

# Louisiana Electric Vehicle Infrastructure Deployment

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Louisiana State Plan  
for Electric Vehicle  
Infrastructure  
Deployment



Louisiana State Plan  
August 1, 2022

Louisiana Department of Transportation and Development | 1201 Capital Access Road | Baton Rouge, LA 70802  
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# Federal Funding

- \$73.1 million – Louisiana – Infrastructure and Jobs Act (IIJA)
  - ❖ Actual FY 2022 Funding = \$10,859,512
  - ❖ National Electric Vehicle Infrastructure (NEVI) Formula Program
  - ❖ Statewide Deployment Plan Approved 9/15/2022

# Federal Funding

## ➤ Estimated Future Disbursements for DOTD

❖ FY 2023 Funding = \$15,626,960

❖ FY 2024 Funding = \$15,627,068

❖ FY 2025 Funding = \$15,627,081

❖ FY 2026 Funding = \$15,627,114

# Grant Program

- Up to 80% Federal Match (NEVI Funds)
- Minimum 20% Grant Recipient Match
- Competitive Selections
  - ❖ Applications January – April 2023
- Grant Awards
  - ❖ Committee Selections by July 2023

# DC FAST CHARGING STATIONS

## Interstate Plan

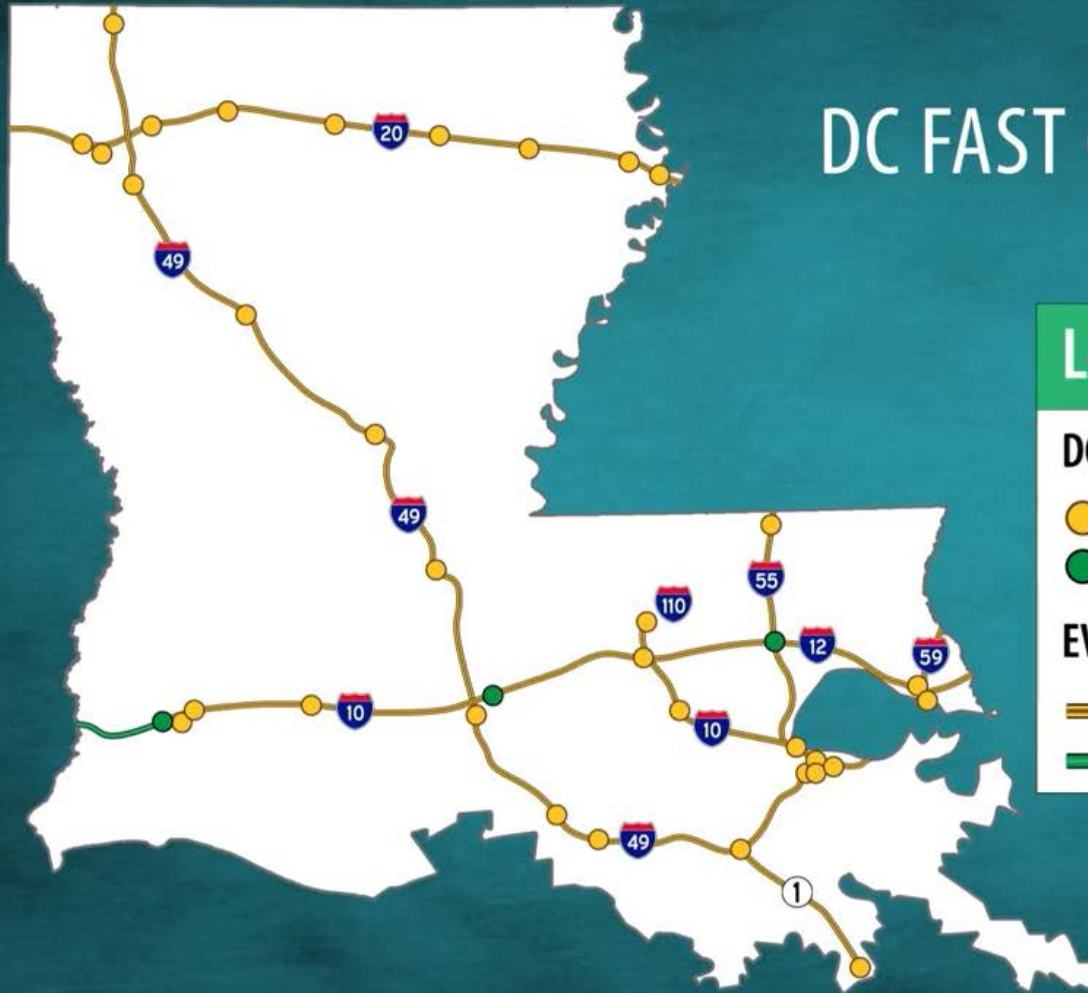
### Legend

#### DC Fast Charging Stations

- Proposed
- Existing

#### EV Corridors

- ══ EV Corridor Proposed
- ══ EV Corridor Ready



# Alternative Fuel Corridors

- Electric and Hydrogen Fuel (July 2022)
- I-10, I-12, I-110, I-210, I-610, I-220/Loop LA 3132, I-49 (Future I-910/US 90/US 167), LA 1/LA 3235, I-59, and I-55



# Statewide EV Deployment Plan

- Direct Current (DC) Fast Chargers
  - ❖ Four 150 kW ports = 600 kW/site
- Phase 1 ~ 30 new and upgraded sites (built-out)
  - ❖ ~120 total DC fast chargers
- Phase 2 ~ 190 new sites beyond corridors
  - ❖ ~760 total EV chargers (may include Level 2)
  - ❖ ~300 DC fast chargers

# Proposed Federal Guidance

- Notice of Proposed Rulemaking – 6/22/2022
  - ❖ Direct Current (DC) Fast Chargers – Level 3
  - ❖ Within 1 Mile of Interstate or Other EV Corridor
  - ❖ Cybersecurity Requirements
  - ❖ 600 kW Minimum Electric Capacity
  - ❖ Build America Buy America





# Proposed Federal Guidance (cont.)

- ❖ Public Use
- ❖ 4 Port Minimum – 4 EV's Simultaneously
- ❖ ADA Compliant
- ❖ 24-hour Accessibility
