State of Delaware



National Electric Vehicle Infrastructure Plan Update 2023



DELAWARE DEPARTMENT OF TRANSPORTATION



DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

https://deldot.gov/Programs/NEVI/index.shtml

State of Delaware: National Electric Vehicle Infrastructure Plan Update 2023

Prepared by: Delaware Department of Transportation Delaware Department of Natural Resources and Environmental Control AECOM

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Acronyms and Abbreviations

AFC	Alternative Fuel Corridor
DAC	Disadvantaged Community
DCFC	Direct Current Fast Charging
DNREC	Delaware Department of Natural Resources and Environmental Control
DelDOT	Delaware Department of Transportation
EVSE	Electric Vehicle Supply Equipment
NEVI	National Electric Vehicle Infrastructure Formula Program
RFP	Request for Proposal
OCPP	Open Charge Point Protocol
OCPI	Open Charge Point Interface

1 Introduction

Transportation emissions are the largest source of greenhouse gas emissions in Delaware and nationwide and are a major contributor to climate change. In 2020, transportation emissions accounted for 33% of overall greenhouse gas emissions in the First State.¹

On November 4, 2021, Delaware Governor John Carney announced the release of Delaware's Climate Action Plan. This plan is guiding the state's efforts to minimize greenhouse gas emissions and maximize resiliency from the impacts of climate change. The plan represents the culmination of a two-year public engagement process and creates a framework for the First State to establish policies and programs that reduce emissions and help the state avoid the worst impacts of global climate change. To achieve the necessary emissions reductions from the transportation sector, the Climate Action Plan sets a goal of 17,000 electric vehicle sales per year by 2030. Transportation is a significant focus of the Climate Action Plan, and equitably expanding charging access is a core strategy listed in the plan.

To help achieve the goals of the Climate Action Plan, and as part of a broad strategy to improve resiliency and sustainability throughout infrastructure statewide, the Delaware Department of Transportation (DeIDOT) launched the Division of Transportation Resiliency and Sustainability. This division partners with the Department of Natural Resources and Environmental Control (DNREC) to plan electric vehicle infrastructure around the state.

In January 2022, DNREC and DelDOT initiated the process of contracting a consultant to assist the state with the development of Delaware's Statewide EV Charging Infrastructure Plan. This puts Delaware in the unique position of including the state's National Electric Vehicle Infrastructure (NEVI) Formula Program plan and goals as part of the statewide plan. The strategies of both plans will align, and the state will be able to complete and implement parts of both plans simultaneously.

Delaware's NEVI plan provides a framework to develop a network of EV charging along major travel corridors. The plan will focus on the installation of new or upgrading existing DC fast-charging stations along Delaware's Alternative Fuel Corridors (AFC) to support the goal of the NEVI Formula Funding Program to facilitate a national EV charging network.

Since publication of the original report, the NEVI Program has been updated with new guidelines for the application as well as new grant financial figures on June 2nd, 2023². DeIDOT has updated the Plan to account for recent updates, included in this document. Under the updated National Electric Vehicle Infrastructure Funding Program, Delaware will receive \$2,617,339 in Fiscal Year 2022 and \$3,766,380 per year from Fiscal Years 2023 to 2026³ (compared to \$2,617,339 per year from

¹ Delaware Department of Natural Resources and Environmental Control, *Delaware's 2017 Greenhouse Gas Emissions Inventory* (Dover, DE: 2020) p. 4 <u>https://documents.dnrec.delaware.gov/Air/Documents/2017-DE-GHG-Inventory.pdf</u>

² National Electric Vehicle Infrastructure Formula Program Guidance (Update) https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf

³ Federal Highway Administration, Apportionment of Fiscal Year (FY) Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act (Washington, DC: U.S. Department of Transportation, 2022) <u>https://www.fhwa.dot.gov/legsregs/directives/notices/n4510873.cfm</u>

FY2022 to 2026 from the previous submittal⁴). With Delaware's Statewide EV Charging Infrastructure Plan and previous experience deploying funds for DCFC projects, state planners are confident that the use of these funds will be maximized in each of these funding rounds to promote equity, convenience, and reliability.

During the first two years of funding through the NEVI program, Delaware will seek to accelerate the construction of DC Fast Charging Stations along its four designated Alternative Fuel Corridors, with the goal of no more than 25 miles between NEVI compliant stations. Once the Alternative Fuel Corridors are built out, Delaware will seek to improve accessibility of neighborhood level charging.

Delaware is well prepared to quickly and efficiently deploy NEVI funds to reach these goals. Over the past ten years, state agencies have worked together and with local partners to incentivize the deployment of electric vehicles and charging stations through grants and rebates, address policy barriers at the state and local level, educate key stakeholders about the benefits of electric vehicles and own and operate their own EVs and charging stations. The First State is ready to charge forward to become the first to fully build out a complete statewide AFC charging network.

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

Milestones for Delaware's NEVI plan and the first round of funding are below. A similar annual cadence is anticipated for years two through five of NEVI funding. This schedule is subject to change based upon a variety of factors including federal approval processes, contract negotiations and supply chain delays.

- February 10, 2022: NEVI Program Guidance Received
- February 2022: Notice to proceed for the Statewide EV Charging Infrastructure Plan
- August 1, 2022: Delaware's NEVI Plan submitted to US DOT
- September 2022: US DOT approves Delaware's NEVI Plan
- July 2023: Request for Proposals for NEVI projects released
- October 2023: Request for Proposals Due
- November 2023: Review and select projects for funding
- December 2023: Initiate contracting process
- January 2024: Selected vendors begin site preparation and permitting
- April 2024: Quarterly progress reports due from vendors every 3 months

⁴ Federal Highway Administration, Apportionment of Fiscal Year (FY) Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act (Washington, DC: U.S. Department of Transportation, 2022) <u>https://www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm</u>

- June 2024: Anticipated opening date for NEVI funded stations
- September 2024: Quarterly progress reports will include usage reports

Concurrent with the development of this NEVI plan, the state of Delaware is developing its Statewide EV Charging Infrastructure Plan. This comprehensive statewide plan will guide EV infrastructure investments, programs and policies for the next decade based upon anticipated market trends in EVs, population growth, housing trends and economic drivers. Updates to this NEVI plan will be informed by the statewide infrastructure plan and its development is referenced throughout this NEVI plan. Milestones for the Statewide EV Charging Infrastructure Plan are below.

- April 2022: Kick-off meeting with consulting firm AECOM, DelDOT and DNREC
- **May 2022:** Initial data collection and modeling; identification of experts and community organizations
- June 2022: Statewide EV Charging Infrastructure Plan advisory group convened
- June 2022: Webpage for initiative launched
- Summer 2022: Data analysis and community engagement with disadvantaged communities
- Summer 2022: Statewide EV attitudes and perceptions survey to launch
- September 2022: First public workshop and additional opportunity for community engagement
- October 2022: Initial results of attitudes and perceptions survey available
- November 2022: Second public workshop
- Summer 2023: Third public workshop
- Fall 2023: Delaware Statewide EV Charging Infrastructure Plan Published

Updates from Prior Plan [REQUIRED - Updated 6/2/23]

- <u>Section 3 Public Engagement:</u> Updated to provide information on the two public workshops that have been held in the last year. Details regarding the outcomes of those meetings as well as the attendees that were engaged are included in this document.
- <u>Section 5 Contracting</u>: Updated to include information about compliance with the FHWA's Final Rule regarding NEVI funding requirements as well as important upcoming dates regarding the release of the RFP and expected award dates. In addition, information was provided in this section regarding the scoring rubric and evaluation criteria and how the criteria incorporate Justice40 and Equity concerns as well as how the state will ensure compliance throughout the life of the contract.
- <u>Section 6 Existing and Future Conditions:</u> This section already included information about the timing for a fully built out determination and existing charging stations. The charging station information was verified and updated where necessary to delineate any changes to existing or planned charging station infrastructure.

- <u>Section 7 EV Charging Infrastructure Deployment:</u> In this section information regarding the required update for Planned EV Charging Stations was added and all tables and maps were updated.
- <u>Section 8 Implementation</u>: Updated to reflect all new guidance regarding Operations and Maintenance of the stations. Details from the RFP were included regarding the requirements for O&M from selected vendors including details regarding data sharing, safety, and strategies to address resiliency during emergency situations.
- <u>Section 9 Civil Rights</u>: This section was updated to include details regarding compliance with regulations for the Americans with Disabilities Act and the Civil Rights Act within the RFP and explains how compliance can be enforced throughout the life of the contract.
- <u>Section 10 Equity Considerations</u>: This section was updated to describe the progress made by the Justice Forty Oversight Committee including feedback from their recent listening sessions with the communities regarding Environmental Justice. In additions goals, metrics and tracking methods were added to the benefits that the state previously set with regards to improving Equity in NEVI deployments.
- <u>Section 11 Workforce Conditions:</u> Updated to demonstrate compliance with <u>23 CFR</u> <u>680.106(j)</u>, within the draft RFP.
- <u>Section 12 Physical Security and Cybersecurity</u>: This section received updates related to the Physical safety precautions which had not been addressed previously and also highlights the RFP requirements for vendors related to a Cybersecurity Plan and plan for physical safety at the siting of the stations.
- <u>Section 13 Program Evaluation</u>: Updated to include information on next steps including the release of the RFP for Round 1 funding as well as the expected award dates.
- Across all sections updates have been added from the progress on the statewide EV Charging Infrastructure Plan.

2 State Agency Coordination

The lead state agencies for developing Delaware's NEVI plan are the Department of Natural Resources and Environmental Control (DNREC) and the Delaware Department of Transportation (DelDOT). The partnership between DNREC and DelDOT pre-dates the NEVI funding opportunity as these agencies have been working together on climate resiliency and climate mitigation since 2010 and have a strong collaborative relationship. The Delaware Departments of Labor and Education were also engaged as the agencies responsible for workforce development and training in the state.

As the state works to achieve the goals of the Delaware Climate Action Plan and reduce transportation emissions, DelDOT established the Division of Transportation Resiliency and Sustainability. The division's mandate includes transportation electrification, but also works to find innovative solutions to increase the state's resiliency to climate change impacts to the transportation system in the state.

DNREC is also engaged in resiliency and emissions reductions in the transportation sector. DNREC is the regulatory authority for vehicle emissions, houses Delaware's Clean Cities Coalition and its Clean Transportation Incentive Program, which provides cash rebates for electric vehicles and Level 2 charging stations. DNREC also led the development of the state's Climate Action Plan, which involved input from various state agencies.

DNREC recently completed a competitive bid process to administer the states' 15% share of the VW Mitigation funds for DC fast-charging stations in Delaware. DelDOT participated in the application review and selection process. Delaware intends to conduct a similar process to administer the NEVI funds. DelDOT and DNREC have worked together to develop a scoring mechanism to evaluate proposals and choose projects that are best for the State of Delaware and satisfy all requirements of the NEVI Formula Program. The scoring mechanism and evaluation criteria are detailed below in Section 5: Contracting.

The state will work to ensure that electric vehicle supply equipment funded through the NEVI Formula Program is U.S.-made and complies with Buy America requirements as specified in the temporary public interest waiver and any forthcoming rules.

2.1 Memoranda of Understanding with other agencies

DelDOT has not entered into any memoranda of understanding with other state agencies to help administer the NEVI program but does have a close partnership with DNREC as described above.

