

Staff Report

Focused Review:

Delaware Infrastructure Readiness for Electric Vehicles

153rd General Assembly, 1st session



*Respectfully submitted to the
Joint Legislative Oversight and Sunset Committee
May 2025*

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ABOUT THIS REPORT

This staff report, prepared by the Division of Legislative Services, focuses on the state's infrastructure readiness to support an increase in electric cars as required by the electric vehicle ("EV") regulations promulgated by the Department of Natural Resources and Environmental Control ("DNREC"). The Joint Legislative Oversight and Sunset Committee selected this topic and assigned it to the Division of Legislative Services staff on May 9, 2024.

The Joint Legislative Oversight and Sunset Committee ("JLOSC" or "Committee") is a bipartisan 10-member legislative body which performs periodic legislative review of the performance and activities of state entities designed to increase accountability and improvement. The primary purpose of any JLOSC review is to assess genuine public need and performance of the entity under review. JLOSC performs its duties with support provided by the dedicated and objective staff of Division of Legislative Services. The Division of Legislative Services is an independent and confidential reference bureau for the General Assembly and supplies many services, including staff support for JLOSC.

JLOSC staff completes focused reviews as assigned by majority vote of JLOSC members. A focused review contrasts with the broader evaluation of a full review and evaluates a component within an entity, such as a specific statute, policy, rule, regulation, or program related to the entity. The Committee and its staff define the scope of a focused review, guiding the research process. Once the research is completed, a staff report is prepared for JLOSC members, summarizing the research, findings, conclusions, and recommendations.

JLOSC staff prepared this report following research conducted in line with an agreed-upon project scope. The focused review adhered to national evaluation standards, requiring thorough planning and execution to gather sufficient evidence supporting the findings and conclusions based on the review's objectives and scope. Staff believe the evidence obtained provides a reasonable basis for their findings and conclusions. Additionally, the Objectives, Scope, and Methodology section discusses the fieldwork procedures used while conducting the research and developing this report.

This staff report may contain recommendations for JLOSC to review and discuss. Committee members are not obligated to adopt the staff's recommendations and may modify, reject, or propose new ones. Final recommendations are determined during public meetings and adopted with an affirmative vote from 7 members. Once JLOSC adopts recommendations, the review progresses to the implementation phase, which may involve drafting legislation.

Next Steps

JLOSC will hold a public meeting to receive an overview of the staff report and accept public comment on the scope of the review.¹ Following this, the Committee will determine the appropriate next steps, which may include adopting recommendations or scheduling additional meetings for further discussion.²

¹ Public meeting notices found on the Committee's website and the State of Delaware's Public Meeting Calendar.

² 29 *Del. C.* § 10214.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

Evaluate the state's infrastructure readiness to support an increase in electric cars as required by DNREC EV regulations. Review to focus on the following infrastructure components: electric grid, effect on gas tax, and electric car charging.

Scope

This focused review examined 3 review objectives: the state's electric grid, effect on gas tax, and electric car charging.

Methodology

This research was aimed to address 3 review objectives, providing JLOSC with insights into current processes, conditions, and policy options. It included contextual background, such as a timeline of DNREC EV regulations, to support an assessment of the state's EV infrastructure and its readiness for these regulations. The methodology combined fieldwork, which involved reviewing publicly available documents, with a field experiment to evaluate the condition of public charging stations along the 4 main travel corridors.

Objective #1: Staff was limited in accessing certain key information and thus, the review on objective number 1 is not comprehensive and inclusive of all relevant factors that would otherwise speak to the impact of DNREC's EV regulation on the electric grid. However, staff was able to examine the current landscape of Delaware's electric grid through accessing reports published by DNREC and the Department of Transportation ("DelDOT"), reports published by utility companies in the region, and news reports.

Objective #2: Staff assessed the current conditions of Delaware's Motor Fuel Tax ("MFT") and, through reviewing recent research conducted by the University of Delaware on behalf of DelDOT, provided summary of the findings in the report.

Objective #3: Staff utilized federal guidance established under the National Electric Vehicle Infrastructure ("NEVI") Formula Program created under the Infrastructure Investment and Jobs Act ("IIJA"), also known as the Bipartisan Infrastructure Law ("BIL") and administered by the U.S. Department of Transportation Federal Highway Administration. Furthermore, staff reviewed all EV infrastructure plans published by DelDOT; a requirement established under NEVI to receive federal funding.

Additionally, staff conducted a field experiment that identified public charging stations located along designated Alternative Fuel Corridors ("AFC") and evaluated each public charging station based on its conditions, accessibility relating to the Americans with Disabilities Act ("ADA") Standards for Accessible Design, and NEVI criteria. Delaware has 4 designated AFCs: Interstate 95, Route 1, Route 13, and Route 113.

Delaware is a relatively small state with an average distance of 96 miles from the most northern part of the state to the most southern point and between 9 and 35 miles east to west. This made the evaluation of the 4 AFCs more feasible to conduct and execute. Data to locate the charging stations along the 4 AFCs was obtained from DelDOT's 2023 NEVI Plan and the US Department of Energy Alternative Fueling Station Locator database. Using the 2 data sources, a route was formulated using Google Maps to outline the route taken to evaluate Delaware's 4 AFCs.

Fieldwork Completed

- All available public documents and news articles.
- Delaware 2022 and 2024 NEVI [plans](#).
- [Charging Forward: Delaware's Strategy for Electric Vehicle Charging Infrastructure \(2024\)](#).
- Related legislation and regulations.
- Federal standards.
- Report regarding Delaware's motor fuel tax.
 - [The Financial and Policy Impact of Electric Vehicles and Improved Fuel Economy on Delaware's Motor Fuel Tax Revenue](#), Philip Barnes, Institute for Public Administration, Biden School of Public Policy & Administration, University of Delaware, August 2024.
- Field experiment identifying and assessing current conditions of public charging stations along designated alternative fuel corridors: Interstate 95, Route 1, Route 13, and Route 113.

REVIEW SUMMARY

In recent years, Delaware officials have actively promoted electric vehicles, including efforts to encourage car dealerships to expand their EV inventories through DNREC regulations. JLOSC staff was tasked with evaluating the state's infrastructure readiness for an expected increase in electric vehicles, focusing on 3 key areas: the electric grid, gas tax, and EV charging infrastructure. Their review identified gaps in each area that must be addressed before Delaware can support a large-scale shift to electric vehicles.

JLOSC staff could not locate a comprehensive study on Delaware's electric grid or how additional EVs and charging stations would impact it. Across the country, electric grids are under increasing strain due to the growing presence of data centers, and Delaware lacks research on the necessary grid upgrades for expanded EV infrastructure.

Delaware has not adjusted its motor fuel tax (gas tax) since 1995. Delaware's gas tax is not tied to fuel prices or the consumer price index. Currently, the gas tax is the third-largest revenue source for the State's Transportation Trust Fund, but as EV adoption increases, gas tax revenues are projected to decline by over 34% by 2040. Since EVs do not require gasoline, this shift poses a significant financial challenge. While potential solutions—such as EV fees or toll increases—exist, no official plan has been announced as of this report's publication.

Federal funding played a critical role in Delaware's adoption of DNREC's EV regulations, with the state set to receive over \$17M over 5 years to build EV infrastructure. However, the availability of these funds is now uncertain, and the issue has not yet been addressed by DNREC or DELDOT. JLOSC staff's field research uncovered significant shortcomings in both the quantity and quality of public charging stations. Inspections revealed widespread non-compliance with federal standards, accessibility challenges, and poor maintenance, indicating that the existing infrastructure is insufficient to support the projected growth of electric vehicles.

While Delaware has adopted California's Advanced Clean Cars II standards, which require 82% of new vehicle sales to be zero-emission by 2032, key implementation details remain unclear. Some states have modified or reversed similar plans, citing infrastructure and cost challenges, which Delaware may also face.

The status of EV regulations is evolving but Delaware currently lacks the electric grid readiness, funding mechanisms, and charging infrastructure needed for a large-scale EV transition. Without urgent planning, investment, and interagency coordination, Delaware risks falling short of its environmental and transportation goals.

This report presents key findings on 3 critical areas affecting Delaware's ability to support widespread EV adoption. While it does not offer formal recommendations, it underscores the pressing need for action in addressing grid readiness, funding mechanisms, and charging infrastructure to meet the state's environmental and transportation goals.

REVIEW CONTEXT

In 1967, Congress adopted the Clean Air Act (“CAA”) which established a framework for controlling mobile source emissions in the U.S. The CAA also provided a special exemption to the State of California despite the federal preemption by Section 209 of the CAA. By 1990, an amendment added Section 177 to the CAA, which opened the doors for other states to adopt California’s vehicle emission standards. The California vehicle emission standards were much more stringent than the federal CAA. Delaware continued its efforts in lowering emission by following the National Low Emission standard which was finalized by the EPA in 1997. However, by 2010 Delaware adopted the California vehicle emissions standards known as Low Emission Vehicle Standards (“LEV III”) beginning with model year 2014.

In 2012, the California Air Resource Board (“CARB”)³ established the Advanced Clean Car Act (“ACC I”) which incorporated 3 elements to the program: setting LEV III, greenhouse gases (“GHG”) standards, and zero emission vehicles standards (“ZEV”). On December 1, 2013, Delaware and Pennsylvania were the only 2 of 16 states that adopted only 2 of the 3 components of the ACC I program, specifically LEV III and GHG Standard.

By March 2022, Governor John Carney directed DNREC⁴ to begin regulatory development for the adoption of the ZEV portion of the ACC. This would align with Delaware’s Climate Change Plan which identifies strategies to reduce greenhouse gas emission with one of the strategies outlined in the plan is the adoption of California’s ZEV standards.⁵

On August 2022, CARB revised its vehicle emission program and was adopted on November 30, 2022⁶ as the Advanced Clean Car II (“ACC II”). Due to Delaware adopting California’s vehicle emission program in 2010, and in accordance with Section 209 of the CAA⁷, Delaware is required to adopt “an identical version of California’s standards” that have been approved by the EPA or default to federal standards.

By December 2023, DNREC Secretary Garvin issued Secretary’s Order No.: 2023-A-0028⁸ which finalized amendments to 7 DE Admin. Code 1140 – Delaware’s Low Emission Vehicle Program⁹ and makes Delaware in compliance with Section 209 of the CAA.

Purpose of DNREC EV Regulations

DNREC cites the transportation sector as the largest source for pollution emissions in Delaware. According to DNREC, the transportation sector contributes 30% GHG emissions of which 60% of emissions are contributed to passenger vehicles and light-duty trucks. To lower Delaware’s GHG emission and align Delaware with the Climate Action Plan, DNREC adopted the ACC II. The purpose for adopting ACC II is to increase

³ California Air Resource Board (“CARB”).

⁴ *Public Meetings Planned This Month on Delaware EV Infrastructure, Clean Transportation Initiatives* - State of Delaware News available at: <https://news.delaware.gov/2022/11/07/public-meetings-planned-this-month-on-delaware-ev-infrastructure-clean-transportation-initiatives>.

⁵ House Bill No. 99, as amended by House Amendment No. 1, 152nd General Assembly, enacted in August 2023.

⁶ Advanced Clean Cars II (“ACC II”) Regulations.

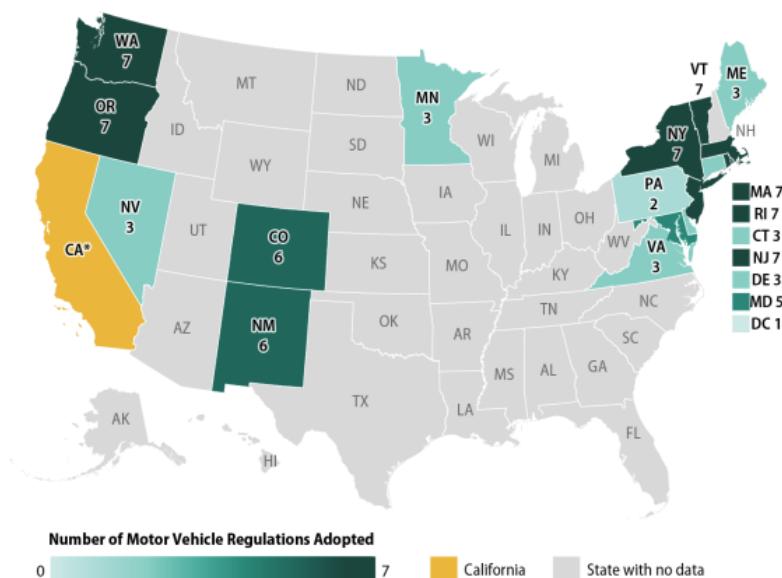
⁷ Section 209, Clean Air Act.

⁸ Secretary’s Order No.: 2023-A-0028 available at: <https://documents.dnrec.delaware.gov/Admin/Orders/Secretarys-Order-No-2023-A-0028.pdf>.

⁹ 7 DE Admin. Code 1140.

the sale and manufacturing of new cars and light-duty trucks to 100% ZEVs by 2032. This was later revised to 82% ZEVs by 2032 as a result of DNREC holding public hearings and receiving over 2,000 written public comments raising various concerns.