- ❖ Justice40 – location, cost, workforce, ownership
- ❖ Open Charge Point Protocol (OCPP)/Plug & Charge

# Proposed Federal Guidance (cont.)

- ❖ Maximum 50 Miles Apart (Built-out Status)
- ❖ Multilingual Payment System
- ❖ Combined Charging System (CCS) Type 1 Connector
- ❖ OSHA Certification
- ❖ Directional Signage
- ❖ Quarterly and Annual Reporting

# Minimum Cybersecurity

- User identity access management
- Appropriate encryption systems
- Intrusion and malware detection
- Event logging and reporting
- Management of software updates
- Secure operation during communication outages



# Build America, Buy America Act

- Required per FHWA 6/22/2022 Notice of Proposed Rulemaking
- Comments for proposed partial waiver ended 9/30/2022
- Steel, iron, manufactured products, and construction materials in EV chargers

# EV Grant Selection Criteria

- Compliance with Federal guidance
- Meets all application scoring criteria
- Priority for locations without utility upgrades (site-ready)
- Cost estimates for installation and maintenance
- Design specifications



# EV Grant Application

- Request for Proposals (RFP) – U.S.C. Title 23
  - ❖ January 2023
- Notice of Intent (NOI)
  - ❖ December 2022
- DOTD Project Number assigned to each site
  - ❖ 1 charging station = 1 Site
  - ❖ 1 or more sites = 1 Project
  - ❖ State Transportation Improvement Plan (STIP)
  - ❖ MPO Transportation Improvement Programs (TIPs)

# EV Grant Application

## ELECTRIC VEHICLE INFRASTRUCTURE GRANT APPLICATION

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### I. Applicant Information

Application Date \*

Applicant's Name \*

<input type="text"/>	<input type="text"/>
First Name	Last Name

Phone \*

Email \*

Address \*

Street Address

Address Line 2

# EV Grant Application

## ➤ Quotes for Cost Estimates

### ❖ Utility Costs (Quote from Utility Company)

- Components to connect station to electricity source
- Transformers and other on-site electrical equipment for power
- Costs to acquire and install electric service, equipment, and upgrades (e.g. power meter, transformer, switch gear)
- Minor grid upgrades to connect station to grid distribution network (e.g. extending power lines, upgrading existing lines)