2.2 Interagency Working Group(s)

DelDOT has not established any interagency working groups with respect to the NEVI program but does have a statewide working group that includes many different types of stakeholders and is detailed below.

3 Public Engagement

Public engagement around electric vehicles in Delaware has been ongoing for several years. This existing work provides a solid foundation from which to build for both the Statewide EV Charging Infrastructure Plan and the NEVI Formula Funding Plan. Specific examples are described below.

In developing Delaware's Climate Action Plan, DNREC hosted two rounds of public workshops in the Spring and Fall of 2020. The first round was held in person, and the second transitioned to virtual workshops after the onset of the COVID-19 pandemic. In these workshops, the public was able to comment on all aspects of the Climate Action Plan, which included a significant focus on transportation electrification.

Since the Climate Action Plan was published, DNREC has been working to implement strategies described in the plan. In 2022, DNREC began working with the University of Delaware's Institute of Public Administration on a webinar series for municipalities on electrifying their fleets. Webinar topics include EV charging station installation, cost of ownership and procurement and codes and policies. These municipalities are engaged on EV issues and can help extend the state's reach to engage the public on this planning process.

In 2021, the Delaware's Clean Cities Coalition hosted webinars on vehicle electrification, including passenger vehicles, medium- and heavy-duty vehicles, and other equipment that could be electrified. Audiences included local governments, industry members and the general public.

As part of the state's efforts to better understand the public's perceptions of electric vehicles and design programs that have a targeted and appreciable impact on vehicle electrification, DNREC has worked with the University of Delaware to conduct a representative survey of Delawareans' perceptions of electric vehicles. This survey will help policymakers identify gaps in public knowledge of EVs, and design effective programs that will ultimately lead to greater EV adoption.

3.1 Statewide EV Charging Infrastructure Plan Public Engagement

Delaware is in the unique position of having initiated the process of developing a Statewide EV Charging Infrastructure Plan shortly before the February 2022 release of the NEVI formula funding guidance. A significant part of the process of Delaware's Statewide EV Charging Infrastructure Plan has been engaging the public and stakeholders around the state in planning for the future of electric vehicle infrastructure. Explanation of the NEVI program and how it impacts broader statewide vehicle electrification is an important feature of the public engagement components of the Statewide EV Charging Infrastructure Plan.

The project leaders at DelDOT and DNREC identified key stakeholders in the state and invited them to join a group advising the creation of the plan.

The webpage for the Statewide EV Charging Infrastructure Plan and the NEVI Formula Funding opportunity launched in June 2022: <u>https://deldot.gov/Programs/NEVI</u>. A virtual room for the public workshops is being hosted there where users can view information about EV's and the NEVI process and provide feedback through a virtual suggestion box. In addition to being convenient for workshop

participants, the virtual room is useful in collecting public feedback and hosting information to provide to the public about both the NEVI funding opportunity and the Statewide EV Charging Infrastructure Plan.

3.2 Stakeholders Involved in Plan Development

In developing the Statewide EV Charging Infrastructure Plan, DNREC and DelDOT collaborated to invite a diverse group of stakeholders to advise the creation of the plan and provide input on ways to engage other stakeholders and the public. The advisory group first met on June 29, 2022. In this initial meeting, the Statewide EV Charging Infrastructure Plan was explained, and the group was asked to comment on the goals and other aspects of the plan, including Delaware's approach for the NEVI formula funding program. The goals of the Statewide EV Charging Infrastructure Plan are aligned with the NEVI plan goals, and public comment on those goals has helped to inform the NEVI program planning process.

Table 1 provides the list of organizations that were invited to participate in the advisory group for the Statewide EV Charging Infrastructure Plan.

Organization	Organization Type
DNREC, Climate and Sustainability	State Agency
DNREC, Energy Office	State Agency
DelDOT, Transportation Resiliency and Sustainability	State Agency
Delaware Area Rapid Transit	State Agency
Delaware Commute Solutions	State Funded Program
Delaware Electric Vehicle Association	Community Advocacy Organization
WILMAPCO	Metropolitan Planning Organization
Dover/Kent MPO	Metropolitan Planning Organization
Salisbury/Wicomico MPO	Metropolitan Planning Organization
Delaware Electric Cooperative	Electric Utility
Exelon / Delmarva Power	Electric Utility
League of Local Governments	County and Municipal Governments
DEMEC	Electric Utility
Delaware Chamber of Commerce	Business Organization
Office of State Planning Coordination	State Agency
Metropolitan Wilmington Urban League	Community Organization
Delaware Hispanic Commission	Community Organization
La Esperanza	Community Organization
First State Community Action Agency	Community Organization
Latin American Community Center	Community Organization

Table 1: Delaware Statewide EV Charging Infrastructure Plan Group

Organization	Organization Type
League of Women Voters	Environmental Justice, Transportation Advocacy
Interfaith Power and Light	Religious Community Organization
Healthy Communities Delaware	Community Organization
Boys and Girls Club of Delaware	Community Organization
Route 9 Coalition	Environmental Justice, Transportation Advocacy
NAACP Delaware	Environmental Justice Advocacy
Delaware Concerned Residents for Environmental Justice	Environmental Justice Advocacy

3.3 Stakeholder Organizations

In the development of both the Statewide EV Charging Infrastructure Plan and the NEVI Formula Funding plan, DelDOT and DNREC continue to seek feedback from a variety of additional stakeholders through public workshops, community dialogues and one-on-one interactions. The list below outlines additional stakeholder groups that have been engaged during the development of these plans:

State Agency

DNREC, Energy Office

DNREC, Climate and Sustainability

DelDOT, Transportation Resiliency and Sustainability

Delaware Area Rapid Transit

Office of State Planning Coordination

State Funded Program

Delaware Commute Solutions

Community Advocacy Organization

Delaware Electric Vehicle Association

Metropolitan Wilmington Urban League

Delaware Hispanic Commission

La Esperanza

First State Community Action Agency

Latin American Community Center

Interfaith Power and Light

Healthy Communities Delaware

Boys and Girls Club of Delaware

Metropolitan Planning Organization

WILMAPCO

Dover/Kent MPO

Salisbury/Wicomico MPO

Electric Utility

Delaware Electric Cooperative

Exelon / Delmarva Power

DEMEC

County and Municipal Governments

League of Local Governments

Business Organizations

Delaware Chamber of Commerce

Environmental Justice Groups

League of Women Voters

Route 9 Coalition

NAACP Delaware

Environmental Justice Advocacy

Environmental Justice Advocacy

3.4 Public Outreach

The Statewide EV Charging Infrastructure Plan's public engagement process involved robust outreach and garnered the attention of many different stakeholders. This process serves the double purpose of informing the NEVI plan and its implementation as well as the development of the Infrastructure Plan itself. Upon its completion, the Infrastructure Plan will address both highway corridor charging needs, as required by the NEVI Plan, as well as more local needs including multi-unit dwellings, townhomes, and on-street parking. In developing this plan, there will be three public workshops, two of which have already been held, milestone meetings with the planning group, focus

groups, and online participation opportunities. DelDOT also developed <u>Delaware's Vehicle</u> <u>Electrification Future</u> website⁵ to keep members of the public and other stakeholders informed on the progress of the plans, the public engagement opportunities and an opportunity to sign up for updates.

3.5 Community Engagement Outcomes Report

Two public workshops were held in the Fall of 2022 and an additional virtual public workshop is planned for late Summer 2023. At these virtual public workshops, the public learned about the plan and was engaged in its planning process. To increase attendance and representation, members of the working group helped share information about the public workshops to their communities and within their organizations. DNREC also maintains a list of Delaware residents who have received rebates for electric vehicles and charging stations and sent communications to potential participants about the public workshops. Public workshops and working group meetings focused on disseminating information regarding the federal NEVI funding opportunity, explaining the status of EV infrastructure planning and opportunities for growth, and receiving stakeholder feedback and input on EV charging infrastructure types and locations, equity provisions and the opportunities for small businesses, among others. The presentation slides for this meeting are available at https://deldot.gov/Programs/NEVI/index.shtml?dc=workshops. In addition to the public meeting slides available at the website, the website also provides a link to DeIDOT's YouTube channel where the video recording of the Zoom meeting is also available for viewing. Approximately 120 people attended the October 24, 2022, virtual public meeting held on Zoom as attendees while about 40 people attended the November 14, 2022, virtual meeting. The November meeting attendance was lower than the October presentation since the November presentation was a repeat presentation of the information presented in October.

3.6 Tribal Engagement

As the time of this update, no tribal engagement has occurred.

3.7 Utility Engagement

Following the second Working Group meeting, a focused discussion meeting was held on December 1, 2022, with representatives from electric utility service providers in Delaware seeking feedback on the EV Infrastructure plan's charging demand analysis and resulting forecasted peak power and energy requirements for each scenario. A follow-up meeting on these same topics to further seek feedback and have a discussion with representatives from electric utility service providers in Delaware was held on January 11, 2023. The three utilities that serve the state are Delmarva Power, DE Electric Coop and DEMEC and all of them have been involved in the planning process. Delmarva Power serves the counties of New Castle, Kent and Sussex with coverage in the majority of New Castle. DE Electric Coop mainly serves the South of Delaware in Sussex and Kent counties, and DEMEC serves the following cities, Newark, MSC of the City of New Castle, the Town of Middletown, the Town of Clayton, the Town of Smyrna, the City of Milford, the Lewes Board of Public Works, and the City of Seaford. Some of these cities offer EV rebates and incentives. For instance,

⁵ Delaware Department of Transportation, *Delaware's Vehicle Electrification Future* (Dover, DE: 2022) <u>https://deldot.gov/Programs/NEVI/index.shtml</u>

Delmarva Power, under its parent company, Exelon, is providing a time-of-use rate for eligible residential customers who choose to charge their electric vehicles at home during off-peak hours and install a second utility meter paid for by the customer. Delaware Electric Coop offers a one-time \$100 billing credit and a \$5 credit for residential customers that participate in their Beat the Peak program to reduce charging demand during peak times. Such programs are encouraged to manage the additional load expected as EV charging increases and further encourage EV adoption.

3.8 Site-Specific Public Engagement

In order to support broader public engagement and equity goals, DelDOT is requiring site specific public engagement. Vendors are required to provide a plan for stakeholder engagement regarding the site within their proposal so that the community will be engaged.

4 Plan Vision and Goals

The guiding principle for Delaware's Statewide EV Infrastructure Plan is to install infrastructure in places that maximize the benefits to EV owners and encourage electric vehicle uptake across all communities. Emissions reduction related to replacing an internal combustion vehicle will help quantify targets and measure success. The vision for the placement of these stations will help achieve the Delaware Climate Action Plan goal of at least 17,000 new electric vehicle sales per year by 2030.⁶

Delaware has successfully administered two DC fast charging grant programs through a competitive request for proposal (RFP) process. In each of these grant processes, data collection, equitable access and network reliability were requirements for successful proposals. Each project required 5-years of data collection on a quarterly basis, an open access network to ensure equitable access and a requirement to have all stations on-line no less than 96% of the time. This experience gives the state a model to follow for the deployment of NEVI Formula Funding and will enable to state to quickly build out its alternative fuel corridors (see Appendix B).

