



2023 UPDATE

Louisiana State Plan for Electric Vehicle Infrastructure Deployment

Glossary of Terms	3
Introduction	5
Updates from Previous Plan	6
Timeline	7
State Agency Coordination	7
Memorandum of Understanding with other agencies	7
Public Engagement	8
Utility Engagement	9
Community Engagement Outcomes Report	11
Site-Specific Public Engagement	12
Stakeholders Involved in Plan Development	13
Engagement with Tribal Governments	16
Plan Vision and Goals	16
5-Year Goals:	17
Year 1	17
Year 2	18
Year 3	18
Year 4	19
Year 5	19
Contracting	20
Status of Contracting Process	20
Awarded Contracts	20

Scoring Methodologies - DRAFT Scoring Criteria as of August 1, 2023	21
Draft Scoring Criteria	22
Business Plan	22
Justice40 Plan	23
Utility Provider Letter & Site Host Agreements	23
Site Design or Layout	23
Plan for Compliance with Federal Requirements	23
Existing and Future Conditions Analysis	24
EV Adoption by Parish - Q4 2022	24
Vehicle Availability	25
Louisiana Utilities and their Service Areas	25
State Geography, Terrain, Climate and Land Use Patterns	26
State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs	28
Alternative Fuel Corridor (AFC) Designations	29
Existing Locations of Charging Infrastructure Along AFCs	30
Known Risks and Challenges	32
EV Charging Infrastructure Deployment	32
Planning Towards a Fully Built Out Determination	33
Required Station Specifications	33
Funding Sources	34
Estimated Cost to Develop an EV Charging Network in Louisiana	34
2022 Infrastructure Deployments	35
Phase 1: Study Areas and Approximate Locations of DC Fast Chargers	35
FY23-26 Infrastructure Deployments	36
Phase 2: Study Areas for EV Infrastructure along nominated EV Corridors	37
Upgrades of Corridor Pending Designations to Corridor Ready Designations	37
Increases in Capacity and Redundancy Along Existing AFC	37
Electric Vehicle Freight Considerations	38
Public Transportation Considerations	38
State, Regional, and Local Policy	38

Implementation	39
Strategies for EVSE Operations & Maintenance	39
Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners	39
Strategies for EVSE Data Collection & Sharing	40
Strategies to Address Resilience, Emergency Evacuation, Snow Removal, and Seasonal Needs	41
Strategies to Promote Strong Labor, Safety, Training, and Installation Standards	41
Civil Rights	42
Equity Considerations	42
Identification and Outreach to Disadvantaged Communities (DACs) in the State	43
Process to Identify, Quantify, and Measure Benefits to DACs	43
Benefits to DACs through this Plan	45
Labor and Workforce Considerations	45
Cybersecurity	46
Program Evaluation	46
Discretionary Exceptions	47
Appendix A: Supporting Materials	48
Typical Specifications for Electric Alternative Fuel Corridor:	48

Glossary of Terms

- **ADA:** Americans with Disabilities Act
- **AFC:** Alternative Fuel Corridor
- **AFDC:** Alternative Fuels Data Center
- **BAU:** Business As Usual
- **BEV:** Battery Electric Vehicle
- **CCS:** Combined Charging System
- **Charging Plug:** The individual charging port
- **Charging Station:** A location where EV charging facilities are located
- **DAC:** Disadvantaged Communities
- **DCFC:** Direct Current Fast Charger
- **DNR:** Department of Natural Resources
- **DOE:** U.S. Department of Energy
- **DOT:** Department of Transportation

- **EPA:** U.S. Environmental Protection Agency
- **EV:** Electric Vehicle
- **EVSE:** Electric Vehicle Supply Equipment (EV Charger)
- **FHWA:** Federal Highway Administration
- **IJA:** Infrastructure Investment and Jobs Act
- **Justice40:** Government program to ensure that 40% of overall program benefits are delivered to disadvantaged communities through jobs, training, business development, etc
- **LA DOTD/DOTD:** Louisiana Department of Transportation Development
- **LADA:** Louisiana Dealers Association
- **LCF:** Louisiana Clean Fuels
- **LDEQ:** Louisiana Department of Environmental Quality
- **LDNR:** Louisiana Department of Natural Resources
- **MPO:** Metropolitan Planning Organization
- **NEVI:** National Electric Vehicle Infrastructure
- **PHEV:** Plug-in Hybrid Electric Vehicle
- **SAE:** Society of Automotive Engineers
- **SLCFP:** Southeast Louisiana Clean Fuels Partnership

Introduction

Through FY 2026, Louisiana will receive \$73,367,735 for electric vehicle (EV) infrastructure through the Infrastructure Investment and Jobs Act (IIJA). The Louisiana Department of Transportation and

Development (DOTD) will administer funds for the deployment of electric vehicle charging infrastructure via a competitive grant process throughout the State.



As part of the EV infrastructure deployment, Congress has made National Electric Vehicle Infrastructure (NEVI) Formula Program funds available for expenditure by state transportation agencies. These funds will cover up to 80 percent of the EV infrastructure expenses with a minimum of 20 percent non-federal match covered by grant recipients. Initial deployment plans for all 50 states were submitted to the Federal Highway Administration (FHWA) back on August 1, 2022. Louisiana was among 35 states to have their plans approved early on September 15, 2022 with the remaining states receiving approval on September 27, 2022. Under federal guidelines, each state must submit updates to their plan every year. This document is the first of such updates for Louisiana. DOTD has contracted with Louisiana Clean Fuels (LCF) and Grant Management Group, LLC to timely submit both the original plan and the 2023 update.

In addition, DOTD recently submitted a Round 7 alternative fuel corridor (AFC) nomination to FHWA on June 19, 2023 to designate one additional bypass route for electric vehicles that was omitted in 2022. All of the nominated highways from Round 6 were approved and can be found [here](#) on the FHWA Alternative Fuels website. These approved Alternative Fuel Corridors for electric vehicles are



important to the overall NEVI program as the DOTD plans to provide connectivity between charging stations within Louisiana and across State lines.

Louisiana is among the most vulnerable States to the impacts of climate change. Louisianans are already experiencing direct physical, mental, and financial tolls as well as indirect impacts to social systems and ecosystems that are struggling to cope with extreme weather events, heat, drought, flooding, and other manifestations of climate change. As is the case globally, Louisiana's low-income communities, communities of color, Indigenous peoples, and other marginalized residents are hit especially hard.

These impacts are projected to get much worse over the coming decades if there is not significant global action to curb greenhouse gas (GHG) emissions. The Louisiana Climate Action Plan contains 28 strategies and 84 specific actions to reduce GHG emissions across the entire State's economy. Under "Strategy 9" of the Transportation section of the [Climate Action Plan](#), Louisiana's task is to "accelerate adoption and accessibility of low- and zero-emission vehicles and fuels." The successful deployment of electric vehicles will play a major role in our attempts to achieve these goals and meet our carbon emission reduction goals.

Louisiana can support greater adoption of clean vehicles by expanding the infrastructure to support this transition, including charging and fueling stations that are accessible to drivers and passengers across income levels. This strategy includes actions focused on light-duty passenger vehicles as well as actions tailored to the additional technological and infrastructural needs to transition medium-duty and heavy-duty transportation, shipping, and aviation to low or zero-carbon fuels. The State of Louisiana can lead by example through efforts to transition public fleets to low and zero-emission vehicles.

As zero-emission vehicles become increasingly available for passenger transit, steps need to be taken to ensure strategic and equitable statewide buildout of vehicle electrification infrastructure, with measures to prioritize access for underserved and overburdened communities. The DOTD intends to strategically utilize these Federal funds to deploy electric vehicle charging infrastructure across the State in a way that increases access for all communities. To that end, the Climate Action Plan sets a goal of 250 stations per 100,000 residents by 2050. These sites include Level 2 workplace and other publicly accessible charging stations in addition to the DC Fast Chargers on the alternative fuel corridors.

Updates from Previous Plan

- Updated timelines for the publication of the RFP and initial awards
- Inclusion of draft scoring criteria for the DOTD's competitive grant program
- Final NEVI minimum standards published
- Updated cost projections based on inflation and supply chain issues
- Updated community engagement activities & outcomes report

Timeline

The [National Electric Vehicle Infrastructure \(NEVI\) Formula Program Guidance](#) from FHWA was published in February 2022 with guidelines for speed, quantity, and location of DC Fast Chargers. DOTD then created an EV planning committee to begin developing an Electric Vehicle Infrastructure Plan. DOTD is in the final stages of developing a competitive grant program through which DC Fast charging station locations will be selected and funded. The state's goal is to finish developing the grant program by Q3 2023 and solicit applications by the 4th quarter of 2023.

State Agency Coordination

Memorandum of Understanding with other agencies

No formal MOUs have been established between the state agencies. However, the DOTD's EV planning committee includes representatives from FHWA, Louisiana Department of Environmental Quality (LDEQ), and Louisiana Department of Natural Resources (LDNR). This committee met bi-weekly for several months to discuss alternative fuel corridors and DOTD's EV Infrastructure Plan as it relates to NEVI formula funds. This interagency coordination contributed to the timely submission of the Round 6 Alternative Fuel Corridor Nomination on May 13, 2022 and assisted with submission of the Louisiana Electric Vehicle Infrastructure Plan prior to the August 1, 2022 deadline.

EV Committee Members:

- Louisiana Department of Transportation and Development
- Louisiana Department of Environmental Quality
- Louisiana Department of Natural Resources
- Grant Management Group, LLC
- Louisiana Clean Fuels (a Clean Cities coalition)
- Federal Highway Administration - Louisiana Division

The EV Committee collaborated with Southeast Louisiana Clean Fuels Partnership (SLCFP), a Clean Cities Coalition, and the Center for Sustainable Energy. Additionally, the Louisiana Senate Committee on Transportation, Highways, and Public Works convened an EV Task Force (Task Force) to study the economic impact of EVs and recommend legislation to enhance the fiscal benefit of EVs in Louisiana. In September 2022, the Task Force published a [report](#) of their findings and recommendations.

Table 1: EV Task Force Members:

Name	Address	Seat Information
Carter, Gary M. Jr. (Sen.)	2401 Westbend Parkway, Suite 3071 New Orleans, LA 70114	Ex-O; Senate Pres or Desig
Cathey, Stewart A. Jr. (Sen.)	209 North Park Drive Monroe, LA 71203	Ex-O; Chair; Senate Cmte on COM or Desig; Mem of Cmte
Freiberg, Barbara Reich (Rep.)	5800 One Perkins Place, Ste. 7A Baton Rouge, LA 70808	Ex-O; Chair, House Cmte on THPW or Desig; Mem of Cmte
Gadberry, Foy Bryan (Rep.)	P. O. Box 1883 West Monroe, LA 71294	Ex-O; House Speaker or Desig
Green, Will H.	LA Automobile Dealers Association 7526 Picardy Avenue Baton Rouge, LA 70808	Ex-O; Pres, LADA or Desig
Kalivoda, Eric, Ph.D.	LA Department of Transportation and Development P. O. Box 94245 Baton Rouge, LA 70804-9245	Ex-O; Sec, DOTD or Desig
Lambert, Eddie J. (Sen.)	P. O. Box 241 Gonzales, LA 70707	Ex-O; Chair, Senate Cmte on R&F or Desig; Mem of Cmte
McMath, Patrick (Sen.)	404 East Gibson St., Ste 2 Covington, LA 70433	Ex-O; Chair, Senate Cmte on THPW or Desig; Mem of Cmte; Chair of TF
Tarver, Phillip E. (Rep.)	132 Jamestown Lake Charles, LA 70605	Ex-O; Chair, House Cmte on COM or Desig; Mem of Cmte
White, Mack A. "Bodi" Jr. (Sen.)	11103 Park Place Baton Rouge, LA 70818	Ex-O; Chair, Senate Cmte on FIN or Desig; Mem of Cmte
Willard, Matthew (Rep.)	UNO TRAC Building 2000 Lakeshore Dr., Rm. 212 New Orleans, LA 70148	Ex-O; Chair, House Cmte on W&M or Desig; Mem of Cmte
Zeringue, Jerome P. "Zee" (Rep.)	423 Goode St. Houma, LA 70360	Ex-O; Chair; House Cmte on APP or Desig; Mem of Cmte

Public Engagement

DOTD and its project partners created a public involvement plan that consisted of a series of public meetings (both virtual and in-person) and online resources on multiple platforms. Resources that explain the program and solicit public feedback from the community and stakeholders include a [landing page for the program on the DOTD website](#), [an online survey](#), [social pinpoint site](#) (a map based public input method for suggested charging locations), social media posts, press releases, and multiple public meetings to discuss the plan. These resources opened a line of communication with the public for the program that was used to draft the statewide plan. DOTD will maintain these resources going forward as the grant program is developed.

Public engagement of underserved communities has included meetings with the Urban League of Louisiana, Louisiana Municipal Association, Black Mayors Caucus, Southern University System Facilities Management, minority Mayors throughout the State, Disadvantaged Business Enterprises, and the City of New Orleans Council Utilities Regulatory Office. These entities were engaged to develop a coalition of groups with a large and deep reach into underserved communities. All have committed to being part of

our stakeholder outreach and to provide feedback on our EV infrastructure deployment plan. Our efforts will expand as the grant program and application process are developed.

Public Involvement Resources:

- [DOTD program landing page](#)
- [Online Survey](#)
- [My Social Pinpoint interactive map](#)
- Official email for public comment: DOTD-EVProgram@la.gov

Utility Engagement

Utilities have been a major part of our stakeholder outreach since the drafting of the first NEVI plan for the State of Louisiana. IOU and Co-Op utilities have been especially receptive and have participated in multiple virtual stakeholder feedback sessions and have been frequent contributors to the DOTD public comment periods.