# EV Grant Application

## ➤ Quotes for Cost Estimates

### ❖ Installation Costs

- Electric Vehicle Supply Equipment (EVSE)
- Installers (EVITP certified electricians, etc.)
- Other fees (e.g. site lease, partnerships, lighting, drainage, structural)

# EV Grant Application

## ➤ Quotes for Cost Estimates

### ❖ Operation and Maintenance Costs

- Cybersecurity
- Monthly Utility Fees
- User Fee Collection
- Quarterly and Annual Reporting
- Annual Incident Management
- Certifications
- Permitting
- Other Operating and Maintenance Costs

# EV Grant Application Scoring

Selection Criteria	Accommodate Vehicles and Large Trucks	Distance from nearest EV charger	Level of DBE Participation	Total Cost (Including utility upgrades)	Business model for service beyond 5 years (Qualitative)
<b>Maximum Points Allowable (100)</b>	<b>1</b>	<b>30</b>	<b>10</b>	<b>15</b>	<b>3</b>
<b>Points Assigned</b>	Yes = 1	Over 40 Miles = 30	Greater than 20% = 10	Less than \$250,000 = 15	Strong = 3
	No = 0	15.1 to 40 Miles = 20	15% -19.9% = 8	\$51,000 - \$500,000 = 10	Reasonable = 2
		5.1 to 15 Miles = 10	10% -14.9% = 5	\$501,000 - \$750,000 = 5	Weak = 1
		Less than 5 Miles = 0	5% -9.9% = 2	Greater than \$750,000 = 0	No Plan = 0
			Less than 5% = 0		

# EV Grant Application Scoring (cont.)

Selection Criteria	On the job training / Apprenticeships (Construction; Operation & Maintenance)	Customer Safety/Security	Percent Markup for Charging (Over utility cost)
Maximum Points Allowable (100)	2	5	15
Points Assigned	Construction Apprentice = 1	On-Site 24 hours 7 days/week Security = 5	0-10% = 15
	Operation & Maintenance Apprentice = 1	On-Site 12 hours 7 days/week Security + Camera = 3	11-20% = 10
	No Apprentice = 0	Camera Only = 1	21-30% = 5
		No Security = 0	Over 30% = 0

# EV Grant Application Scoring (cont.)

Selection Criteria	Payment Options	Customer Amenities	Proximity to Justice40 community	Service during power outage
Maximum Points Allowable (100)	2	2	10	5
Points Assigned	Cash = 1	Bathrooms = 1	Inside = 10	Backup generator = 5
	Credit Card/Debit Card = 1	Vending/Food/Beverage = 1	Within 1 mile = 5	Solar with sufficient power = 3
	Cashless/Cardless = 0	No Amenities = 0	Within 5 miles = 2	No service = 0
			Over 5 miles = 0	