State Adoption of California's Vehicle Regulations



*California is the originator of the adopted regulations

Chart 1. State Adoption of California's Vehicle Regulations

First Applicable Model Year Adoptions

	Light-Duty Vehicle Standard				Heavy Duty Vehicle Standard		
	Advance Clean Car II	LEV	GHG	ZEV	Advance Clean Trucks (ACT)	Heavy-Duty Omnibus	Phase 2 Greenhouse Gas
Delaware	2027	2014	2014				
Maryland	2027	2011	2011	2011	2027		
New Jersey	2027	2009	2009	2009	2025	2027	2027
Pennsylvania		2001	2009				
New York	2026	1992	2009	1993	2025	2026	2026
Virginia		2025	2025	2025			
Rhode Island	2027	2008	2009	2008	2027	2027	2027
Massachusetts	2026	1995	2009	1995	2025	2025	2025
Connecticut		2008	2009	2008			
Maine		2001	2009	2009			
Colorado	2027	2022	2022	2023	2027	2027	
Minnesota		2025	2025	2025			
Nevada		2025	2025	2025			
New Mexico	2027	2026	2026	2026	2027	2027	
Oregon	2026	2009	2009	2009	2025	2025	2025
Vermont	2026	2000	2009	2000	2026	2026	2026
Washington	2026	2009	2009	2025	2025	2026	2026
Washington, D.C.	2027						

*States with no Model year indicates no adoption of regulation

Chart 2. First Applicable Model Year Adoptions

As of April 2025, **12 states have adopted the ACC II**. Delaware requires that automakers increase the delivery of electric vehicles to Delaware by 43% starting with model year 2027.¹⁰ Below is a breakdown percentage requirement for Original Equipment Manufacturers (“OEM”) of each state neighboring Delaware:

Percentage Requirements for Original Equipment Manufacturers

	Model Years									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Delaware	N/A							ACC II Expires		
Maryland ⁹		43%	51%	59%	68%	76%	82%			
New York ¹⁰	35%							88%	94%	100%
New Jersey ¹¹										

Chart 3. Percentage Requirements for Original Equipment Manufacturers

Original Equipment Manufacturers and Advanced Clean Car II Credit System

The ACC II requires OEMs to increase the delivery of electric vehicles to Delaware by 43% starting with model year 2027. The adoption of these regulations does not prohibit the sale of internal combustion engine vehicles (“ICEV”); however, the regulations do phase out the sale of ICEVs over a 6-year period. The regulations are set to expire in model year 2033.

Per California Code of Regulations 13 § 1962.4 (e)(1),¹⁴ the annual percentage requirements apply to OEMs that produce and deliver for sale passenger cars and light-duty trucks in California. Depending on each OEM’s production volume, the number of ZEVs that will be required to be delivered to Delaware will be different for each OEM and will have a ripple effect to auto-dealers depending on OEM type vehicles they sell. The ACC II defines 4 types of OEMs, including a small volume manufacturer, independent low volume manufacturer, intermediate volume manufacturer, and large volume manufacturer. The annual ZEV requirements for 2027-2032 apply only to OEMs that fall within the definition of an intermediate, independent low volume manufacturer, and large volume manufacturers. Small volume manufacture are exempt from the annual ZEV requirement until year 2035 (California).¹⁵ For a list of definitions, refer to footnote.¹⁶

¹⁰ 7 DE Admin. Code 1140.

¹¹ COMAR 26.11.34.

¹² New York Sections 1-0101.

¹³ NJ Title 7, Chapter 27, subchapter 29A.

¹⁴ 1962.4.

¹⁵ DNREC 7 DE Admin. Code 1140 incorporates by reference and cuts off the annual ZEV requirement in model year 2032. Therefore, it is unclear how this applies to small volume manufacturers or how the credit system will work following model year 2033.

¹⁶ Cal. Code Regs. Tit. 13, § 1900 - Definitions | State Regulations | US Law | LII / Legal Information Institute

Under the ACC II, the annual number of ZEVs required is calculated by the following formula:

$$\text{Annual Percentage Requirement} \times \text{Production volume} = \text{Annual ZEV Requirement}^{17}$$

If, however, an OEM is unable to meet the required annual percentages of producing ZEVs, the OEM may fulfill a portion of its total annual ZEV requirement with PHEVs. California Code of Regulations 13 § 1962.4 (e) lays out what criteria PHEVs must fulfill to count towards a “value of one ZEV” to fulfill the ZEV annual requirement. Some of the criteria include that the PHEVs have at least an electric range of 75 miles, have a high-speed range of 45 miles, and fulfill certain warranties and compliance standards. Additionally, the California Code sets a cap on the number of PHEVs that can be credited to count as a ZEV. OEMs can use PHEVs for up to only 20% of their annual ZEVs requirement. For example, if an OEM produces and delivers 100,000 vehicles for sale in Delaware in 2027, a 43% annual percentage requirement is applied, and the OEM is required to produce and deliver 45,000 ZEVs. To use PHEVs to meet their quota, the OEM will need to produce and sell 9,000 PHEVs or 20% of annual ZEV requirement.

Reversal, Reconsideration, and Pause of Advanced Clean Car II

Of the states that have adopted ACC II, **Virginia** has reversed the decision to do so. **Connecticut** considered adoption of ACC II, but later withdrew its consideration. **Maryland** recently paused enforcement of penalties associated with ACC II ZEV delivery shortfalls for model years 2027 and 2028 through an issuance of executive order.¹⁸ It is also worth noting that, of the states adopting the Advanced Clean Trucks (“ACT”), several are currently considering delaying enforcement, citing concerns of inadequate charging infrastructure for trucks.¹⁹

Virginia’s Reasons for Reversal

In 2021, Virginia’s then-Governor Ralph Northam signed into law House Bill 1965 directing state agencies to adopt ACC I. However, now-Governor Glenn Youngkin withdrew Virginia’s participation in ACC II, citing an opinion from Virginia’s Attorney General that HB 1965 did not mandate Virginia to participate in ACC II.²⁰ This allowed Virginia to reverse its participation in ACC II and default back to federal standards.

In addition, Virginia’s Office of Regulatory Management conducted an economic review of ACC I.²¹ The review revealed that the potential and direct costs on Virginia’s consumers of requiring auto dealers to increase their inventory of EVs would amount to between \$210M and \$660M. In addition, the review cited the likelihood for non-ZEVs to become higher in price due to automotive companies pushing consumers to purchase ZEVs. This would put pressure on the market and could lead some auto dealers to incur financial penalties for not meeting statutory quotas, which would eventually trickle down to consumers. Furthermore, an analysis on the indirect costs of the ZEVs mandate found that the indirect costs are “indeterminate” but, as ZEVs sales increase, costs to deploying charging infrastructure and costs by auto dealers to accommodate ZEVs sales and servicing ZEVs will also increase. There will also be higher costs associated with higher demands for electricity, due to increase in electric generations, upgrading substations and grid transmissions.

¹⁷ This formula uses the previous year average method. OEMs have the option to also use the Same year method. Refer to Title 13 California Code of Regulations 192.4 (c)(1)(C)(1) and (2).

¹⁸ Governor Wes Moore, Executive Order 01.01.2025.10.

¹⁹ Maryland, Oregon, and Massachusetts.

²⁰ Attorney General Jason S. Miyares, Opinion 24-017, June 4, 2024.

²¹ Virginia’s Office of Regulatory Management, Economic Review of ACC I.

REVIEW OBSERVATIONS

Objective #1 Delaware's Electric Grid: Overview

The electric grid has gained traction as a topic discussed in the realm of renewable energy policies, climate change, and electric vehicles. In simple terms, the electric grid represents an interconnected network of electricity producers, transmission lines, and distribution centers that provide electricity to consumers. In the U.S., electricity is produced through various resources. The most common resource used is natural gas, with coal and nuclear power plants as the 2 second most used resources to produce electricity. Similarly, 87% of Delaware's total in-state electricity was generated from natural gas in 2022. According to the **U.S. Energy Information Administration**,²² only 41% of electricity used in Delaware was generated in Delaware while the remaining electricity power supply came from out-of-state suppliers via the regional electric grid.

No Study on Delaware's Electric Grid

The literature on the impact that EVs will have on the electric grid is limited and often vary in conclusions, primarily due to the complexity of assessing this issue. The impact that EVs will have on one state's electric grid will be drastically different from the impact on the electric grid of another state. This is due to various factors, such as the geographic location of a state, annual average temperatures, and load capacity for transformers, feeders, and substations. Since the publications cited in this report, Delaware has not conducted an assessment that evaluates the state's grid ability to withstand increasing EV projections and thus increasing energy demands. In 2023, California conducted a study commissioned by the California Public Utilities Commission to identify grid enhancements and changes necessary to support California's transportation and building electrification policy goals by 2035. The study revealed that California will need \$50B in traditional electricity distribution grid infrastructure investments by 2035 to meet its electrification goals. Additionally, California passed Assembly Bill 2127, which requires the California Energy Commission to biennially assess the EV charging infrastructure needed to meet California's EV goals.²³

Electricity Demand by EVs and Data Centers

PJM Interconnection, the regional transmission organization for Delaware and 12 other states, published a 2025 long-term load forecast report.²⁴ In the report, PJM predicts significant increase in electricity demand due to proliferation of data centers, and electrification of buildings and vehicles, and manufacturing. However, in the zone for Delaware, DP&L, PJM did not specify whether a growth in data centers or electric vehicle expansion existed.

Limited EV Load Capacity in New Castle and Sussex Counties

A concern with the electric grid is that EV owners will charge their vehicles all at once after work, which would increase demand of electricity and in some cases put a strain on the electric grid. The strain on the electric grid could result due to feeders, transformers, or substations lacking the capacity to sustain high energy demands. Pepco Holdings, a subsidiary of Exelon Corporation, partnered with Delmarva Power & Light Company along

²² Analysis available at: <https://www.eia.gov/state/analysis.php?sid=DE>.

²³ Electric Vehicle Charging Infrastructure Assessment - AB 2127

²⁴ Report available at: <https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf>.

with other distributors, to produce capacity maps such as an EV load capacity map²⁵ and hosting capacity maps.²⁶ These maps are used to identify an electric grid's ability to accommodate new energy loads or generations. For example, the maps identify load capacity for feeder lines, transformers and substations, crucial components to consider when states are considering installing EV charging stations. The EV load capacity map reveals pocket areas in New Castle County and large areas in Sussex County where feeder lines, transformers, or substations lack the energy capacity needed to install EV charging infrastructure.²⁷ It is worth noting that Delmarva Power states that they cannot guarantee the timeliness or accuracy of the information presented in the maps due to the complex and evolving nature of the electric grid. They do, however, attempt to keep these maps current. DelDOT and DNREC have not commented on whether this hinders installation of EV charging stations in these locations, or if there is consideration to install EV charging stations in those areas.

Limited EV Load Capacity in New Castle County

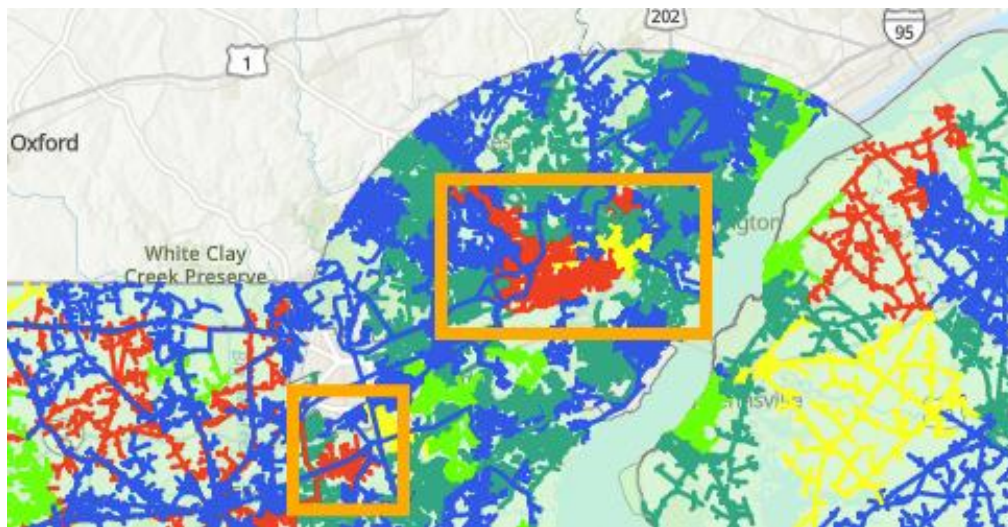


Figure.1.1 Limited EV Load Capacity in New Castle County

Limited EV Load Capacity in Sussex County

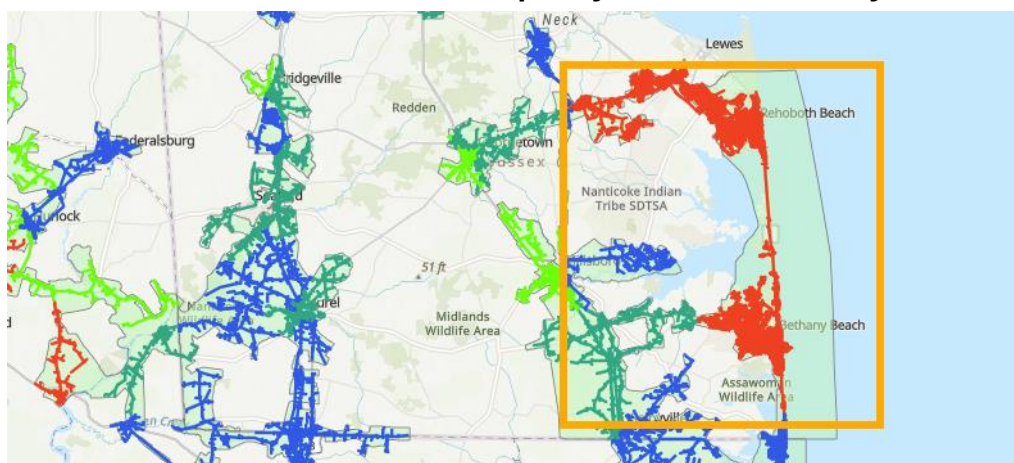


Figure 1.2 Limited EV Load Capacity in Sussex County

²⁵ Map available at: <https://www.delmarva.com/smart-energy/innovation-technology/ev-load-capacity-map>. Example available in Appendix A.

²⁶ Maps available at: <https://www.delmarva.com/smart-energy/my-green-power-connection/developers-contractors/technical-consideration/hosting-capacity-map>. Example available in Appendix B.

²⁷ Full state map available in Appendix A.