Louisiana Clean Fuels, a contractor with the DOTD and a U.S. Department of Energy designated Clean Cities coalition has leveraged its stakeholder base and strong relationships with utilities to facilitate additional conversations with the IOUs and Co-Ops across the state:

- February 22, 2022 and March 18, 2022: Drive Electric Louisiana (DELA), a program of LCF, hosted a Policy Committee meeting in partnership with the FHWA to disseminate information about the IJIA and to discuss the National Electric Vehicle Infrastructure Program and FHWA Alternative Fuel Corridors with area stakeholders such as CLECO, SWEPCO, Entergy, Capital Region Planning Commission, New Orleans Regional Planning Commission, Department of Natural Resources, and Grant Management. All presentation materials, feedback, and recordings were made available to DOTD.
- Association of Louisiana Electric Cooperatives (ALEC) is a non-profit organization which exists to represent the electric distribution cooperatives operating in the state of Louisiana. These cooperatives provide electric service to roughly 1 million citizens in 50 of the state's 64 parishes. In January 2023, LCF presented information about the state's NEVI plan at the ALEC's 2023 Members First Conference whose attendees represented most of the Co-ops in the state of Louisiana.
- At the Louisiana Clean Fuels NEVI Applicant Workshop and Expo on January 2023, two major utilities shared their service processes for electric vehicle infrastructure and tips for working with your utility with potential applicants to the program. Entergy's presentation can be found [here](#) and SWEPCO's can be found [here](#).

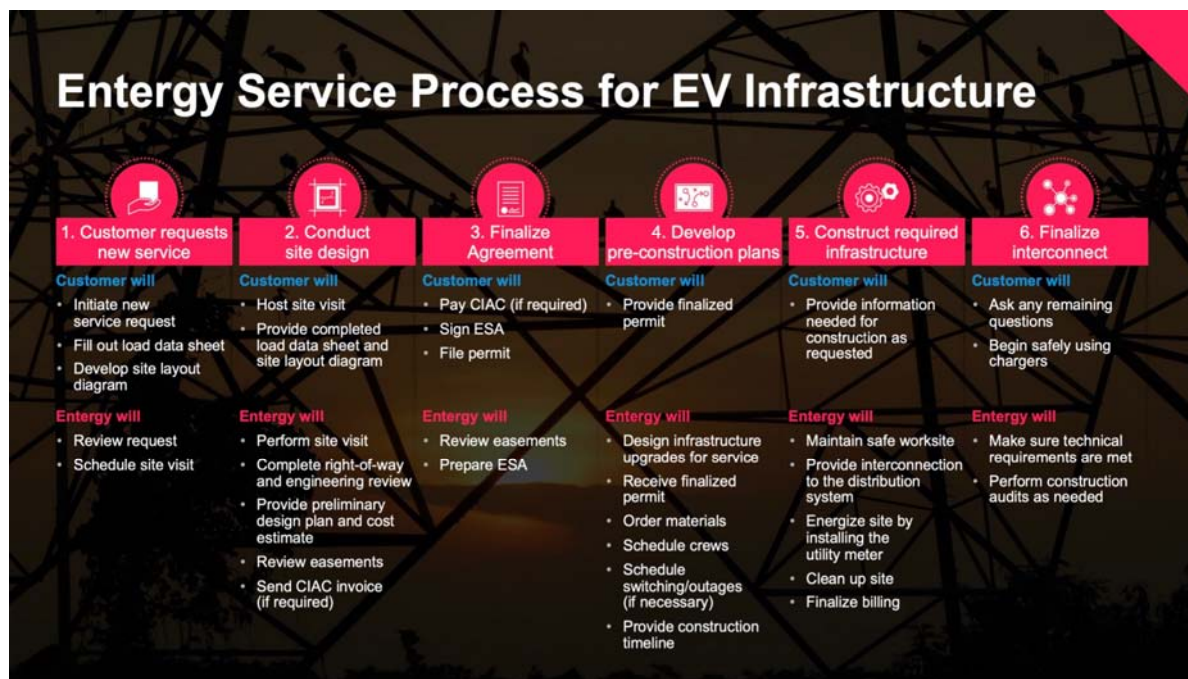


Figure 1: Entergy Service Process for EV Infrastructure

Table 2: Types of utilities in LA and how they are regulated

Types of Utilities in Louisiana		
Investor-owned utilities (IOUs)	Municipal Power Companies (“Municipalities”)	Cooperatives (“Co-ops”)
For-profit Owned by shareholders	Not for-profit Owned by cities and counties	Not for-profit Owned by co-op members
Example: Entergy, CLECO & SWEPCO (AEP)	Example: Lafayette Utility Service (LUS)	Example: Dixie Electric (DEMCO)
Regulators		
SWEPCO, DEMCO, SLEMCO, CLECO, and Entergy Louisiana are regulated by the Louisiana Public Service Commission (LPSC) (http://www.lpsc.louisiana.gov) Entergy New Orleans is regulated by the New Orleans City Council	CLECO, SWEPCO, and Entergy are subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) with respect to transmission tariffs and interconnection with other utilities, reliability, and the transmission of power. It should be the same for Entergy and SWEPCO.	Municipal Power Companies (“Municipalities”) are often regulated by Local government (city council or elected or appointed board) and in some cases, a state board. The Louisiana Public Service Commission does not regulate utilities owned by municipalities.

Community Engagement Outcomes Report

The DOTD has created an open information sharing process that is readily accessible to interested applicants of the state's competitive grant program. To date, a total of 11 virtual, 11 in-person and 3 hybrid events (in person with virtual option) reaching approximately 400 individuals have been conducted by DOTD to help develop their competitive grant program.

Virtual and in-person forums provided an overview of the program and allowed for ample Q&A from the audience. Virtual meetings were recorded and posted on the DOTD website for public viewing. Attendees were encouraged to share their contact information and the resulting list has been published and shared to allow for collaboration amongst potential applicants, and underserved communities.

After the 2022 State Plan for Louisiana was published, DOTD led public meetings across the state for education purposes and to connect with the community. These meetings were held in person with virtual options accessible:

- September 28, 2022- Monroe LA at Monroe City Hall
- November 10, 2022: 6:00 pm- DOTD's Headquarters Auditorium at 1201 Capitol Access Road, Baton Rouge, LA 70802
- December 8, 2022: 6:00 pm- Shreveport LA, at Louisiana State University in Shreveport

These events were attended by local experts, policy makers, and the public to disseminate information about the NEVI program, timeline for Louisiana, and draft scoring criteria. The [presentation](#) used for these events were created by the DOTD and was placed online at the [EV Resources page](#) of the DOTD website.

Links to a few key resources are listed below:

- Public Meeting Recordings:
https://louisianacleanfuels.org/images/meeting/012423/nevi_workshop_presentation_swepco_1_19_23_sm.pdf
- Notice of Intent Responses:
http://wwwsp.dotd.la.gov/_layouts/download.aspx?SourceUrl=/Inside_LaDOTD/Divisions/Operations/Electric-Vehicle/webdocs/2022%20NOI%20Respondents%20-%20EV%20Program.xlsx
- EV Infrastructure Contacts / Interested Parties - Contacts shared with permission:
http://wwwsp.dotd.la.gov/_layouts/download.aspx?SourceUrl=/Inside_LaDOTD/Divisions/Operations/Electric-Vehicle/webdocs/EV%20Infrastructure%20Contacts.xlsx

Community engagement will be an ongoing process over the life of the program, and feedback from community members has been and will continue to be incorporated into all aspects of the program. The DOTD has an [open survey](#) that solicits feedback from the public on many aspects of the state plan priorities and an [interactive map](#) that encourages the public and potential applicants to share ideas on

the siting of EV charging infrastructure in our state. A sample result pulled from the survey dated July 21, 2023 is shown below and includes feedback from 378 individuals to date.

Q6 Please rank the importance of the following parameters for convenient, reliable, affordable, and equitable electric vehicle infrastructure, with 1 being the highest importance and 10 being the lowest:

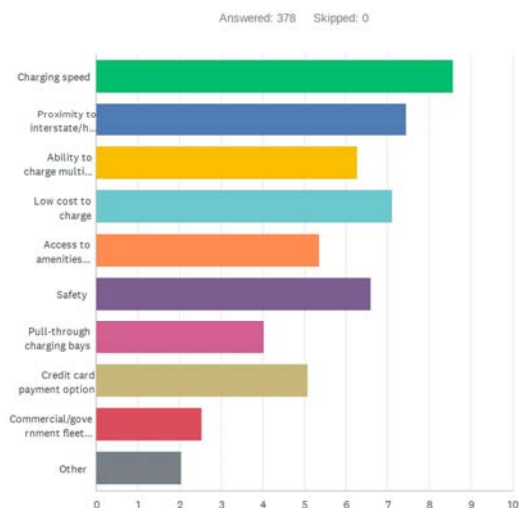


Figure 2: Sample DOTD survey question response as of July 21, 2023

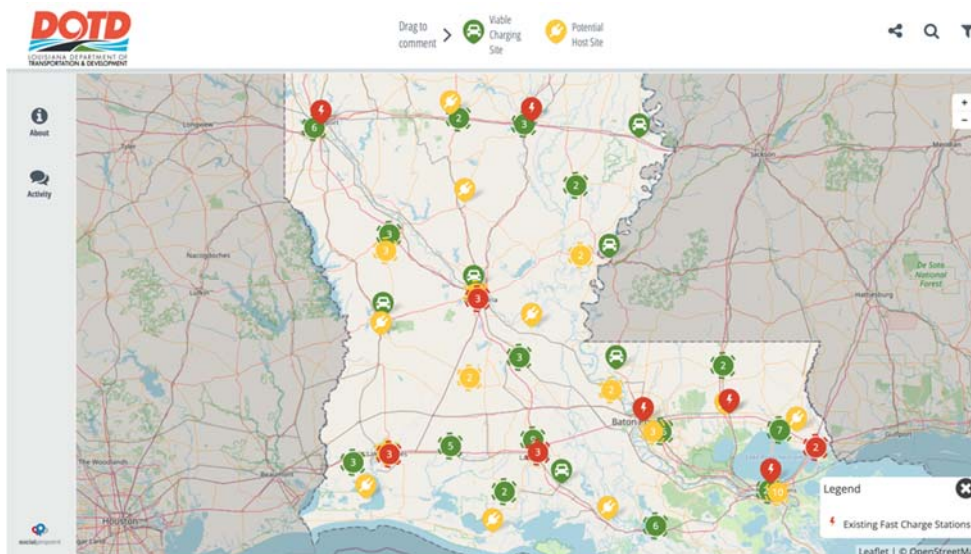


Figure 3: Interactive map via https://lcf.mysocialpinpoint.com/la_ev_plan

DOTD solicited comments on the draft scoring criteria with interested parties through multiple feedback sessions and public meetings in December 2022. The feedback received during those public meetings and through both the DOTD-EVProgram@la.gov email and online survey provided valuable information that informed updates to the current draft scoring criteria. The DOTD will keep all public comment

channels open throughout the program period and will continue to evaluate and adjust the scoring criteria as deemed appropriate. Further details of the DOTD's Community Engagement efforts are shared in **Table 3**.

Site-Specific Public Engagement

The DOTD has not selected specific sites to be targets for EV Charging through this program in a prescriptive manner, and as such has performed no site-specific public engagement. Instead, the DOTD is performing public engagement activities as outlined in the Public Engagement section above, targeting communities along all of the designated EV Corridors to ensure a robust applicant pool to select from upon closing of the application period. The DOTD has stressed the importance of applicants performing community engagement in their project planning as part of the Justice40 scoring metric in the Scoring Criteria.

Looking ahead, the DOTD is contemplating a plan to host community engagement events at Phase 1 study areas to provide foundational information to help prepare communities members to actively provide feedback for decisions (e.g., outreach and education on EV charging basics, existing and planned public EV charger locations, etc.) and to understand the benefits from EV infrastructure projects enabled by this investment.

Stakeholders Involved in Plan Development

Following the publication of the NEVI guidance document in February 2022, DOTD has had conversations with utilities, Metropolitan Planning Organizations, private sector companies, non-profit organizations, and other various entities. This outreach effort helped solicit diverse, high-quality feedback from these stakeholders across the State, and that feedback was crucial in guiding the development of the overall Electric Vehicle Infrastructure program.

In order to incorporate high-quality feedback from the public, the DOTD and its project partners held one-on-one calls, virtual meetings, and one hybrid (in person meeting with virtual component) with targeted stakeholders during the development of the state plan. The draft plan was published on June 18, 2022 for a 30-day public comment period on the DOTD website. The DOTD hosted meetings (virtual and in person) with stakeholders to gather their feedback on the draft plan. Comments and feedback from stakeholders were accepted through the official DOTD email account, DOTD-EVProgram@la.gov, and will be accepted for the entire 5-year project period.