In March 2022, Governor John Carney announced a \$56 million grant that is part of an initiative to expand broadband and high-speed internet access and ensure every Delawarean has access to high-speed internet.⁷ This initiative will support a vision for a fast and reliable EV charging network.

Delaware's overall plan for fast charging along highway corridors is to build out corridor charging to NEVI requirements as quickly as possible and to be the first state to accomplish this goal. Delaware is a small state with only 96 miles from the most southern to the most northern point and between nine and 35 miles from east to west. This puts the First State at a great advantage to build out its AFCs with NEVI funded stations within the first two rounds of funding. The Statewide EV Charging Infrastructure Plan will include a timeline for building out NEVI infrastructure and this timeline is also shared below in Section 6.3 regarding Alternative Fuel Corridors.

Delaware has three overarching goals to deploy stations around the state:

- 1. Facilitate the installation of new DC fast-charging stations and upgrade existing DC fast charging stations every **50** miles including the Biden Welcome Center I-95 rest area.
- 2. Facilitate the installation of new DC fast-charging stations and upgrade existing DC fast charging stations every **25** miles or less.
- 3. Facilitate the installation of level 2 and DC fast charging stations within communities that lack access to convenient neighborhood level charging.

Detailed locations and a plan to achieve these goals are described in the Infrastructure Deployments and Upgrades section of this plan.

⁶ Delaware Department of Natural Resources and Environmental Control, *Delaware's Climate Action Plan*, by Jennifer de Mooy, Margaret Pletta, and Ian Yue (Dover, DE: 2021) p. 38 <u>https://dnrec.alpha.delaware.gov/climate-plan/</u>

⁷ Delaware Department of Technology and Information, *Delaware Announces Start of Universal Broadband Construction* (Dover, DE: 2022) <u>https://news.delaware.gov/2022/03/17/delaware-announces-start-of-universal-broadband-construction/</u>

4.1 Goals and Vision for Statewide EV Charging Infrastructure Planning

The following goals were reviewed by the Statewide EV Charging Infrastructure Plan advisory group (detailed above) and at the fall 2022 public workshops. These goals will guide electric vehicle infrastructure deployments in the state and provide an overall framework for transportation decarbonization planning in Delaware.

Centering Equity

The State's primary goal with the Statewide EV Charging Infrastructure Plan and in deployment of NEVI funds is to ensure that affordable, reliable and consistent charging reaches every Delawarean. The Statewide EV Charging Infrastructure Plan will also help identify communities where public charging access could be a catalyst for increasing electric vehicle purchases and is expected to be released in Fall 2023.

Reliability

Meeting uptime requirements, deploying an adequate number of stations to avoid long wait times, and energy access for the stations are all crucial components of stations being accessible and reliable. This will be achieved through data collection, ongoing maintenance support, and analyzing Delaware's electrical grid in the context of expanded EV charging infrastructure. The Statewide EV Charging Infrastructure Plan is an important first step in assessing the impacts of EV deployment on the grid and will provide recommendations on managing the increased demand on electricity. Project proposals will be required to explain their approach to network security and connectivity. As a small state with a significant tourism industry, consistency across state lines and network reliability among Mid-Atlantic states and across a national charging network is an important consideration.

Speed and Convenience

State transportation planners expect to meet the minimum requirement of 50 miles between stations in the first round of funding from NEVI. In future rounds of NEVI funding, the state aims to incentivize the installation of stations at least every 25 miles along Delaware's designated Alternative Fuel Corridors. Delaware's Statewide EV Charging Infrastructure Plan will help inform needs around charging speed, amenities, user experience, and other conveniences related to station operation.

Connecting a national EV network

As a state at the center of the Mid-Atlantic travel corridor and with a large tourism economy, partnering with our neighbor states and considering seasonal travel needs will be a crucial part of connecting a national EV infrastructure network.

5 Contracting

Delaware has successfully administered two DC fast charging grants, in 2016 and 2022, through a competitive request for proposal (RFP) process. The State of Delaware does not intend to own and operate DC fast charging stations and will use the competitive RFP process to administer the NEVI funds with the applicable requirements of the NEVI guidance. A scoring mechanism has been developed to give particular attention to small businesses and women-owned/minority-owned businesses. All contractors will be required to meet the minimum licensing and training requirements as defined by the NEVI final rule making.

Contracts will require station owners and operators to submit detailed operations and maintenance plans as well as quarterly and annual reports on station usage, emissions reductions, energy usage and other applicable data requirements over a period of at least five years. They will also be required to submit, then implement, a plan for community engagement. The state anticipates the NEVI funded stations may need upgrades after five years to meet the technology advances in the electric vehicle and charging landscape.

Contracting requirements will adhere to standards outlined by FHWA. This contracting language will be based on Delaware's previous experience deploying VW mitigation trust funds for DC Fast Charging stations and complies with the NEVI Final Rules published by FHWA effective March 30, 2023. Contracting requirements include specific standards regarding price transparency, 97% uptime, third party data sharing and interoperability among others.

Station operators will also be required to fulfill NEVI program standards related to connectivity, such as communications between vehicles and charging stations, between charging stations, and between charging stations and the grid.

As the Manual on Uniform Traffic Control Devices (MUTCD) is updated to reflect NEVI guidance and standards, the traffic control and signage requirements for Delaware's deployment of NEVI funding will reflect the latest MUTCD. As a part of a heavily trafficked regional travel corridor, it will also be important that Delaware's signage is consistent within the Mid-Atlantic region.

5.1 Status of Contracting Process

DelDOT has drafted the Request for Proposals for the first round of NEVI funding and anticipates a release on July 31, 2023 with an anticipated deadline for proposals on October 3. Awards are expected to be made by December of 2023.

5.2 Awarded Contracts

Currently no contracts have been awarded as the RFP process is underway. The RFP contract provisions to be utilized will be competitive bids using the same scoring criteria with conditional approval pending an environmental review and site host agreement. Contracts will use the Design-Build model. Costs are included in the scoring methodology and proposals request a cost breakdown and narrative describing where costs will be incurred on the project. This is meant to

include all costs such as site costs, project planning, design, O&M, data sharing, and utilities. The financial proposal represents 15% of the total scoring criteria.

5.3 Scoring Methodologies Utilized

The draft scoring methodology to be included in the RFP for release is outlined below.

The Sustainability, Equity, Resilience, and Economic Development element, including Justice40, are included in the scoring matrix and can be awarded a maximum of 10 points out of 100 possible points.

This section specifically asks the vendor to identify the following:

- a) Describe any usage of renewable energy sources in the electric vehicle charging process for this site.
- b) Describe any innovative technologies used and/or innovative approaches, such as on-site battery storage, to site design or operation being employed on the project.
- c) Describe the plan for the site to serve users with disabilities including access to amenities at the site.
- d) Describe your plan for addressing additional components of the Justice40 Initiative to allow for a more equitable charging experience for all users.

Submittal	Element	Description	Max Points
	Team Structure	 Organizational chart showing all organizations involved by roles Identification of a single Point of Contact person and POC's qualification of effective management and communication Existing and planned partnership and/or conditional site agreements 	5
Administrative Proposal	Qualifications and Experience	 Similar installations experience in the past 5 years Additional relevant experience 	15
	Financial Capabilities	 Funding commitments, sources, and cash flow management Who is responsible for costs and profits Rate structure, payment options, and billing practices 	5
Technical Proposal	Work Approach	 Project planning Design and permitting Utility Commitment Site preparation and construction O&M duration and plan Uptime plan Data sharing Schedule and timeline 	20
	Siting	 Interchange score and access Site characteristics Safety and ADA compliance Site readiness Enhancements and amenities 	15

Submittal	Element	Description	Max Points
		 Site layout and details 	
	Future Proofing	 Potential for additional charging ports Current and future ability to allow for parking and charging of MDVs/HDVs Additional equipment that can improve site resiliency 	10
	Sustainability, Equity, Resilience, and Economic Development	 Renewable energy usage Innovative technologies and battery storage Charging accessibility and equity principles, Justice40 initiatives 	10
	Safety and Training	 Safety Considerations EVSE Incident Plan (including vandalism protection and/or mitigation) Workforce Training Public and stakeholder engagement 	5
Financial	Funding Requests	Overall eligible costs proposedOverall amount requested	10
Proposal	Cost Breakdown and Narrative	Breakdown of expected costsNarrative describing costs	5

5.4 Plan for Compliance with Federal Requirements

To ensure compliance with 23 U.S.C., 23CFR 680, and all applicable requirements under 2 CFR 200, DeIDOT has detailed these requirements within the RFP and requires submission of plans for compliance with all proposals. The RFP also indicates that selected vendors will be required to adhere to any additional requirements released by FHWA related to the NEVI program including the latest EV-ChART data reporting requirements as authorized under 23 CFR 680.112.

To ensure compliance throughout the lifetime of the contract, ten percent of each payment will be withheld by DelDOT as a performance guarantee payment. Throughout the course of the required 5-year operations and maintenance period, DelDOT shall disburse one-fifth of the performance payment each year, upon approval of the vendor's annual report and quarterly reports for the previous year which shall demonstrate compliance with all regulations.

6 Existing and Future Conditions Analysis

As the lowest lying state in the country and the 7th most densely populated state in the nation, sea level rise and increased precipitation due to climate change present significant risks for Delaware, as does increasing temperatures. In addition, Delaware's population is growing and ageing. Understanding climatic risks and population growth are critical in planning electric vehicle infrastructure for the growing popularity of electric vehicles.

The Statewide EV Charging Infrastructure Plan, discussed in more detail in the previous sections, will include detailed projections for future market conditions and electric vehicle growth in the state. In 2022, Delaware's Governor John Carney announced that Delaware would initiate the regulatory process to implement California's Zero Emissions Vehicle (ZEV) regulation, which will ensure more electric vehicles are delivered to Delaware. This regulatory action, coupled with incentives for consumers, decreasing battery costs and increased availability of charging infrastructure will increase the number of electric vehicles on the road, which will allow the state to meet or exceed the Climate Action Plan goal of 17,000 electric vehicle sales per year by 2030.

As of July 1, 2023, Delaware has 6,831EVs on the road, roughly 0.007% of the 950,864 registered passenger vehicles, but EV uptake is growing and from the writing of the NEVI plan to July 1, 2023 the state saw a 54% increase in EV registrations. This trend is expected to continue with increasing awareness of EVs, more accessible infrastructure, and greater focus on reducing emissions.

6.1 State Geography, Terrain, Climate and Land Use Patterns

Geography and Terrain

Delaware is the second smallest state in the United States. Its 1,982 square miles comprise twothirds of the Delmarva Peninsula. It is surrounded by the Atlantic Ocean and Delaware Bay to east and the Chesapeake Bay to the west.

Delaware's landscape is located within two physiographic regions: the Atlantic Coastal Plain and the Appalachian Piedmont, with the vast majority of the state comprised of the low-lying coastal plain. Delaware's highest point is 447 feet above sea level.

Climatic Conditions

Delaware has cold winters, hot summers, and precipitation that varies greatly year to year. The state is situated in a transition zone between humid subtropical climate conditions to the south and humid continental conditions to the north. The surrounding water bodies also have a moderating effect on temperature extremes.