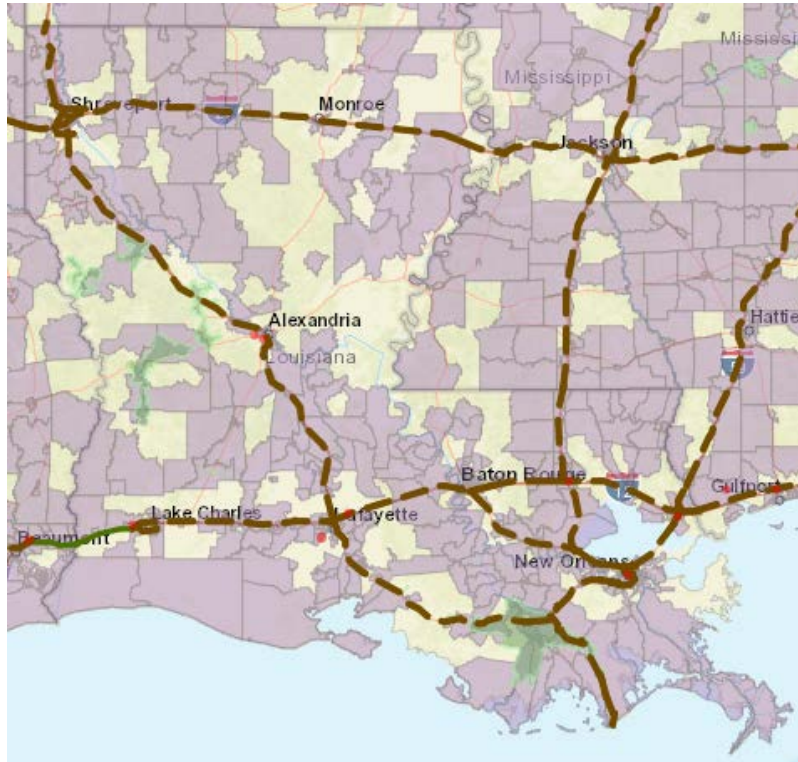
# EV Grant Program

- Up to 80% of invoiced amount will be paid to grant recipients
  - ❖ Satisfactory inspection and reporting
    - Operable Stations
    - In Compliance with State and Federal Requirements
- Contract between **DOTD and Grant Recipients**
  - ❖ DOTD Standard Form
- Contract between **Grant Recipients and Vendors**
  - ❖ DOTD Standard Form

# Justice40

- 40% of EV Program benefits are delivered to Disadvantaged Communities (DACs)
  - ❖ Tribal Nation, Women, Black, Latino, Asian American Pacific, Indigenous, and other underrepresented groups
  - ❖ Charging Sites (Access, Zero Emissions)
  - ❖ Equitable Payment Options
  - ❖ Job Training/ Workforce Development/ Entrepreneurship
    - Ownership, Installation, Operation, Maintenance, Apprenticeships
    - Disadvantaged Business Enterprise (DBE) Vendors

# EV Charging – Justice40 Map



## Map Legend

Public EV Charging Station (Non Tesla DC Fast, as of July 22, 2022)



FHWA Designated EV Corridors (Rounds 1-6)



EV Corridor Ready - A sufficient number of EV charging stations currently exist (minimum 50-mile intervals)



EV Corridor Pending - An insufficient number of EV charging stations currently exist

Tribal Lands



DOE/DOT Interim Guidance DAC (May 2022)



U.S. Territories



[Electric Vehicle Charging Justice40 Map \(arcgis.com\)](https://arcgis.com)

[Energy Justice Dashboard \(anl.gov\)](https://anl.gov)



# Suggestions for Profitability

## ➤ Partnerships

- ❖ Land owners may partner with supply equipment (EVSE) companies as site hosts
  - Existing business locations may attract new customers
- ❖ Investors/donors may partner with companies for non-federal match
- ❖ Electricians may partner with EVSE companies as installers

# Associated Work Types

- ❖ Electrical installation/electric company – wiring, lighting, boring, etc.
- ❖ Electric Vehicle Supply Equipment (EVSE) installation
  - Electrician - NAICS 238210
- ❖ EVSE provider/manufacturer
- ❖ Concrete worker – pouring slab for EVSE
- ❖ Parking lots and striping
- ❖ Permitting
- ❖ EVSE reporting
- ❖ Cybersecurity analyst
- ❖ Site designer/drafter

# Associated Work Types (cont.)

- ❖ Security guard/camera monitoring
- ❖ Awning/overhead covering provider
- ❖ Drainage installation
- ❖ Directional signage
- ❖ Accounting/bookkeeping
- ❖ Site host/lease
- ❖ Insurance Provider
- ❖ Service for other amenities (vendors, janitorial)

# Upcoming Dates

- TBD: Electrical Contractor Meeting
- January – April 2023: Applications Open
- July 2023: Site Selection and Grant Awards
- Fall 2023/Winter 2024: Round 1 Installations

# Resources

- U.S. Joint Office of Energy and Transportation
  - ❖ [www.DriveElectric.gov](http://www.DriveElectric.gov)
- Alternative Fuels Data Center
  - ❖ [www.AFDC.Energy.gov](http://www.AFDC.Energy.gov)
- Justice40
  - ❖ <https://www.energy.gov/diversity/justice40-initiative>
- DOTD EV Infrastructure Deployment
  - ❖ [EV-Infrastructure \(la.gov\)](http://EV-Infrastructure.la.gov)

# Contact

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