Table 3: Outreach Conducted and Planned by DOTD For State EV Plan Development

Completed Outreach		
Entity	Type of meeting	Date held
American Association of State Highway Transportation Officials EV Practitioner's Working Group	Virtual Feedback Sessions	Monthly
International Brotherhood of Electrical Workers - Business Development (AL, FL, GA, MS, LA)	Virtual Meeting	April 21, 2022
Adjacent State DOT (Mississippi Department of Transportation)	One-on-One Call	May 9, 2022
EVSE Company	Virtual / Feedback Session	May 11, 2022
EVSE Company	Virtual / Feedback Session	June 2, 2022
EVSE Company	Virtual / Feedback Session	June 3, 2022
U.S. Joint Office of Energy and Transportation Regions 6 & 8	Virtual Feedback Sessions	May 20, 2022, June 3, 2022, June 30, 2022, July 14, 2022
EV Planning Consultant (Stantec)	Virtual Meetings	April 6, 2022 & June 7, 2022
Municipalities (5 parishes in the Capital Region Planning Commission)	In Person / Presentation	June 8, 2022
Louisiana Dealers Association	Email correspondence / feedback	June 8, 2022
U.S. Joint Office of Energy and Transportation	One-on-One Virtual Meeting	June 9, 2022
EVSE Company	Virtual / Feedback Session	June 10, 2022
Tribes (Chitimacha Tribe, Coushatta Tribe, Tunica-Biloxi Tribe, and the Jena Band of Choctaw Indians)	Virtual / Regional Meeting in cooperation with various state DOTs and the FHWA	June 14, 2022
Utilities, Regulators	Virtual / Feedback Session	June 16, 2022
Baton Rouge City-Parish	In-Person Meeting	June 23, 2022
Gas Station Owners/Operators Conference	In Person / Presentation	July 12, 2022
Utilities, MPOs, RPCs, PSC	Hybrid Feedback Session	July 13, 2022
Monroe LA NEVI presentation at Monroe City Hall / General public and potential applicants	In Person / Presentation	September 28, 2022
NEVI Stakeholder Meeting in Lafayette at ULL / General public and potential applicants	Hybrid Informational and Feedback Session	October 5, 2023
NEVI Stakeholder Meeting in New Orleans / General public and potential applicants	Hybrid Informational and Feedback Session	October 26, 2023
Public Meeting: NEVI Presentation at DOTD Headquarters, Baton Rouge LA / General public and potential applicants	In Person / Presentation	November 10, 2022
NEVI Presentation at Louisiana State University in Shreveport LA /	In Person / Presentation	December 8, 2022

Utilities, General public and potential applicants		
Louisiana Dealers Association	In Person / Presentation by LCF	December 13, 2023
NEVI Feedback Session: Scoring Criteria	Webinar	January 5, 2023
“All About the DBE in 2023!” Statewide Meeting at DOTD Headquarters for DBEs (Over 200 attendees)	In person	January 18, 2023
LCF’s NEVI Workshop and EVSE Expo / Utilities, EVSE Companies, Electricians, Potential Applicants, Engineering firms, NPOs	In person event hosted by LCF	January 24, 2023
2023 Louisiana Transportation Conference / Transportation professionals, Engineers, State Agencies	In Person / Presentation	March 15, 2023
Clean Fuels Summit / CBOs, Municipalities, Fleets, and Clean Cities stakeholders	In Person / Presentation	April 19, 2023
Planned Outreach		
Entity	Type of meeting	Date held
Public Meeting at DOTD	In Person and Virtual	One week after RFP is issued
Public Meeting	In Person and Virtual	During RFP open period, before due date
Louisiana Municipal Assoc Annual Conference / Rural and Small municipalities around LA/ in Alexandria, LA	In Person	August 3-5, 2023
Virtual “office hours” for all applicants	Virtual	Approximately two webinars during application period
Awardee Informational Sessions /Public Meeting at DOTD	Virtual and In Person	TBD - Periodic informational sessions to allow for awardees to check in on their deliverables
Community Engagement in Phase 1 Study Areas	In Person	TBD

DOTD is considering hosting one public forum shortly after the release of the RFP, and a second session sometime closer to the RFP due date. Further, DOTD is looking to follow best practices and examples from other states for effective dissemination of information to potential applicants of the program. A continuously updated FAQ document will be made available on the DOTD website. All questions submitted to the official plan email DOTD-EVProgram@la.gov along with DOTD's responses will be published in the FAQ document.

How feedback has been incorporated into the plan: The open lines of communication with and the involvement of various stakeholder groups in the Plan’s development helps ensure that the deployment, installation, operation, and use of EV charging infrastructure will achieve equitable and fair distribution, in addition to meeting federal Justice40 requirements. This feedback has resulted in significant changes to the Draft Scoring Criteria and a more robust framework for incorporating Justice40 principles into the development of the RFP.

Engagement with Tribal Governments

DOTD partnered with the Federal Highway Administration and other State DOT’s to conduct a joint webinar on June 14, 2022, to engage the Tribal Nation with land interest in Louisiana. These tribes include the Chitimacha Tribe, Coushatta Tribe, Tunica-Biloxi Tribe, and the Jena Band of Choctaw Indians. The participating DOT’s include Mississippi (MDOT), New Mexico (NMDOT), Texas (TxDOT), Oklahoma (ODOT), and Arkansas (ARDOT); all of which are located in FHWA Regions 6 and 4. In addition to the virtual meeting, DOTD has provided the Tribal Nation with surveys to engage them in our plan and gather their feedback. The following map shows Tribal lands in relation to DOTD’s designated Alternative Fuel Corridors.

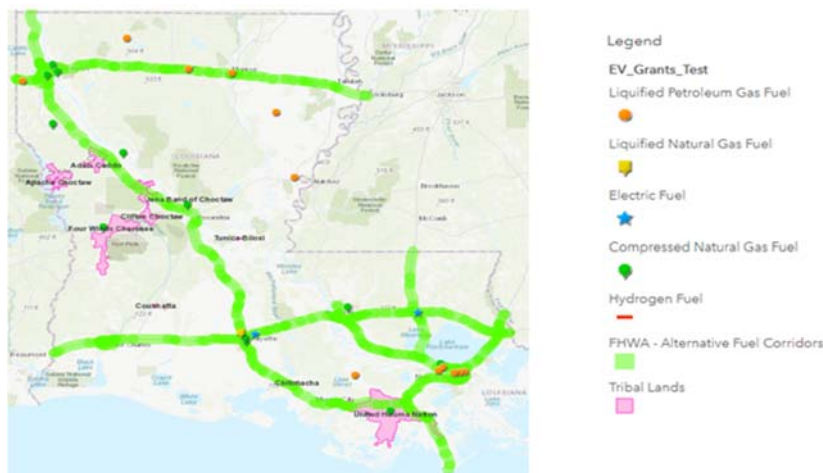


Figure 4: Tribal Land Map of Louisiana

Plan Vision and Goals

The Louisiana EV plan is designed to enable residents and businesses who currently own or want to purchase electric vehicles to fuel quickly and safely across the State for work, recreation, and travel. In order to accomplish this goal, DOTD is in the final stages of creating a competitive grant program that allows for a phased approach to the buildout of electric vehicle supply equipment (EVSE) over 5 years that meets the FHWA requirements of DC Fast Chargers spaced a maximum of 50 miles apart and within one mile of an interstate exit or highway intersections along the corridor, with electric capacity of at

least 600kW. Under the State's forthcoming competitive grant guidelines, rural areas and those with historically low EV adoption rates and low highway utilization numbers are expected to be built in phases over the 5-year period of the program.

As stated in Louisiana's first EV infrastructure deployment plan, this document will continue to be updated, incorporating feedback and lessons learned on an annual basis. The program will allow public and private entities to apply for funding to build stations that meet the qualifications set forth by FHWA's final minimum standards. Based on 2022 registration data, EV utilization continues to be low over all, being the lowest in underserved areas of Louisiana but is beginning to improve. As allowed by the federal program guidance, these underserved areas with low EV ownership and/or high levels of poverty are candidates for operating assistance to address equity issues in rural and urban areas.

As stated previously, Louisiana intends to take a phased approach to awarding grant applications to build out our electric vehicle fueling corridors. The first phase of the grant program (See Figure 10) will prioritize the installation of the minimum number of AFC-compliant stations that satisfy AFC requirements (i.e., one compliant charging station every 50 miles or less). Once the adequate number of applications have been awarded to achieve these minimum standards, the State will begin awarding projects that fall into Phase 2 of the program (See Figure 11). Applications for sites in or near the study areas indicated in this map will be awarded with remaining funds and are optimized using the criteria and weights as outlined in this plan to prioritize site selection with the highest potential charging demand and efficiency. These study areas illustrate the State's strategy to create redundancy in the charging network and increase capacity at locations with high utilization.

5-Year Goals:

Year 1

The original plan was to open up the RFP by the beginning of 2023. Due to multiple factors, the state of Louisiana has not yet opened their grant program for funding. That said, the DOTD still plans to focus on building out the electric alternative fuel corridors to meet minimum FHWA standards with an RFP release by Q4 of 2023. Initial analysis conducted by consultants indicates that approximately 30 new and upgraded sites are needed to complete nominated EV corridors statewide. With the addition of an Electrify America charging site that meets the minimum standards and updates to three other station statuses, that number is now 25 new sites. As Louisiana intends to disburse grants for the installation of public DC Fast Chargers, the state can only award proposals that fit the criteria set forth by FHWA and the State plan. Additional outreach and education may be needed to reach qualified site hosts and encourage them to apply for funding. A full list of the approved EV corridors can be found in the Existing and Future Conditions section of this document.

Year 1 Goals	Status
Host one in-person expo for potential applicants and at least 2 additional virtual events to encourage quality proposals to the DOTD grant solicitation.	Completed by consultant, LCF, on January 24, 2022
Award approximately 10 projects and distribute approximately \$9 million for DC Fast Chargers.	Incomplete
Conduct a funding decision review process conducted at the end of the funding round to ensure diversity, equity, and inclusion (DEI) and network reliability goals are being met.	Incomplete
Collect data from the network to assess usage and identify trends for future development.	Incomplete

Year 2

Year 2 will focus on further building out the electric alternative fuel corridors according to FHWA standards. After the first round of projects is awarded, DOTD will assess the success of the grant program and adjust the strategy and timeline going forward.

Year 2 Goals
Conduct a grantee feedback session with Year-1 Awardees to determine effectiveness of the program.
Host at least 2 educational outreach events to encourage quality proposals to the DOTD grant solicitation.
Award approximately 12 projects and distribute approximately \$11 million for DC Fast Chargers.
Collect data from the network to assess usage and identify trends for future development.

Year 3

Year 3 will focus on building remaining sites that will complete the corridors so that Louisiana will achieve “fully built out” status under the FHWA guidelines. Once we achieve this status, the State will begin awarding projects that are indicated as near “Phase 2 study areas” and other sites allowed by the NEVI funding as appropriate. DOTD intends to continuously monitor the grant program and make adjustments using the lessons learned in years one and two. Monitoring will include site visits to ensure grant recipients are properly installing and maintaining the charging sites and meeting [Justice40](#) requirements and data reporting requirements in the Federal Minimum Standards.

Year 3 Goals
Continuous monitoring of the grant program by DOTD overseeing the grant recipients’ use of NEVI funds to ensure continued compliance with state and federal requirements.
Award enough grants based on availability of funds to close remaining gaps in the corridors that will allow our state to achieve “fully built out status”.

Begin awarding applications under Phase 2 to create redundancy and increase capacity in the charging network and ensure that underserved areas and disadvantaged communities are being adequately covered.

Collect data from the network to assess usage and identify trends for future development.

Year 4

DOTD intends to continuously monitor the grant program and make adjustments using the lessons learned in years one, two, and three. Monitoring will include site visits to ensure grant recipients are properly maintaining the charging sites and meeting Justice40 requirements. Monitoring will also include collecting data regarding the usage and cost of electricity according to data reporting requirements in the Federal Minimum Standards.

Year 4 Goals

Continuous monitoring of the grant program by DOTD overseeing the grant recipients' use of NEVI funds to ensure continued compliance with state and federal requirements.

Award grants based on availability of funds to close remaining gaps in the corridors that will allow our state to achieve "fully built out status".

Begin awarding applications under Phase 2 to create redundancy and increase capacity in the charging network and ensure that underserved areas and disadvantaged communities are being adequately covered.

Year 5

Within 5 years of implementing the statewide EV plan, DOTD intends to completely build out designated corridors that meet the FHWA requirements. Once the corridors are fully built out, any remaining NEVI funds may be spent on EV charging infrastructure on other public roads or in other publicly accessible locations that are open to the general public. These sites and study areas have been identified through extensive analysis of various available data sources and are illustrated on Figure 11 of this document (see section: EV Charging and Infrastructure Deployment).

Year 5 Goals

Approximately 75 DC Fast Charger sites installed statewide / 300 charging ports.

Corridors designated as fully built out by FHWA Standards.

If adequate funding remains after corridors are deemed "complete", then off-corridor projects may apply for and receive funding for chargers.

Collect data from the network to assess usage and identify trends to create a program evaluation report.

Contracting

To implement the statewide plan using NEVI funds, DOTD intends to administer a competitive grant program which will involve contracts with grant recipients to whom NEVI funds will be disbursed for the installation, operation, and maintenance of electric vehicle charging stations throughout the State. Through DOTD's procurement and authorization process, grant recipients will be responsible for ensuring that any subcontractors and vendors meet all federal requirements for charging infrastructure funded as part of the NEVI program. DOTD intends to list on the EV webpage the applicants, bidders, selected bidders, and amount of funds disbursed. Grant recipients will be monitored to ensure the charging stations remain operational and adequately maintained. According to the [NEVI Formula Program Q&A](#) following operations costs are eligible:

- Charging equipment lease fees, in the case that an EV charging station operator opts to lease rather than purchase charging equipment.
- Cellular network fees, internet service fees, or other similar fees necessary to provide communications between EV charging stations and charging network providers.
- Hardware and software maintenance and repair costs, including service agreements with third-party contractors and charging equipment manufacturers or warrantors.
- Other operating costs that are necessary and directly related to the charging of vehicles.

Both Clean Cities coalitions in the state, Louisiana Clean Fuels and the Southeast Louisiana Clean Fuels Partnership, will work to provide resources and education to communities to engage small businesses and disadvantaged communities (DAC's) to ensure awareness of the funding and access to assistance.

DOTD also intends to contract with a third party to perform site inspections of awarded projects to ensure continued compliance with program requirements.

