most to the community, what valuable measure would benefit the community, locations of where the public would like charging stations to be placed, and the ranking of program benefits, have provided MDOT with additional insight and helped to shape some of the strategies in this Plan. Results from the survey can be seen in Section3 and the complete survey results are provided in Appendix A.

MDOT intends to have community stakeholders meaningfully involved in defining what constitutes the "benefits" of the program. Using feedback acquired during DAC engagements along with suggested benefits and metrics provided by the Joint Office, MDOT will compile a list of benefits they anticipate measuring and tracking toward the Justice40 goal. Some of the expected benefits are shown in Table 10-1. Strategies for tracking benefits are still being determined, but some examples for tracking benefits may be location, emission calculations, and use of infrastructure.

Table 10-1: Potential NEVI Program Benefits

Benefits Category (examples)	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Improve clean transportation access through the location of chargers	To Be Determined (TBD)
Decrease the transportation energy cost burden by enabling reliable access to affordable charging	TBD
Reduce environmental exposures to transportation emissions	TBD
Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities	TBD
Increase energy resilience	TBD
Increase equitable access to the electric grid	TBD

Once the benefit metrics are identified, they will be regularly monitored to ensure compliance with the Justice40 Initiative.

11 Labor and Workforce Considerations

Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Electricians must be EVITP certified on Page 54, Paragraph 2.*
- *Added paragraph describing Mississippi's workforce of electricians. It includes a discussion of how the State will ensure that the workforce installing, maintaining, and operating chargers has appropriate licenses, certifications, and trainings in compliance with 23 CFR 680.106(j) on Page 54 Paragraph 2.*

Through the implementation of the state's EV charging program, new workforce opportunities will be created for Mississippians, especially those who live or work in DACs. Installers, maintenance technicians, electrical workers, and various other skilled workers will be needed to serve this new industry.

NEVI contracts in Mississippi will include a provision requiring that with the exception of apprentices, the electrical workforce installing, maintaining, or operating the chargers shall be certified through the Electric Vehicle Infrastructure Training Program (EVITP). Mississippi had 5,020 electricians recognized by the Bureau of Labor Statistics (BLS)[xxv] in 2022. However, only 18 electric companies registered in the State of Mississippi currently employ EVITP Certified Electricians[xxvi]. The NEVI program presents an excellent avenue for Mississippi to strengthen its electrical workforce and to provide growth opportunities for people living or working in DACs.

MDOT will work alongside the appropriate state agencies to develop training programs to support these workforce opportunities. Coordinating with the MDA, MDA's Office of Energy, and the Department of Education, MDOT will ensure that the appropriate colleges, universities, education programs, and industry partners are included when developing and deploying training programs. MDOT also plans to work with its in-house Local Technical Assistance Program (LTAP) to identify the best opportunities and resources for workforce training and to help support the workforce needs of the state's EV infrastructure deployment program.

MDOT plans to follow all current and future established local, state, and federal regulations regarding training, licenses, certifications, experience level, and diversity of the workforce used to install and maintain EV charging infrastructure. Additionally, MDOT will follow FHWA's final regulations of minimum standards and requirements for the NEVI Formula Program.

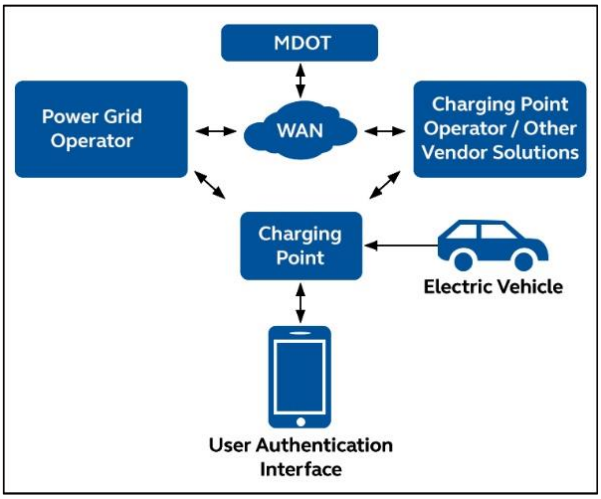
12 Physical Security and Cybersecurity

Updates from 2022 Plan:

- *Made minor edits for clarity.*
- *Added paragraph describing the physical security aspects of the charging stations on Page 56 paragraph 2.*

As technology rapidly advances, physical security, personal privacy risks and cybersecurity become more of an ever-evolving obstacle. EV charging stations have the potential to allow exposure to consumer data, the charging infrastructure, and the electric grid through the networked equipment. To combat this risk, MDOT's proposed EV charging infrastructure implementations will meet the critical infrastructure security obligations dictated by local, federal, state, and other regulatory bodies, including the recommendations outlined in the National Institute of Standards and Technology Cybersecurity Framework. MDOT intends to develop and implement strategies to address all physical security and cybersecurity requirements under 23 CFR 680.

From the perspective of physical security, MDOT plans to put precautions in place to help provide a safe consumer experience and keep the EV charging stations from being damaged. These precautions may include but are not limited to lighting, video surveillance, emergency call boxes, siting, and station design to ensure visibility from onlookers, charger locks and protective payment methods.



From the perspective of cybersecurity, MDOT's precautions include but are not limited to user identity and access management, selection of appropriate encryption systems, intrusion and malware detection, event logging and reporting, management of software updates, and secure operation during communication outages. MDOT will contract with third-party entities for NEVI deployment, and those entities will be required to perform detailed security assessments and ensure compliance with all requirements and policies identified in the procurement documents. It is MDOT's intent that the third-party entity who owns, operates, and maintains the EV charging station will develop an information security management plan and cybersecurity management plan. These plans will provide guidance on risk assessments for personnel involved with the proposed charging infrastructure, and provide strategies consistent with this document, procurement documents, and any other guidance provided by MDOT.

The communications network infrastructure should be specific to each site and its geographic location, and at the end of the project, it should be demonstrated that all federal, state, and local cybersecurity requirements were met.

13 Program Evaluation

Updates from 2022 Plan:

- *Made minor grammatical edits for clarity.*

Though there are currently no updates for the Program Evaluation section from the 2022 Plan, once EV chargers are installed this section will include a summary and assessment of their performance based on data submitted to the Joint Office in compliance with 23 CFR 380.112.

MDOT recognizes the importance of implementing an effective and successful EV network. Using data and feedback received from stakeholders, including stakeholders who represent DACs, Mississippi will update the Plan annually to best reflect the current goals of the program. MDOT will continue to engage with stakeholders, including DACs, to ensure that the program is creating an equitable and reliable EV infrastructure for the state of Mississippi. To monitor and report progress of the overall statewide EV network, MDOT may develop a data-driven program evaluation report that complies with FHWA final regulations of minimum standards and requirements for the NEVI Formula Program, as well as MDOT tools and practices to ensure accountability and program success. In its annual updates, MDOT plans to address opportunities for improvement by regularly producing and utilizing project-level and program-level performance metrics. Engagement with stakeholders, including input from stakeholders representing DACs, will assist in the development of evaluation metrics. MDOT also plans to ensure that the report documenting key program performance metrics will be submitted annually to the Joint Office. Some examples of metrics that may be addressed in the report are included in Table 13-1.