DelDOT Partnerships with Distributors and Regional Partnerships

DelDOT has partnered with the 3 utility providers that serve the state: Delmarva Power, DE Electric Coop, and Delaware Municipal Electric Corporation (“DEMEC”). Some of the utility providers have created programs to incentivize EV owners to charge EVs during off-peak hours and receive credits. Currently, Exelon, Delmarva Power’s parent company, is a part of a joined coalition called the National Electric Highway Coalition (“NEHC”). The NEHC aims to create a network of DCFC stations connecting major highway systems from the Atlantic Coast to the Pacific Coast of the United States. NEHC conducted an analysis of the EV charging infrastructure needed to support the EV market at a national level. Their analysis reveals that 34.4 million EVs will be on U.S. roads by 2030, which would require the installation of 182,000 DCFC ports, 1 million public level 2 (“L2”) ports and 1 million workplace and multi-family dwelling L2 ports in 2030.²⁸

Delaware Exploring Vehicle-to-Grid

The University of Delaware, in collaboration with Delmarva Power, PJM Interconnection, and Ford Motor Company are exploring vehicle-to-grid (“V2G”). V2G is a type of energy storage system that aims to reduce the strain on the electric grid by storing energy and providing support or during power failures. In addition, Senate Joint Resolution No. 3 of the 153rd General Assembly, directs all electric public utilities in Delaware to explore and participate in a study that aims to assess and analyze the costs and benefits of the adoption of energy storage systems in Delaware.²⁹

Objective #2 Delaware’s Motor Fuel Tax – Overview

The gas tax or motor fuel tax (“MFT”), in its initial implementation, was a reliable source of revenue that funded various road and highway projects. Under an MFT system, the purchase of motor fuel per gallon is taxed. Currently, the federal gas tax is used to fund the Highway Trust Fund, which receives 84% of its revenue from motor fuel tax, and 16% from other sources like diesel, heavy trucks, and trailers sales tax, tires, and heavy vehicles annual use tax. After the success of the MFT at the federal level, in 1919, Oregon became the first state to implement the motor fuel tax. Oregon’s innovative move set a precedent, leading 35 states to adopt the gas tax by 1995. However, reliance on the motor fuel tax has slowly eroded the purchasing power of the fund over time for various factors. For example, automakers are increasing the production of highly fuel-efficient internal combustion engine vehicles (“ICE”). This has resulted in a decrease in fuel purchase, but also more road wear because fuel-efficient vehicles can travel longer distances. Further, the federal MFT rate is not pegged to inflation, resulting in a gradual decline in revenue over time as inflation erodes the purchasing power of the tax. Additionally, with the proliferation of electric vehicles on the roads, energy source displacement is likely to occur.

Delaware’s Motor Fuel Tax Unchanged Since 1995

Delaware’s gas tax of 23 cents per gallon has remained unchanged since 1995.³⁰ According to the U.S. Energy Information Administration, the average state excise gas tax in 2023 was 27.1 cents per gallon of motor fuel; by 2025, it will be 33 cents per gallon. Since 2021, 10 states—including Delaware—have gone 2 decades without a gas tax increase, while 36 states have raised or reformed their gas tax since 2010.

²⁸ Analysis available at: <https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Electric-Transportation/EV-Forecast-Infrastructure-Report.pdf>.

²⁹ Senate Joint Resolution No. 3, as amended by Senate Amendment No. 2, 153rd General Assembly, out of committee April 2025.

³⁰ 30 *Del. C.* § 5110.

Gas Tax Map

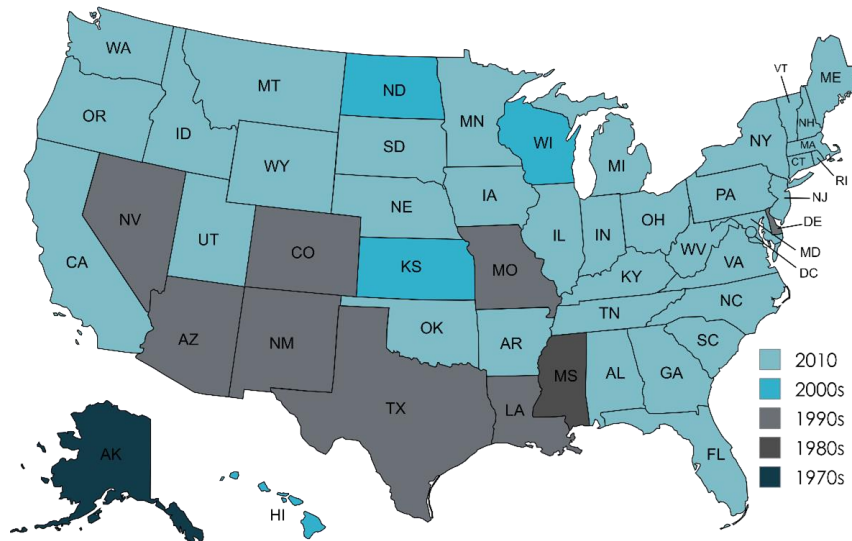


Figure 2. 1. Gas Tax Map

Source: (Institute on Taxation and Economic Policy)

Delaware's MFT Has No Structure

In 24 states and Washington, D.C., the MFT is adjusted or fixed to inflation or average gasoline prices. Delaware's motor fuel tax is not pegged on gas prices, or the consumer price index ("CPI").³¹

July 2024 Gas Tax Rates

State	Cents/Gallon	Year of Last Increase	Gas Tax Structure
Delaware	23	1995	N/A
Maryland	42.6	2013	Tax varies with gas price and CPI
Pennsylvania	58.7	2015	Tax varies with gas prices
New Jersey	42.3	2016	Tax varies with gas prices and revenue collections
New York	25.7	2013	Tax varies with gas prices

Figure 2. 2. July 2024 Gas Tax Rates

Source: (National Conference of State Legislatures, NCSL)

3rd Largest Revenue Source

Delaware's MFT makes up the third largest category of revenue for the State's Transportation Trust Fund, ("TTF"), \$133.3M. The MFT across states varies, with some having the MFT as a big percentage of overall revenue of their TTF, while others rely on other means of revenue. According to the National Association of State Budget Officers, 38.4% of revenue generated to fund the TTFs of many states comes from the MFT.

³¹ Rates available at: <https://www.ncsl.org/transportation/variable-rate-gas-taxes>.

DelDOT Transportation Trust Fund Chart Fiscal Year 2023

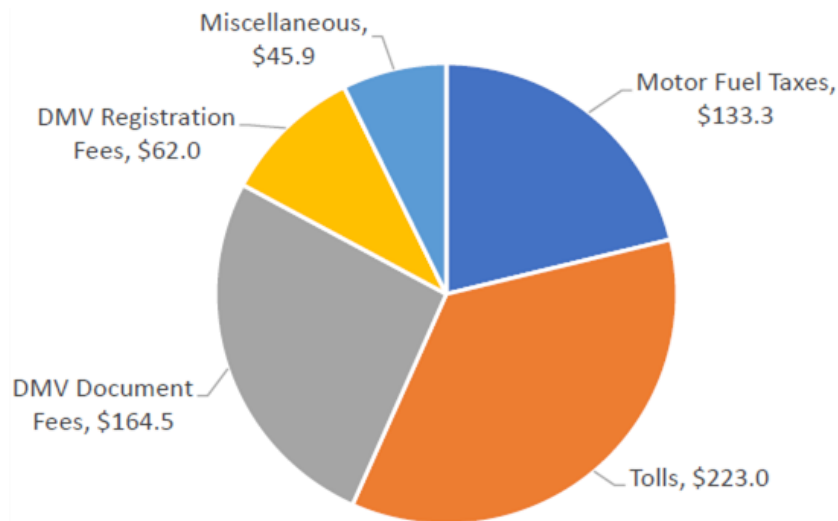


Figure 2. 3. DelDOT Transportation Trust Fund Chart Fiscal Year 2023

Source: (DelDOT, 2023, p.104)

University of Delaware Motor Fuel Tax Study

According to a report conducted by the University of Delaware in 2024 and prepared for the DelDOT, MFT revenue is estimated to decline from \$133.3M in 2023 to \$87.2M in 2040.³² This estimate incorporated all Delaware regulations passed in 2023 to estimate the total number of ICE, PHEV, hybrid vehicles, and EVs for years 2023-2050.

University of Delaware Fuel Tax Chart

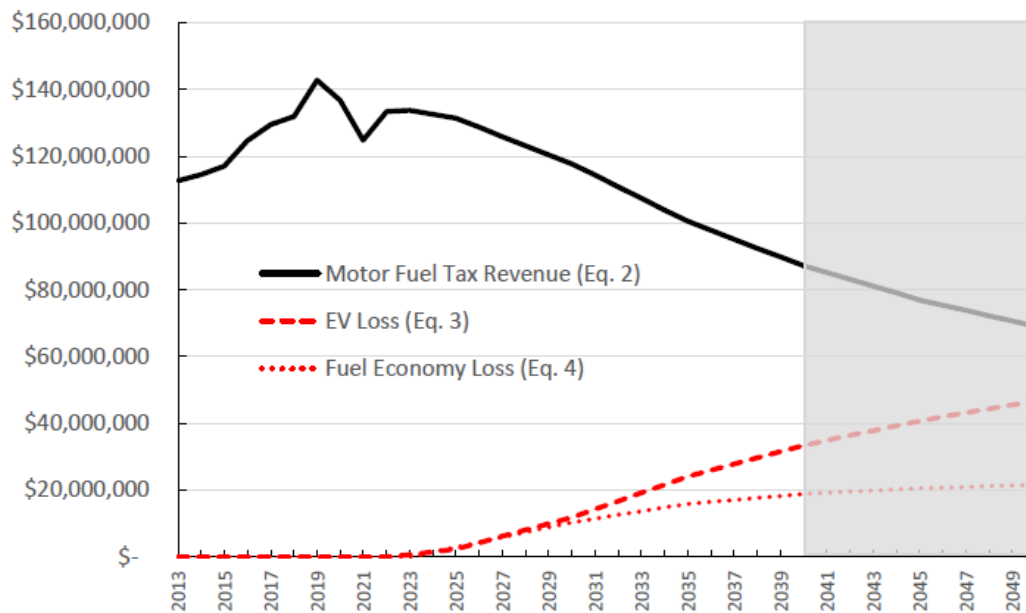


Figure 2. 4. University of Delaware Fuel Tax Chart

Source (University of Delaware, Institute for Public Administration)

Additionally, the report conducted an analysis and evaluation of possible policy options to address the projected revenue decline generated through Delaware's MFT. The policy options evaluated in the report are detailed below.

³² Report available at: <https://udspace.udel.edu/items/b28f5b76-42c2-4f9b-97d2-a6f3e2b8eb76>.

Policy Options

- **Alternative Fuel Vehicle Fee:** An annual fee collected from EV owners as part of the vehicle registration process. Thirty-nine states have an alternative fuel vehicle fee, including all of Delaware's neighboring states, except New York.
- **Highway Use Fee ("HUF"):** An annual fee collected from EV owners and ICE vehicle owners based on fuel-efficiency. Virginia is one of the states with a HUF, which generated \$59.7M in 2023. The fee is collected during the process of vehicle registration and calculates the fee based on fuel-efficiency data collected for each vehicle make and model.
- **Mileage-Based User Fee ("MBUF"):** A fee on all vehicles based on the distance travelled. Three states have legislated and implemented voluntary MBUF systems.³³ The MBUF requires tracking miles driven using a global position system ("GPS") device that is installed into a vehicles on board diagnostics ("OBD") port.
- **Public Charging Fee:** A fee on the electricity that EV drivers use when charging their vehicles. Georgia, Iowa, Kentucky, Montana, and Oklahoma use a per kilowatt hour (kWh) fee system. Washington imposes an annual flat registration fee for public charging stations. Currently, Delaware charges 15 cents/kWh fee at state-owned charging stations. A public charging fee would be an additional surcharge that would apply to all public stations.
- **Retail Delivery Fee:** A fee on retail orders delivered by motor vehicles that utilize Delaware roads. Colorado imposes a retail delivery fee of 28 cents on orders that are delivered in the state and are subject to the state's sales tax. Minnesota imposes the fee of 50 cents on orders delivered in the state and are over \$100 and are subject to the state's sales tax.
- **Increasing Motor Fuel Tax Rate:** Increasing Delaware's MFT or indexing Delaware's MFT to inflation or consumer price index ("CPI").
- **Increase Tolls:** Raising tolls in Delaware could generate additional revenue for the TTF, with a 10% increase potentially bringing in an extra \$22 million annually. While tolling operates as a user-fee system, concerns about equity arise, particularly regarding lower-income drivers and non-residents who use the infrastructure infrequently. Despite these challenges, public opinion research suggests that toll increases are generally acceptable when the tolling authority clearly communicates how the revenue will be used, and existing infrastructure makes implementation relatively straightforward.
- **Increase Division of Motor Vehicles ("DMV") Fees:** Increasing DMV fees in Delaware, as last done in 2015, could generate significant revenue to offset losses from EVs and fuel-efficient vehicles, but the effectiveness of a fee increase would decline over time. While administratively feasible, this policy is considered inequitable because flat fees do not account for usage or ability to pay, making it burdensome for some vehicle owners. Public opposition is expected, though likely less intense than reactions to toll or gas tax increases, as DMV fees are less noticeable in day-to-day expenses.

³³ Oregon, Utah, Virginia.

- **Maintain Existing Policy:** Maintaining Delaware’s current policies will lead to declining MFT revenue and negatively impact the TTF, making this approach ineffective in the long term. While the policies are currently equitable, the increasing number of EVs will shift the burden onto ICE vehicle owners, creating future inequities, though public resistance to change is likely until infrastructure challenges become more apparent.

The report evaluated the policy options using 4 criteria: effectiveness, equity, social acceptability, and administrative feasibility. Based on the evaluation, 2 policy options yielded positive outcomes in alignment with all 4 criteria: alternative fuel vehicle fee and increasing tolls.