Status of Contracting Process

The RFP and draft contract language have been developed and are pending final review by DOTD. DOTD is targeting a release of the RFP in late summer/early fall of 2023 and anticipate to allow from 90-120 days for applications to be submitted. This will be DOTD's first round of RFPs, which will seek out applications for site locations. DOTD will award as many locations as they are able to, from the first round of NEVI funding. DOTD issued the Notice of Intent (NOI) in December 2022, and identified the number of NOI respondents who provided the Department with a letter of interest.

Awarded Contracts

The first application round for the program has not opened as of the submission of this plan update, and as a result there are no awarded contracts to report on.

Scoring Methodologies - DRAFT Scoring Criteria as of August 1, 2023

DOTD has developed a competitive grant program where applications will be competitively scored and winning applications will be selected by a committee of State agency staff. The basis for the evaluation criteria was established by the Federal Highway Administration in the National Electric Vehicle Infrastructure Standards and Requirements and posted in the federal register [Federal Register :: National Electric Vehicle Infrastructure Standards and Requirements](#). These include but are not limited to:

- Station locations within one travel mile of a designated alternative fuel corridor
- Minimum 600-kilowatt (kW) power capacity to charge four vehicles simultaneously at four ports per site at a minimum of 150 kW per port
- Ability of the charger owner to provide at least 20% of the overall utility, operation, installation, and maintenance costs for at least 5 years]
-
- Registered apprenticeships and on-the-job training
- Demonstration of Justice40 initiatives. The following link is a reference for Justice40 initiatives: [Justice40 Initiative | Department of Energy](#)
- Equitable Payment System - Access cannot be limited by payment type to be mindful of the underbanked.
 - Open Charge Point Interface (OCPI) and Open Charge Point Protocol (OCPP) for operability
 - Shall not require memberships for use
 - Payment options must include contactless payment method that accepts major credit and debit cards
 - Multilingual
 - Automated toll-free number or short message/messaging system (SMS) to initiate a charging session and submit payment
- Ability to accommodate oversized vehicles and commercial trucks
- Business plan or model that includes operation and maintenance beyond 5 years
- Site layout or sketch
- Compliance with required Build America Buy America provisions
- Compliance with the Americans with Disability Act of 1990 (ADA)
- Certified by an Occupational Safety and Health Administration (OSHA) nationally recognized testing laboratory
- 24-hour public accessibility year round
- Combined Charging Systems (CCS) connectors – Type 1 (or other non-proprietary connectors capable of servicing CCS-compliant vehicles)
- Directional signage
- Cybersecurity

- Consumer data privacy, including compliance with Payment Card Industry Data Security Standards (PCI DSS)
- Mechanism to report outages, malfunctions, and other issues with charging infrastructure, including access to platforms that provide multilingual services
- All other federal requirements as outlined in the February 2023 National Electric Vehicle Infrastructure Standards and Requirements, also known as the NEVI Final Rule found here: [Federal Register :: National Electric Vehicle Infrastructure Standards and Requirements](#)

Draft Scoring Criteria

In addition to the federal rules, specific criteria will be evaluated and scored for each application as established by DOTD. These are outlined in the draft scoring matrix below and include:

- Accommodation of oversized vehicles and commercial trucks (pull through options to accommodate vehicles larger than a standard-sized passenger vehicle)
- Distance from nearest NEVI-Compliant DC (Level 3) EV charger
- Total cost (including utility upgrades)
- Business model for service for 5 to 10 years
- On the job training and registered apprenticeships in construction, operation, and maintenance
- Customer safety and security
- Percent markup over utility rates to encourage affordable charging rates
- Customer amenities within 500 feet of the charger
- Proximity to Justice40 community
- Service during power outage

All applications received by the submittal deadline will be reviewed and scored by a scoring committee. Late submittals and incomplete applications will not be considered for scoring. Business Plan

In addition to the aforementioned evaluation and draft scoring criteria, applicants shall provide a business plan detailing their strategy for operation and maintenance for 5 to 10 years, including, staffing, training, and operations. At a minimum, the business plan shall include the following items:

- Project Overview and Goals
- Project Team and Qualifications
 - Per NEVI Final Rule:
 - All electricians installing, operating, or maintaining EV supply equipment shall have a certification from the Electric Vehicle Infrastructure Training Program (EVITP) or graduation or a continuing education certificate from a registered apprenticeship program

- For projects requiring more than one electrician, at least one electrician must be enrolled in an electrical registered apprenticeship program
- Project Approach
- Project Schedule
 - Operation and Maintenance Plan

Justice40 Plan

The application shall also include Justice40 initiatives to ensure at least 40% of the program benefits historically underserved communities. These communities include the Tribal Nation, Women, Black, Latino, Asian American Pacific, Indigenous, and other underrepresented groups. Locations for disadvantaged communities are based on Justice40 maps found online: [Electric Vehicle Charging Justice40 Map \(arcgis.com\)](#).

Utility Provider Letter & Site Host Agreements

Each site proposal will require a letter from the utility provider stating whether the site meets the minimum 600 kW requirement or whether upgrades are needed, along with the estimated cost of upgrades. Permits that are required by the local jurisdiction must be acquired prior to site construction and prior to disbursement of program funds. Grant recipients shall also have adequate insurance to protect against damage, loss, and injury. In addition, the applicant shall confirm they are authorized to install a NEVI-compliant DC Fast Charger on the site by ownership or contractual agreement.

Site Design or Layout

A site design or layout will also be required and shall include dimensions, drainage, lighting, and overhead cover. Dimensions should show accommodation for oversized vehicles and commercial trucks. Traffic control devices or on-premise signs acquired, installed, or operated shall comply with the Manual on Uniform Traffic Control Devices (MUTCD) and 23 CFR Part 750 [eCFR :: 23 CFR Part 750 -- Highway Beautification](#).

Plan for Compliance with Federal Requirements

DOTD will review all project applications to ensure that they meet the Federal Minimum Standards (23 CFR 680) of the Program to determine Program eligibility, and will work to ensure that, if awarded, all applicants will comply with the necessary contracting requirements defined in 2 CFR 200.

Project features over and above Minimum Standards outlined in (23 CFR 680) may contribute to a higher score for the project according to the DOTD's Draft Scoring Criteria (described in the section above, titled "Scoring Methodologies Utilized"). Any such projects will still need to comply with all Minimum Standards and all relevant State and Federal contracting requirements.

Existing and Future Conditions Analysis

At the end of 2021, there were approximately 3,065 Battery Electric Vehicles (BEV) registered in Louisiana. By the end of 2022, there were 5,884 BEVs showing an 85% growth in electric vehicle adoption - compared to a 63% growth over the previous year. While the state of Louisiana’s adoption rate is much lower than the rest of the nation, popularity of more affordable models and high gas prices have contributed to the increase in popularity of EVs in our state.

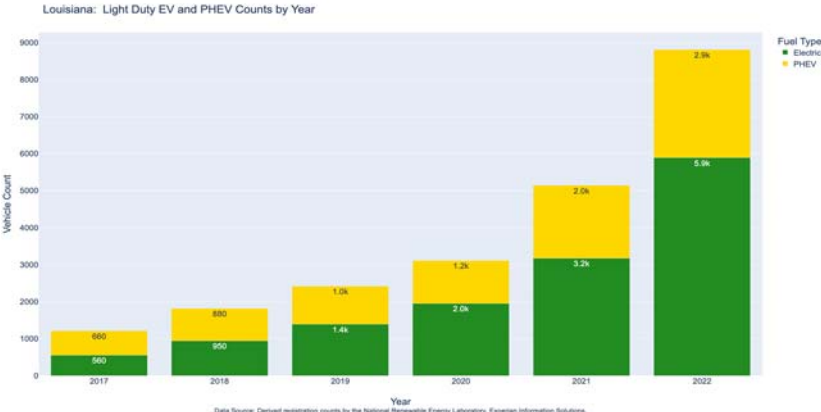


Figure 5: Louisiana: Light Duty EV and PHEV Counts by Year

EV Adoption by Parish - Q4 2022

The map below shows the distribution of registered fully electric vehicles by parish in the state of Louisiana as of the fourth quarter of 2022

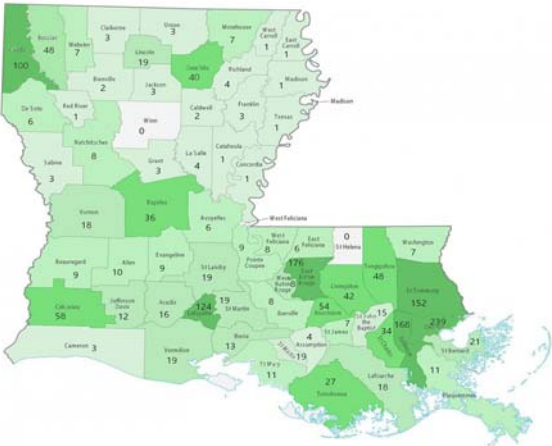


Figure 6: EV Registration by Parish in Louisiana Q4 2022

Table 5: Existing EVSE in Louisiana as of July 13, 2023

Existing EVSE in Louisiana as of July 13, 2023 Via: https://afdc.energy.gov/stations	
153 Chargers / 370 ports Total	
DC Fast Chargers	
<ul style="list-style-type: none"> ● 40 DCFC locations with 202 ports <ul style="list-style-type: none"> ○ 25 non-Tesla DCFC locations with 63 ports ○ 1 non-Tesla locations fit the Round 6 standards for FHWA EV Corridors 	
Level 2 Public Charging	
<ul style="list-style-type: none"> ● 179 locations with 358 ports <ul style="list-style-type: none"> ○ 147 non-Tesla locations with 259 ports 	

Vehicle Availability

The Alliance of Automotive Innovation has indicated, in statements to the Louisiana Dealers Association (LADA), that the automotive industry will invest over \$330 billion in EV’s by 2025 and grow the number of available EVs for sale. According to [Atlas EV Hub](#), there are currently 39 BEV models available in Louisiana compared to 43 available in the US. The LADA has stated that Louisiana dealers are currently investing millions of dollars in facilities, tools, and training to sell these models. Dealerships across the nation are still experiencing some supply chain issues resulting in reduced inventory as compared to their pre-pandemic levels. Many dealerships in Louisiana have commented on how difficult it is to get or keep an EV or a plug-in hybrid electric vehicle (PHEV) on their lots as manufacturer supplies are low and vehicles sell quickly. Delivery of ordered vehicles may take up to a year. These issues surrounding electric vehicle availability are not unique to Louisiana and are being experienced by all States.

Louisiana Utilities and their Service Areas

Electric utilities that service the program areas are Entergy, Cleco, Lafayette Utility Services, LEPA, AEP/SWEPCO, and members of the Association of Louisiana Electric Cooperatives such as DEMCO. The utility companies maintain that they have adequate capacity, but it is unknown how much work is needed to complete “make ready” status work for individual sites along corridors. The availability of 3-Phase power will be a minor issue in most of the state. However, there are instances where exceptions to the distance requirements may be granted, such as when grid capabilities are limited, or when the exception would support charging in disadvantaged communities, or in rural areas. Utilities request site-specific requirements, such as point of service and power needs, to determine any issues with providing power to the site.

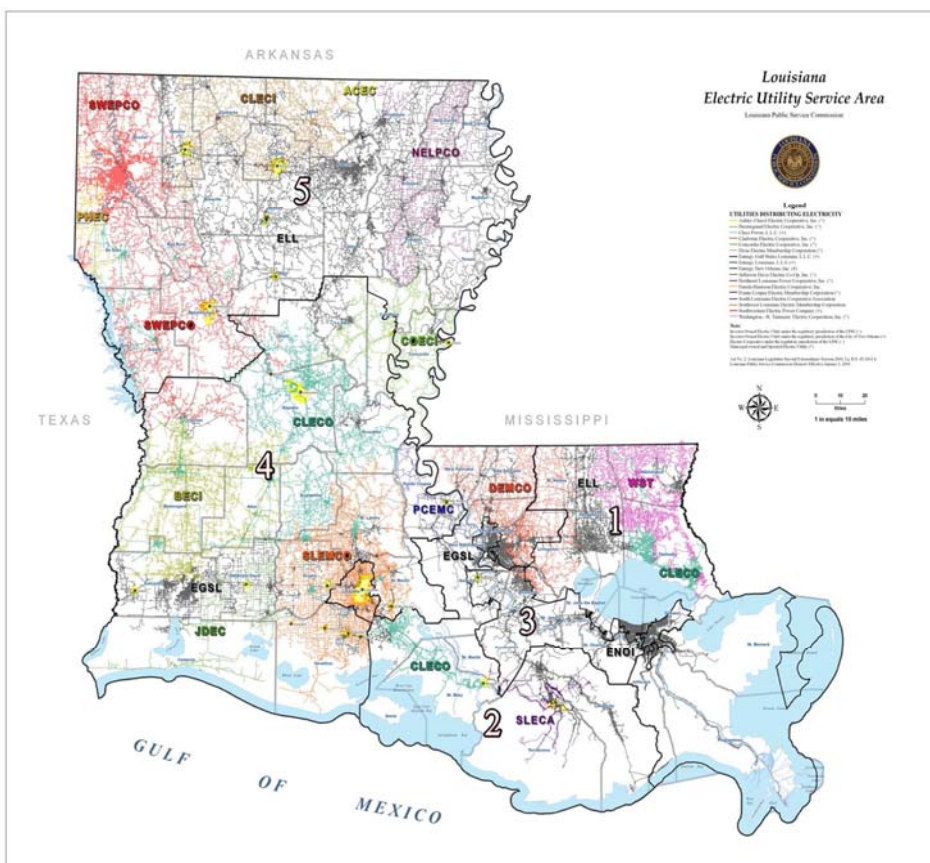


Figure 7: Louisiana Electric Utility Service Areas

State Geography, Terrain, Climate and Land Use Patterns

The EPA defines ecoregions as “areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources.” Louisiana is subdivided into six “Level III” EPA ecoregions: South Central Plains ecoregion (northwestern and center-west parishes); Mississippi Alluvial Plain ecoregion (northeastern, center-east, and southeastern parishes); Mississippi Valley Loess Plains, Southeastern Plains, and Southern Coastal Plains ecoregions (southeastern inland parishes); and Western Gulf Coastal Plain ecoregion (southwestern parishes). The listed ecoregions are further subdivided into smaller regions denoting more detailed comparisons of land areas within the state, however, for the sake of brevity this document will summarize only the six Level III ecoregions that make up the state.