Table 13-1: Program Evaluation Plan

	Program Evaluation Plan Element	Performance Metrics Addressed
	**Program Progress Breakdown**	• Number of charging stations constructed and in construction. • Average time required to construct new charging stations.
	**Design Evaluation**	• Assessing the effects of proposed designs, taking into consideration issues such as product safety, durability, strength, acceptance, and usefulness. • Lessons learned, unforeseen and unintended consequences from the designs. • Design Failure Mode and Effect Analysis from EV charging infrastructure manufacturers and operators.
	**Cost-Effectiveness Evaluation**	• Quantity of funds distributed. • Number of funding recipients. • MDOT EV infrastructure costs versus other states' EV infrastructure costs. • Outputs or outcomes compared to internal and external costs of the program.

	Program Evaluation Plan Element	Performance Metrics Addressed
	**Process Evaluation**	• Performance compared to NEVI initial and future requirements. • Customer, public, or stakeholder engagement, expectations, and actions taken. • Contract compliance of EV infrastructure providers.
	**Outcome Evaluation**	• An assessment of the program's progress toward its 5-year vision and goals. • Root cause analysis of the differences between the outcomes and the established MDOT missions and goals.
	**Impact Evaluation**	• Number of clean-energy jobs created, including the jobs created within DACs. • Change in EV adoption rates within DACs compared to EV adoption rates outside of DACs. • Improvements to EV charging infrastructure access and equitable distribution. • Change in greenhouse gas emissions (if measurable). • Implementation of ADA-compliant facilities. • Assessment of EV trainings, licenses, and certifications. • Proximity of EV stations to DACs. • EV charging station usage within DACs compared to EV charging station usage outside of DACs. • Evaluation of the utility cost. • Impact of EV charging on the grid. • Smart-charging data analysis to improve operations based on customer feedback. • Charging station availability, idle time, uptime, average charge time, station location demand, port utilization.
	**Operations and Maintenance Evaluations**	• Number of maintenance orders created for EV charging infrastructure. • Time to address maintenance orders. • Cybersecurity issues reported. • Operational status report. • EV charging infrastructure usage rates. • Customer satisfaction ratings. • Required data collection from the FHWA.

14 Discretionary Exemptions

Updates from 2022 Plan:

- *Made edits to comply with the NEVI Guidance Formula Program (Update).*

There is currently no anticipated need for discretionary exceptions to FHWA's requirement that charging infrastructure must be installed every 50 miles along that state's portion of the interstate highway system within 1 travel mile of the interstate or 25 miles from corridor termini. However, if an exception is necessary to create an effective and equitable EV charging network in Mississippi, MDOT plans to comply with FHWA final regulations of minimum standards and requirements for the NEVI Formula Program in documenting these exceptions in future plan updates.

Appendix

Appendix A: Public Survey Results

Table A-1: What benefit(s) do you see the Electric Vehicle Infrastructure program providing most to your community?

Benefit	Count
Improved access to charging stations in your community	9
Creating more job opportunities, training, and business in the clean energy sector for your community	8
Improved air quality by reducing transportation emission	6
Reliable access to affordable charging	3

Figure A-1: What benefit(s) do you see the Electric Vehicle Infrastructure program providing most to your community?

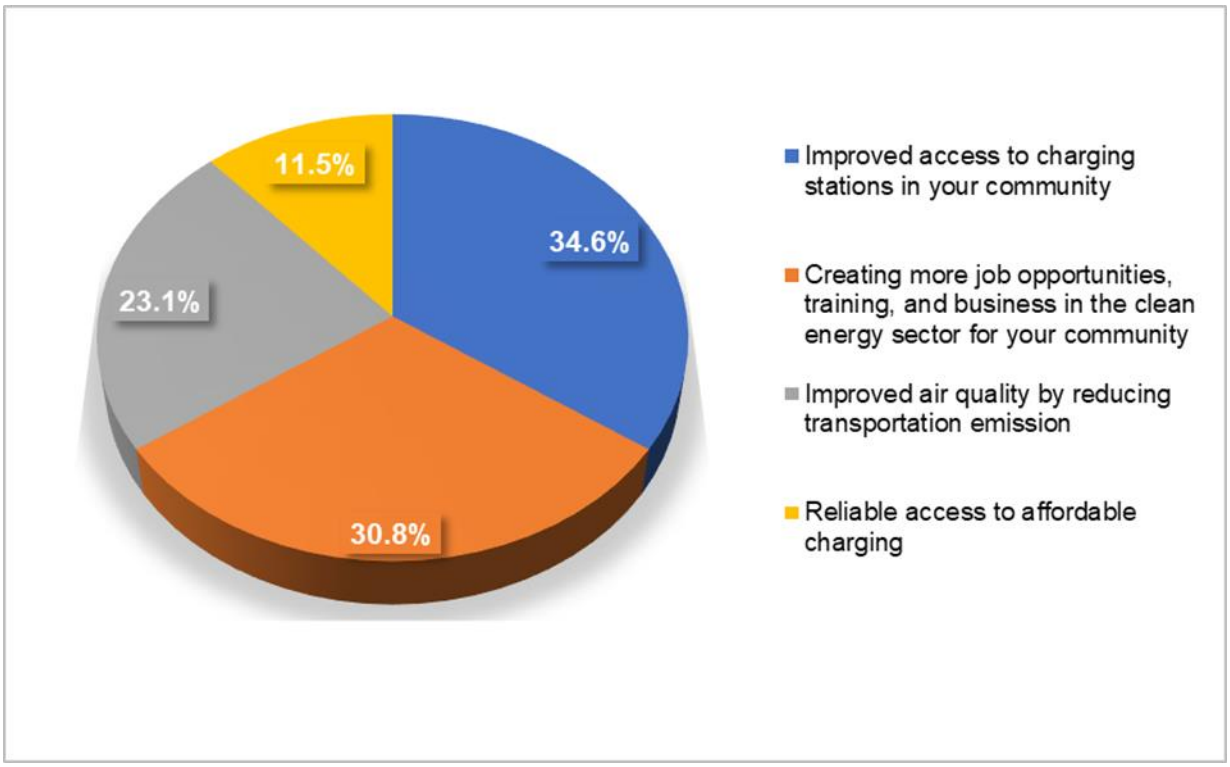


Table A-2: What would you see as a valuable measure to show the EV Infrastructure program has benefited your community?

Valuable Measure	Count
Location of electric vehicle charging stations	8
Increase job creation	7
Increased employment	6
Increased training enrollment	5
Improved air quality	4

Figure A-2: What would you see as a valuable measure to show the Electric Vehicle Infrastructure program has benefitted your community?