Objective #3 Delaware’s Public EV Charging Infrastructure – Overview

A key indicator to a state’s EV readiness is the condition of its charging infrastructure (“EVCI”). States with well-maintained and widely available charging networks have shown to be better equipped to handle the growing number of EVs. In contrast, states with limited or inadequate maintenance procedures of EVCI face various challenges in meeting the growing demand of EVs. Factors such as the number of charging stations, location of charging stations, charging speed, and accessibility play crucial roles in determining the status of an EV-ready state. In acknowledging these factors as crucial elements to a state’s EV readiness, and in ensuring that federally designated alternative fuel corridors (“AFC”) are EV ready, the U.S. Department of Transportation Federal Highway Administration (“FHWA”) issued in 2022 the previously-discussed federal program, the National Electric Vehicle infrastructure formula program, or NEVI.

Federal Fund Uncertainty

NEVI provides a framework for states to develop a network of EV charging along federally designated AFCs. Under the NEVI program, states receive funding to upscale their AFCs by submitting their plans to the FHWA and following the standards set³⁴ under the NEVI program. According to data obtained from DelDOT and DNREC, Delaware was set to receive \$17.5M in federal funds over a 5-year period. In fiscal year 2022, Delaware received \$2.6M; Delaware was set to receive \$3.76M per year from fiscal years 2023 to 2026.³⁵

However, on February 6, 2025, FHWA suspended approval of state electric vehicle infrastructure deployment plans.³⁶ A spokesperson for Governor Matt Meyer’s office confirmed that Delaware was set to receive \$7.5M for the NEVI program for fiscal years 2025 and 2026; however, that funding is now uncertain. To date, DelDOT and DNREC have not released a news press or updated their websites to reflect this uncertainty with NEVI funds.

Since the issuing of the NEVI program, DelDOT and DNREC have collaborated on producing annual plans outlining how the state is utilizing the NEVI funds. In addition to the NEVI plan, the 2 departments have also published a Statewide EV Charging Infrastructure Plan (“Statewide plan”), otherwise titled, “Charging Forward: Delaware’s Statewide plan for Electric Vehicle Charging Infrastructure.” While the NEVI plan focuses on the State’s use of NEVI funds to build out its EV charging infrastructure along AFCs, the Statewide plan centers on identifying EV charging infrastructure gaps around the state

³⁴ NEVI sets 15 criteria that states must follow to ensure sufficient, reliable and efficient EV chargers along AFCs.

³⁵ Chart available in Appendix C.

³⁶ Letter available in Appendix D.

and identifying priority communities where funding can be allocated. The 2 plans work in tandem to align Delaware with the Climate Action goals, and the standards established under the ACC.

As of April 2025, DelDOT and DNREC have released 2 reports on the NEVI plan; NEVI Plan 2022-2023³⁷ and NEVI Plan 2024.³⁸ JLOSC staff evaluated both plans and reviewed how the 2 departments are ensuring that the EV charging infrastructure is both efficient and accessible to meet the demands in EV charging following DNREC's adoption of ACC II.

NEVI Plan

In the 2022-2023 NEVI plan, DelDOT and DNREC stated the only corridor in Delaware considered EV-ready by the standards established by NEVI was I-95. However, in the NEVI plan 2024, the 2 departments stated that they will not be using existing charging stations to determine whether Delaware is fully built out, citing the lack of available information on existing charging stations. This raises questions on whether the built-out segments of the corridors (based on the 2022-2023 NEVI plan) will need to be reevaluated to conform to NEVI standards.

Statewide Plan

DelDOT and DNREC have released only 1 Statewide plan which became available in October 2024.³⁹ After reviewing the Statewide plan, JLOSC staff found that the Statewide plan highlighted a level of planning that is being conducted through the coordination of DelDOT and DNREC.

- The Statewide plan provided an EV infrastructure forecast, which is a crucial analysis to assessing where Delaware currently stands, and what future measures need to be taken to successfully transition to EVs under the standards of ACC II. Additionally, in the Statewide plan is the analysis conducted on identifying priority areas in Delaware that need EV charging infrastructure. This analysis sets the blueprint for future EV charging infrastructure installations and funding allocations that are more centered around communities and not only alternative fuel corridors.
- The Statewide plan conducted a charge load analysis using the U.S. Department of Energy's Electric Vehicle Infrastructure Projection Tool ("EVI-X"), a projection tool that provides EV load profiles on the electric grid for states based on various assumptions.⁴⁰ Their findings revealed that charging peaks under unmanaged scenarios (in scenarios where the status quo remains) between 6:00pm and 10:00pm as EV owners return home from work or weekend activities. During the weekdays, most EV owners will likely charge their vehicles in the morning at home or at night. To ensure the grid can accommodate future EV demand, the Statewide plan recommends exploring an EV Time-of-Use rate for EV owners that can be facilitated by electric distributors. The Statewide plan did not provide an assessment on Delaware's electric grid, and did not reveal if certain components of the electric grid need to be upgraded.

³⁷ Plan update available at: <https://deldot.gov/Programs/NEVI/pdfs/FFY22-23%20NEVI%20Plan.pdf?cache=1744907466002>.

³⁸ Virtual room available at: <https://aecomviz.com/DelawareEV2022>.

³⁹ Report available at: https://aecomviz.com/DelawareEV2022/pdf/Charging_Foward.pdf.

⁴⁰ Projection tool available at: <https://afdc.energy.gov/evi-x-toolbox#/evi-pro-ports>.

Existing Conditions and Projections

Number of Electric Vehicles in Delaware

Figure 3. 1. Number of Electric Vehicles in Delaware

SOURCE	BEVS	PHEVS	HEVS	TOTAL EVS	ALL REGISTERED VEHICLES (ALL FUEL TYPES)	PERCENT OF EVS TO ALL REGISTERED VEHICLES
US DEPARTMENT OF ENERGY (2023) ⁴¹	8,400 (0.9%)*	3,800 (0.4%)*	22,900 (2.50%)*	35,100	914,700	3.82%
DELDOT (2025) ⁴²	12,886 *(1.3%)	32,608 *(3.3%)		45,494	991,735	4.2%

*Percent of all registered vehicles

According to the Statewide plan, Delaware is projected to have an estimated 58,835 EVs on the road by 2027 and over 205,217 EVs by 2032 (a 351% increase from current EVs) representing 6% and 21% of Delaware's passenger market. This projection does not offer estimates for each type of EV that will be on Delaware roads, though its inclusion would have enriched the analysis, considering that BEVs use considerably more electricity and require more EV charging infrastructure in place than PHEVs or HEVs. The importance of this analysis will be further elaborated on in the next table when assessing current and future conditions of EV charging ports. Despite this, and considering market trends⁴³ and the current composition of EVs in Delaware by fuel-type, the bulk of EVs that will be on Delaware roads are likely to be PHEVs or HEVs. The Statewide plan also indicates that market penetration for EVs in Delaware will remain below 50% in 2032 under ACC II due to long vehicle replacement times. In other words, although under Delaware's ACC II 82% of vehicles delivered to Delaware will be EVs by 2032, only 21% of EVs will be on the road in 2032.

Delaware EV Adoption Forecast

Figure 3. 2. Delaware EV Adoption Forecast

EV Adoption Rate	2023 ²¹	2027	2032
% EV Delivered	5%	43%	82%
% EV on the Road	1%	6%	21%

*Source: (Statewide Plan p.12)

⁴¹ Available in Appendix E.

⁴² Delaware Open Data Portal available at: https://data.delaware.gov/Transportation/Registered-Vehicles-by-Fuel-Type/ity3-3688/about_data. Note: This data does not indicate whether "electricity" means a vehicle is a BEV, nor does the data indicate whether "electric+gas" means a vehicle that is a PHEVs or HEVs.

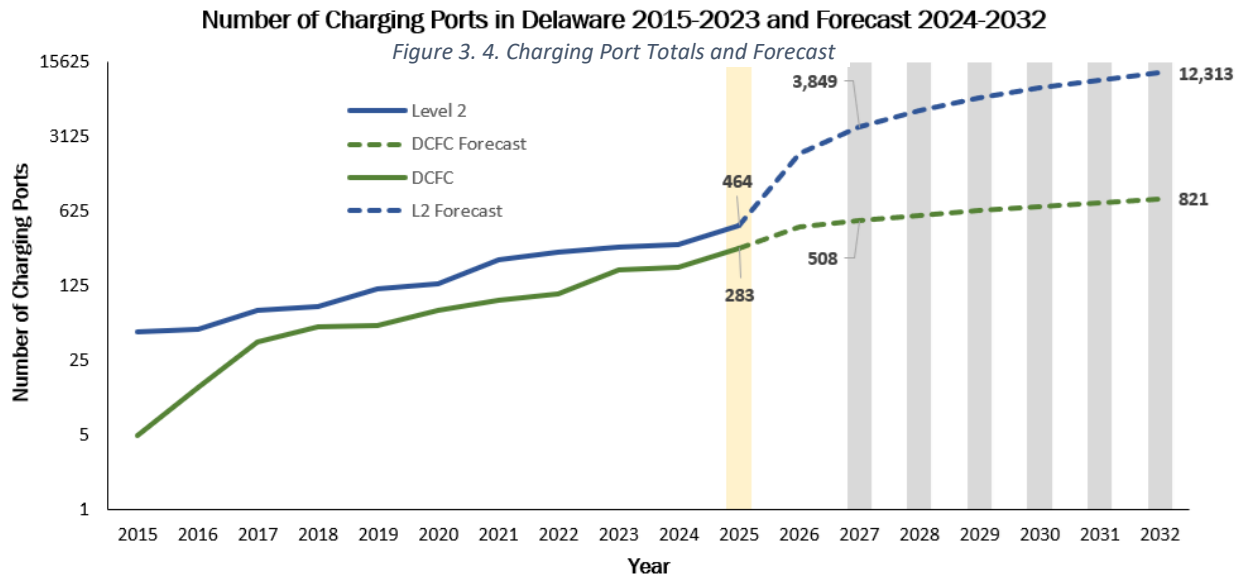
⁴³ According to Alliance for Automotive Innovation, Get Connected Electric Vehicle Quarterly Report, Delaware EVs market share made up 11.54% in Q4 2024 an increase of 2.56% from Q3 in 2023.

Charging Port Totals According to State Planning

Year/Plan	Level 2	DC Fast Charging	
		Non-Tesla	Tesla
NEVI Plan 2022-23	96	10	13
NEVI Plan 2024	287	176	
Statewide Plan 2024	308	185	
Alternative Fuel Data 2025 ⁴⁴	464	95	188

Figure 3. 3. Charging Port Totals According to State Planning

The data on the number of charging ports changes rapidly. To provide a better picture of the current landscape of the number of charging ports in Delaware, JLOSC staff provided the numbers from the NEVI plans, Statewide plan, and Alternative Fuel Data. As the table above illustrates, the number of charging ports is increasing, more so for L2 charging ports, than non-Tesla DC fast charging. This disparity in the increasing number of L2 charging ports compared to DC fast charging ports exists due to various factors such as the difference in price of installation,⁴⁵ electricity demand, access to home charging, and access to workplace charging.



The Statewide plan projects that to meet Delaware’s projected EV adoption rates, Delaware will need to have 235 DC fast charging ports and 3,530 L2 by 2027.⁴⁶ The projection does not specify if the 235 DC fast charging ports includes Tesla or non-Tesla charging ports. This distinction is crucial to this assessment since as of April 2025, the role-out of the National American Charging System (“NACS” or “J3400”) is still

⁴⁴ DNREC Alternative Fueling Station Locations (accessed April 1, 2025) available at: https://dnrec.delaware.gov/climate-coastal-energy/clean-transportation/alternative-fuel-stations/#!/analyze?region=US-DE&tab=fuel&fuel=ELEC&ev_levels=2.

⁴⁵ The National Renewable Energy Laboratory conducted an analysis estimating U.S. Light-duty demand for Electric Vehicle Charging Infrastructure (p.33). Report available at: <https://www.nrel.gov/docs/fy23osti/85654.pdf>.

⁴⁶ The projection for the number of charging ports needed in Delaware was based on multiple assumptions. One of the assumptions of the analysis, is that a ratio of 4 DCFC ports per 1000 EVs and 60 L2 ports per 1000 EVs is the ideal ratio of ports to EVs. The International Council on Clean Transportation provides a ratio of 10.9 EVs per charging station (includes L2 and DC), available at: <https://theicct.org/wp-content/uploads/2021/12/charging-up-america-jul2021.pdf>.

unavailable in many Tesla charging stations, and thus, inaccessible to non-Tesla EVs. In addition, there are several automakers that are yet to optimize their vehicles to use Tesla chargers.⁴⁷

The Statewide plan estimates that Delaware will require 12,313 L2 ports and 821 ports to accommodate the projected 205,217 EVs on Delaware roads by 2032. The graph above showcases the number of charging ports Delaware installed year-by-year from 2015 to 2023. The graph also illustrates that Delaware has gradually increased the number of ports year by year; however, to meet the projections of the Statewide plan, Delaware will need to substantially increase the number of L2 charging ports in a 6-year period. Although the number of DC fast ports currently outnumbers the projected estimate needed for 2027, a closer examination of multiple factors suggest that this achievement is relatively modest. First, more than half of current DC fast ports are Tesla-only ports. Second, the Tesla chargers are currently inaccessible to non-Tesla EVs model years 2026 and below. Third, many Tesla locations have not yet optimized their charging stations to be compatible with NACS adapters.

Although the Statewide plan provides projections for the number of public L2 and public DC fast charging ports, it does not provide projections for the number of single-family charging ports and multi-family housing charging ports required. The absence of this analysis fails to reflect the level of planning required to accommodate Delaware's EV adoption rate, since majority of the charging takes place at homes. Despite Delaware having a higher housing stock in single-family homes, an analysis into the number of shared-private charging ports needed in multi-unit dwellings or workplaces would have provided a clearer picture of the number of charging ports needed to accommodate Delaware's EV adoption rates.