According to the Delaware Climate Office, mean annual temperatures in Delaware range from 54.0° F in northern New Castle County to 58.1° F along the Atlantic coast of southern Delaware. Average annual precipitation is approximately 45" statewide.⁸

Delaware is affected by a variety of severe weather events. Winter and spring nor-easters are a significant recurring threat as they can drop heavy snow and cause coastal flooding. Tropical systems, typically occurring during the fall, also cause heavy rainfall, coastal flooding and high winds. Severe thunderstorms in spring and summer also cause heavy downpours and flooding. Tornadoes also occur in Delaware; generally, Delaware experiences about one tornado each year. Despite the amount of attention given to hurricanes and hurricane preparedness, no tropical cyclones have hit the state of Delaware at hurricane intensity since reliable recordkeeping began.

Climate Change

Global anthropogenic climate change is driving changes to Delaware climate. While climate change will bring a variety of new challenges, the three climate change effects most likely to be observed in Delaware are sea level rise, increasing heavy precipitation events and increasing temperatures. These anthropogenic climate changes in turn have significant impact to Delaware's economy, natural resources, infrastructure and quality of life.

The mid-Atlantic coastal region, which includes Delaware, lies within a sea level rise "hotspot" where sea levels are rising faster and higher than elsewhere due to a combination of rising seas, sinking land, and ocean currents. Sea levels at the Lewes Delaware tidal gauge have risen more than one foot since 1900 and are expected to rise an additional 9-23 inches by 2050⁹ In 2021, tides exceeded the threshold for high-tide flooding eight times as measured by the Lewes tide gauge. By 2050, the frequency of high tide flooding as measured by this gauge is projected to occur between 50 and 135 times per year. ¹⁰

Permanent inundation as a result of sea level rise threatens up to 11% of the state's land mass, including 484 miles of roadway (five percent of the state's roadway network), 65 miles of evacuation routes, and 25 miles of rail line.¹¹

Temperatures in Delaware are also warming, especially in winter. Since the 1890s, annual average temperatures in Delaware have increased by 2 degrees F. In 2012, Delaware created future climate

⁸ Delaware Climate Office, Delaware's Climate (Newark, DE: 2022) <u>https://climate.udel.edu/delawares-climate/</u>

⁹ Callahan, John A., Benjamin P. Horton, Daria L. Nikitina, Christopher K. Sommerfield, Thomas E. McKenna, and Danielle Swallow, *Recommendation of Sea-Level Rise Planning Scenarios for Delaware: Technical Report* (Dover, DE: Delaware Department of Natural Resources and Environmental Control (DNREC) Delaware Coastal Programs, 2017) <u>https://www.dgs.udel.edu/sites/default/files/projects-docs/DE%202017%20SLR%20Technical%20Report_Mar2018.pdf</u>

 ¹⁰ National Oceanic and Atmospheric Administration, *The State of High Tide Flooding and Annual* Outlook (Silver Spring, MD: 2021)
 https://tidesandcurrents.noaa.gov/HighTideFlooding_AnnualOutlook.html

¹¹ Delaware Department of Natural Resources and Environmental Control, *Preparing for Tomorrow's High Tide* (Dover, DE: 2012) https://documents.dnrec.delaware.gov/coastal/Documents/SeaLevelRise/AssesmentForWeb.pdf

projections for temperature and precipitation through statistical downscaling of global climate models. Key findings include.¹²

- By 2039, annual average temperature increases of 1.5 to 2.5 degrees F are projected in both a low and high emissions scenario
- By 2059, annual average temperature increases of 2.5 to 4 degrees F are projected under the low emissions scenario, and 4.5 degrees F under the higher emissions scenario
- The growing season will lengthen
- The number of days over 100 degrees F is projected to increase to 1-3 days by 2039 and up to 8 days per year by 2059

Annual average precipitation is also projected to increase by an estimated ten percent by latecentury, and rainfall extremes are also projected to increase.

Delaware has developed a variety of tools that facilitate the incorporation of future climate conditions into investment and infrastructure decisions. In addition to the documents and data referenced above, these tools include the Delaware Flood Planning Tool¹³, which provides at a glance mapping of FEMA flood maps and sea level rise inundation, and the Climate Projections Portal¹⁴ which provides data and visualizations for dozens of temperature and precipitation indicators.

Land-Use and Population Patterns

Despite its small size and large agricultural economy, Delaware is the 7th most densely populated state in the nation. The state lies within a two-hour drive of New York City, Washington DC, Baltimore and Philadelphia. Its location, coupled with its low taxes and beach resort communities have made it a desirable retirement location. Sussex County, the most southern of Delaware's three counties, is among the fastest growing counties in the nation, with a growth rate of 4.3% between 2020 and 2021.¹⁵

Delaware's Office of State Planning Coordination's 2021 annual report describes recent land use trends in Delaware.¹⁶ Statewide, building permits have increased significantly since the 2008-2011 recession. Development applications declined after the recession but have increased significantly since 2017. The most notable increase in building permit activity is from 2019-2020, reflecting the development boom that occurred statewide in 2020. Sussex county, in particular, has demonstrated tremendous growth in recent years. Between 2014- 2020, just under 22,000 building permits have

¹² Delaware Department of Natural Resources and Environmental Control, Delaware Climate Change Impact Assessment. (Dover, DE: 2014) <u>https://documents.dnrec.delaware.gov/energy/Documents/Climate%20Change%202013-</u>2014/DCCIA%20interior_full_dated.pdf

¹³ Delaware Department of Natural Resources and Environmental Control, *Delaware Flood Planning Tool* (Dover, DE: 2022) <u>https://floodplanning.dnrec.delaware.gov</u>

¹⁴ Delaware Department of Natural Resources and Environmental Control, *Delaware Climate Projections Portal* (Dover, DE: 2022) <u>https://cema.udel.edu/declimateprojections</u>

¹⁵ United States Census Bureau, Quick Facts Sussex County, Delaware, United States (Washington, DC: 2022) https://www.census.gov/quickfacts/fact/table/sussexcountydelaware,US/PST045221

¹⁶ Delaware Office of State Planning Coordination, 2021 Report on State Planning (Dover, DE: 2021) <u>https://stateplanning.delaware.gov/publications/documents/2021-annual-report.pdf</u>

been approved compared to 11,565 in New Castle County and 6,877 in Kent County. Sussex Co. is additionally important in the context of charging stations due to the influx of visitors and temporary residents around Delaware beaches in the summer months.

Statewide, both development applications and building permits have increased over the past few years. Understanding where these building permits are concentrated can help predict commuting trends in coming years and help inform EV infrastructure placement. Northern New Castle County has been popular in recent years among warehouse developers and distribution facilities, due to the proximity to Interstate 95 and other regionally important highway corridors.

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

The most traveled roads in Delaware are SR-1, US-13, US-113, and I-95, all of which are included in the USDOT's alternative fuel corridors list. The SR-1, US-13, and US-113 cut through Delaware passing through every major city indicative of the needs for electric charging stations along those routes. Traffic is most heavy towards Delaware's capital city, Dover, up to the Delaware Pennsylvania border approaching Philadelphia. The I-95 on the northern end of Delaware serves as the passage between Pennsylvania and Baltimore, Maryland, likely the reason for the condensed traffic on this route.

Currently, Delaware Authority for Regional Transportation (DART) has plans to reduce emissions by 50 percent by 2030. As a part of this plan, DART has been transitioning dieselpowered buses to electric buses. DART's goals are to have a total of 26 electric buses in Delaware. Currently there are a total of 26 electric buses operating in Delaware: 14 are in New Castle, six are in Sussex, and six are in Kent. There are an additional four electric buses on delivery for New Castle and Sussex counties.

Delaware is working on their Freight Analysis Plan. Thus far, they have identified three main "emphasis areas:" growth, technology, and global disruption. Moreover, they are considering ecommerce, tourist impacts, platooning, drones, automation, vulnerable networks, supply chains, and localized traffic flow constraints.

High freight bottlenecks have been noted along the SR7-SR2 (Kirkwood Highway), US13: 1-495 to SR273, SR273: Airport Rd to SR 141, SR 4: SR 273 to SR 7/SR4 (JP Morgan), US 9/DEI: Five Points Area. The highest truck flows are 200,000 to 800,000 tons. Most of the industrial organic chemicals for pharmaceuticals are transported via trucks contributing to these highly trafficked areas. These chemicals are important for the production of fuel, over the counter products, specialty goods, and plastics.

Regarding supply chain needs, one of Delaware's largest industries is the chemical industry. Although there has been a decline in regional chemicals and manufacturing, demands internationally are expected to increase. Data suggests that there are operational constraints for cargo in New Castle. These constraints are a major hinderance because seaport freight operations are extremely important for chemical and manufacturing abilities in the Delmarva plain.

6.3 Alternative Fueling Corridor Networks

Delaware has four designated Alternative Fuel Corridors: Interstate I-95, State Route 1, State Route 13, and State Route 113. I-95 is the only corridor in Delaware considered "EV-Ready" for its entire length within the state. State Routes 1, 13, and 113 have segments that are "EV-Ready" but also segments that remain "EV-Pending." See Appendix B for maps of the designated corridors in Delaware.

6.3.1 Planning Towards a Fully Built Out Determination

Because of Delaware's small size, Delaware's AFCs can be fully built out to meet the 50-mile minimum threshold between stations with the construction or upgrade of four to five charging stations. Delaware can meet its goal of no less than 25 miles between stations by dedicating NEVI funds for six additional stations. Delaware is not planning any additional AFC designations at this time. Given the relatively small number of stations required, DNREC and DelDOT anticipate that Delaware will be able to be certified by US DOT as one of the first states to be fully built out.

6.4 Existing Locations of Charging Infrastructure Along AFCs

As of July 2022, Delaware has one DC Fast charging station that fully complies with the NEVI standards, including number of stations, power, and proximity to an AFC. This station is at the intersection of three interstate highway corridors, and near a state highway. Other existing DC Fast charging stations along Delaware's AFC highway corridors do not meet the NEVI standards and would be eligible for upgrades through the NEVI formula funding program. Locations of existing DC Fast charging stations along Delaware's alternative fuel corridors can be found in Appendix B.

There are 27 universal DC Fast charging ports at seven locations along Delaware's Alternative Fuel Corridors. There are also eight proprietary Tesla DC Fast charging locations with 68 ports within one mile of Delaware's AFCs.

Table 2 below includes a list of the universal public DC fast charging stations within one mile of Delaware's AFC network. Please see Appendix B for a map of all charging stations in Delaware and Appendix C for a list of all stations that are along AFCs, including Level 2, universal DC-Fast and Tesla DCFC.

State EV Charging Location Unique ID	Alt Fuel Corridor	Location	# and Type of Connectors	EV Network	kW of stations
165405	195, DE-13	4000 N. Dupont Hwy, New Castle, DE 19720	6 (1CHadeMO, 11 CCS)	Electrify America	CHAdeMO: 50kW CCS: 350kW each
*202959	195	1301 N. Grant Ave, Wilmington, DE 19806	1 CCS/CHAdeMO	Chargepoint	62.5 kW
*261139	DE-13	22694 Dupont Blvd., Georgetown, DE 19947	2 CCS	EV Connect	120 kW

Table 2: Location and Descr	iption of Universal DC Fas	t Charging Stations alon	α Delaware's AFC

State EV Charging Location Unique ID	Alt Fuel Corridor	Location	# and Type of Connectors	EV Network	kW of stations
*299244, 299245	DE-13	591 S. Dupont Hwy., Dover, DE 19901	4 (2CCS, 2 CHAdeMO)	Chargepoint	62.5 kW CCS, 50kW CHAdeMO

*Stations are at local car dealerships and are not always publicly accessible.