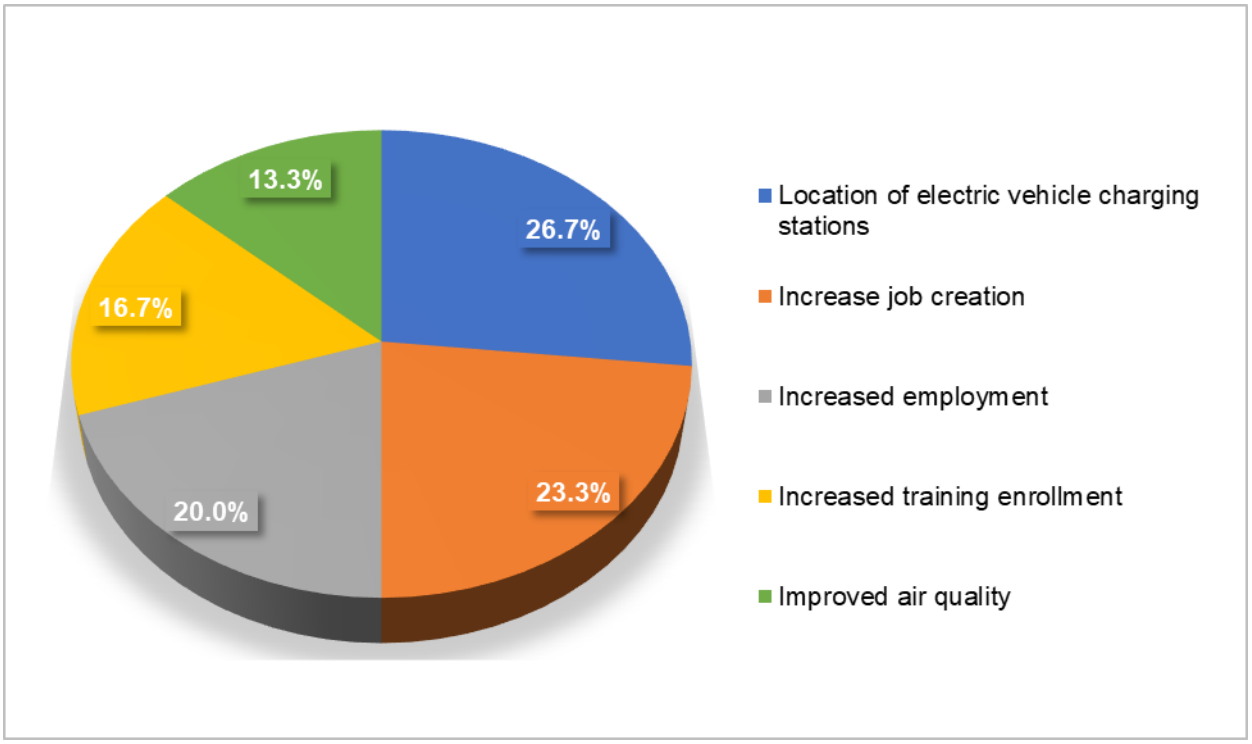


Table A-3: Where would you like to see electric vehicle charging stations in your community?

Locations	Count
Close to places of employment	11
Close to grocery stores	8
Close to recreation	6
Close to schools	4
Close to healthcare	3
Other: Retail	1

Figure A-3: Where would you like to see electric vehicle charging stations in your community?

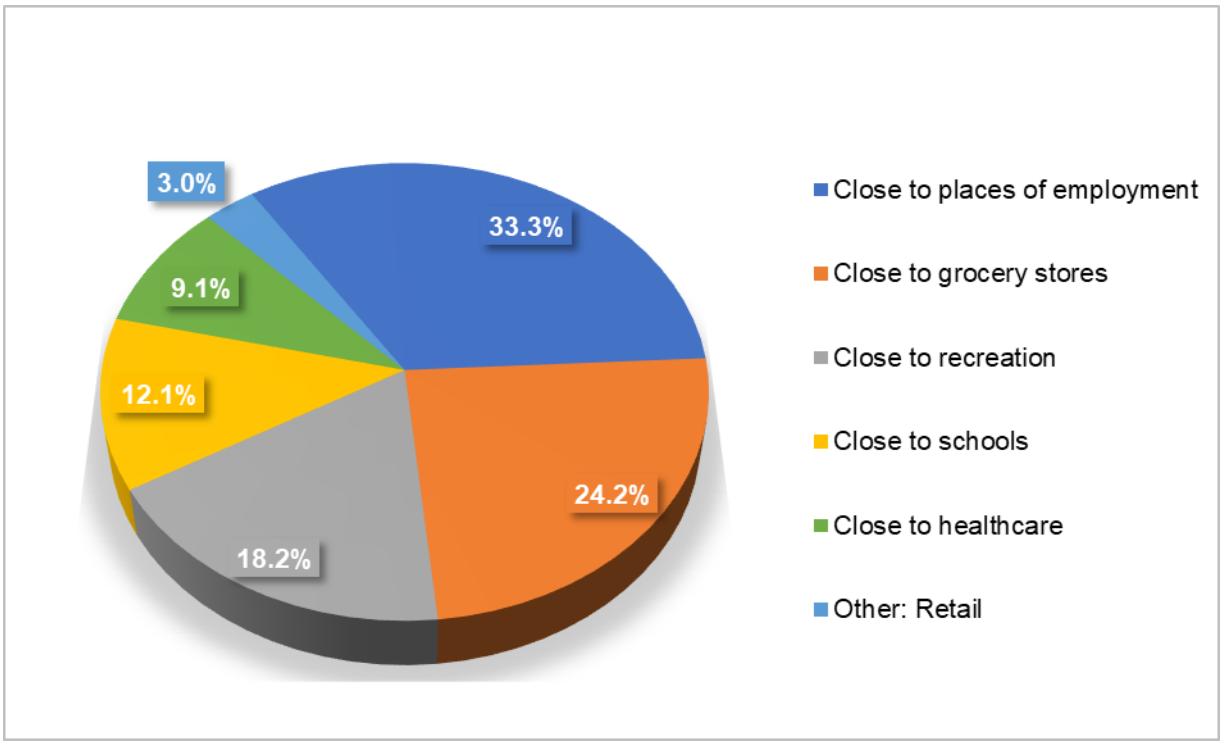
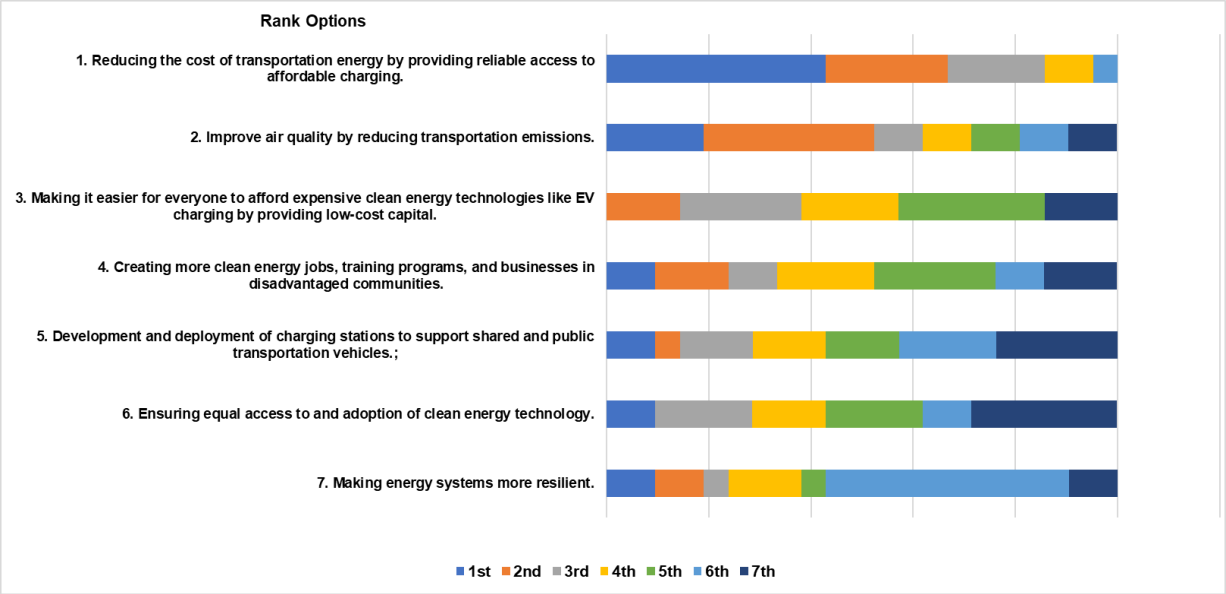