Compliance with Federal Standards

NEVI establishes 15 criteria that states must adhere to in order to be certified as “fully-built out” by the FHWA and the Joint Office of Energy and Transportation.⁴⁸ The criteria include that charging stations must be 1 mile from a designated AFC, each station must have 4 ports, and charging stations must not be more than 50 miles apart.⁴⁹ In June 2022, the FHWA released guidelines on NEVI and outlined the process and the standards to meet to qualify for “fully-built out” certification.⁵⁰ As of the date of this report, none of Delaware's 4 corridors have been certified as “fully-built out.”⁵¹ This is despite the FHWA releasing a revised and more flexible process to reaching fully-built out certification in late 2024.⁵²

Additionally, it is unclear how the NEVI funds have been used or if any station has been built using the NEVI funds. The 2023 NEVI plan states that Delaware has one DC fast charging that fully complies with NEVI standards and that other stations will be upgraded to meet NEVI standards. However, the 2024 NEVI Plan states that DelDOT and DNREC,

⁴⁷ Tesla charger locations available at: <https://www.tesla.com/NACS>.

⁴⁸ Available in Appendix F.

⁴⁹ Standards and requirements available at: <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>.

⁵⁰ Program guidance update available at: https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf?cache=1745346146311.

⁵¹ Rhode Island became the first, and only state, to be certified as fully built out in July 2024. It is also worth noting that Rhode Island is a relatively small state with only one designated AFC.

⁵² Program guidance available at: <https://www.fhwa.dot.gov/environment/nevi/resources/memorandum-build-out-certification.pdf>.

“[do] not plan on counting any of the existing chargers towards a fully built out determination,” and instead will build 12 new NEVI compliant charging stations. Currently, the 2024 NEVI Plan indicates only one contract has been finalized and issued to the vendor. The status of the remaining contracts is unknown.

The 2024 NEVI Plan also states that the State is unable to “assess whether the [existing] stations meet NEVI [standards],” and that all the information the State has on the EV chargers built in Delaware is the name of the vendor. The State’s inability to collect and assess critical information such as number of connectors, type of connectors, and uptime for each charging station is, at a minimum, cause for concern.

JLOSC Staff Fieldwork Findings: Current Public Charging Station Conditions

In light of this information, and to assess NEVI compliance of Delaware charging stations, JLOSC staff conducted a 3-day EV Charging Station Field Evaluation. Staff initially began by renting a BEV from the Office of Fleet Services (“OFS”). However, after staff drove approximately 90 miles, OFS stated that public charging stations could not be used and that State-owned BEVs could be charged only at State facilities, using State-owned L2 chargers.⁵³ As a result, the first day of the evaluation was cut short due to the inability to charge the BEV with a public charging station, and staff completed the remaining 2 days using a hybrid fleet vehicle.

Using the information available on DelDOT’s website and the charging stations in the 2023 NEVI Plan, 25 stations, including Tesla charging stations, located along designated AFCs (Interstate-95, Route-1, Route-13, Route-113) were assessed based on 3 criteria; 10 of the 15 NEVI standards, condition of charging station, and accessibility relating to the Americans with Disabilities Act (“ADA”) Standards for Accessible Design.

A limitation of this evaluation is that 5 of the 10 NEVI standards used to evaluate the charging station were given less weight due to JLOSC staff’s limitation to fully assess a charging station based on that criterion. For example, 1 of the 10 NEVI standards used to evaluate the charging station is the number of connectors. This criterion can be easily tested and observed. However, in evaluating a charging station based on what cybersecurity mechanisms are in place for each charging station, JLOSC staff were limited in the resources to reach conclusive assessment on this criterion.⁵⁴ The 5 NEVI standards that were given less weight in the evaluation include security, long-term stewardship, customer service, and traffic control devices. Regulation on EV traffic control devices at the time of the EV charging station field evaluation were not yet updated and therefore received less weight.⁵⁵ Additionally, 5 NEVI standards were not accounted for in this evaluation, those include network switching capability, qualified technician, customer data privacy, and interoperability of EV charging infrastructure.

⁵³ L2 charging takes over 8 hours to complete when the battery is almost dead with ¼ of its capacity left.

⁵⁴ Payment method, security, long-term stewardship, and customer service are the 5 NEVI standards JLOSC staff gave less weight.

⁵⁵ NEVI requires compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways. This manual is updated every 4 years and has since (January 2024) been updated to reflect EV charging signs. Handout available in Appendix G.

Map of Public Charging Stations

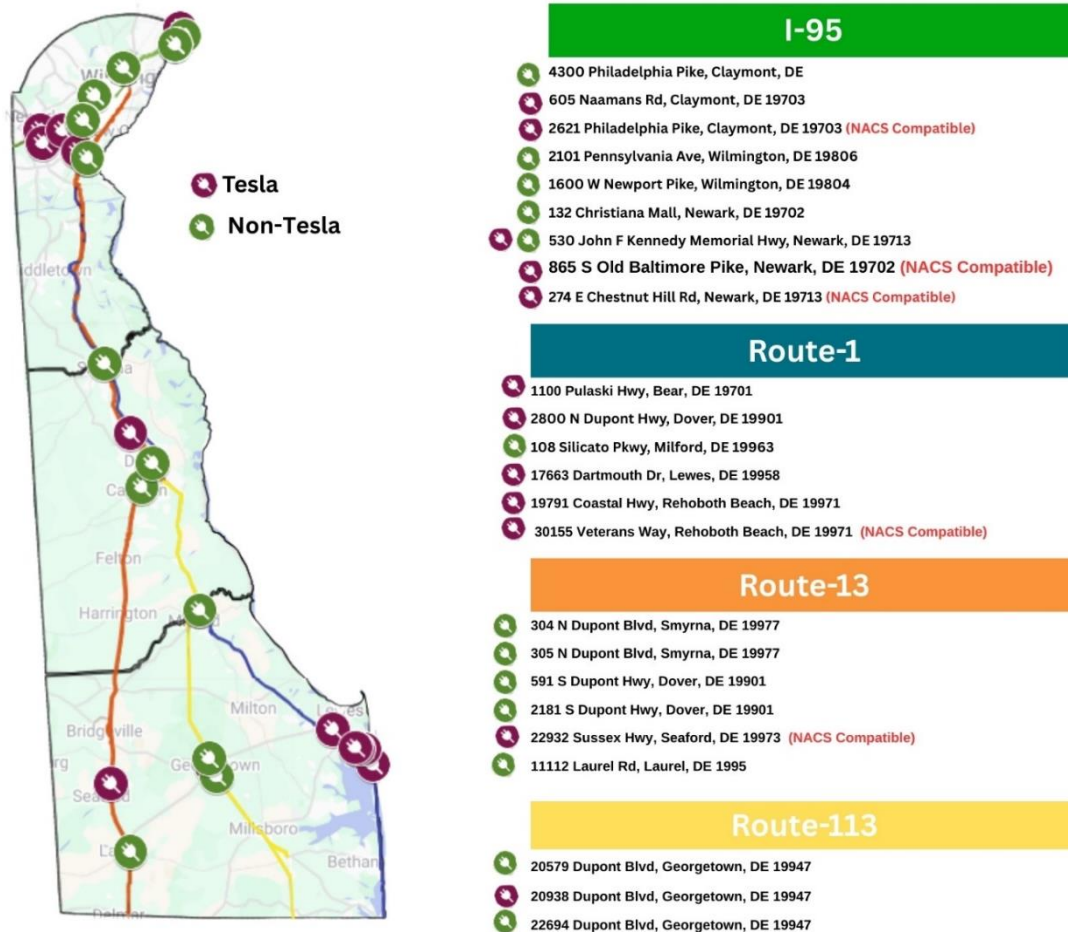


Figure 3. 5. Map of Public Charging Stations

NEVI Compliance

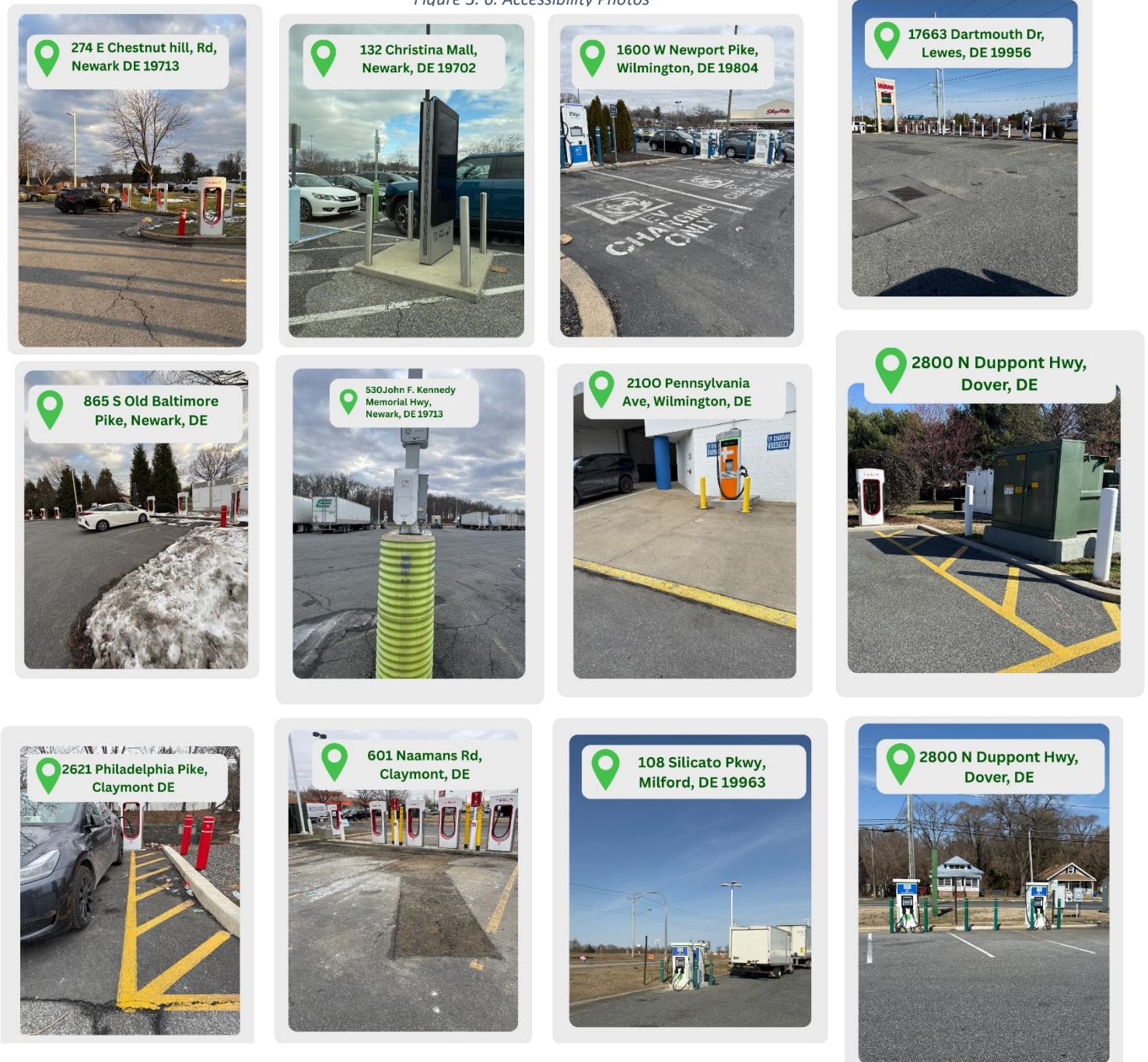
- 6 of the 25 charging stations evaluated satisfied 5 or more NEVI standards. Of those, 3 were non-Tesla charging stations. No charging stations in Delaware satisfy all 15 NEVI standards. The standards satisfied include:
 - The charging station is within 1 mile of a designated AFC.
 - The distance between each charging station located at a AFCs is less than 50 miles.
 - The charging station is available 24 hours for the public.
 - The charging station is capable of charging any CCS-compliant vehicle.
 - The charging station has 4 charging ports and can charge 4 EVs simultaneously.
- No Tesla charging stations in Delaware have the NACS adapter.
 - 5 Tesla charging stations in Delaware are NACS compatible, meaning non-Tesla owners can charge at these locations if they bring their own adapter.⁵⁶
- At all 24 charging stations, apart from one L2 charging station located in Claymont Transit Center, no signs or traffic control devices were present at intersection or parking lots to direct EV owners to the charging station. JLOSC staff relied on Google Map images to pinpoint the location of each charging station.

⁵⁶ Adapters are cost prohibitive for a lot of EV drivers and the EV manufacturers do not provide an adapter.

Accessibility Relating to the ADA Standards for Accessible Design

- The majority of charging stations were not accessible in the following ways:
 - Access to aisle is obstructed or not present.
 - Charging cable is not within reach for individuals with limited hand dexterity.
 - Charging stations placed on curbs rather than ground level.
 - Route to amenities or buildings are not accessible, often far distance and obstructed by parking spaces and traffic.
 - No weather shelter is available around charging station.
 - No accessible or priority signage.

Figure 3. 6. Accessibility Photos



Public EV Charging Station Conditions

- Some charging stations demonstrated signs of deterioration.
 - Damage to the charging cable.
 - Non-functional levers, leaving charging cables on the ground.
 - Charging cables can be damaged when a vehicle drives over or rests on top of them.
 - Damage to the pavement or parking lines are no longer visible.
 - Curb guardrails not present and in poor conditions.
 - Damage to charging casing due to guardrails not being present.

Figure 3. 7. Photos of Public EV Charging Station Conditions



Figure 3. 8. Photos of Public EV Charging Stations Conditions



JLOSC STAFF FINDINGS

Findings Summarized

The following findings reveal significant gaps in information that are essential to assessing the EV readiness of Delaware:

1. Implications following the expiration of Delaware's ACC II is unclear.

- California's ACC II regulations establishes that small volume manufactures are exempt from meeting the annual ZEV requirement until model year 2035. California also establishes that small volume manufacturers can earn credits in model years 2026-2035. Delaware adopted the ACC II by reference and then amended annual percentage requirement from 100% in 2035 to 82% in 2032, with the regulation expiring in model year 2033. DNREC has not commented on what transpires following the expiration of the ACC II in 2033 and whether small volume manufacturers are exempt from the ACC II in Delaware.⁵⁷ It is also worth noting that Colorado and New Mexico are the only states, excluding Delaware, that reduced their annual ZEV percentage requirement to 80% in model year 2032.