Major land uses in the South-Central Plains EPA ecoregion consists of timber production, livestock grazing, and oil and gas production. Dominant vegetation includes pines (native short-leaf pines are now largely replaced by commercial pine plantations), several varieties of oak, sweetgum, and understory growth including sumac, greenbriar, and hawthorn. Rolling plains are one distinguishing feature of this ecoregion that differentiates it from the flatter Mississippi River Valley plains or Gulf Coast plains. The

major body of water running through this ecoregion is the Red River. The Red River floodplains are naturally bottomland hardwood forests, but have been largely cleared for crop cultivation and grazing, although some wooded areas remain. Crops dominating this region include cotton, soybeans, corn, wheat, and rice.

The Mississippi Alluvial Plain EPA ecoregion spans the entire length of Louisiana (north to south), following the current course of the Mississippi River and covering some areas west of the river, and north near Lakes Maurepas and Pontchartrain. Climates are notably variable throughout the region, with temperatures and precipitation increasing from north to south, however there are many commonalities along the river corridor. Constructed levees restricted river overflow and opened adjacent land for agricultural use. Northern and central Louisiana climates and soil are amenable to cultivation of cotton, soybeans, corn, and rice; while southern Louisiana agriculture is dominated by sugarcane, with some soybeans and pastures. This ecoregion is also home to extensive wetland habitats. Though deforestation and development have reduced cohesion of wetland habitats over time, this region remains a major bird migration corridor and is rich with biodiversity. Bald cypress and water tupelo trees can be found in freshwater wetland areas throughout this ecoregion, as well as oak in more well-draining areas. The southern portions of this ecoregion are host to many live oak, laurel oak, and Spanish moss.

The main distinguishing feature of the Mississippi Valley Loess plains EPA ecoregion is the prominent presence of loess – loosely compacted wind-blown sediment. Soils in this ecoregion tend to be sandy, silty, and well-draining in comparison to the dense clayey deposits found in the Mississippi Alluvial Plains. This ecoregion covers a relatively small portion of southeast Louisiana, including much of East Baton Rouge Parish, and West and East Feliciana Parishes. Land use in this region hosts a heavy presence of pine plantations, pasture, and crop land, however urban use covers a large portion in the Baton Rouge vicinity.

Northern St. Helena, Tangipahoa, and Washington Parishes make up the Southeastern Plains ecoregion of Louisiana. This landscape is home to oak-pine and mixed hardwood forests, pastures, cropland, and growing residential and commercial development. Dairy is a prominent industry here. Soils of this ecoregion are largely sandy, gravelly, and well-draining.

Eastern Livingston Parish, southern Tangipahoa Parish, and southern St. Tammany Parish make up the Southern Coastal Plains ecoregion of Louisiana. Lower elevations than the Southeastern Plains and wetter soils are characteristic of this ecoregion. Habitats here include marshes and swampy lowlands. Soils range from poorly to moderately well-draining. Floodplains in this ecoregion contain forests of bald cypress, water tupelo, and oak-dominated hardwood forests.

The Louisiana portion of the Western Gulf Coastal Plain ecoregion spans from the Sabine River to the Atchafalaya Basin. The southernmost latitudes of this ecoregion contain the Chenier plains which are

largely treeless, but do contain live oak and hackberry with a palmetto-heavy understory, and extensive salt or brackish-water grassy marshes along the Gulf Coast. Much of the northern portions of this ecoregion are dominated by grasslands and herbaceous plant species, with inclusions of live oak and long-leaf pine. The area has suffered urbanization and conversion to croplands and pastures. Crops include sugarcane, rice and crawfish agriculture, and soybeans. Soils of this ecoregion are primarily clayey and poorly draining, though sandy, loamy textures are somewhat present at surface-levels in some areas.

According to the EPA, statewide average annual precipitation falls somewhere between 44.8 – 84.7 inches per year, with northern regions generally receiving between 50 – 60 inches per year, and southern regions receiving between 60 – 70 inches per year. Hurricane season is lengthening over time, so these concerns will continue to be relevant for more areas across Louisiana and these changes will be considered in the selection of projects through this program. According to National Oceanic and Atmospheric Administration (NOAA) maps depicting areas vulnerable to storm surge flooding, areas as far north as central Livingston Parish may be vulnerable to storm surge flooding during a Category 1 hurricane. During a Category 5 hurricane, areas as far north as northern Pointe Coupee Parish may be vulnerable to storm surge flooding.

Especially in areas susceptible to flooding or storm surge from hurricanes, consideration will need to be made for how electric vehicle chargers installed under this program will be resilient against the unique environmental concerns in our state. As discussed above, the southern portions of the state are susceptible to storm surge flooding during hurricane season, and this makes it imperative that our major evacuation routes are well supported by electric vehicle charging infrastructure so that EV owners in these regions can safely evacuate their homes in the event of a major storm. DOTD may also consider backup generation (such as solar + battery storage) for EV chargers along major evacuation routes for additional resiliency for emergency situations.

Sources:

https://gaftp.epa.gov/EPADDataCommons/ORD/Ecoregions/la/la_front.pdf

<https://enviroatlas.epa.gov/enviroatlas/interactivemap/>

<https://noaa.maps.arcgis.com/home/index.html>

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

Louisiana has a total of 943 miles of Interstate highways. DOTD has nominated all of its Interstate highways as EV corridors. In order to build out the statewide EV charging network the interstate highways should be prioritized since freight movement by truck in Louisiana relies heavily on the Interstate Highway System. I-10, I-12 and I-20 provide much of the east-west movement for truck traffic, while I-49, I-55, and I-59 facilitate north-south truck freight movements. There are also Interstate loops

and spurs in a number of the State’s metropolitan areas. In Louisiana, trucking accounts for approximately 58 percent of the tonnage moved in, out, and through the state (excluding pipelines).

Alternative Fuel Corridor (AFC) Designations

DOTD, in partnership with the Louisiana Department of Environmental Quality (LDEQ), the Louisiana Department of Natural Resources (LDNR), Louisiana Clean Fuels, and many other partners, submitted Round 6 nominations for the designation of alternative fuels corridors in Louisiana in accordance with 23 U. S. C. 151(a) on May 13, 2022 and again for Round 7 on June 19, 2023. While Round 7 was a simple update to include a section of interstate that was inadvertently left off in Round 6 for EVs, the state nominated multiple Interstate Highway Systems in Round 6, including some loops and spurs, with additional nominations for US 90 (Future I-49) from I-10 in Lafayette to US 90 Business / Westbank Expressway (Future I-910) in New Orleans, and LA 1 / LA 3235 from US 90 south to Port Fourchon, a major energy corridor for our nation. These sections of non-Interstate corridors also serve as crucial evacuation routes for southeast Louisiana.

Since the approval of the State’s EV Corridors by the FHWA on July 6, 2022, the above-mentioned interstate and highway routes in Louisiana are now eligible for the National Electric Vehicle Infrastructure (NEVI) program.

Table 6: FHWA Round 6 - Electric Alternative Fuel Corridor Definitions

Corridor Ready	Corridor Pending
<p>Public DC Fast Charging:</p> <ul style="list-style-type: none"> ● No greater than 50 miles between one station/site and the next on the corridor. ● No more than 1 mile from Interstate exits or highway intersections along the corridor. ● Stations should include four Combined Charging System (CCS) connectors - Type 1 ports (simultaneously charging four electric vehicles). ● Site power capability should be no less than 600 kW (supporting at least 150 kW per port simultaneously across 4 ports). ● Maximum charge power per DC port should not be below 150 kW. 	<p>A strategy/plan and timeline for public DC Fast Charging stations separated by more than 50 miles.</p> <p>Location of station/site- no more than 1 mile from Interstate exits or highway intersections along the corridor.</p>

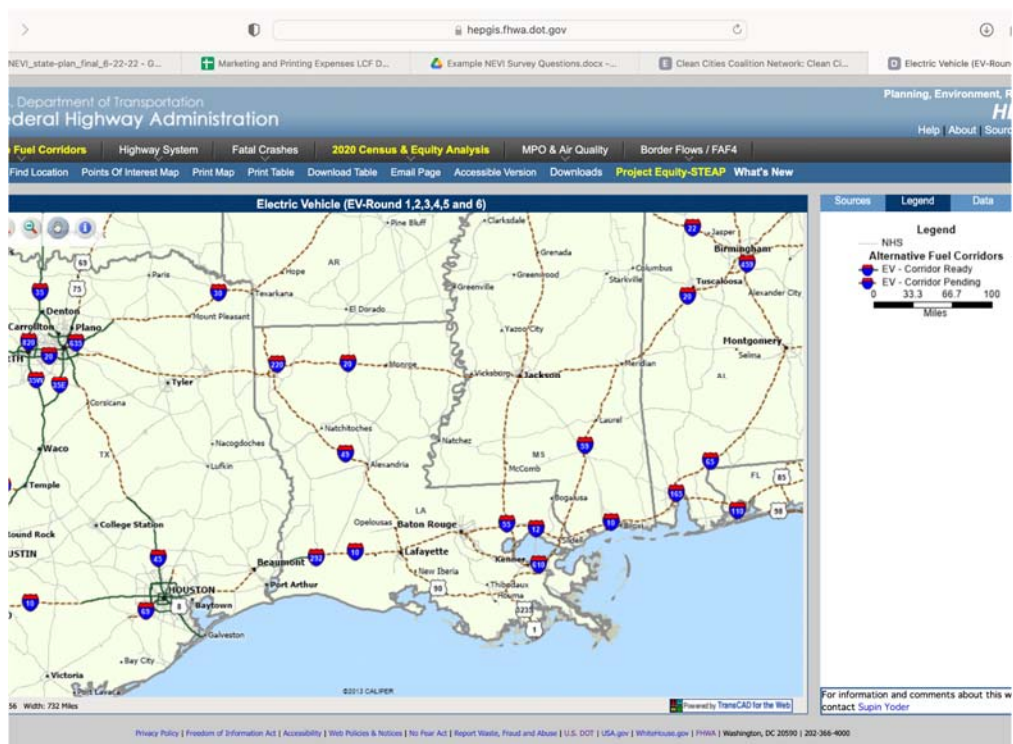


Figure 8: Round 6 Approved FHWA Alternative Fuel Corridors for Electric Vehicles

Existing Locations of Charging Infrastructure Along AFCs

DOTD feels that the NEVI formula funding is critical to helping Louisiana do its part to reduce carbon emissions in order to provide a more sustainable future for generations to come. As a part of our previous strategy to complete our EV corridors, the LDEQ utilized a DC Fast Charging Master Plan created by Louisiana Clean Fuels that suggested charging sites that met all of the previous FHWA Alternative Fuel Corridor standards. Since the NEVI guidance and Round 6 standards were published, the DOTD has learned that many of the stations that were awarded funding will no longer qualify under the new, higher standards. Fortunately, three of the Electrify America (EA) sites that were built along I-10 still qualify under the new standards and EA recently added one charger along Interstate 20 in the Monroe area that is also NEVI compliant.

Table 7: Existing DC Fast Chargers in Louisiana

State EV Charging Location Unique ID	Charger Level (DCFC, L2)	Route	Location	City	# of EV Connectors	Distance from Interstate	Meets FHWA Speed & Connector Standards	EV Network
74214	DC	I-10	701 Baronne St	New Orleans	1	4.2 miles from I-10	NO	Non-Networked
121845	DC	I-10	1932 Rees Street	Breaux Bridge	6	0.8 miles from I-10	YES	Electrify America

121847	DC	I-10	525 N Cities Service Hwy	Sulphur	4	1.3 miles* from I-10	YES	Electrify America
124830	DC	I-12 / I-55	2030 Hammond Square Drive	Hammond	4	.9 miles from I-12 1.8 Miles from I-55	YES	Electrify America
193011	DC	I-49	7520 Coliseum Blvd	Alexandria	1	5 miles from I-49	NO	ChargePoint Network
214270	DC	I-49	1515 Dorchester Drive	Alexandria	1	4 miles from I-49	NO	ChargePoint Network
214940	DC	I-10	6606 Johnston St	Lafayette	1	7 miles from I-10	NO	ChargePoint Network
222565	DC	I-10	6142 Johnston St	Lafayette	1	8.9 miles from I-10	NO	ChargePoint Network
234476	DC	LA-90	1190 W Tunnel Blvd	Houma	1	44.6 miles from I-10	NO	ChargePoint Network
235570	DC	I-49	5853 Interstate 49 South Service Road	Opelousas	1	0.4 miles from I-49	NO	EV Connect
238502	DC	I-20/ I-49	7581 EAST KINGS HWY	Shreveport	2	4 miles from I-49 and 7 miles from I-20	NO	EV Connect
238859	DC	LA-90	1345 Hwy 90 E	Broussard	1	15.5 miles from I-10 and I-49	NO	EV Connect
240753	DC	LA-167	125 Southcity Pkwy	Lafayette	1	7.4 miles from I-10	NO	ChargePoint Network
250523	DC	I-10/I-12	12326 Airline Hwy	Baton Rouge	3	3.9 miles from I-12 and 1.8 miles from I-10	NO	Non-Networked
256876	DC	I-55/ I-12	401 N Morrison Blvd	Hammond	1	1.4 miles from I-55 and 1.6 miles from I-12	NO	ChargePoint Network
259866	DC	I-12/ I-10	6505 Florida Blvd	Baton Rouge	1	3.4 miles from I-12 and 2.8 miles from I-10	NO	Non-Networked
259978	DC	I-20	520 Broadway St	Minden	1	1.5 miles from I-20	NO	Non-Networked
261235	DC	I-10	12730 Airline Highway	Baton Rouge	2	1.9 miles from I-10	NO	Blink Network
261297	DC	I-20	4103 Pecanland Mall Dr	Monroe	6	0.5 miles from I-20	YES	Electrify America

*Fits speed requirements but may require discretionary exemptions for distance.