Table A-4: EV Infrastructure Program Benefits Ranked

Benefits	Rank
Reducing the cost of transportation energy by providing reliable access to affordable charging	1
Improve air quality by reducing transportation emissions	2
Creating more clean energy jobs, training programs, and businesses in disadvantaged communities	3
Development and deployment of charging stations to support shared and public transportation vehicles	4
Ensuring equal access to and adoption of clean energy technology	5
Making energy systems more resilient	6
Making it easier for everyone to afford expensive clean energy technologies like EV charging by providing low-cost capital	7

Figure A-4: Rank the below benefits from the Electric Vehicle Infrastructure program?



Appendix B: Supporting Materials

Table B-1: Ranking of EV adoption rate in the Southeast region[xxvii]

State	Registration Count (2020)*	Total Motor Vehicles (2020)	EV Adoption Rate**	Ranking
Florida	58,160	18,464,506	0.31%	1
Georgia	23,530	8,829,596	0.27%	2
Virginia	20,510	7,606,452	0.27%	3
North Carolina	16,190	8,739,280	0.19%	4
Tennessee	7,810	5,855,373	0.13%	5
South Carolina	4,390	4,561,299	0.10%	6
Kentucky	2,650	4,459,685	0.06%	7
Alabama	2,890	5,320,340	0.05%	8
Arkansas	1,330	2,913,369	0.05%	9
Louisiana	1,950	3,861,204	0.05%	10
Mississippi	780	2,058,975	0.04%	11
West Virginia	600	1,657,362	0.04%	12

*Based on the EV registration counts data provided by Alternative Fuels Data Center, the EV registration counts data only include BEVs. PHEVs are not included in the EV registration counts data.

** The EV adoption rate is calculated by dividing EV registration count by total motor vehicle count.

Table B-2: Existing DC fast charge and Level 2 stations along AFCs (source: AFDC as of May 13, 2022)

State EV Charging Location Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
170338	DC Fast	I-10	10000 Factory Shops Blvd Gulfport, MS	6	Electrify America
165460	Level 2	I-10	15610 Daniel Blvd Gulfport, MS	1	Non-Networked
45834	Level 2	I-10	9480 US Highway 49 Gulfport, MS	1	Non-Networked
87680	Level 2	I-10	I-10 D'Iberville, MS	2	ChargePoint Network
187281	DC Fast	I-10	3586 Sangani Blvd D'Iberville, MS	12	Tesla
45850	Level 2	I-20	2195 N Frontage Rd Vicksburg, MS	1	Non-Networked
45838	Level 2	I-20, I-55	905 I-20 Frontage Rd Jackson, MS	1	Non-Networked

State EV Charging Location Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
102258	DC Fast	I-20	200 Bass Pro Dr Pearl, MS	8	Tesla
45822	Level 2	I-20	108 Gray Daniels Blvd Brandon, MS	1	Non-Networked
165458	Level 2	I-20	108 Gray Daniels Blvd Brandon, MS	2	Non-Networked
102257	DC Fast	I-20, I-59	1210 Bonita Lakes Dr Meridian, MS	8	Tesla
207935	DC Fast	I-20, I-59	1217 MS-39 Meridian, MS	1	ChargePoint Network
114612	Level 2	I-20, I-59	519 Azalea Dr Meridian, MS	3	Tesla Destination
165444	Level 2	I-55	371 Goodman Rd E Southaven, MS	2	Non-Networked
	DC Fast			1	
114618	Level 2	I-55	135 Homewood Dr Southaven, MS	3	Tesla Destination
172506	Level 2	I-55	59 Church Rd W Southaven, MS	2	ChargePoint Network
73275	Level 2	I-55	59 Church Rd W Southaven, MS	2	ChargePoint Network
144213	DC Fast	I-55	4870 Venture Dr Southaven, MS	1	ChargePoint Network
165445	Level 2	I-55	2675 McIngvale Rd Hernando, MS	3	Non-Networked
114606	Level 2	I-55	2675 McIngvale Rd Hernando, MS	6	Tesla Destination
102256	DC Fast	I-55	2030 Sunset Dr Grenada, MS	8	Tesla
45832	Level 2	I-55	2105 Sunset Dr Grenada, MS	1	Non-Networked
167278	Level 2	I-55	318 Hwy 82 Winona, MS	2	Greenlots
	DC Fast			2	
122452	Level 2	I-55	413 SE Frontage Rd Winona, MS	7	Tesla Destination
114616	Level 2	I-55	121 Southtowne Ave Ridgeland, MS	6	Tesla Destination
114617	Level 2	I-55	200 Township Pl Ridgeland, MS	6	Tesla Destination