2. Uncertainty with federal funding and mechanisms requiring DelDOT and DNREC to report on their EV plans.

- With the uncertainty of NEVI following the FHWA suspension of approval of state EV plans and by extension funding, uncertainty remains regarding federal funding and mechanisms requiring the state agencies to report on their EV plans and use of NEVI funds.

3. Informational gap in Delaware's electric grid ability to sustain increasing EVs.

- Although the Statewide plan provides a charge load analysis that provides EV load profiles on the electric grid, JLOSC staff find that this analysis is not sufficient to comprehensively assess Delaware's electric grid ability to sustain the projected increase in EVs. California, for example, conducted a study commissioned by the California Public Utilities Commission to identify grid enhancement and changes necessary to support California's transportation and building electrification policy goals.

4. Absences of proactive measures to maintain Delaware's Motor Fuel Tax: Delaware's 3rd largest revenue stream to the Transportation Trust Fund.

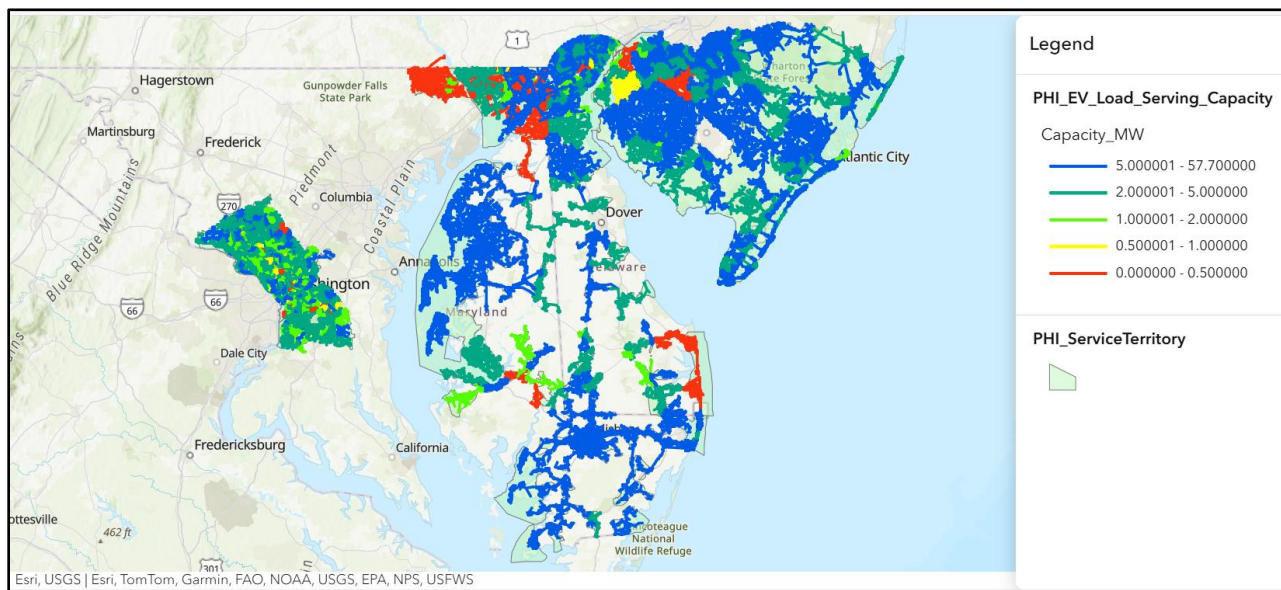
- The MFT has historically been a reliable source of revenue for road infrastructure, but its effectiveness is diminishing due to inflation, the rise of fuel-efficient vehicles, and the growing adoption of electric vehicles. Delaware's gas tax, unchanged since 1995, is lower than the national average and lacks an inflation-adjusted structure, making future revenue declines inevitable. A 2024 University of Delaware study projected MFT revenue would decline by over 34% by 2040 and found that alternative fuel vehicle fees and toll increases are the most viable policy options to address this decline.

⁵⁷ Hearing officer's report available at: <https://documents.dnrec.delaware.gov/Admin/Hearings/2022-R-A-0011/Hearing-Officers-Report-ACCII-20230426.pdf>.

5. **The Statewide plan did not include projections for workplace and multi-unit dwelling EV charging ports.**
 - Despite Delaware having a higher housing stock in single-family homes, an analysis into the number of shared-private charging ports needed in multi-unit dwellings or workplace would have provided a clearer picture of the number of charging ports needed to accommodate Delaware's EV adoption rates. Absences of this analysis fails to reflect the level of planning required to accommodate Delaware's EV adoption rate, since majority of the charging is taken place at homes, and workplace.
6. **Lack of transparency on the use of NEVI funds and agencies inability to collect information on EV charging stations.**
 - It is unclear how the NEVI funds have been used or if any station has been built using the NEVI funds. The 2023 NEVI plan states that Delaware has one DC fast charging station that fully complies with NEVI standards and that other stations will be upgraded to meet NEVI standards. However, the 2024 NEVI plan states that DelDOT and DNREC, "[do] not plan on counting any of the existing chargers towards a fully built out determination," and instead will build 12 new NEVI compliant charging stations. Currently, the 2024 NEVI plan indicates only 1 contract has been finalized and issued to the vendor. The status of the remaining contracts is unknown.
 - The 2024 NEVI plan also states that the State is unable to "assess whether the [existing] stations meet NEVI [standards]," and that all the information the State has on the EV chargers built in Delaware is the name of the vendor or network. The State's inability to collect and assess critical information, such as the number of connectors, type of connectors, and uptime for each charging station is, at a minimum, cause for concern.
7. **JLOSC staff EV field evaluation revealed that the public DC charging stations located along Delaware's AFCs are in poor condition, do not comply with NEVI guidelines, and have poor accessibility relating to the ADA Standards for Accessible Design. In addition, at all public DC charging stations evaluated, JLOSC staff found no signs or traffic control devices at intersections or parking to direct EV owners to the charging stations.**
 - JLOSC staff conducted a 3-day evaluation of EV charging stations in Delaware to assess their NEVI compliance. During the evaluation, they encountered restrictions on charging state-owned BEVs at public stations, forcing staff to complete most of the study using a hybrid fleet vehicle.
 - The assessment reviewed 25 charging stations along designated AFCs based on NEVI standards, station conditions, and accessibility, revealing that no station met all 15 NEVI criteria, and accessibility was inadequate.
 - Many stations showed signs of wear, lacked proper signage, and had structural issues, highlighting challenges in Delaware's EV charging infrastructure.

Appendix A

Delmarva Power EV Load Capacity Map as of May 2025



Delmarva Power (DPL) uses a color-coded load capacity map to indicate the availability of electricity on circuits. The map helps identify where capacity is sufficient or where system upgrades may be required for new electrification projects.

- **Green** represents circuits with more than **1 MW** of available capacity.
- **Yellow** indicates **0.5 MW to 1 MW**.
- **Red** signals less than **0.5 MW**, suggesting limited capacity.
- **Magenta** highlights areas with only single or two-phase service, where upgrades may be necessary for demands exceeding **100 kW**.
- For projects requiring more than **4 MW**, a new express feeder would be needed.

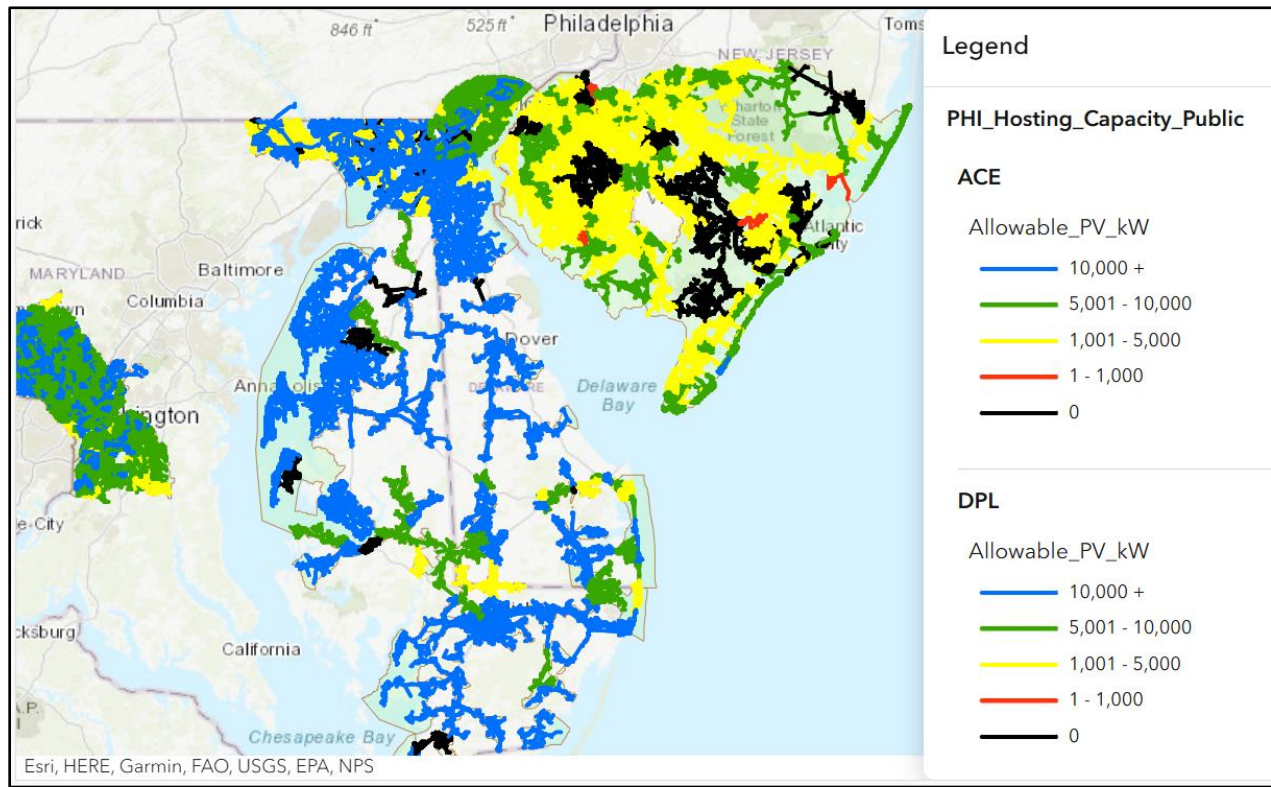
The interconnection of solar generation and other distributed energy resources involves complex and evolving technological, legal, and regulatory considerations. The maps provided are for illustrative purposes only and may not reflect definitive interconnection feasibility.

Current maps available at:

<https://www.delmarva.com/smart-energy/innovation-technology/ev-load-capacity-map>

Appendix B

Delmarva Power Distribution Feeder Hosting Capacity Map as of May 2025



The Hosting Capacity map estimates how much generation (in kW) can be added to a feeder before reaching capacity or impacting service reliability. While it provides a general indication of availability, feeder space is not guaranteed and may change. All interconnection applications require full review and may involve additional costs. Since hosting capacity isn't an exact science, results may underestimate actual capacity and will be reassessed over time.

The interconnection of solar generation and other distributed energy resources involves complex and evolving technological, legal, and regulatory considerations. The maps provided are for illustrative purposes only and may not reflect definitive interconnection feasibility.

Current maps available at: <https://www.delmarva.com/smart-energy/my-green-power-connection/developers-contractors/technical-consideration/hosting-capacity-map>

Federal Highway Administration

1200 New Jersey Avenue, SE

Washington, DC 20590

202-366-4000

INFRASTRUCTURE INVESTMENT AND JOBS ACT[Home](#)[Overview](#)[Funding](#)[Assistance / Local Support](#)[Fact Sheets](#)[Guidance / Regs](#)**ELECTRIC VEHICLES****5-year National Electric Vehicle Infrastructure Funding by State**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATIONFY 2022-2026 FUNDING FOR THE NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE
FORMULA PROGRAM UNDER THE INFRASTRUCTURE INVESTMENT AND JOBS ACT

State	Actual FY 2022	Estimated FY 2023	Estimated FY 2024	Estimated FY 2025	Estimated FY 2026	Estimated Total
Alabama	11,738,801	16,892,267	16,892,384	16,892,399	16,892,434	79,308,285
Alaska	7,758,240	11,164,195	11,164,272	11,164,282	11,164,305	52,415,294
Arizona	11,320,762	16,290,704	16,290,816	16,290,830	16,290,864	76,483,976
Arkansas	8,010,850	11,527,704	11,527,783	11,527,793	11,527,817	54,121,947
California	56,789,406	81,720,595	81,721,161	81,721,230	81,721,400	383,673,792
Colorado	8,368,277	12,042,045	12,042,129	12,042,139	12,042,164	56,536,754
Connecticut	7,771,342	11,183,049	11,183,127	11,183,136	11,183,159	52,503,813
Delaware	2,617,339	3,766,380	3,766,406	3,766,409	3,766,417	17,682,951
Dist. of Col.	2,468,807	3,552,641	3,552,666	3,552,669	3,552,676	16,679,459
Florida	29,315,442	42,185,251	42,185,543	42,185,579	42,185,666	198,057,481
Georgia	19,978,342	28,749,059	28,749,258	28,749,282	28,749,342	134,975,283
Hawaii	2,616,956	3,765,829	3,765,855	3,765,858	3,765,866	17,680,364
Idaho	4,425,511	6,368,360	6,368,404	6,368,409	6,368,422	29,899,106
Illinois	21,998,178	31,655,626	31,655,845	31,655,872	31,655,938	148,621,459
Indiana	14,743,125	21,215,523	21,215,670	21,215,688	21,215,732	99,605,738
Iowa	7,604,168	10,942,483	10,942,559	10,942,568	10,942,591	51,374,369
Kansas	5,847,059	8,413,984	8,414,042	8,414,049	8,414,067	39,503,201