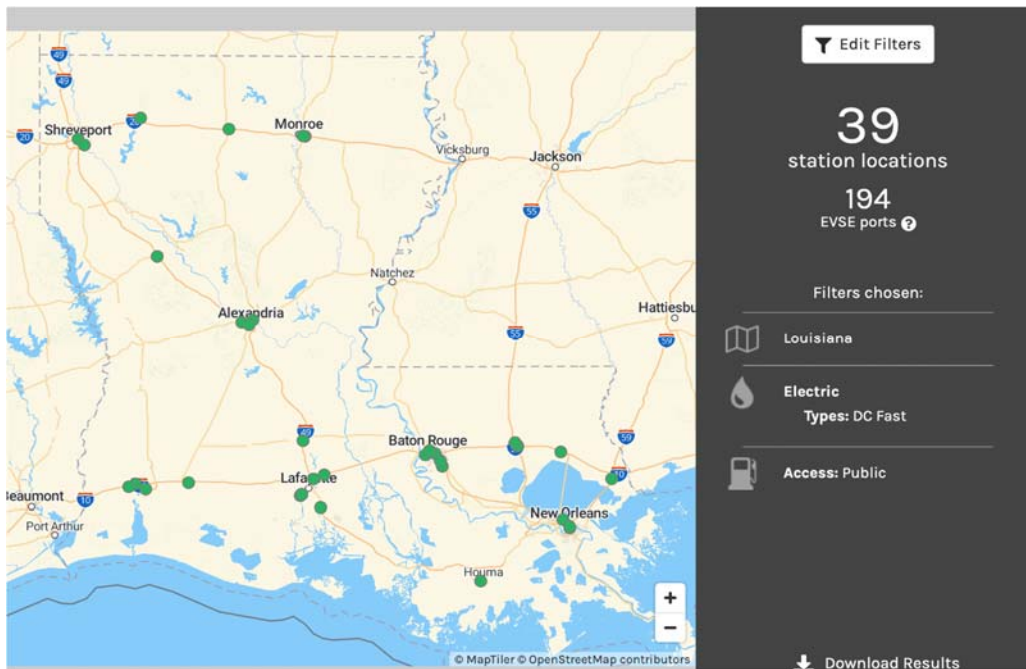


Figure 9: Existing public DCFC in Louisiana as of July 15, 2023, Includes TESLA

Known Risks and Challenges

Vehicle availability, transformer shortages, nationwide demand for EVSE charging equipment, and potential labor shortages of trained and qualified EVSE installers are significant barriers to success for projects awarded under the State’s competitive grant program. Additionally, Build America Buy America requirements may make procurement a difficult and taxing process for grant awardees.

Weather conditions such as flooding, hurricanes, and their corresponding power outages may also reduce the timeframe for site owners and operators to ensure charging stations are operable.

These ongoing supply chain issues for vehicles, switchgear, labor, raw materials, ground mounted transformers, microchip shortages, and other hardware do have the potential to extend project implementation timelines.

EV Charging Infrastructure Deployment

Through a competitive grant program, DOTD will develop the EV charging network along the interstate corridors. DOTD’s goal is a robust network of DC Fast Charging stations that satisfy the FHWA Alternative Fuel Corridor requirements for EVSE. As part of the strategy is to create a seamless national EV charging network, DOTD is coordinating with nearby DOT’s through participation in the [National Alternative Fuels Corridor Council](#), which is facilitated by Clean Cities coalitions as well as through participation in

meetings organized by the American Association of State Highway and Transportation Officials ([AASHTO](#)) and the National Association of State Energy Officials ([NASEO](#)).

The DOTD performed an analysis of existing and projected EV adoption rates, existing EV charging stations, and existing EV infrastructure using the [DOE Alternative Fuels Data Center's Station Locator](#) by the U.S. Department of Energy in order to model the regional volume of public Level 2 and DCFC EV infrastructure needed to support annual EV adoption. This study allowed the State to pinpoint the optimal locations for charging stations based on weighting criteria determined through stakeholder feedback (e.g., EV or charging density, equity, alternative fuel corridors, environmental justice areas) and allowed DOTD to prioritize the identified locations for site selection based on characteristics (e.g., military or tribal areas, parks, travel destinations or other points of interest) specified through the stakeholder involvement process.

DOTD is planning a two-phased approach to developing Louisiana's EV charging network through the NEVI program. Phase 1 of the program would focus on satisfying the minimum requirements of the FHWA Alternative Fuel Corridor program (shown in Figure 10) while focusing on areas with high demand. Phase 2 of the program will focus on building resiliency, redundancy, and overall coverage of the charging network. This second phase (shown in Figure 11) will help add redundancy for long-distance travel, but will also provide a more widely distributed network of charging for intrastate and local travel. Distributing charging sites widely along our designated corridors will provide crucial support for EV owners to travel freely throughout the state and will provide resiliency in the event of emergency situations in which owners will need to evacuate their homes.

Planning Towards a Fully Built Out Determination

The DOTD anticipates that Louisiana will require approximately 25 new DCFC sites to satisfy the 50-mile minimum distance requirements under the FHWA Alternative Fuel Corridor program for all of the highways that were nominated in our "Round 6" corridor nomination package. After that requirement is satisfied and after DOTD and the FHWA deem Louisiana's corridors to be "fully built-out", the state will prioritize installing additional chargers along and off the nominated corridors to better serve high use areas and to achieve redundancy in underserved areas. The estimated time frame for this is within 1 year of grant applicant submissions. Refer to Figure 10 for more information.

Required Station Specifications

The Louisiana Department of Transportation will require that projects meet all [Federal Minimum Standards for the NEVI Program](#). *For an example of station specifications, see Appendix A.*

Funding Sources

DOTD has developed a competitive grant program where grant recipients fund the non-federal share of the NEVI Formula Program. Operations and maintenance funds may be available for the first five years of station operations for select locations that qualify as rural, underserved, and or disadvantaged communities.

The potential funding sources for the non-federal sources will vary based on the applicants. The DOTD encourages applicants to provide matching funds in excess of the required 20% minimum when possible. The DOTD understands that asset management firms have an interest in working with local governments and non-government organizations on financing the implementation of EV Charging Infrastructure in exchange for profit sharing similar to the arrangements they have for funding basic utility infrastructure. The program also has the interest of venture capital firms that can partner with owners and operators.

Estimated Cost to Develop an EV Charging Network in Louisiana

In the previous state plan, both empirical data from the California Electric Vehicle Infrastructure Project (CALeVIP) and EV charging cost data from external literature was used to estimate the cost to install a 150kW power level DC charger for AFC compliance. The average per-port cost for these projects was approximately \$310,000, which includes the capital cost of charging equipment, construction, and miscellaneous expenses such as permitting, licensing, waste hauler, construction management, etc. Note that these projects use FreeWire chargers that do not require utility upgrade, therefore the charging station OEM cost may be significantly higher than other cost estimates using the traditional 150kW DCFC chargers. On the other hand, a [working paper](#) from the International Council on Clean Transportation suggests that a DCFC networked 150kW charging station with one port costs \$75,000 on average, which is equivalent in purchasing power to about \$83,775 in 2022. Installing each port at a site with 3-5 chargers costs \$28,312 on average, which is equivalent in purchasing power to about \$31,625 in 2022.

DOTD has adjusted these original assumptions based upon current reports and quotes from EVSE companies and utilities across the country which indicate that the cost to build out a NEVI compliant DCFC site is closer to \$1M - \$1.5M per site (4 ports).

The funding available for installing EV infrastructure in Louisiana is approximately \$91M (\$73M from IJJA/NEVI plus approximately \$18M in matching funds). DOTD estimates that to build out all 25 sites for Phase 1, the total project cost will be between \$25M - \$35M, leaving enough funding for approximately 200 more DCFC ports for Phase 2 for a combined total of ~300 charging ports. The wide range is due to unpredictable factors such as inflation, supply chain change, site-specific variations, compliant stations

built without federal funds, and other changes in hardware or labor costs over the funding period, which could all result in more or fewer allocated chargers from the available funds.

2022 Infrastructure Deployments

DOTD conducted initial analysis and modeling with the Center for Sustainable Energy’s (CSE) Caret software to determine the approximate number and location of chargers to be installed across Louisiana. The State breaks the grant program into two phases with Phase 1 prioritizing the installation of the minimum number of AFC-compliant stations that satisfy AFC requirements (i.e., one compliant charging station every 50 miles or less) and Phase 2 where the state will prioritize the installation of additional chargers along and off the nominated corridors to better serve high use areas and to achieve redundancy in underserved areas.

Currently, there are a total of four AFC-compliant DCFC charging sites in Louisiana. To make all nominated AFC segments compliant, the DOTD’s updated projections suggest that 100 DCFC chargers at 25 sites should be installed at various locations along I-10, I-12, I-20, I-49, I-55, US-90, and a few local highways in the southern part of the state. The text description of the locations of these suggested stations are provided in Table 9, and a detailed map of suggested stations, including upgrades and new installations, are presented in Figure 10.

Phase 1: Study Areas and Approximate Locations of DC Fast Chargers

Table 9: Study Areas: Description and Approximate Locations of DCFC stations to be installed, Phase 1

Actions	Route	Location	Utility District	Funding Amount
Install 4 chargers	I-10	Exit 266	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 10	SWEPCO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 33	SWEPCO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 69	ELL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 93	ELL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 153	ELL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-20	Exit 186	ELL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 241	SWEPCO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 177	SWEPCO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 138	SWEPCO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 99	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 66	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-49	Exit 25	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	I-55	Exit 61	ELL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-10	Exit 64	EGSL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-10	Exit 135	EGSL	\$1,000,000 to \$1,500,000
Install 4 chargers	I-10	Exit 206	ENOI	\$1,000,000 to \$1,500,000
Install 4 chargers	I-12	Exit 1B	EGSL	\$1,000,000 to \$1,500,000

Install 4 chargers	I-12	Exit 63A	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	US-90	Exit 129	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	US-90	Patterson-Bayou Vista	CLECO	\$1,000,000 to \$1,500,000
Install 4 chargers	US-90	Exit 202; LA-24	SLECA	\$1,000,000 to \$1,500,000
Install 4 chargers	US-90	Waggaman	ENOI	\$1,000,000 to \$1,500,000
Install 4 chargers	LA-3235	3235-3162; South Lafourche HS	EGSL	\$1,000,000 to \$1,500,000
Install 4 chargers	LA-3090	Southernmost LA	EGSL	\$1,000,000 to \$1,500,000

The Phase 1 map below (Figure 10) indicates approximately 25 sites needed to achieve the minimum sites needed to achieve “fully built out” Electric Alternative Fuel Corridors under FHWA standards. Utilizing updated station data from the AFDC Station locator, the DOTD has recalculated the EV charging infrastructure density (e.g., stations per 50 miles) along the AFC corridors, including the Interstate Highway System and a few other highways in the state.

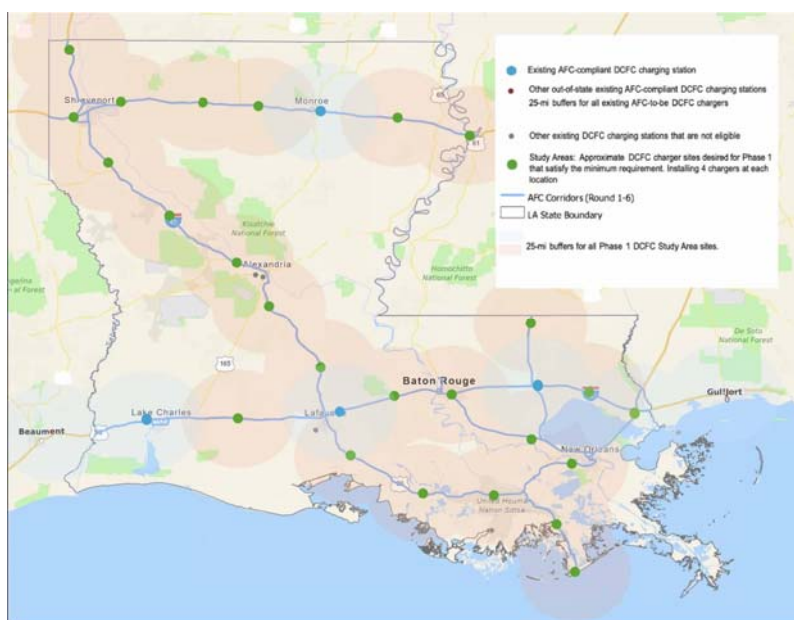


Figure 10: Approximate Locations for Installation and Upgrading of DCFC stations, Phase 1

FY23-26 Infrastructure Deployments

The infrastructure scenario for Phase 2 (Figure 11) indicates the results of analysis on how to provide the best coverage possible for EV owners in our state. Depending on installation costs and potential fluctuations in cost of equipment and materials, the State estimates that it will have enough funding to award approximately 75 sites over the course of the project period. The first couple of years, funding awards will focus on building out of the approximately 25 new sites needed to satisfy Electric Alternative Fuel Corridor requirements by the FHWA. Once the state achieves complete corridors, as per the FHWA standards, DOTD will move to awarding projects under the “Phase 2” of the state Plan.