6.5 Known Risks and Challenges

Traffic Burden

It is imperative that all new and upgraded charging stations be sited in locations that will not increase already heavy traffic burdens borne by many of Delaware's disadvantaged communities. Community input is crucial to ensure that traffic burden and other challenges are appropriately considered in station location and design. Additionally, community input can help capture benefits associated with EV charging accessibility such as providing economic benefit and growth opportunities.

Available Power

The statewide EV charging infrastructure planning process will seek to highlight geographic areas where EV charging is needed but adequate power may not already exist and will provide recommendations for managing the additional load that is expected as more drivers transition to EVs. All three of Delaware's electricity providers are participating in this planning initiative and all offer programs for electric vehicle charging.

A requirement for all applications for NEVI grant funding will be to demonstrate adequate electric capacity to serve the site. If adequate capacity does not already exist, the applicant must demonstrate that the utility serving electric to the site has adequate capacity to upgrade the site.

State and Local Permitting Process

In 2019, Delaware became the 33rd state to exempt electric vehicle charging stations from regulatory jurisdiction by the state public service commission. ¹⁷ From a practical standpoint, this means that owners and operators of public charging stations are not considered a public utility or an electric supplier by the state. This will provide NEVI-funded projects in Delaware with regulatory certainty and eliminate potential delays from the state level.

Local permitting processes are not always clear. Delays have occurred in previous infrastructure deployments as a result of unclear or undefined local permitting processes for charging stations.

¹⁷ Public Service Commission, PSC Docket No. 19-0377 In the Matter of the Commission's Jurisdiction Over Electric Vehicle Charging Stations and Service Providers (Dover, DE: 2019) <u>https://depsc.delaware.gov/wp-content/uploads/sites/54/2019/06/19-0377.06.19.19-PUBLIUC-NOTICE-EV-CHARGING-.pdf</u>

Should issues arise, DelDOT and DNREC will help facilitate dialogue and solutions to reduce permitting delay.

Supply Chain Delays

Delivery delays are already occurring for some charging station manufacturers and for electrical equipment that may be required for capacity upgrades at sites. It is anticipated that supply chain delays may only become exacerbated as all states work to accelerate the speed of infrastructure deployment. DelDOT and DNREC will work to provide flexibility in the contracting process in anticipation of r supply chain delays and mitigate impacts on projects.

7 EV Charging Infrastructure Deployment

As Delaware works to achieve the goals set in the state's Climate Action Plan, the EV Charging Infrastructure Plan, and the NEVI Plan, actions have been taken across the state to build the state's capacity to deploy electric vehicle charging stations quickly, effectively, and equitably. Information requested in the required update section regarding Planned Charging Stations is addressed throughout this section. As the state has not yet released its RFP for NEVI station installations, no stations are currently under construction using NEVI funds. Tables and maps have been updated and included that describe the anticipated location of the stations along the AFCs, but no other updates for planned stations are available at this time.

7.1 Funding Sources

Federal funding through the NEVI Formula program will cover up to 80% of charging stations and related costs. The 20% match will be provided by the entities receiving funds and installing charging stations. Documentation of match will be required in application materials and quarterly and annual reporting requirements. Although match from the applicants is currently envisioned, additional non-federal match sources will be accepted. These could include utility programs, state funded economic development programs and foundation grants. For example, DNREC currently provides the Clean Vehicle Rebate Program for the purchase of battery EV and plug-in hybrid electric vehicles, as part of Delaware's commitment to innovating the transportation sector, reducing greenhouse gases, and improving Delaware's air quality. Rebates for this program range from \$1,500 for a plug-in hybrid to \$2,500 for a full battery electric vehicle.

DNREC has experience with this model of private match for EV infrastructure projects through two previous grant solicitations for DC Fast charging. In the most recent example, DNREC has begun to distribute \$1.4 million from the VW Mitigation Trust to install DC fast charging stations around the state; match of 25% was required for this grant opportunity.

7.2 2023 Infrastructure Deployments/Upgrades

As discussed above in the Vision and Goals section, Delaware has three overarching goals to deploy stations around the state:

Goal 1: Delaware's first goal is to facilitate the installation of new stations and upgrade existing DCFC stations along its Alternative Fuel Corridors every 50 miles as required. There is currently one NEVI-compliant Electrify America charging station location in Delaware. But there are several DC fast-charging stations along Delaware's designated alternative fuel corridors that are not currently compliant with NEVI station requirements.

Table 3 below shows the list of priority locations in cities and towns that are within 50 miles of each other that are best suited for the first round of funding.

City/Town	Alternative Fuel Corridor	Station Upgrade or New?	Existing AFDC Station ID
Newark (Biden Welcome Center Rest Area)	1-95	New	N/A
Dover	US 13	New	N/A
Rehoboth Beach	SR 1	New	N/A
Selbyville	US 113	New	N/A
Laurel	US 13	New	N/A

Table 3: Goal 1 locations every 50 miles.

Goal 2: Delaware's second goal is to install new DC fast charging stations every 25-miles or less along its designated corridors. This will consist of new charging stations and upgraded locations.

Table 4 below is a list of cities and towns that are within 25 miles or less of the Goal 1 locations that are best suited for the second round of funding. Delaware assumes that the Goal 1 locations will exhaust the funding amount for the first year of funding; however, if there are remaining funds, Goal 2 locations will be considered.

City/Town	Alternative Fuel Corridor	Station Upgrade or New?	Existing AFDC Station ID
Middletown	SR 1 and US 13	New	N/A
Smyrna	US 13	New	N/A
Milford	SR 1	New	N/A
Harrington	US 13	New	N/A
Bridgeville	US 13	New	N/A
Georgetown	US 113	New	N/A

Table 4: Goal 2 locations every 25 miles or less.

Goal 3: Once the U.S. Department of Transportation designates that Delaware has fully built out its NEVI compliant AFC network, the state will focus the remaining funds in locations that will serve neighborhood charging, with an emphasis on level 2 and DC fast charging stations within 1 mile of a disadvantaged community as defined by the <u>J40 Electric Vehicle Charging Infrastructure Map.</u>⁹

Particular attention and focus will be on communities with a high proportion of apartments and other multi-family dwellings and/or with high concentrations of on-street parking. Locations will be chosen to ensure safe and equitable access to stations without further burdening communities with increased traffic. The state will also use the Statewide EV Charging Infrastructure Plan to make informed decisions about the most appropriate and equitable places to deploy any remaining NEVI funds.

Upgrades of Corridor Pending Designations to Corridor Ready Designations

DelDOT will seek to upgrade Corridor Pending AFC segments to Corridor Ready as soon as adequate infrastructure is installed and operational. Based on the anticipated number of stations needed, it is anticipated that all AFCs in Delaware could be ready for Corridor Ready designation after the first NEVI funding round, as early as 2025.

Increases of Capacity/Redundancy along Existing AFC

Delaware seeks to have one NEVI compliant station at least every 25 miles along its AFCs. In addition, grant funds through the VW Mitigation Trust will expand the network of DC Fast charging along this network; however, many of these new deployments will not meet the minimum power and/or number of stations required to be NEVI compliant.

Electric Vehicle Freight Considerations

In 2021, DNREC contracted with CalStart to lead a technical analysis of the medium- and heavyduty vehicle fleet landscape across Delaware and to identify opportunities for rebate program improvement to include medium- and heavy-duty electric incentives and to identify which fleets and technology will help meet the state's greenhouse gas and pollutant emissions reductions goals. The findings of that report, along with other state freight plans, will drive any considerations placed on electric vehicle freight.

We will also engage relevant parties in our Statewide EV Charging Infrastructure Plans to discuss design principles for stations that could be useful for medium- and heavy-duty vehicles.

Public Transportation Considerations

Delaware Transit Corporation (DTC), an operating division of DelDOT, is the public transit operator for the State of Delaware. DTC has committed to reducing its vehicle emissions by fifty percent by 2030 and already begun transition buses to propane, battery electric and is exploring hydrogen fuel cells. As a component to their program support non-profit agencies by providing them with vehicles to support their mission. The establishment of the NEVI in Delaware will provide more opportunities for these agencies to switch to battery electric vehicles in the future.

7.3 FY23-26 Infrastructure Deployments

Infrastructure deployments in the first two years of the NEVI program funding will focus on building out AFCs with the state-specific goal of not more than 25 miles between stations. Once the AFCs have been designated as fully built out, infrastructure deployments will focus on higher density residential areas to maximize access to public charging and provide a catalyst for EV adoption.

The Statewide EV Charging Infrastructure Plan will guide the deployment of charging stations beyond those along AFCs.

7.4 State, Regional, and Local Policy

As mentioned above, Delaware state agencies and partners have been working together on vehicle electrification for a decade. Highlights of state and local policies that have developed as a result are highlighted below:

In Delaware, EV charging stations are not regulated as a public utility. This allows owners and operators of EVSE to charge a per kilowatt hour (kWh) fee for charging without utility regulation. This is an important factor in being able to quickly install EVSE and connect stations to the grid. It will also allow for greater fee transparency for users. Additional detail is provided above in the "State and Local Permitting Process" subsection.

Governor John Carney announced in March 2022 that Delaware would adopt California's Zero Emission Vehicle Regulation. This will accelerate the commercialization of battery-electric, plug-in hybrid, and fuel cell electric vehicles. The program will be managed by DNREC.

Delaware state agencies own and operate dozens of publicly available Level 2 charging stations across the state as a service to their employees and visitors to state facilities. In 2021, Governor Carney signed a bill which allows state agencies that own and operate EV charging to charge a fee for the use of those charging stations. There are no plans for the state to install and operate publicly available DC Fast charging stations on state properties, but state agencies have identified locations where additional Level 2 charging would be effective, particularly large employers, parks, and outdoor recreation spaces. Over time, Level 2 charging on state properties can fill gaps in access to charging.

In 2021, New Castle County, Delaware's most populous county, amended its county building codes to require new multi-family residences to install EV charging in parking spaces and make other parking spaces ready for future EV charging station installations.¹⁸ New Castle County has the most electric vehicles in Delaware as well as the most multi-unit dwellings. This updated ordinance will have a beneficial impact on availability home charging availability and could catalyze additional EV adoption.

Senate Substitute 1 for Senate Bill 187 was signed into law on June 16, 2022.¹⁹ This law requires municipalities with populations of more than 30,000 to develop a process for residents to install curbside EV charging. Through this law, Delaware's largest municipalities have been required to engage on electric vehicle issues. The state's EV Infrastructure plan will help identify priority areas for utilizing these permitting processes.

In June 2023, the Delaware Legislature passed several bills which further advance action towards the adoption of electric vehicles.