Kentucky	10,280,470	14,793,712	14,793,815	14,793,827	14,793,858	69,455,682
Louisiana	10,859,512	15,626,960	15,627,068	15,627,081	15,627,114	73,367,735
Maine	2,856,158	4,110,043	4,110,072	4,110,075	4,110,084	19,296,432
Maryland	9,298,080	13,380,042	13,380,134	13,380,146	13,380,174	62,818,576
Massachusetts	9,397,238	13,522,732	13,522,825	13,522,837	13,522,865	63,488,497
Michigan	16,290,764	23,442,593	23,442,756	23,442,775	23,442,824	110,061,712
Minnesota	10,089,418	14,518,786	14,518,886	14,518,899	14,518,929	68,164,918
Mississippi	7,483,268	10,768,508	10,768,582	10,768,591	10,768,614	50,557,563
Missouri	14,647,722	21,078,237	21,078,383	21,078,400	21,078,444	98,961,186
Montana	6,348,350	9,135,347	9,135,410	9,135,418	9,135,437	42,889,962
Nebraska	4,472,243	6,435,608	6,435,652	6,435,658	6,435,671	30,214,832
Nevada	5,618,414	8,084,961	8,085,017	8,085,024	8,085,041	37,958,457
New Hampshire	2,556,450	3,678,760	3,678,786	3,678,789	3,678,796	17,271,581
New Jersey	15,448,790	22,230,983	22,231,137	22,231,156	22,231,202	104,373,268
New Mexico	5,681,977	8,176,429	8,176,486	8,176,493	8,176,510	38,387,895
New York	25,971,644	37,373,488	37,373,747	37,373,779	37,373,856	175,466,514
North Carolina	16,137,196	23,221,608	23,221,768	23,221,788	23,221,836	109,024,196
North Dakota	3,841,352	5,527,749	5,527,787	5,527,792	5,527,804	25,952,484
Ohio	20,739,853	29,844,883	29,845,089	29,845,114	29,845,177	140,120,116
Oklahoma	9,812,934	14,120,923	14,121,021	14,121,032	14,121,062	66,296,972
Oregon	7,733,679	11,128,851	11,128,928	11,128,937	11,128,961	52,249,356
Pennsylvania	25,386,631	36,531,648	36,531,901	36,531,932	36,532,008	171,514,120
Puerto Rico	2,020,490	2,915,577	2,909,472	2,908,724	2,906,890	13,661,153
Rhode Island	3,383,835	4,869,376	4,869,410	4,869,414	4,869,424	22,861,459
South Carolina	10,360,855	14,909,387	14,909,490	14,909,503	14,909,534	69,998,769
South Dakota	4,363,463	6,279,072	6,279,116	6,279,121	6,279,134	29,479,906
Tennessee	13,074,884	18,814,906	18,815,036	18,815,052	18,815,091	88,334,969
Texas	60,356,706	86,853,980	86,854,582	86,854,655	86,854,836	407,774,759
Utah	5,372,731	7,731,421	7,731,474	7,731,481	7,731,497	36,298,604
Vermont	3,140,247	4,518,851	4,518,882	4,518,886	4,518,895	21,215,761
Virginia	15,745,244	22,657,583	22,657,740	22,657,759	22,657,806	106,376,132
Washington	10,489,110	15,093,948	15,094,052	15,094,065	15,094,096	70,865,271

West Virginia	6,761,785	9,730,285	9,730,352	9,730,361	9,730,381	45,683,164
Wisconsin	11,642,061	16,753,057	16,753,173	16,753,188	16,753,222	78,654,701
Wyoming	3,963,841	5,704,011	5,704,051	5,704,056	5,704,067	26,780,026
Total	615,000,000	885,000,000	885,000,000	885,000,000	885,000,000	4,155,000,000

Page last modified on January 31, 2025



Appendix D

February 6, 2025

State Department of Transportation Directors

Subject: Suspending Approval of State Electric Vehicle Infrastructure Deployment Plans

Dear State Department of Transportation Directors:

The Federal Highway Administration (FHWA) administers several grant programs under which the applicable statutes require the Secretary to apportion grant funds to States under a prescribed statutory formula. The National Electric Vehicle Infrastructure (NEVI) Formula Program is one such program. Most statutory formula programs require the Secretary to make the prescribed apportionments to the States on a specific date and then make the funds available for obligation. *See, e.g.*, 23 U.S.C. 104. The NEVI Formula Program, however, is unique in that this Program requires the Secretary to approve a plan for each State describing how the State intends to use its NEVI funds.¹ The State plans are to be developed in accordance with guidance the Secretary provides on how States are to strategically deploy the electric vehicle (EV) charging network.² The NEVI Formula Program requires the Secretary to approve each State's plan prior to the obligation of NEVI Formula Program funds for each fiscal year.³

The new leadership of the Department of Transportation (U.S. DOT) has decided to review the policies underlying the implementation of the NEVI Formula Program. Accordingly, the current NEVI Formula Program Guidance dated June 11, 2024, and all prior versions of this guidance are rescinded. The FHWA is updating the NEVI Formula Program Guidance to align with

¹ See National Electric Vehicle Infrastructure Formula Program provisos 4-9 of paragraph (2) under the Highway Infrastructure Programs heading in Title VIII, Division J of the Infrastructure Investment and Jobs Act, Pub. L. 117-58; November 15, 2021; 135 Stat.1422. See also Paragraph 5c of [FHWA Notice N 4510.895 Apportionment of Fiscal Year 2025 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act](#) as well as Paragraph 5c of FHWA Notices N 4510.863, N 4510.873, and N 4510.883 for the apportionments for Fiscal Years 22, 23 and 24, respectively..

² See National Electric Vehicle Infrastructure Formula Program provisos 14-15 of paragraph (2) under the Highway Infrastructure Programs heading in Title VIII, Division J of the Infrastructure Investment and Jobs Act, Pub. L. 117-58; November 15, 2021; 135 Stat.1423.

³ See National Electric Vehicle Infrastructure Formula Program provisos 4-9 of paragraph (2) under the Highway Infrastructure Programs heading in Title VIII, Division J of the Infrastructure Investment and Jobs Act, Pub. L. 117-58; November 15, 2021; 135 Stat.1422. See also Paragraph 5c of [FHWA Notice N 4510.895 Apportionment of Fiscal Year 2025 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act](#) as well as Paragraph 5c of FHWA Notices N 4510.863, N 4510.873, and N 4510.883 for the apportionments for Fiscal Years 22, 23 and 24, respectively.

current U.S. DOT policy and priorities, including those set forth in DOT Order 2100.7, titled “Ensuring Reliance Upon Sound Economic Analysis in Department of Transportation Policies, Programs, and Activities.” The FHWA aims to have updated draft NEVI Formula Guidance published for public comment in the spring. After the public comment period has closed, FHWA will publish updated final NEVI Formula Guidance that responds to the comments received.

As result of the rescission of the NEVI Formula Program Guidance, FHWA is also immediately suspending the approval of all State Electric Vehicle Infrastructure Deployment plans for all fiscal years. Therefore, effective immediately, no new obligations may occur under the NEVI Formula Program until the updated final NEVI Formula Program Guidance is issued and new State plans are submitted and approved. Instructions for the submission of new State plans for all fiscal years will be included in the updated final NEVI Formula Program Guidance. Since FHWA is suspending the existing State plans, States will be held harmless for not implementing their existing plans. Until new guidance is issued, reimbursement of existing obligations will be allowed in order to not disrupt current financial commitments.

If you have any questions, please contact Gary Jensen, Director of the Office of Natural Environment at Gary.Jensen@dot.gov or 202-366-2048

Sincerely,



Emily Biondi
Associate Administrator
Office of Planning, Environment and Realty

cc: FHWA: HOA, HCC, HPL, HCF, FHWA Division Offices
Joint Office Director

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM STATUS OF FUNDS AS OF FEBRUARY 6, 2025					
STATE	TOTAL AVAILABLE	TOTAL OBLIGATIONS	UNOBLIGATED BALANCE	UNPAID OBLIGATIONS	TOTAL EXPENDITURES
ALABAMA	62,415,851.00	299,520.00	62,116,331.00	216,127.45	83,392.55
ALASKA	41,250,989.00	1,122,662.82	40,128,326.18	595,261.31	527,401.51
ARIZONA	60,193,112.00	12,090,426.00	48,102,686.00	10,875,499.40	1,214,926.60
ARKANSAS	42,594,130.00	80,000.00	42,514,130.00	55,595.84	24,404.16
CALIFORNIA	301,952,392.00	2,111,375.00	299,841,017.00	1,784,493.65	326,881.35
COLORADO	44,494,590.00	8,368,277.00	36,126,313.00	8,368,277.00	
CONNECTICUT	41,320,654.00	1,440,000.00	39,880,654.00	1,155,326.14	284,673.86
DELAWARE	13,916,534.00	10,150,125.00	3,766,409.00	9,987,185.63	162,939.37
DISTRICT OF COLUMBIA	13,126,783.00	3,552,666.00	9,574,117.00	3,538,562.25	14,103.75
FLORIDA	155,871,815.00	9,400,000.00	146,471,815.00	6,010,504.30	3,389,495.70
GEORGIA	106,225,941.00	12,018,243.56	94,207,697.44	8,976,716.14	3,041,527.42
HAWAII	13,914,498.00	11,846,015.52	2,068,482.48	8,099,164.82	3,746,850.70
IDAHO	23,530,684.00	800,004.00	22,730,680.00	133,667.38	666,336.62
ILLINOIS	116,965,521.00	25,479,521.29	91,485,999.71	25,479,521.29	
INDIANA	78,390,006.00	3,831,649.20	74,558,356.80	3,209,902.06	621,747.14
IOWA	40,431,778.00	2,700,860.41	37,730,917.59	1,861,305.22	839,555.19
KANSAS	31,089,134.00	644,446.00	30,444,688.00	644,446.00	
KENTUCKY	54,661,824.00	36,870,951.10	17,790,872.90	34,960,616.41	1,910,334.69
LOUISIANA	57,740,621.00		57,740,621.00		
MAINE	15,186,348.00	15,186,348.00		14,583,660.87	602,687.13
MARYLAND	49,438,402.00	14,668,457.72	34,769,944.28	14,639,961.23	28,496.49
MASSACHUSETTS	49,965,632.00	49,965,632.00		49,965,632.00	
MICHIGAN	86,618,888.00	57,961,353.92	28,657,534.08	56,145,585.08	1,815,768.84
MINNESOTA	53,645,989.00	10,880,891.36	42,765,097.64	10,880,891.36	
MISSISSIPPI	39,788,949.00	1,449,698.00	38,339,251.00	769,572.00	680,126.00
MISSOURI	77,882,742.00		77,882,742.00		
MONTANA	33,754,525.00	698,760.00	33,055,765.00	296,002.60	402,757.40
NEBRASKA	23,779,161.00	592,763.65	23,186,397.35	310,513.53	282,250.12
NEVADA	29,873,416.00		29,873,416.00		
NEW HAMPSHIRE	13,592,785.00	4,128,058.00	9,464,727.00	3,622,957.35	505,100.65
NEW JERSEY	82,142,066.00	9,038,495.85	73,103,570.15	8,769,316.73	269,179.12
NEW MEXICO	30,211,385.00	11,693,974.72	18,517,410.28	11,693,974.72	
NEW YORK	138,092,658.00	17,733,999.00	120,358,659.00	17,669,191.69	64,807.31
NORTH CAROLINA	85,802,360.00	8,285,408.00	77,516,952.00	7,336,312.00	949,096.00
NORTH DAKOTA	20,424,680.00	1,864,346.46	18,560,333.54	1,082,418.51	781,927.95
OHIO	110,274,939.00	9,810,736.75	100,464,202.25	2,316,213.23	7,494,523.52
OKLAHOMA	52,175,910.00	3,478,999.00	48,696,911.00	2,293,731.96	1,185,267.04
OREGON	41,120,395.00	29,047,405.58	12,072,989.42	26,094,376.91	2,953,028.67
PENNSYLVANIA	134,982,112.00	76,950,000.00	58,032,112.00	73,820,345.44	3,129,654.56
RHODE ISLAND	17,992,035.00	1,650,183.76	16,341,851.24	48,797.83	1,601,385.93
SOUTH CAROLINA	55,089,235.00	1,760,000.00	53,329,235.00	1,149,536.97	610,463.03
SOUTH DAKOTA	23,200,772.00	773,214.48	22,427,557.52	300,000.00	473,214.48
TENNESSEE	69,519,878.00	638,360.00	68,881,518.00	158,398.20	479,961.80
TEXAS	320,919,923.00	22,985,071.33	297,934,851.67	22,985,071.33	
UTAH	28,567,107.00	13,104,152.00	15,462,955.00	12,765,047.70	339,104.30
VERMONT	16,696,866.00	823,342.29	15,873,523.71	268,384.71	554,957.58
VIRGINIA	83,718,326.00	792,444.00	82,925,882.00	292,444.00	500,000.00
WASHINGTON	55,771,175.00	500,000.00	55,271,175.00	118,309.31	381,690.69
WEST VIRGINIA	35,952,783.00	280,000.00	35,672,783.00		280,000.00
WISCONSIN	61,901,479.00	16,904,011.37	44,997,467.63	15,695,733.88	1,208,277.49
WYOMING	21,075,959.00		21,075,959.00		
PUERTO RICO	10,754,263.00	155,192.61	10,599,070.39	155,192.61	
TOTAL	3,270,000,000.00	526,608,042.75	2,743,391,957.25	482,179,746.04	44,428,296.71

Vehicle Registration Counts by State

This page provides approximate light-duty vehicle registration counts derived by the National Renewable Energy Laboratory with data from Experian Information Solutions. Counts are rounded to the closest 100 vehicles and reflect the total number of light-duty registered vehicles through the selected year. Fuel types are based on vehicle identification numbers (VINs), which do not reflect aftermarket conversions to use different fuels or power sources.

2023

▼

For a map comparing the density of light-duty vehicles per state and charts comparing registration counts over time, see [TransAtlas \(/transatlas/\)](#).