Phase 2: Study Areas for EV Infrastructure along nominated EV Corridors

Figure 11 below indicate study areas as suggested by the State’s initial EV charging infrastructure siting analysis. The sites indicated are ones that would be of interest to the State once the AFC requirements are satisfied in order to create redundancy for the purpose of reliability and to increase capacity in areas where traffic is heaviest.



Figure 11: Phase 2 DCFC Installation, ~200 DCFC chargers

Upgrades of Corridor Pending Designations to Corridor Ready Designations

At the time this document was drafted, the state did not have any new corridors that were able to be designated as “Ready”. As part of the 5-year EV implementation plan, the State will reevaluate the status of the corridors and conduct an annual gap analysis to determine when previously nominated pending corridors can be upgraded to “Ready” or “Complete” status. The goal of the implementation plan is precisely to accomplish this feat.

Increases in Capacity and Redundancy Along Existing AFC

DOTD examined the existing charging stations and after applying Round 6 standards, there are only three sites along the I-10 that meet AFC requirements and one along I-20. As Louisiana has little to no existing AFC corridors for EVs, it is essentially starting from scratch. It is understood that redundancy in EV infrastructure in metropolitan areas will likely be necessary to achieve Justice40 goals. However, our first priority will be to complete our Pending EV Corridors so that they can achieve “Signage Ready” status. Any NEVI funds remaining after basic corridor build out is achieved and certified by FHWA will go to increasing capacity and redundancy in high-use areas, ensuring that evacuation routes are adequately

covered with accessible fast chargers. Additionally, these funds will go to identifying and adding chargers to previously underserved “charging deserts” on state routes or other non-corridor highways.

Electric Vehicle Freight Considerations

While the focus of NEVI funding is on passenger vehicles and not freight transportation, the encouragement of charging sites to include pull-through spots may contribute to supporting freight transportation by electric vehicles. DOTD expects freight companies to pursue infrastructure funding through the \$2.5b discretionary funding for CFI Discretionary Grant Program through the Bipartisan Infrastructure Law. DOTD is also engaging with organizations such as the Louisiana Motor Transport Association and various port authorities to incorporate their needs into this State EV Plan and forthcoming grant program. The agency hopes to have a detailed freight plan in place by year 3 of this program.

Public Transportation Considerations

Transit agencies in a few metro areas in Louisiana have already begun adding electric transit buses to their fleets. East Baton Rouge Parish’s transit system, the Capital Area Transit System, currently has 9 electric BYD buses with plans to have a total of 24 electric buses by the end of 2024. Shreveport’s transit system, SporTran, currently has 5 fully electric Proterra buses and is in the process of procuring more. Other transit agencies around the state have shown strong interest in these buses such as the cities of Monroe and Lafayette.

The New Orleans Regional Transit Authority will receive \$71M in FTA “Low-No” Program funding to buy zero-emission vehicles and charging equipment, provide a microgrid to support charging resiliency after major storm events, and design and implement a workforce training program. The project will improve safety, air quality and reliability for residents and visitors to the New Orleans metropolitan area.

Additionally, seven school districts in Louisiana have been awarded a combined \$43.8M in funding from the [EPA’s Clean School Bus Program grants](#) and many others are currently preparing to submit their applications for the open Notice of Funding Opportunity (NOFO) which closes on August 22, 2023. While the conversion of public transportation vehicles to alternative fuels, including battery-powered electric vehicles, has been underway for many years in Louisiana, charging those vehicles typically occurs “behind the fence” on public transit agency or school property and is not accessible by the public.

State, Regional, and Local Policy

The EV infrastructure plan will rely on third-party entities to coordinate with municipalities on zoning and permitting. Discussions with stakeholders during the development of the EV infrastructure plan demonstrated that utilities and EVSE companies were well equipped to handle zoning and permitting processes as part of their normal business practices. DOTD will monitor developments at the state and

local levels during the implementation of this plan and provide updates to state and local officials when requested. The DOTD, in partnership with its contractors, may provide educational resources and assistance to applicants and stakeholders on best-practices as needed.

Implementation

The State strategy is to encourage EV deployment in rural and underserved communities. The State will conduct outreach efforts with elected officials, non-governmental organizations, unions, disadvantaged businesses, citizens, and potential workforce participants. This effort will focus on the potential economic, workforce, wealth building, and transformational transportation opportunities for these disadvantaged communities.

The installation and operation of EV charging stations in these communities can create new revenue sources for financially challenged but strategically located towns and cities by attracting EV owners to visit their shops, restaurants, and local attractions. It will allow communities to utilize their relationships with utilities to help ensure affordability and community access. These relationships can be built to include community revenue sharing and partnerships with automobile dealers to focus on building EV ownership, particularly in rural areas.

Strategies for EVSE Operations & Maintenance

Grant applicants receiving awards will follow agreed-upon requirements for operation and maintenance. Monitoring and service level agreements for station performance will be specified in award agreements. DOTD will monitor station up-time through vendor reported usage data and general user satisfaction on publicly accessible third-party charging websites. Operation and maintenance costs will be evaluated per location over time. Enforcement of any idle fees will be the responsibility of the vendor/station operator.

EVSE companies may be required to provide 24/7 support year-round and have call centers available to ensure that help can be given at any time. Additionally, most charging issues can be resolved via remote diagnostics or the implementation of remedial measures.

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

In addition to its existing solicitation methods to advertise, select, and award contracts to electric vehicle charging equipment service providers/property owners, the DOTD will partner with its Clean Cities coalitions to both solicit applications and to educate potential applicants on the grant process. Part of the State's strategy to assist grant applicants with identifying qualified electric vehicle charger

service providers was to host an in-person EVSE expo with educational sessions put on by Louisiana Clean Fuels, EVSE companies, engineering and consulting firms, utilities, and other experts. This event was highly successful and may be replicated for future rounds. Additionally, relevant educational resources will continue to be made available and published on the DOTD website. These resources may include webinars, videos, and links to technical help documents.

As part of the feedback process for the EV plan development, it has become clear that utilities and charging equipment (EVSE) companies have the expertise and ability to locate suitable locations for charging stations within DOTD's recommended EV study areas. Additionally, EVSE companies are well equipped to maintain the equipment for the site owners and hosts. DOTD will monitor the progress of awarded projects with regular correspondence between the vendor and project team as spelled out in award agreements.

Strategies for EVSE Data Collection & Sharing

The DOTD is aware of the substantial data submission requirements that each funded project must meet on a quarterly and annual basis. Contracts with grant applicants will include requirements to provide anonymized usage data for analysis and monitoring by the DOTD, we will abide by the published [minimum standards](#) for NEVI compliance. According to the final minimum standards, real-time availability of each plug needs to be available online through an open API so third-party apps can access the data. The following will likely need to be available in real-time:

- Location
- Connector type
- Power level
- Status
- Number of ports meeting ADA requirements

Working with its stakeholders and the U.S. Joint Office of Energy and Transportation, the DOTD will develop its data management plan according to the final specifications.

As stated in the final minimum standards, "given the inherent difficulty of collecting electricity cost information that is isolated to electricity for charging vehicles, due to the uncertainty of separately metered stations, FHWA removed the requirement for reporting electricity cost from § 680.112(b)(6) and instead will estimate electricity cost." Please refer to Section 680.112 of the final standards for further details on data submittal requirements.

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

The Louisiana Fuel Team was developed in an effort to supplement the state's emergency response to the public's need for fuel during times of evacuation and/or other emergencies. The group is composed of public and private sector volunteers working together to gain greater efficiency in making fuel available prior to, during, and after an emergency such as a hurricane.

The state Department of Natural Resources (DNR) serves as the lead agency to oversee the Fuel Team Playbook, while the Department of Agriculture and Forestry (LDAF) serves as the lead state agency for coordination and optimization of the emergency fuel supply.

With hurricane season starting earlier and ending later each year, and with the intensity of said storms also increasing, the need to include alternative fuel vehicles and EVs into the state's emergency response and preparedness plans is critical. As such, EV owners need a reliable charging network for continued travel that is also designed to help the public evacuate from extreme conditions. To address the need for EVSE along evacuation routes for coastal areas, the DOTD nominated US 90, LA 1, and LA 3235 as Planned Alternative Fuel Corridors for EVs.

The DOTD and Fuel Team should explore and establish readiness capabilities to mitigate these risks. Priorities include placing charging stations in safe, well-lit locations near interchanges and crossroads that are easily accessible, near commercial or public sites, and have adequate physical and cyber security, communications systems, and power access.

Emerging technologies and new business models that include mobile EV charging, fast chargers designed with battery backup systems and solar power, and vehicles with bi-directional charging capabilities can all be part of a resilience plan that state DOTs could adopt in the future to assist motorists during emergency evacuation events.

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

DOTD expects vendors selected under this program to emphasize safety in all aspects of station development, installation, and maintenance. DOTD will add training and certification criteria to the scoring matrix for vendor evaluation in the solicitation process. The State will follow the FHWA minimum standards, many of which address workforce certification and safety requirements.

Civil Rights

The NEVI Program will be implemented to meet all federal and state requirements regarding accessibility and equity. This will be pursuant to all federal, state, and local regulations and statutes to ensure compliance with the Americans with Disabilities Act (ADA), 504 compliance and Title VI of the Civil Rights Act of 1964 (Title VI). The ADA prohibits discrimination against persons with qualified disabilities regarding the usability and or participation of all programs, services, activities or benefits offered by DOTD. DOTD ensures that no person in Louisiana shall, on the grounds of race, color or national origin, be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under any program activity.

Equity Considerations

The State plan emphasizes the Justice 40 goals in all aspects of the NEVI program. In all of the Outreach efforts regarding the program the need and ability to comply with Justice 40 goals was stressed including in the review of the draft scoring criteria. The Justice 40 map of Louisiana was used to illustrate the large number of opportunities to locate EV stations in Justice 40 census tracts along the designated alternative fuel corridors.

Efforts were also made, during outreach events, to introduce disadvantaged business owners to EVSC company representatives, fuel station owners, utilities and other stakeholders to encourage partnerships among applicants.

Working with the Louisiana Workforce Commission we delivered that they have engaged over eighty entities in EVITP apprenticeship training programs to train certified vehicle installation technicians. This workforce initiative is creating a ready cadre of workers to support the buildout of charging infrastructure.

This NEVI Plan will align with the Justice40 Initiatives by focusing on deployment in urban and rural underserved communities. [Eighteen percent of Louisiana's population lives in poverty](#). The implementation of the NEVI Program offers opportunities for entrepreneurial and workforce initiatives in these communities. The program will give special consideration to applications that are focused on these communities.

Current EV growth in Louisiana has occurred predominantly in more urban areas and in neighborhoods of affluence due to the current higher initial cost of EVs and the current need to charge them at home or access limited charging sites. Our plan utilizes the Caret model to project EV ownership growth in our state as electric vehicles become cheaper and more accessible for lower income individuals and as a used EV market develops.

Our initial approach will install the EV charging stations along the designated alternative fuel corridors which are mostly in rural areas, then move to a more distributed model that will increase reliability and accessibility throughout the charging network, especially in underserved communities. The DOTD has engaged with the State’s Metropolitan Planning Organizations (MPOs) in order to understand local infrastructure needs and focus on historically underserved communities in Louisiana. DOTD will continue to work with local leaders and stakeholders in both urban and rural communities throughout the program to ensure that the NEVI funds meet federal Justice40 requirements. The DOTD will continue to conduct outreach through several media channels to increase awareness and improve the accessibility of the State EV Plan. As projects are awarded, all project partners will be required to comply with all federal requirements for the program.

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

DOTD will continue to reach out to a wide spectrum of interest groups and stakeholders such as colleges, universities, churches, neighborhood associations, and environmental justice groups to identify and work with disadvantaged communities across Louisiana.

DOTD will include disadvantaged businesses and use its Compliance Section to access those groups they regularly engage with to inform them of the EV opportunities and assist with applications and project implementation as needed.

Process to Identify, Quantify, and Measure Benefits to DACs

Table 10: Community 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;	Location of proposed chargers within study areas is a large contributor to the grading of potential sites. A particular focus on identifying if sites are within or will directly benefit a disadvantaged community through using tools such as the Climate and Economic Justice Screening Tool or or the EPA’s Environmental Justice Screening Tool can better help our committee identify historically disadvantaged communities.
Decrease the transportation energy cost burden by enabling reliable access to affordable charging;	The scoring rubric for applications prioritizes applications for sites that plan to utilize Justice 40 locations for site hosts, installations, maintenance, operation, etc.
Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities; Increase energy resilience;	Louisiana aims to encourage the local developing EVSE workforce for operation, maintenance, and installation. Programs in our state that will develop a certified workforce include the approximately 80 apprenticeship programs in our territory and Community College courses. To ensure all EVSE workers are adequately certified, the State has made public a list of apprenticeship programs so individuals interested in installations can connect with well trained workers. Additionally, with funds from the DOE, Louisiana Clean Fuels is leading a project

	<p>with local community colleges to develop an EVSE workforce training program. This information will be converted into a replication playbook and distributed to community colleges across the country via the Clean Cities network.</p>
--	---

The DOTD will use tools developed by the U.S. Department of Energy to meet the goals of the federal Justice40 Initiative. In particular, DOTD will utilize the [Electric Vehicle Justice40 Mapping Tool](#) to identify Disadvantaged Communities, which was developed through the following four main steps:

1. Calculate Burden Indicator Percentiles - for each census tract, DOE calculated the percentile values for each of the 36 burden indicators.
2. Calculate Cumulative Burden Score - DOE summed the percentiles across the indicators to create a score for each tract with each indicator receiving equal weight. The final scores for each census tract could range from 0 to 36, where 36 would represent the greatest disadvantage.
3. Select 20% Most Burdened Census Tracts in Each State - based on the score, DOE selected the top 20 percent of census tracts in each state. This ensured that every state was represented.
4. Prioritize High-Poverty Census Tracts - to ensure wealthier locations were not inadvertently included, DAC eligibility was further restricted based on income. A census tract selected in step 3 was categorized as a DAC if at least 30% of households:
 - a. are at or below 200% of Federal Poverty Level and/or
 - b. are considered low-income households as defined by the Department of Housing and Urban Development (HUD).