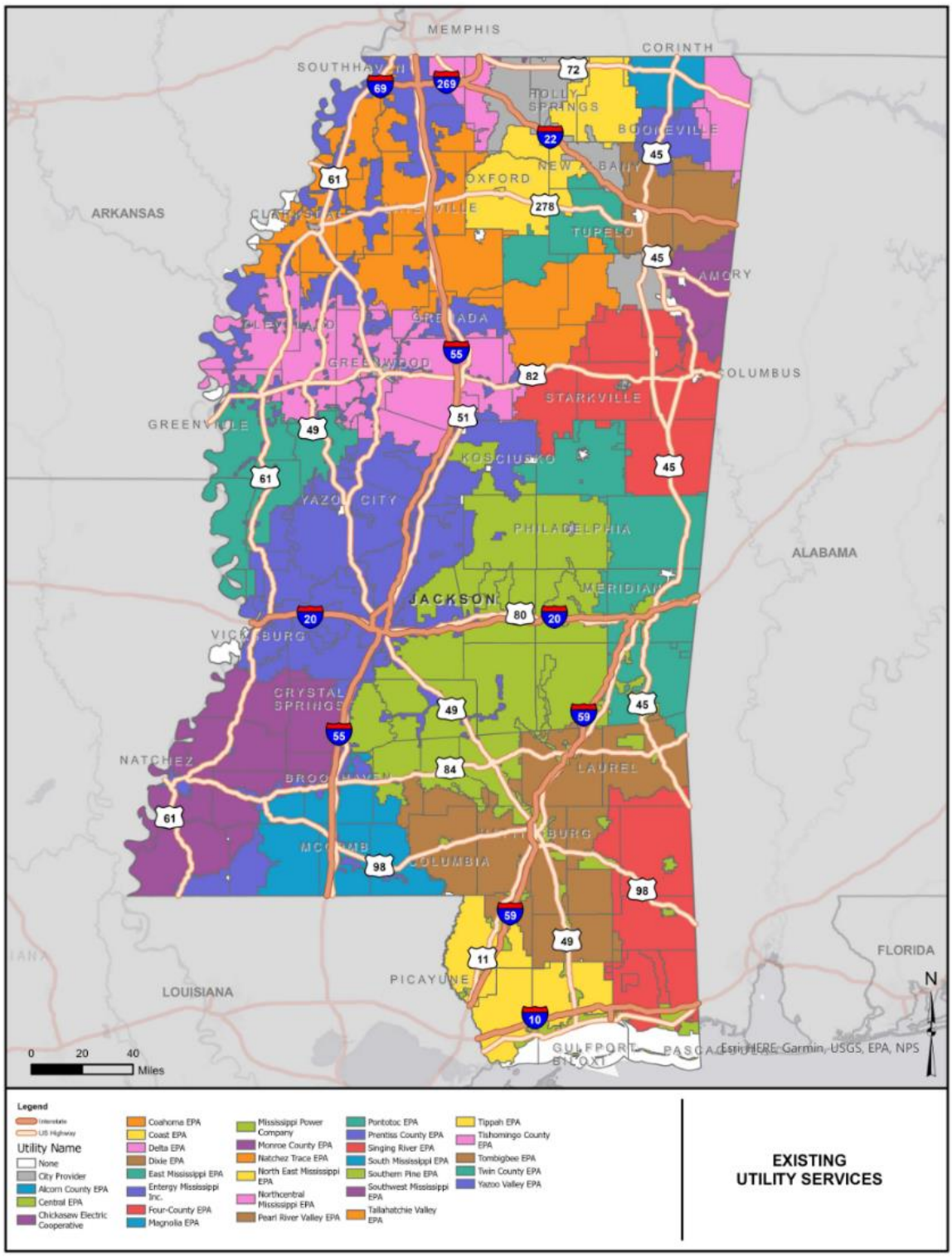
State EV Charging Location Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
195896	Level 2	I-55	455 Steed Rd Ridgeland, MS	2	ChargePoint Network
195897	Level 2	I-55	455 Steed Rd Ridgeland, MS	2	ChargePoint Network
45840	Level 2	I-55	6080 I-55 N Frontage Rd Jackson, MS	1	Non-Networked
114609	Level 2	I-55	5723 Interstate 55 Jackson, MS	6	Tesla Destination
79817	Level 2	I-55	4500 I-55 N Jackson, MS	1	Non-Networked
114610	Level 2	I-55	734 Fairview St Jackson, MS	2	Tesla Destination
119010	Level 2	I-55	802 Harding St Jackson, MS	1	ChargePoint Network
173856	Level 2	I-55	802 Harding St Jackson, MS	1	ChargePoint Network
114608	Level 2	I-55	310 Greymont St Jackson, MS	6	Tesla Destination
45824	Level 2	I-55	845 Brookway Blvd Brookhaven, MS	1	Non-Networked
153420	DC Fast	I-55	1432 Delaware Ave McComb, MS	8	Tesla
165456	Level 2	I-59	712 24th Ave Meridian, MS	1	Non-Networked
165457	Level 2	I-59	601 23rd Ave Meridian, MS	1	Non-Networked
45846	Level 2	I-59	239 Frontage Rd Picayune, MS	1	Non-Networked
165449	Level 2	I-22	400 MS-30 W New Albany, MS	1	Non-Networked
165450	Level 2	I-22	219 King St New Albany, MS	2	Non-Networked

*Defined by the State – this matches the unique ID in the State's applicable GIS databases.

Table B-3: Charging Station Criteria

Requirement #	Criteria
1	Publicly Accessible
2	Include at least four 150kW Direct Current Fast Chargers with CCS ports
3	Be capable of simultaneously charging four EVs at 150kW or above at each port, with a minimum station power capability at or above 600kW
4	Meet the minimum standards and requirements as described in 23 CFR 680.104, 23 CFR 106(b), 23 CFR 680.106(c), 23 CFR 680.106(d), 23 CFR 680.106(e), 23 CFR 680.106(f), 23 CFR 680.106(g), 23 CFR 680.106(h), 23 CFR 680.106(i), 23 CFR 680.106(k), 23 CFR 680.106(l), 23 CFR 680.108, 23 CFR 680.110, 23 CFR 680.114, and 23 CFR 680.116

Figure B-1: Existing utility services



Appendix C: 2022 Public Survey Results

Table C-1: What Do You Consider the Largest Benefit(s) of Driving an EV?

Benefit	Count
Reduce emissions from transport sources	713
Increase energy resilience	126
Cost savings on fuel	788
Promote technological advances in transportation	158
Other	995

Figure C-1: What Do You Consider the Largest Benefit(s) of Driving an EV?