¹⁸ New Castle County Code, Ordinance No. 21-094 New Castle, DE: 2021) https://www.newcastlede.gov/DocumentCenter/View/43614/21-094

¹⁹ 22 Del. C. Chapter 1, An Act to Amend Title 1 of the Delaware Code Relating to Residential Electric Vehicle Charging Infrastructure Requirements (Dover, DE: 2022) https://legis.delaware.gov/json/BillDetail/GenerateHtmlDocumentSessionLaw?sessionLawId=78993&docTypeId=13&sessionLaw

https://legis.delaware.gov/json/BillDetail/GenerateHtmlDocumentSessionLaw?sessionLawId=78993&docTypeId=13&sessionLawId=7898&docTypeId=13&sessionLawId=7898&docTypeId=13&sessionLawId=7898&docTypeId=13&sessionLawId=7898&docTypeId=788&sessionLawId=788&sessionLawId=788&sessionLawId=788&sessionLawId=788&sessionLawId=788&sessionLawId=788&sessionLawId=788&

House Bill 99, known as the Delaware Climate Change Solutions Act, establishes targets for reducing greenhouse gas emissions in the State.²⁰ The Act establishes a process of regularly updating the State's Climate Action Plan, which will serve as the framework for achieving the targeted emissions reductions by developing and implementing mitigation strategies, including the promotion of zero-emission vehicles.

Senate Substitute 1 for Senate Bill 7 expands the duties of the State Energy Office to develop and implement energy policies and programs.²¹ As Delaware plans for electric vehicles and the clean energy future, this bill directs the State Energy Office to promote the buildout of the statewide energy grid.

Senate Substitute 1 for Senate Bill 103 requires that all new residential buildings in the State of Delaware are constructed to support charging an electric vehicle.²² The bill also requires that multi-family dwellings install electric vehicle charging stations at 5% of their parking spaces while ensuring that an additional 10% of their parking spaces are capable of supporting chargers.

House Bill 12 codifies DNREC's long-standing Electric Vehicle Rebate Program to incentivize the purchase and lease of new and used electric vehicles by Delaware residents.²³ Rebates of up to \$2,500 are available for the purchase of all-electric vehicles and up to \$1,000 for the purchase of plug-in hybrid vehicles.

House Bill 10 establishes targets for gradually increasing the adoption of zero-emission school buses in Delaware. School districts will be required to ensure that a certain percentage of their school bus purchases are zero-emission vehicles.²⁴ Beginning in 2025, 5% of school bus purchases must meet this requirement, with a target of reaching 30% of school bus purchases being zero-emission vehicles by the year 2030.

²⁰ https://legis.delaware.gov/BillDetail?LegislationId=130272

²¹ https://legis.delaware.gov/BillDetail?LegislationId=140471

²² https://legis.delaware.gov/BillDetail?LegislationId=140422

²³ https://legis.delaware.gov/BillDetail?LegislationId=130286

²⁴ https://legis.delaware.gov/BillDetail?LegislationId=130292

8 Implementation

8.1 Strategies for EVSE Operations & Maintenance

Per the NEVI Program Guidance and subsequent Final Rule, the operations and maintenance requirements Delaware's operations and maintenance requirements specify the obligations related to ownership and transfers, uptime, data sharing and interoperability, testing, customer service, testing, privacy and cyber security and any potential requests for modification to the systems in compliance with the Final Rule.

DNREC's 2022 grant for DC Fast charging through the VW Mitigation Trust included requirements for operation and maintenance and those have been updated to reflect NEVI specific standards... The language below for Operation and Maintenance Requirements and Operations and Maintenance Plans is included in the draft RFP:

1. Equipment Ownership

Upon completion of construction and installation and written acceptance by DelDOT of fully operational EVSE (including power and data service), the vendor shall own the EVSE equipment. Vendors shall ensure there is a separate and distinct meter for the EVSE system.

2. Five-Year Operations and Maintenance Obligation

The selected vendor shall be required to ensure the operations and maintenance of the EVSE at the site for a period of at least five years from the date identified on the Notice of Acceptance letter. Compliance with the at least 97.00 percent uptime requirement throughout the five-year performance period is essential, and vendors may satisfy this requirement one of two ways:

Option 1—Full-Coverage Service Contract: The Vendor shall comply with a five-year maintenance and operation plan and a five-year networking plan. The Vendor shall have a five-year service contract providing 100 percent coverage of labor, parts, and materials as well as emergency service. This contract shall include comprehensive preventive maintenance for the covered equipment and systems and repair and replacement coverage (sometimes called a "breakdown" insurance policy) for the covered equipment.

Option 2—In-House Operations and Maintenance: DelDOT will not fund in-house operation and maintenance programs with NEVI program grant funds and thus Vendors will have to use other funding sources. In-house operation and maintenance programs will comply with the Vendor's Operations and Maintenance Plan. If DelDOT receives information that the Vendor is not providing comprehensive preventive maintenance or system repair or replacement, DelDOT will have the right to enter the property to inspect. If necessary, DelDOT will also have the right to hire a contractor to perform the needed operations and maintenance, at the Vendor's cost. If DelDOT incurs costs, it may deduct those costs from performance payments as noted in Section Error! Reference source n ot found..

3. Transfer After or During the Performance Period

If the vendor decides to retain and operate the equipment following the expiration of the five-year period, the vendor will be responsible for management of, receipt, and disbursement of fees charged. If the vendor sells the site, closes the business, or otherwise is unable to fulfill the five-year obligation, the vendor must either work with DelDOT to assign a new operator at the site or pay back project funds prorated for the portion of the remaining five years. The O&M Plan should acknowledge the Vendor's anticipated plan at the end of the five-year O&M Plan and whether the Vendor plans to retain the infrastructure to transfer.

4. Up Time Requirement

Other than allowable downtime for maintenance and repairs, equipment must be up and running equal to or greater than 97.00 percent of the time. Uptime shall be self-monitored by the vendor and reported to DelDOT if uptime is less than 97.00 percent for a continuous window exceeding twelve hours. DelDOT may notify the vendor if it has reason to believe the uptime requirement is not being met and require the vendor to develop an action plan to bring the equipment back to working condition. DelDOT also reserves the right to have third party monitoring of uptime to validate vendor reporting. DelDOT reserves the right to retain a contractor of its own choosing to repair or replace it, at the vendor's cost.

If DelDOT determines the vendor is not in compliance with the uptime requirements for two consecutive quarters, DelDOT may require the vendor to submit an action plan. Material or repeated non-compliance with the uptime requirements may be considered an event of default.

Notwithstanding anything to the contrary contained in this Notice of Funding Opportunity (NOFO) (including its terms and conditions and applicable appendices) or the Vendor Agreement, if the vendor is in default of the uptime requirement, DelDOT may terminate the Vendor Agreement, and if the default occurs within five years following the disbursement of any part of the Grant, require the vendor to repay to DelDOT the amount of financial assistance provided, prorated for the portion of the remaining five years.

5. Data Sharing/Interoperability Requirements

DelDOT is required to provide both quarterly and annual data submittals for similar evaluation at the national level. Data must be transferred or made available using methods authorized under the Vendor Agreement and as agreed upon between the contracted parties. The submitted data will be maintained in a secure manner and will not be used for any purposes other than those required to fulfill the requirements of the Vendor Agreement. The proposing vendor must also disclose, via the Data Management Plan the location of the data and security processes and systems governing it while under the vendor's control. The Data Management Plan shall also include contingency plans for when internet service is out and other information technology (IT) requirements.

6. Proposed Modifications to System Specifications

If the proposing vendor seek to use EVSE that deviate from the NOFO minimum requirements, the vendor shall fully explain the deviation from the requirements as part of the application for DelDOT review. DelDOT will review the request, evaluate compliance with program requirements, and approve or reject the proposed modifications.

7. Testing Requirements

Vendors shall conduct standard factory testing and post-installation system testing for each charging unit to verify functionality of the EVSE, as well as access and/or integration into the DelDOT or other prescribed data sharing system. Factory test results shall be provided for each unit as verified by the vendor's quality assurance or test manager. Similar test results for the installed system shall be provided with the test manager's approval. DelDOT will also have the right to test the EVSE and any data sharing connections (DelDOT systems and/or vendor provided portal). For data sharing, DelDOT will participate in the testing through verification of receipt of the specified data. For the charging unit, DelDOT or its representative may run on-site testing at its own expense.

8. Customer Service

Vendors shall ensure that customer service is provided and available 24 hours per day, 7 days a week, 365 days a year. The customer service shall provide support and responses to inquiries and comments from EVSE users who are using or attempting to use the EVSE charging equipment. The proposing vendor shall submit a plan detailing how such service shall be provided which is accessible by all users.

9. Privacy And Cybersecurity

Vendors shall be responsible for cybersecurity as it relates to owning, operating, maintaining, and data sharing for the EVSE. After selection, the vendor shall participate in a privacy impact assessment with DelDOT, including their Data Governance and Security team. After agreement execution, vendors shall share the following:

- How cybersecurity will be assessed throughout the Agreement term,
- Results of third-party cybersecurity testing (not proprietary information that would make the overall system vulnerable),
- How system updates will affect end users, and
- Proposed protocols for notifying DelDOT of any security breach.

Vendors shall develop a Data Management Plan that incorporates this information and guidance on risk assessments for personnel involved with the charging network, including contractors and service providers. Vendors shall submit the Data Management Plan to DelDOT for approval. Vendors shall comply with local, state, or federal laws as they relate to cybersecurity and privacy. Vendors shall provide an updated Data Management Plan annually along with the annual report for approval by DelDOT. Vendors shall specifically identify the need for the changes and changes to the Data management Plan as part of the annual updates. Vendors can update and submit the Data Management Plan more frequently, if required.

The O&M Plan should address physical security and protection against vandalism as it is the responsibility of the Vendor and/or site host to ensure protection against vandalism and related security issues.

DelDOT will adhere to rulemaking guidelines related to operations and maintenance, and the public will have the opportunity to provide input on these aspects of the Statewide EV Charging Infrastructure Plan to ensure a consistent user experience.

8.2 Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

DNREC has managed the Clean Transportation Incentive Program since 2015. Through this program, DNREC has a database of businesses and groups in the state interested in electric vehicle charging stations, who may be important businesses in deploying NEVI funding. In addition, DNREC staff have working relationships with representatives of the major national charging companies and local EV charging station owners and installers.

8.3 Strategies for EVSE Data Collection & Sharing

Data collection and sharing are crucial for being able to maximize the effective use of EVSE stations. Highways in Delaware in particular serve corridors that extend far beyond Delaware to other cities and states along the east coast. Continuing the effective deployment of EV charging stations will depend on understanding station use through data collection and sharing. Details regarding data sharing requirements for selected vendors are included in section 8.1.iv above.

The state maintains an open data portal for the public to access certain public data. Certain data related to the NEVI program could be included on this webpage. Additionally, DelDOT maintains a <u>website</u> which maps transportation infrastructure around the state. An optional layer is EV charging. This website could be adapted to include constructed and proposed NEVI projects.

DelDOT will follow all reporting requirements at intervals set by the FHWA. Reporting requirements are included in the contracts which successful applicants sign with the state following a competitive bid process.

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

Delaware experiences some snowfall in the winter months, and increasingly severe storms in coastal areas. Addressing these emergency needs, and seasonal operational needs is included in the Existing Site Details section of the proposal requirements. Specifically, the RFP requires applicants to describe EVSE access during times of emergency such as evacuation during natural disasters.

In the summer months, Delaware experiences a significant increase in traffic as visitors travel to Delaware beaches in Sussex County. DelDOT measures vehicle volume annually, accounting for

seasonal shifts in traffic patterns. The Statewide EV Charging Infrastructure Plan will consider seasonal traffic flows in laying out priority EV charging station locations.