In sum: To be considered a DAC, a census tract must rank in the 80th percentile of the cumulative sum of the 36 burden indicators and have at least 30% of households classified as low-income.

Nationwide, 13,581 census tracts were identified as DACs using this methodology (18.6% of 73,056 total U.S. census tracts). Additionally, federally recognized tribal lands and U.S. territories, in their entirety, are categorized as DACs in accordance with the Office of Management and Budget's (OMB) Interim Guidance "common conditions" definition of community.



Figure 12: Electric Vehicle Charging Justice40 Map of Louisiana
 (Source: <https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee>)

Benefits to DACs through this Plan

DOTD will make an effort to measure the benefits, direct and indirect, of this plan on disadvantaged communities. Metrics to measure such benefits may include the following:

- The number of people from disadvantaged communities receive apprenticeships or job training related to EV infrastructure, and how many are hired.
- Number and type of community groups who are engaged in outreach activities

The DOTD will follow national standards established by the DOE/DOT office and FHWA to finalize the metrics for measuring benefits.

One of our strategies will be to use the installation of charging stations to increase access to locally owned businesses, cities, and towns. Travelers charging in these communities offers an opportunity for additional income that will support local economic growth. Indirect benefits will be improved air quality due the absence of tailpipe emissions from electric vehicles. An additional benefit of the use of electric vehicles will be the lower cost of fuel and maintenance compared to comparable gasoline or diesel vehicles.

Labor and Workforce Considerations

The Louisiana Workforce Commission has provided the opportunity, working with electrical workers unions, electricians and workforce organizations, to participate in EVITP apprenticeship training programs. These programs have graduated and continue to train a number of certified installers that are available to work on applicant teams. There are currently eighty such programs around the State. The applicants will be required to warrant that they have trained installers and the certifications will be verified as part of the required monitoring of the applicants by the State.

Louisiana has an opportunity to create new workforce opportunities through the implementation of its EV charging program. Installers, maintenance technicians, electrical workers, and various other trades will be needed to serve this new industry.

DOTD will work with the Louisiana Workforce Commission, its Compliance Section, Board of Regents, and colleges and universities to develop training programs to respond to fill these workforce needs. Further, grant applicants will be encouraged to engage with community residents and stakeholders to maximize workforce participation.

Louisiana EV Committee member, Louisiana Clean Fuels, has won a federal grant and is partnering with the Louisiana Community and Technical College System (LCTCS), to develop curricula at community and technical colleges in the state to develop a workforce specifically targeted at the installation, service, and maintenance of charging stations. This program will allow members of DACs to have access to an

education that targets a growing need in the community and will provide skilled workers for the state. This system will build a more diverse workforce and filter feed into the small business community of the state. The DOTD has signed a letter of support for this project.

Additionally, during the application and selection process of grant funds for charging sites, special considerations will be made for projects that fall in disadvantaged communities under the [Justice40 initiative](#). These may be businesses that serve rural areas or DACs or if a site plans to utilize service or maintenance crews from DACs.

Cybersecurity

DOTD is committed to ensuring that cybersecurity charging networks, electric vehicles, including Electric Vehicle Charging Networks, do not pose a cybersecurity risk to people or property in Louisiana. The agency will comply with both federal and state (Louisiana Division of Administration) cybersecurity standards. DOTD's grant recipients who own, operate, and maintain EV charging stations and their data are required to share anonymized data with DOTD on a recurring basis. These grant recipients should also publish station locations, power ratings, and costs to various sites tracking EV charging stations including the U.S. Department of Energy's Alternative Fuel Data Center (AFDC.gov). Additionally, annual usage data will be made available and collected by Clean Cities Coalitions in the state to track usage trends in funded sites. The Coalitions will in turn, report the data to the DOTD.

As part of award agreements, prior to issuance of the award, the grant recipients will be required to:

- Provide details about how they have hardened their infrastructure to minimize cybersecurity risks to protect their station, the network of stations or the electrical infrastructure
- Provide a cybersecurity plan that demonstrates the cybersecurity maturity of the recipient and its compliance with State regulatory and federal cybersecurity requirements
- Demonstrate how they will maintain and improve cybersecurity throughout the life of the proposed solution
- Alert DOTD and the Cybersecurity and Infrastructure Security Agency (CISA) of any known suspected network of system compromises
- Report any cyber-related incidents (along with incident data) in a timely fashion to DOTD
- Provide evidence on how the cybersecurity plan was implemented

Program Evaluation

To evaluate the grant program, DOTD's 5-year plan includes monitoring the grant recipients' sites through site visits to ensure proper maintenance and compliance with state and federal guidelines, as well as monitoring usage at the sites. These guidelines include ensuring the sites continue to meet Justice40 requirements where at least 40% of overall program benefits are delivered to disadvantaged

communities through jobs, training, business development, etc. DOTD will oversee and monitor the criteria annually.

In addition, EV data will be available on DOTD's Open Data Portal at <https://data-ladotd.opendata.arcgis.com/> with a web map application for easy viewing. Data will include charging station types for Level 2 and DC Fast Charger stations and their locations. Statistics, data summaries, and shapefiles are also available online at the Alternative Fuel Data Center, along with an interactive map of EV charging locations throughout the State that is validated regularly.

Program evaluation will involve online data collection quarterly and annually. Applicants will be required to provide data to identify charging station use, reliability, maintenance, and installation cost information as required under the FHWA minimum standards. Annual data will be collected related to the organization operating, maintaining or installing Electric Vehicle Supply Equipment (EVSE) as well as information on certifications of local businesses certified to do the work.

Data collection of particular interest will be network connectivity of electric vehicle charging infrastructure and real-time accessibility.

Program evaluation will continue throughout the life of the grant program. The grant program is designed for the installed infrastructure to be maintained for a 5-year period of time. An onsite review of each site will be performed annually. Maintenance funds will be disbursed based on satisfactory completion of the site visit and evaluation.

Discretionary Exceptions

As analysis of the potential sites is completed and a strategy is employed for the Louisiana EV Infrastructure Plan, DOTD may request exemptions from some or all of the FHWA AFC requirements such as: 50-mile maximum distance between sites, 1-mile maximum distance from an approved AFC, 4 port minimum, and requirements for electricity output (150kW per plug simultaneously). Any exception requested will need to be supported by a reasoned justification from the DOTD that demonstrates the exception will support a convenient, affordable, reliable, and equitable national EV charging network. These exemption requests will be submitted before the aforementioned yearly updates with the provided template to the Joint Office of Energy and Transportation for review. Only those projects in disadvantaged communities, rural areas, or where grid capabilities are limited will be considered for exceptions.

Specifically, a speed and connection compliant DC charger in Sulphur, LA is located 1.3 miles from the closest exit on I-10, a designated AFC corridor. As this is very close to the expectations for NEVI, we are expecting to request a waiver for this exemption (See Table 7)

Appendix A: Supporting Materials

Typical Specifications for Electric Alternative Fuel Corridor:

- CCS Connector (SAE standard)
- 150-350kW Max Power (higher power acceptable assuming costs are not prohibitive)
 - 400-800 volts, 150-600 amps, 3 phase
- Any shared circuits provide a minimum of 150kW per vehicle
- Idle fee after charging complete/time limit exceeded
- Minimum 4 DC Fast Charge units per station
- Max 8 units per station
- Pull through spaces for vehicles with trailers
- Open 24/7 and publicly available
- Adequate lighting, restrooms, ADA compliant
- Plug to Charge Preferred (payment handled by vehicle when plugging in) payments by phone/app/card will also be acceptable
- Include contactless payment methods from all major debit/credit card providers
- Compatible with OCPP communications
- Spaces marked “EV Only”
- Signs recommending charging to 80%
- Real-time station location, operational status, and cost/fees available through a freely accessible API to third-party software developers
- Vendor required to make usage data per location available to DOTD on a quarterly basis
- Signage directing users to charging locations
- Charging station/vehicle awnings
- Must allow for customers to report outages, malfunctions, and other issues in real-time

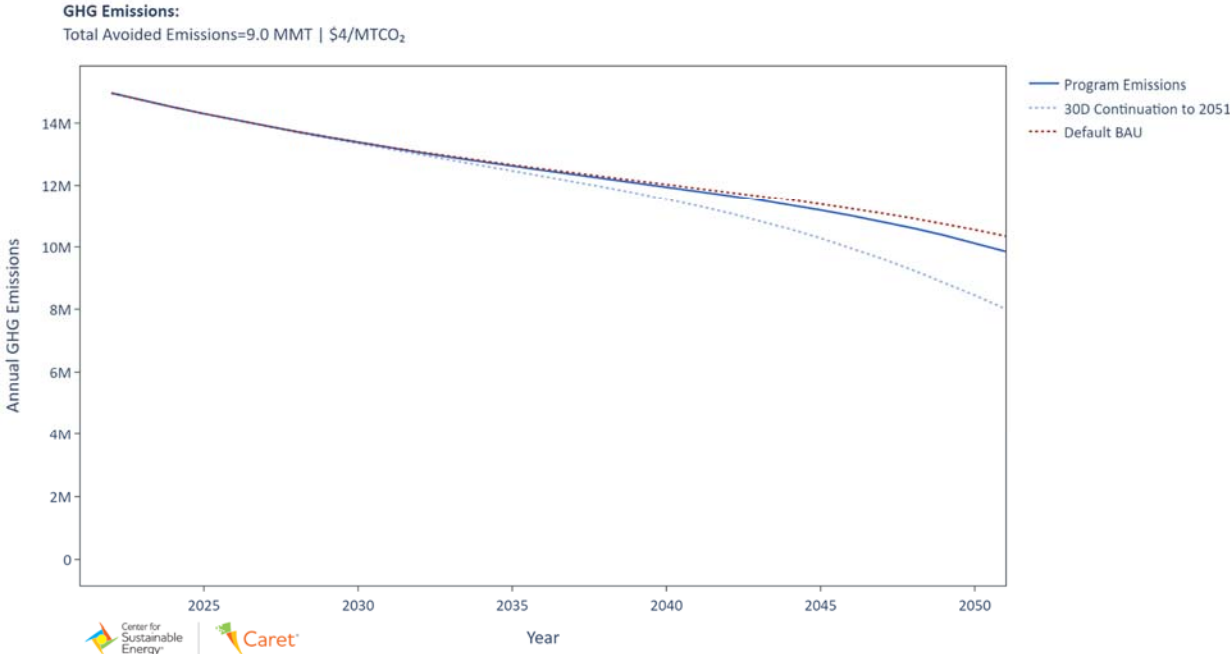


Figure 13: Estimated GHGs Reduced with No State Incentives and Production Caps in Place for Federal Incentives

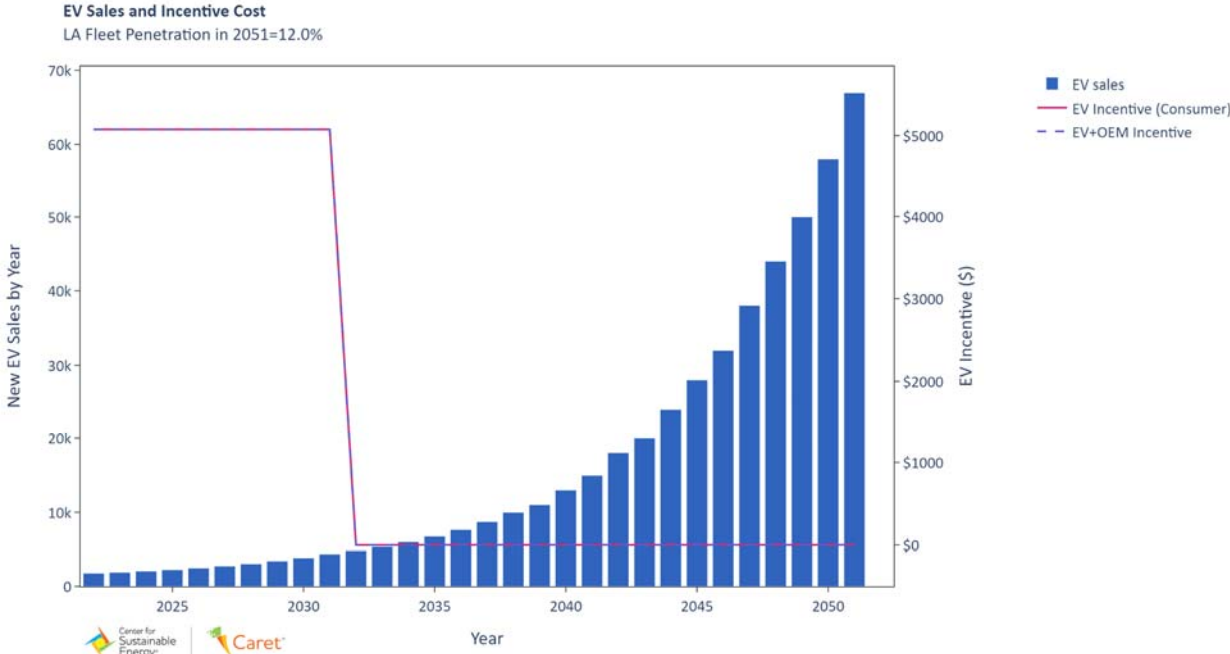


Figure 14: Estimated EV Sales in Louisiana with No State Incentives and Production Caps in Place for Federal Incentives