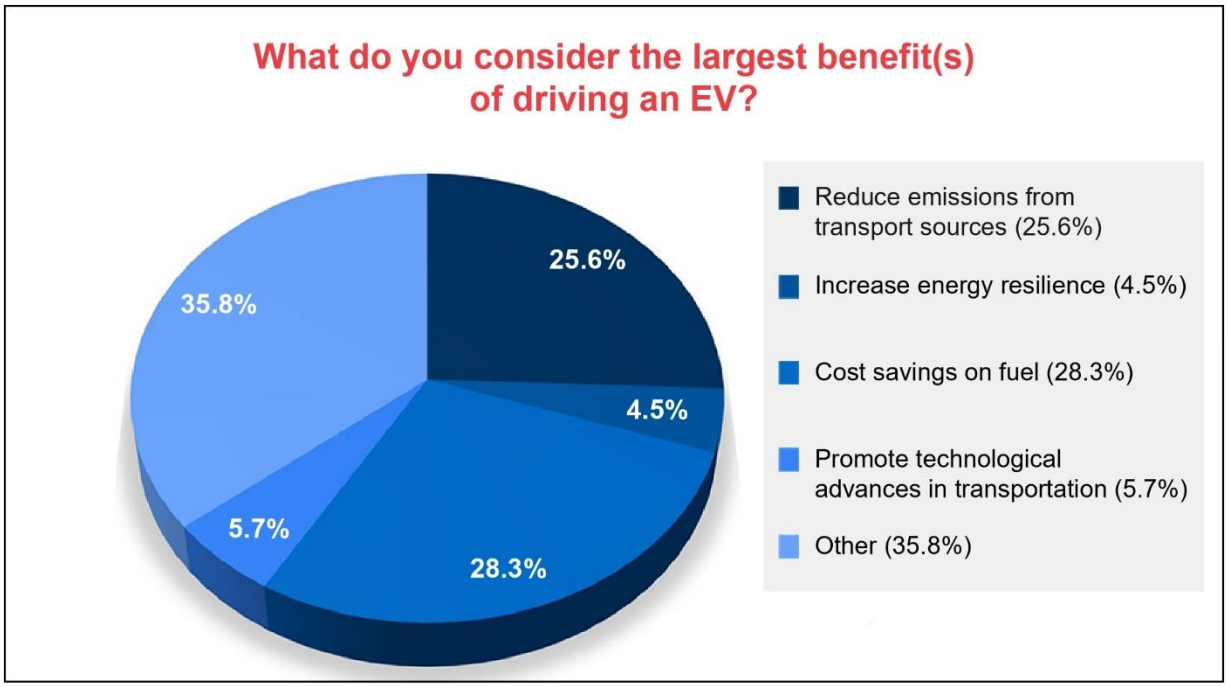


Table C-2: On a Typical Day, What Form(s) of Transportation Do You Mostly Use?

Transportation form	Count
I drive a hybrid electric vehicle (does not have charging station port)	93
I drive a plug-in electric vehicle (must have charging station port)	306
I drive a non-electric vehicle	2306
I ride bikes/scooters	4
I take the bus	1
I walk	10
Other	60

Figure C-2: On a Typical Day, What Form(s) of Transportation Do You Mostly Use?

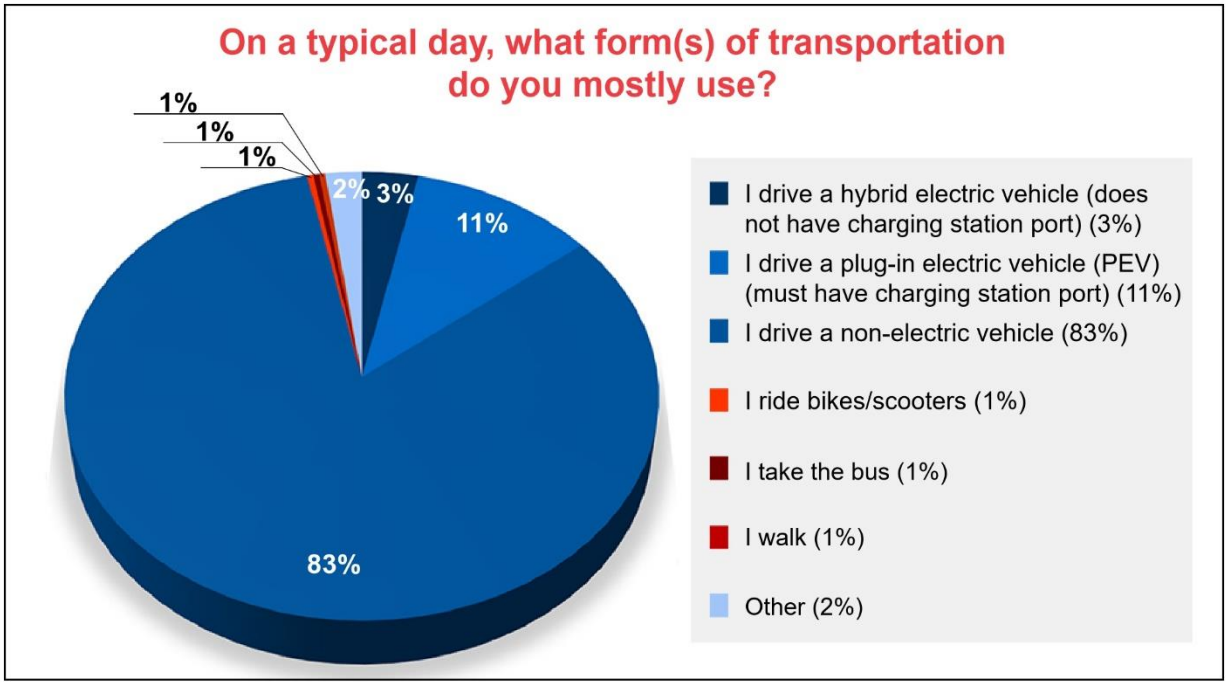


Table C-3: What region of the state do you live in?

Area	Count
Central	1217
Gulf Coast	757
Northeast	222
Northwest	156
Southeast	280
Southwest	148

Figure C-3: What region of the state do you live in?