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

DelDOT and DNREC are working closely with the Departments of Labor and Education to enhance training programs in the state related to EV infrastructure installation and other electric transportation needs.

The state is working to maximize the number of electricians that are certified under the Electric Vehicle Infrastructure Training Program (EVITP), given the regulations requiring a Qualified Technician for NEVI installations and operations and maintenance. Additionally, the state may look to expand opportunities for other electric vehicle infrastructure certification programs to ensure that certification is not limited to those who are able to access EVITP such as registered apprenticeship programs with charger specific training.

State standard contracting language has provisions to ensure that small and minority-owned businesses can be competitive with larger firms. This language is part of proposal criteria administered by DeIDOT for NEVI funding deployments under the Sustainability, Equity, Resilience, and Economic Development section. The Division of Small Businesses is among the state agencies that will be engaged in the Statewide EV Charging Infrastructure Plan, and they will be able to reach out to small businesses to distribute information about funding opportunities.

The Statewide EV Charging Infrastructure Plan will give the state a sense of how many EV charging stations will be needed in the state to meet EV uptake scenarios. This analysis will give the state a sense of how many electricians will need to be trained and will provide a framework for the size and scope of these training programs.

Contracting language adheres to the final rulemaking provided by FHWA and promotes strong labor, safety and installation standards within the guidelines provided by those rules.

9 Civil Rights

DelDOT's Office of Civil Rights is responsible for overseeing all external civil rights programs, ensuring compliance with all federal and state civil rights and non-discrimination laws and requirements, and acting to move forward the goals and objectives of civil rights provisions.

The Office of Civil Rights is committed to ensuring that all management, staff, contractors, consultants, vendors, subrecipients, and service beneficiaries are informed, educated, and assisted with the provisions of Title VI of the Civil Rights Act of 1964. In particular 23 CFR 680 reiterates compliance with Title VI and VIII of the Civil Rights Act, and The American with Disabilities Act of 1990 (ADA) and requires that EV charging stations comply with applicable accessibility standards adopted by the Department of Transportation into its ADA regulations (49 CFR part 37) in 2006, and adopted by the Department of Justice into its ADA regulations (28 CFR parts 35 and 36) in 2010.

It also the policy of DelDOT to ensure compliance with other non-discrimination regulations, amendments, policies, and Executive Orders as shown below.

Title VI of the Civil Rights Act of 1964	In accordance with Title VI, DelDOT is committed to ensuring that no person in the State of Delaware is excluded from participation in, denied services or benefits of those services, or subjected to discrimination under any and all programs and activities administered by the department, its sub-recipients (e.g., MPOs, counties, municipalities), and contractors on the basis of race, color, or national origin.
23 CFR part 230	These regulations require equal opportunity requirements be included in Federal and Federal-aid highway construction contracts including supportive services. The policy also encourages supportive services to improve the effectiveness of participants working on federal projects by offering on-the-job training programs and other assistance as required.
23 CFR Subpart A- §633.102- §633.104	The required contract provisions found in Form FHWA-1273 must be included in all Federal-aid construction contracts (other than Appalachian construction contracts). The language encompasses, among other things, prohibitions on all class discrimination.
Americans with Disabilities Act of 1990;49 CFR Part 27 and Part 38	This Act prohibits discrimination on the basis of a disability by public entities. DelDOT understands and is committed to providing accessibility for all users, customers, and beneficiaries of our programs, activities, and public services.
Rehabilitation Act of 1973	This Act protects the rights of individuals with disabilities against discrimination from programs that receive Federal Funds. Specifically, section 504 provides: No otherwise qualified individual with a disability in the United States, as defined in section 705 (20) of this title, shall, solely by reason of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Service.

In order to ensure compliance with these regulations, the draft RFP requires that vendors certify that they comply with all federal, state and local laws applicable to its activities and obligations including the applicable portions of the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990. The state reserves the right to disregard the proposal, terminate the contract, or consider the vendor in default if the vendor does not comply. In addition, the proposal requires the vendor to

describe site compliance with ADA, 42 U.S.C. 12101 et seq., and 49 U.S.C. 322 or describe modifications proposed to make the site compliant under the Site Layout and Details section of the proposal and includes ADA compliance in the scoring criteria.

10 Equity Considerations

The Justice40 Initiative, part of U.S. Executive Order 14008, seeks to deliver at least 40% of the benefits of federal investments in climate and clean energy to disadvantaged communities. A variety of federal agencies have created tools to help state and local governments identify disadvantaged communities, including US DOT and the White House Council on Environmental Quality, among others. The methods and tools for identifying disadvantaged communities, as well as calculating the benefits to these communities, is still evolving. In its deployment of federal funds for electric vehicle infrastructure, state agencies will coordinate and collaborate with federal partners for technical assistance and emerging guidance. Throughout this plan, the primary source for delineation of Delaware's disadvantaged communities is the US DOT Disadvantaged Communities definition and mapping tool, as amended in May 2022.²⁵ Delaware's planning considerations for equitable distribution of charging stations may also include other federal tools and programs such as the Small Area Income Poverty Estimates Program or Opportunity Zones.

The State of Delaware recognizes the importance of equity in project planning, investments, and delivery. Delaware's 151st General Assembly passed House Concurrent Resolution No. 40 on June 29, 2021, to create the "Justice Forty Oversight Committee" to ensure that disadvantaged communities in the state derive the benefits as outlined in the President Biden's Executive Order 14008 to include the Justice40 Initiative. This committee has been tasked with identifying disadvantaged and marginalized communities in Delaware, identifying infrastructure deficiencies in the identified communities, and assisting community members. The committee has since held listening sessions with the Counties of Sussex, Kent and New Castle regarding equity issues and has summarized those findings. Some of the concerns that the communities brought up related to transportation include desires for a green rail project going from northern NCC to the Sussex beaches and a desire in general to see more sustainable public transportation options in Sussex County in particular. Many of the other environmental concerns raised were related to water quality and waste, in particular agricultural or chemical waste as well as siting of industrial facilities in EJ communities.

In a related effort, DeIDOT is using data and guidance provided by the federal EPA's EJ Screen, the Climate and Economic Justice Screening Tool (beta) in combination with census block group data, affordable housing data, public school feeder data, public housing development datasets and other demographics data to identify and define environmental justice communities at a more granular level than the census tract level. This GIS analysis will allow Delaware to identify and engage in public outreach and engagement in these identified communities as well as ensure the overall benefits from federal funds, like the NEVI funding, will be received by these identified communities by incorporating equity as a weighted factor in the capital project prioritization process.

²⁵ U.S. Department of Transportation, Justice40 Initiative (Washington, DC: 2022) <u>https://www.transportation.gov/equity-Justice40</u>

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

Detailed in the public engagement section above, the Statewide EV Charging Infrastructure Plan development process includes a focus on engaging underserved and disadvantaged communities and receiving input from community members on all aspects of the plan, including how to measure benefit to disadvantaged communities.

As detailed above, the state has convened an advisory group for the development of a comprehensive electric vehicle infrastructure plan which will inform infrastructure investments, including NEVI, policy development and education and outreach. This advisory group is composed of technical experts from the energy, environment and transportation sectors as well as leaders of community organizations which serve disadvantaged communities. This group will provide advice and recommendations to DelDOT and DNREC regarding technical issues and strategies for how to engage disadvantaged communities. The first meeting of this group was June 2022—that meeting resulted in several opportunities for community-based dialogues about electric vehicles and infrastructure development. A larger public workshop was held in Fall 2022; a key goal for this first workshop was to ensure broad participation and feedback from disadvantaged communities. Some of the EJ community groups that participated in the advisory group were Delaware Concerned Residents for Environmental Justice, Healthy Communities Delaware, and the League of Women Voters.

Engagement of disadvantaged communities will be an on-going effort throughout each phase of NEVI infrastructure investments. While engagement at beginning phases is essential to success, so is continued engagement as electric vehicle infrastructure is installed and becomes operational. Relationship-building with disadvantaged communities is especially important to ensuring that installed electric vehicle charging stations are beneficial for communities and not creating unanticipated negative outcomes.

Several federal tools and programs provide frameworks for identifying disadvantaged communities. These include Opportunity Zones defined by the Internal Revenue Service, Small Area Income and Poverty Estimates Program from the U.S. Census Bureau, and the Disadvantaged Community Electric Vehicle Charging mapping tool provided by Argonne National Laboratory. These and other tools will be utilized to identify DACs.

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

The State of Delaware will work with federal and local partners, including its advisory group for electric vehicle infrastructure, to identify best practices to measure benefits to disadvantaged communities. At minimum, the following indicators will be tracked over time:

• Location of EV infrastructure within and near delineated disadvantaged communities which will be measured based on number of chargers per zip code using the DAC EV mapping tool provided by ANL with a goal to keep this on par with non-DAC's.

• Electric vehicle registrations within disadvantaged communities which will be measured based on data from the Open Data Portal described below, with a goal to keep this on par with non-DAC's.

DelDOT already has a framework for data collection and reporting. The state hosts an Open Data Portal, where data on EV registrations, EV charging infrastructure and EV rebates are served and updated routinely. ²⁶ In addition, the Delaware Division of Health and Social Services maintains the My Healthy Community web portal, which serves relevant environmental and public health data including air quality and asthma hospitalizations.²⁷

10.3 Benefits to DACs through this Plan

The transition to clean energy and the electrification of the transportation sector is a key component of reducing emissions of greenhouse gases and meeting federal and state climate goals. This transition will also have significant health benefits to Delawareans, especially in disadvantaged communities near major transportation routes. A recent report by the American Lung Association quantified the cumulative health benefits of this transition statewide. It found that this transition would avoid 11,200 asthma attacks and 462 premature deaths between 2020 and 2050 while also providing more than five billion dollars of cumulative health benefits.²⁸

In addition to significant health benefits, increasing the availability of public DC-Fast and Level 2 electric vehicle charging stations will eliminate barriers to electric vehicle ownership, especially for Delawareans without access to off-street or garage parking. The increasing availability of charging infrastructure, coupled with decreasing costs of ownership for electric vehicles, means that more Delaware families can benefit from the health and economic benefits of driving electric.

The initial focus for electric vehicle infrastructure deployments utilizing NEVI funds is highway corridors, as required by the federal NEVI guidance. This does present a potential for unintended consequences for disadvantaged communities, as infrastructure sited within a disadvantaged community may not be initially utilized by community members but could increase traffic through that community. Achieving the equity goals of our state EV infrastructure planning will mean ensuring that stations are sited in a way that limits undue traffic burden but can provide economic benefit to a community. The EV Charging Infrastructure Plan, currently under development, identifies zip codes in which funding should be prioritized based on factors such as EV adoption levels, existing charging network sites, multi-family housing density, and equity concerns. As a part of the approach, community level stations with a priority of DACs, will be funded once the required AFCs have been built out.