2023 Light-Duty Vehicle Registration Counts by State and Fuel Type												
State	Electric (EV)	Plug-In Hybrid Electric (PHEV)	Hybrid Electric (HEV)	Biodiesel	Ethanol/Flex (E85)	Compressed Natural Gas (CNG)	Propane	Hydrogen	Methanol	Gasoline	Diesel	Unknown Fuel
Alabama	13,000	5,800	63,300	54,200	441,200	100	100	0	0	4,102,200	127,000	29,000
Alaska	2,700	900	10,600	9,600	46,800	0	0	0	0	454,300	29,800	5,100
Arizona	89,800	25,600	175,700	68,600	437,100	600	700	0	0	5,469,000	197,700	64,200
Arkansas	7,100	3,200	37,000	37,000	276,700	200	0	0	0	2,246,100	90,700	10,300
California	1,256,600	410,700	1,703,200	201,600	1,314,600	10,100	1,500	16,900	0	31,191,900	735,300	7,900
Colorado	90,100	37,500	152,700	68,100	334,300	300	100	0	0	4,508,800	203,400	46,500
Connecticut	31,600	18,400	75,300	10,900	133,600	100	0	0	0	2,612,600	42,300	20,900
Delaware	8,400	3,800	22,900	5,100	63,900	0	0	0	0	791,300	14,200	5,100
District of Columbia	8,100	3,700	18,100	400	16,800	100	0	0	0	262,500	1,800	600
Florida	254,900	57,300	414,500	170,500	1,101,100	400	100	0	0	16,136,500	351,800	96,100
Georgia	92,400	22,700	175,300	92,500	719,400	300	200	0	0	8,256,400	206,300	76,900
Hawaii	25,600	7,300	36,400	3,400	37,300	0	0	0	0	951,000	15,400	3,700
Idaho	8,500	4,600	43,700	45,900	132,900	100	100	0	0	1,568,600	138,600	31,600
Illinois	99,600	33,400	285,400	61,500	772,900	300	0	0	0	8,560,300	170,200	59,600
Indiana	26,100	12,900	119,100	56,300	576,300	300	0	0	0	5,166,200	156,400	58,500
Iowa	9,000	6,100	57,200	41,700	331,300	100	0	0	0	2,545,400	105,000	57,500
Kansas	11,300	5,600	50,400	27,900	253,500	200	100	0	0	2,168,600	87,400	16,100
Kentucky	11,600	5,600	67,100	36,900	361,200	300	0	0	0	3,415,000	117,600	24,400
Louisiana	8,200	4,000	40,200	64,200	380,100	100	0	0	0	3,142,800	115,500	19,100
Maine	7,400	7,600	33,600	12,000	104,500	0	0	0	0	1,036,100	26,900	7,900
Maryland	72,100	31,300	168,700	32,100	309,300	300	0	0	0	4,327,800	86,900	31,500
Massachusetts	73,800	43,800	187,300	21,300	285,000	200	0	0	0	4,791,300	58,400	30,000
Michigan	50,300	29,100	148,100	70,400	873,700	300	0	0	0	7,129,600	174,500	49,400
Minnesota	37,100	16,100	124,500	52,700	516,400	100	0	0	0	4,219,200	127,900	24,500
Mississippi	3,600	2,000	28,200	34,900	295,200	100	0	0	0	2,275,600	75,200	8,500
Missouri	26,900	13,900	113,900	70,400	575,500	900	100	0	0	4,608,600	178,200	37,600
Montana	4,600	2,500	21,100	37,900	94,500	0	0	0	0	780,700	69,600	10,800
Nebraska	6,900	3,800	32,600	28,900	197,100	100	0	0	0	1,600,400	76,100	25,300
Nevada	47,400	10,600	69,600	27,200	125,600	200	100	0	0	2,169,300	85,800	20,300
New Hampshire	9,900	6,600	36,800	13,900	89,600	100	0	0	0	1,185,300	29,200	12,300
New Jersey	134,800	40,900	174,200	27,800	392,100	300	0	0	0	6,433,000	84,600	36,400
New Mexico	10,300	4,900	44,300	32,100	151,600	100	100	0	0	1,597,600	88,500	22,900
United States	3,555,900	1,307,200	7,392,300	2,803,600	20,240,600	24,700	6,000	16,900	0	242,870,900	7,184,300	1,694,100

2023 Light-Duty Vehicle Registration Counts by State and Fuel Type

State	Electric (EV)	Plug-In Hybrid Electric (PHEV)	Hybrid Electric (HEV)	Biodiesel	Ethanol/Flex (E85)	Compressed Natural Gas (CNG)	Propane	Hydrogen	Methanol	Gasoline	Diesel	Unknown Fuel
New York	131,300	92,300	314,000	54,300	591,100	400	100	0	0	9,905,500	150,500	79,100
North Carolina	70,200	23,700	210,600	80,200	655,000	300	100	0	0	7,764,000	209,700	71,700
North Dakota	1,000	800	8,200	20,400	89,900	0	0	0	0	625,300	44,600	7,200
Ohio	50,400	24,000	199,800	70,300	833,500	700	100	0	0	8,881,400	196,200	60,900
Oklahoma	22,800	33,000	56,400	63,100	352,400	1,800	200	0	0	3,567,500	145,700	45,000
Oregon	64,400	28,800	156,900	55,500	184,600	100	100	0	0	3,074,300	217,000	51,000
Pennsylvania	70,200	38,900	245,400	73,900	661,700	500	100	0	0	8,886,400	192,100	41,800
Rhode Island	6,400	5,100	22,100	3,100	41,900	0	0	0	0	782,000	11,000	6,000
South Carolina	20,900	9,000	83,100	44,600	404,600	100	100	0	0	4,325,000	110,100	44,900
South Dakota	1,700	1,300	11,900	21,500	98,800	0	0	0	0	718,300	51,200	13,300
Tennessee	33,200	11,000	113,300	53,100	509,000	200	100	0	0	5,620,500	160,700	37,700
Texas	230,100	55,300	445,100	460,700	2,315,400	1,300	1,300	0	0	21,392,800	772,800	121,800
Utah	40,000	13,000	83,200	68,500	185,200	2,200	500	0	0	2,499,600	158,000	26,000
Vermont	7,800	5,700	20,300	7,000	36,600	0	0	0	0	496,000	14,700	5,000
Virginia	84,900	26,800	229,400	44,300	484,800	300	0	0	0	6,670,000	152,800	30,200
Washington	152,100	41,200	307,200	73,800	337,700	100	100	0	0	5,583,000	274,200	46,700
West Virginia	2,800	1,800	22,400	17,300	123,400	100	0	0	0	1,281,500	46,400	15,200
Wisconsin	24,900	12,500	123,600	52,900	536,200	300	0	0	0	4,604,700	147,500	26,400
Wyoming	1,100	800	8,400	21,200	57,700	0	0	0	0	489,100	60,900	13,700
United States	3,555,900	1,307,200	7,392,300	2,803,600	20,240,600	24,700	6,000	16,900	0	242,870,900	7,184,300	1,694,100



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The AFDC is a resource of the U.S. Department of Energy's [Vehicle Technologies Office \(https://energy.gov/eere/vehicles/technology-integration\)](https://energy.gov/eere/vehicles/technology-integration).

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Appendix F

NEVI 23 CFR 680 Requirements Applicable to Fully Built Out Creditable Stations

NOTE: This document is intended to support states as they determine whether their NEVI programs meet the requirements for Fully Built Out certification, which is required before NEVI formula funding can be directed to developing EV charging away from the state's AFCs. It provides a visual organization of the set of minimum standards and requirements listed in the third bullet under section 1 of the Fully Built Out Criteria on page 29 of the [NEVI Program Guidance](#) dated June 11, 2024. The full set of FBO criteria is online (link below).

THIS DOCUMENT DOES NOT MODIFY THE NEVI REGULATION OR PROGRAM GUIDANCE IN ANY WAY.

Section Number	Sub-section	Sub-Section Topic
680.104	Definitions	
680.106	Installation, operation, and maintenance by qualified technicians of electric vehicle charging infrastructure.	
680.106	a	Not applicable for fully built out creditability*
680.106	b	Number of charging ports.
680.106	c	Connector Type.
680.106	d	Power Level.
680.106	e	Availability.
680.106	f	Payment Methods.
680.106	g	Equipment Certification.
680.106	h	Security.
680.106	i	Long-term stewardship.
680.106	j	Not applicable for fully built out creditability*
680.106	k	Customer Service.
680.106	l	Customer data privacy.
680.106	m	Not applicable for fully built out creditability*
680.108	Interoperability of electric vehicle charging infrastructure.	
680.108	a	Charger-to-EV communication.
680.108	b	Charger-to-Charger-Network Communication.
680.108	c	Charging-Network-to-Charging-Network Communication.
680.108	d	Network switching capability.
680.110	Traffic control devices or on-premises signs acquired, installed or operated.	
680.110	a	Manual on Uniform Traffic Control Devices for Streets and Highways.
680.110	b	On-premises signs.
680.112	Data Submittal	
680.112	a-d	Not applicable for fully built out creditability*
680.114	Charging network connectivity of electric vehicle charging infrastructure.	
680.114	a	Charger-to-Charger-Network communication.

680.114	b	Interoperability. See § 680.108 for interoperability requirements.
680.114	c	Charging-Network-to-Charging-Network communication.
680.114	d	Charging-Network-to-grid communication.
680.114	e	Disrupted network connectivity.
680.116	Information on publicly available electric vehicle charging infrastructure locations, pricing, real-time availability, and accessibility through mapping applications.	
680.116	a	Communication of price.
680.116	b	Minimum uptime.
680.116	c	Third-party data sharing.
680.118	Other Federal Requirements	
680.118	a-h	Not applicable for fully built out creditability*

[Link to Final Rule](#)

Each subsection letter above is linked to the specific subsection of 23 CFR 680 online

NOTE: A corridor ready designation for AFC EV corridors is not related to achieving a fully built-out status in the NEVI program.

* The 680 items above not applicable for fully built out creditability are still required for EV stations that use Federal funding.

https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf

Except for the statutes and regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind applicants in any way. This document is intended only to provide information regarding existing requirements under the law or agency policies.

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MUTCD 11th EDITION HANDOUT

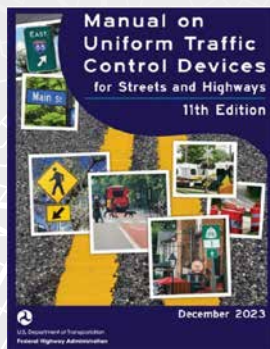
MUTCD 11th Edition

What's New in Signage for Electric Vehicle Charging and Parking?

This handout summarizes key changes to the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) with respect to signage for electric vehicle (EV) charging and parking. The final rule for the 11th edition of the MUTCD was published in the *Federal Register* on Dec. 19, 2023, and became effective Jan. 18, 2024. The previous edition was issued in 2009. Going forward, the Bipartisan Infrastructure Law requires updates every four years. Visit the MUTCD 11th Edition for full details.

What is the MUTCD?

The MUTCD is the national standard for traffic signs, signals, and pavement markings to ensure a uniform and predictable environment for people who walk, bike, and drive. It is an important manual used every day by transportation professionals for roadway safety.



Link to MUTCD 11th Edition
<https://bit.ly/3X15TRM>

Summary of Changes to MUTCD Related to EVs

Specific Service Signs Eligibility and Application (Sections 2J.01 and 2J.02)

Specific service signs are defined as guide signs that provide road users with business identification and directional information for eligible services. EV charging is now an eligible service if the chargers meet the criteria for DC fast chargers (DCFCs) in 23 CFR 680.106 and are in continuous operation at least 16 hours per day, 7 days per week.

If eligible, and if there are multiple specific service signs along an approach to an interchange, EV charging would be in the following successive order of service signs: attraction, camping, lodging, food, EV charging, and gas services. When spacing does not allow, the EV charging specific service sign may be located anywhere within the successive specific service sign order where adequate spacing between signs allows.





Logos and Business Identification Sign Panels (Section 2J.03)

To be eligible for an “EV Charging” supplemental message on a business identification sign panel, the business must (1) offer EV charging to the public without purchasing the primary service (e.g., gas, food); and (2) provide EV chargers at gas, food, and attraction service categories that qualify as DCFCs per 23 CFR 680.106; or (3) provide EV chargers at camping and lodging service categories that qualify as DCFCs and/or AC Level 2 charging.

General Service Signs: Conventional Roads (Section 2I.02) and Freeways and Expressways (Section 2I.03)

To be eligible for an EV charging general service sign, the EV chargers must meet the criteria for DCFC in 23 CFR 680.106 and be in continuous operation at least 16 hours per day, 7 days per week.

Alternative Fuels Corridor Sign (Section 2H.14)

This is an entirely new section to the MUTCD. EV charging is one of the eligible fuels to be designated as an Alternative Fuel Corridor (AFC). This section provides provisions on the design and appropriate use of signs for designated AFCs. These signs must only be used on highway segments that have been designated by the Federal Highway Administration as “Corridor Ready.” See Figure 2H-10 in the MUTCD for an example of signage for an AFC.

Signs at Interchanges (Section 2J.06)

When the distance to the next exit providing access to EV charging is 50 miles or greater, the “Next EV Charging” sign should be used. This sign should be located directly after the general service sign for the fuel type displayed in the signage sequence for the next exit.

Parking, Standing, and Stopping Signs (Sections 2B.52 and 2B.53)

These signs either (1) prohibit parking or (2) permit parking with restrictions. New guidance is provided for parking spaces designated for EV parking or charging, or where restrictions apply while the EV occupies the space.

Connect with The Joint Office

Visit [DriveElectric.gov](https://driveelectric.gov) to subscribe to updates on Joint Office of Energy and Transportation (Joint Office) news and events, explore tools and resources, access all 52 certified state National Electric Vehicle Infrastructure plans and planning websites, and learn more about Joint Office work to create a future where everyone can ride and drive electric.