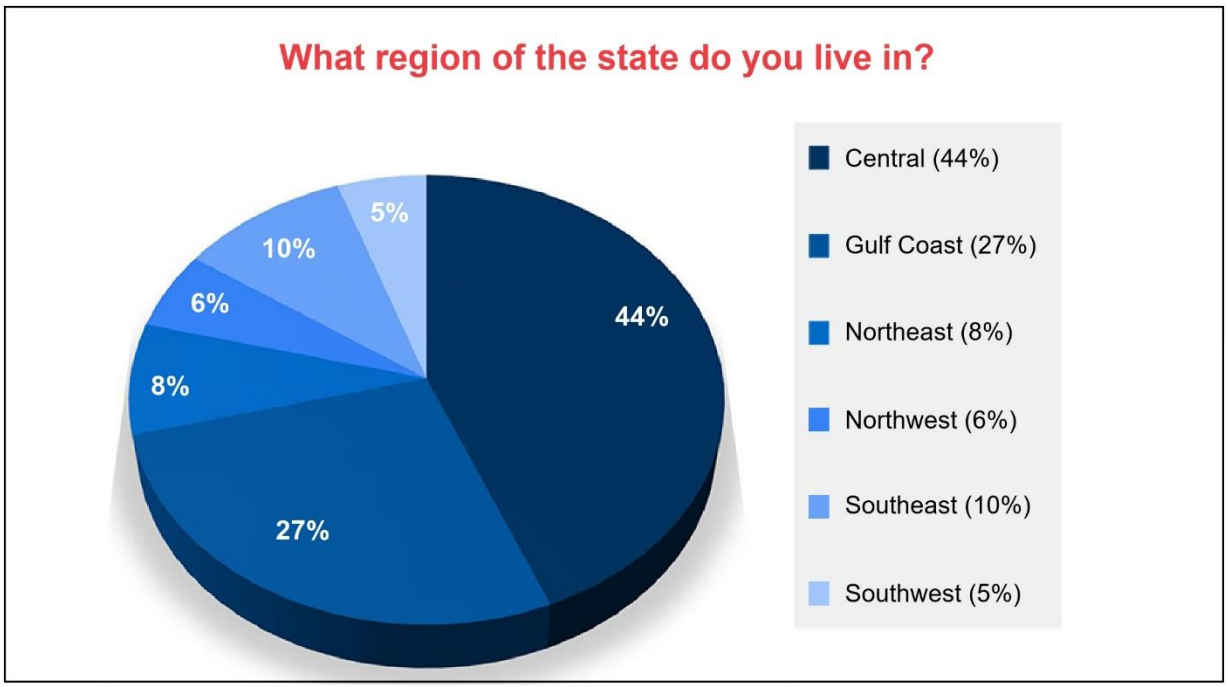


Table C-4: How Many Miles Per Day Do You Travel For Your Daily Round Trip Commute To And From Work, With Occasional Errands?

Miles	Count
Fewer than 5 miles	209
5-10 miles	304
11-30 miles	834
31-50 miles	696
51-75 miles	338
Over 75 miles	399

Figure C-4: How Many Miles Per A Day Do You Travel For Your Daily Round Trip Commute To And From Work, With Occasional Errands?

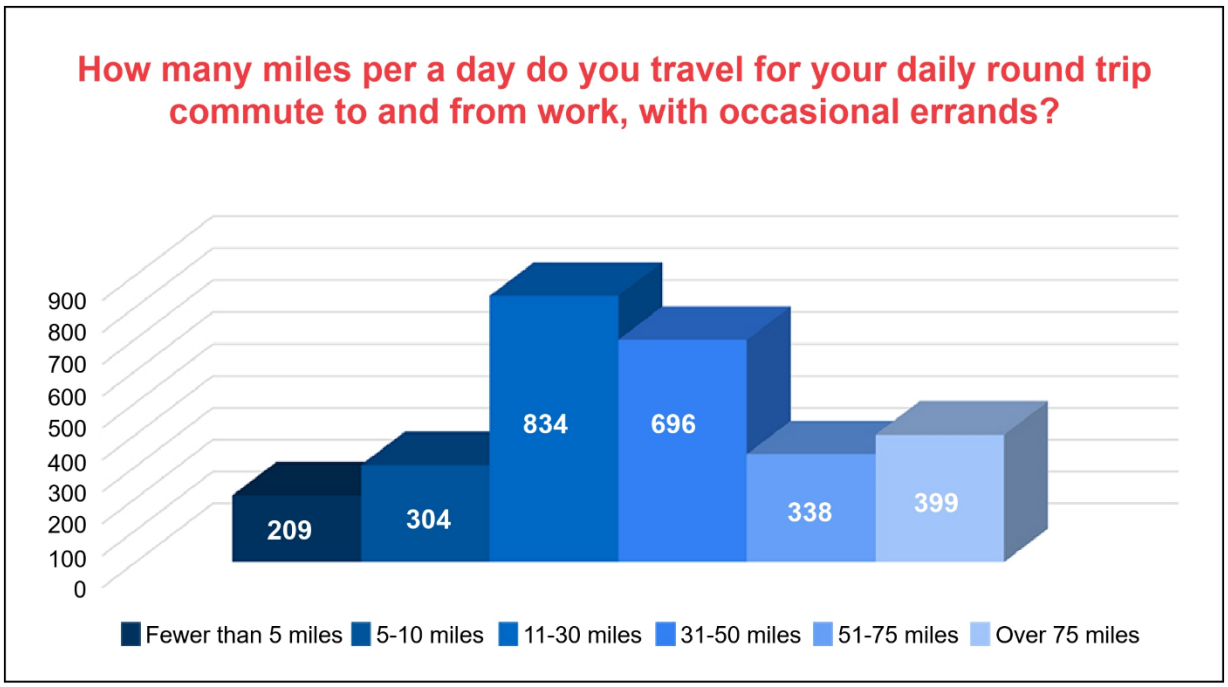


Table C-5: Are You Comfortable Driving an EV Long Distances?

Comfortable	Count
Neutral or Undecided	641
No	1563
Yes	576

Figure C-5: Are You Comfortable Driving An EV Long Distances?

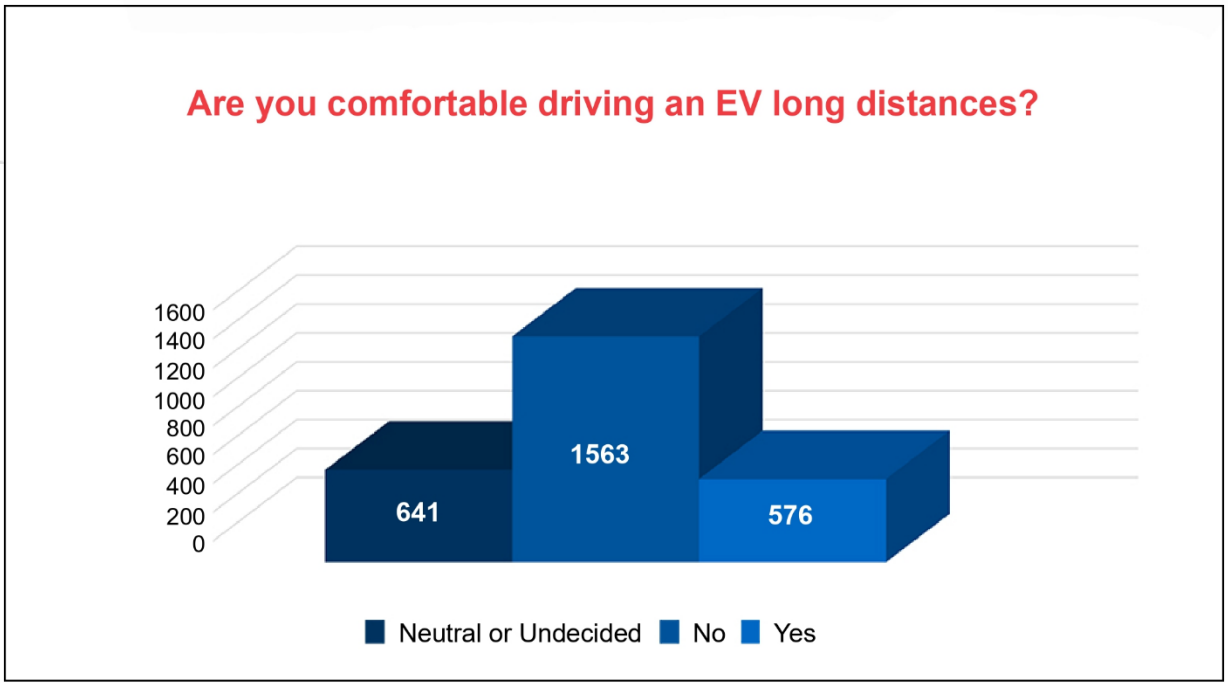


Table C-6: What Are Some Concerns You Have About Owning An EV?

Concern	Count
Accessibility to EV charging stations/Charging Infrastructure	1987
Time needed to charge EV	1801
Cost of an EV	1713
Driving range/range anxiety	1694
Travel planning	1243

Figure C-6: What Are Some Concerns You Have About Owning An EV?

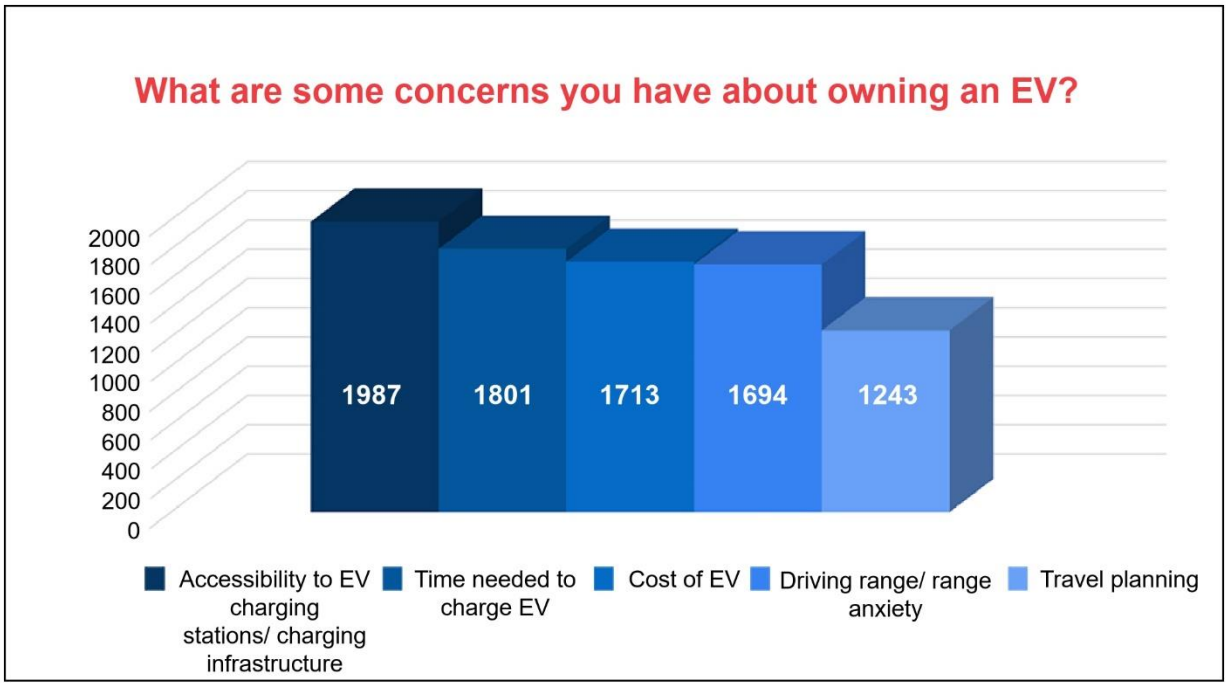
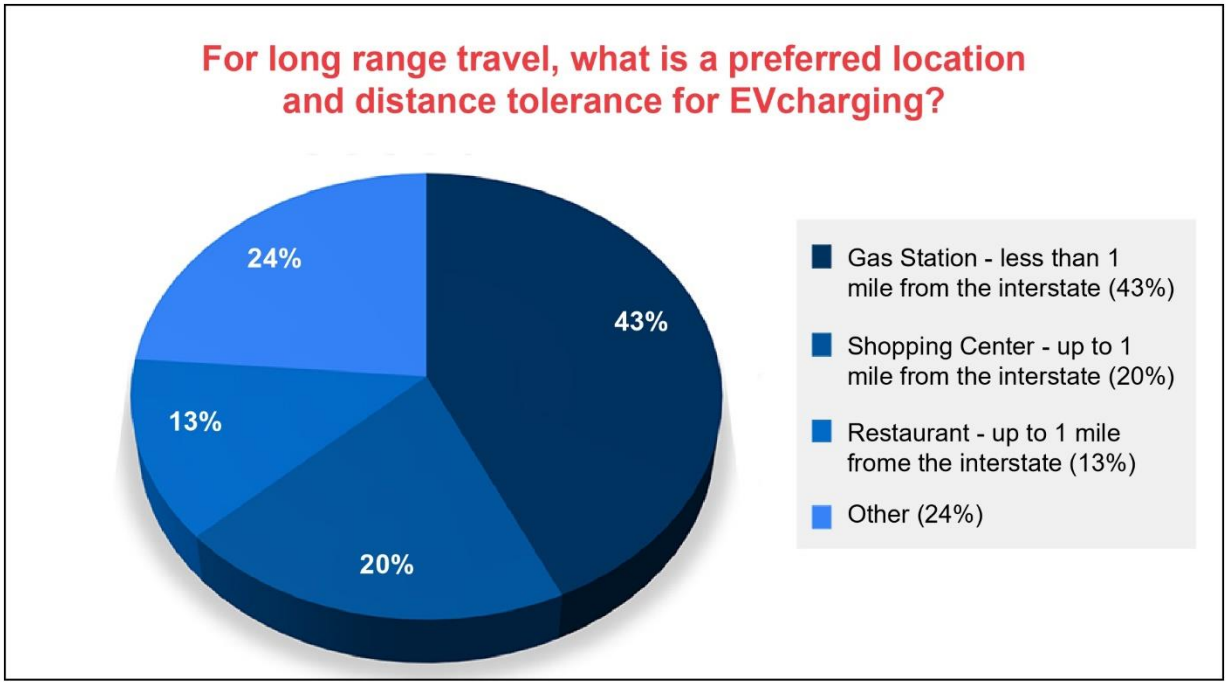


Table C-7: For Long Range Travel, What Is A Preferred Location And Distance Tolerance For EV Charging?

Preferred Location	Count
Gas Station – less than 1 mile from the interstate	1197
Shopping Center - up to 1 mile from the interstate	557
Restaurant – up to 1 mile from the interstate	366
Other	660

Figure C-7: For Long Range Travel, What Is A Preferred Location And Distance Tolerance For EV Charging?



[ii]U.S. Department of Labor, Americans with Disabilities Act. URL: https://www.dol.gov/general/topic/disability/ada (Access date: 5/8/2023)
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