²⁶ Delaware Open Data, *Electric Vehicle Charging Equipment* Rebates (Dover, DE: 2022) <u>https://data.delaware.gov/browse?q=electric%20vehicles&sortBy=relevance</u>

²⁷ Delaware Department of Health and Social Services, *My Healthy* Community (Dover, DE: 2022) https://myhealthycommunity.dhss.delaware.gov/home

https://myhealthycommunity.dhss.delaware.gov/home
 ²⁸ American Lung Association, Zeroing in on Healthy Air (Chicago, IL) 10 https://www.lung.org/getmedia/13248145-06f0-4e35-b79b-6dfacfd29a71/zeroing-in-on-healthy-air-report-2022.pdf

11 Labor and Workforce Considerations

The State of Delaware can provide the required workforce at scale and across various groups of individuals. Specifically, the state will draw on its history of training those that are unemployed, new workforce entrants, career changers, and the incumbent workforce. The state currently invests in a variety of training models using state and federal funds, and existing programs that support the development and execution of new training programs that are customized to specific needs of employers. The state also invests heavily in the registered apprenticeship system and is expanding this training model into new industries and occupations as well as across different population segments through a pre-apprenticeship and registered apprenticeship pipeline integrated into our secondary schools and community not-for-profit organizations.

The state's size and network are an advantage. Employers and future employees throughout the state have access to a variety of training models, which can also be brought on-site to a place of employment. Additionally, the Department of Labor, the Delaware Workforce Development Board, the Delaware Prosperity Partnership (economic development group), and Department of Education work collectively to engage the business community and ensure that operational models are efficient. The state also prioritizes worker voice through entities like the Department of Labor, United Way of Delaware, local housing authorities, local unions, and community-based organizations, ensuring individual workers are partners in the design and execution of training programs.

The Delaware training and vocational community is rich. The state's size is an advantage in reaching employers and future employees with training opportunities. State agencies work collectively to engage the business community and ensure that operational models are efficient.

The state's vocational technical school districts and one community college system offer curricula that work alongside four-year degree programs to ensure a cohesive education ecosystem. These programs are well suited to support new programs or program updates, which will be needed to support Delaware's transportation electrification goals.

Delaware's workforce is here and ready. There are approximately 1,000 youth in construction related pathways across the state with a growing number of high school youth engaged in workbased learning programs and youth apprenticeship programs. Delaware is home to a civilian labor force of about 500,000 people. Of this about 22,000 are unemployed and seeking new opportunities. Many incumbents welcome new skills training that leads to job stability, growth, and increased wages. The Department of Labor often provides free training opportunities to serve lower skilled workers obtain education and training that leads to employment and a career. Including vehicle electrification courses in these programs will offer an important workforce development opportunity and support a decarbonized future.

The Delaware Department of Labor and Department of Education will remain engaged in the planning process for electric vehicles and electric vehicle infrastructure and stand ready to assist in adapting training programs in Delaware to ensure adequate workforce capacity.

In addition, DelDOT also shared information from the NEVI notice of proposed rulemaking regarding the electric vehicle infrastructure training program (EVITP) with the Delaware Contractors Association. As training programs are launched, DNREC and DelDOT will ensure that the EVITP is a significant focus of training programs to ensure that the Delaware workforce is well prepared for NEVI funding opportunities and other electric vehicle infrastructure deployments. Annual updates to this plan will highlight progress made on EV and EV infrastructure training program development.

In order to ensure workforce compliance with <u>23 CFR 680.106(j)</u>, DelDOT is including the following requirements in its draft RFP related to Labor and Workforce Considerations:

- 1. A requirement for applicants to describe their plan for workforce training and meeting EVTIP certification as well as scoring criteria related to the plan.
- 2. All proposals are required to be submitted with Delaware license(s) and/or certification(s) necessary to perform services as identified in the scope of work.

12 Physical Security and Cybersecurity

The NEVI program and other federal and state funding opportunities plan to rapidly increase the number of publicly available EV charging stations. This coupled with increasing reliance on digital solutions, raises cybersecurity concerns both for grid operators and electric vehicle drivers. DelDOT is committed to ensuring that charging infrastructure is as safe as possible for its users.

The minimum guidance for the NEVI program, provided by the US Department of Transportation, details physical and cybersecurity measures that must be included in project proposals. Requests for proposals for these projects will include the necessary security measures described by the minimum guidance.

Currently, research on cyber security threats in a growing electric vehicle charging market is in its infancy and focuses on identifying the risks. This research has been conducted by the Department of Energy's National Renewable Energy Laboratory, as well as researchers at universities around the world, and insurance companies concerned with indemnifying these emerging risks. Some of the risks this research have identified include:

- Payment fraud at public charging stations
- Vehicles made immobile or inoperable
- Vulnerabilities in data exchanged between vehicles and charging stations
- Leakage of personally identifiable information from users of charging station
- Vehicle GPS data
- Grid stability and reliability
- Unknown risks as EVs are further integrated into the grid through distributed energy resources and technologies like vehicle to grid (V2G)

In response, the State will require owners and operators of NEVI funded charging stations to provide a cybersecurity plan that complies with current and future requirements and applicable federal and state laws as part of the conditions of the award. Cybersecurity plans will require that the station operator ensure that charging station hardware, networks, and ongoing operations are secure. The charging station operator will also be required to outline specific steps that will be taken to mitigate cybersecurity threats and address cybersecurity attacks should they occur. In addition, after selection, the vendor shall participate in a privacy impact assessment with DeIDOT, including their Data Governance and Security team. After execution of the following, vendors shall share the following with the State:

- How cybersecurity will be assessed throughout the Agreement term,
- Results of third-party cybersecurity testing (not proprietary information that would make the overall system vulnerable),
- How system updates will affect end users, and
- Proposed protocols for notifying DelDOT of any security breach.

In addition, the O&M Plan submitted along with the RFP must address physical security and protection against vandalism as it is the responsibility of the Vendor and/or site host to ensure protection against vandalism and related security issues. In addition, vendors are required to submit details regarding site safety measures including lighting, automatic shutoff and fire extinguishers and safety considerations are included in the scoring rubric.

13 Program Evaluation

DelDOT, in cooperation with other state agencies and partners, will produce an annual report highlighting the state's deployment of NEVI funds and the build-out of the AFC charging network. This report will also highlight electric vehicle deployment and build out of a neighborhood-based charging network. In addition, operators of all charging stations funded through NEVI will be required to provide charging station usage reports to DelDOT. This usage information will be aggregated into the annual report and utilized to determine future areas of focus for charging stations.

The annual report will comply with relevant USDOT timelines and requirements.

13.1 Discretionary Exceptions

At this time, Delaware does not anticipate requesting exceptions from the requirements that charging infrastructure be installed every 50 miles and within 1 travel mile of AFCs. Should a need arise, DelDOT will work to obtain the necessary approvals from US DOT.

13.2 Next Steps

Building upon its previous experiences with competitive grant programs for DC-Fast charging stations, Delaware will be issuing its RFP for the first round of NEVI funding at the end of July 2023. Awards are expected to be issued by December of 2023.

During Fall 2023, the state will release its Delaware Statewide EV Charging Infrastructure Plan, including opportunities for stakeholder and community engagement. When complete, this statewide plan will inform future NEVI phases.

The state is poised to live up to its history and nickname of "the First State" by becoming the first state in the nation to fully build out its AFC highway charging corridor to NEVI standards.

Appendix A: Definitions

Alternative Fuel Corridor: Designated national network of roadways with plug in charging, hydrogen fuel, propane, or natural gas fueling infrastructure along highway corridors.

Direct Current (DC) Fast Charging: The fastest type of available charging, DCFC provides at least 50kW of direct current charging to a vehicle. DCFC can charge a vehicle in around 30 minutes.

EV-Ready: Nominated corridors that have the sufficient number of fueling facilities to allow for corridor travel with the designated alternative fuel.

EV-Pending: Nominated corridors that do not currently have the sufficient number of fueling stations to meet US DOT standards.

Formula Program: A federal funding program in which funds are guaranteed to states based on population and other factors.

Level 2: Charging station that requires a 208–240-volt, 40-amp circuit. L2 chargers typically charge a vehicle in 6-8 hours, depending on the range of that vehicle.

Port: The part of an electric vehicle charging station that connects to a vehicle to provide charge.

Open Charge Point Protocol: is a standard system for communication between EV chargers and a central management system called the network.

OCPI: Open Charge Point Interface is a standard for payment and user operability among charging stations.

Site: The location where one or more charging stations are placed.

Statewide EV Charging Infrastructure Plan: Required to be submitted to the Federal Highway Administration for approval before awarding of funds through the National Electric Vehicle Infrastructure Formula Program.

Station: The unit that connects electric vehicles to an electricity source and can collect payment.

Appendix B: Maps



Delaware's Ready and Pending AFC



Delaware's AFC and existing public DCFC/level 2 locations



Delaware's Planned EV Charging Locations

Appendix C: Full List of All Charging Stations along AFC

State EV Charging	Charger						Number of EV		
Location Unique ID	Level	Charger Type (DCFC, L2)	Route	Location	City	Zip	Connectors	EV Network (If Known)	As of
216435	Level 2	J1772	DE-1	101 Governors Place	Bear	19701	2	SemaCharge Network	7/28/2023
234946	Level 2	J1772	DE-1	214 DE-26	Bethany Beach	19930	2	Non-Networked	7/28/2023
234947	Level 2	J1772	DE-1	214 DE-26	Bethany Beach	19930	2	Non-Networked	7/28/2023
234948	Level 2	J1772	DE-1	6 S. Pennsylvania Ave.	Bethany Beach	19930	2	Non-Networked	7/28/2023
234949	Level 2	J1772	DE-1	123 Garfield Parkway	Bethany Beach	19930	2	Non-Networked	7/28/2023
122345	DCFC	TESLA	195	605 Naamans Road	Brandywine	19703	8	Tesla	7/28/2023
236011	Level 2	J1772	DE-13	106 Hertiage Shores	Bridgeville	19930	2	ChargePoint Network	7/28/2023
236012	Level 2	J1772	DE-13	201 Waterside Drive	Bridgeville	19930	2	ChargePoint Network	7/28/2023
69735	Level 2	J1772	DE-13	18657 Sussex Hwy	Bridgeville	19933	2	Non-Networked	7/28/2023
194538	Level 2	J1772COMBO	DE-1 / I95	132 Christiana Mall	Christiana	19702	1	Volta	7/28/2023
168041	DCFC	TESLA	195	2621 Philadelphia Pike	Claymont	19703	8	Tesla	7/28/2023
113676	DCFC	TESLA	DE-1	1301 Coastal Hwy	Dewey Beach	19971	2	Tesla Destination	7/28/2023
47361	Level 2	J1772	DE-13	Scarborough Rd	Dover	19901	2	ChargePoint Network	7/28/2023
143650	Level 2	J1772	DE-13	21 Jerusalem Way	Dover	19901	2	ChargePoint Network	7/28/2023
148461	Level 2	J1772	DE-13	130 West Water Street	Dover	19904	2	SemaCharge Network	7/28/2023
167664	Level 2	J1772	DE-13	100 Campus Drive	Dover	19904	2	Blink Network	7/28/2023
205693	Level 2	J1772	DE-13	900 Public Safety Blvd	Dover	19901	2	ChargePoint Network	7/28/2023
205694	Level 2	J1772	DE-13	900 Public Safety Blvd	Dover	19901	2	ChargePoint Network	7/28/2023
205978	Level 2	J1772	DE-1 / DE-13	800 South Bay Road	Dover	19901	2	SemaCharge Network	7/28/2023
117080	DCFC	TESLA	DE-13 / DE-1	2800 North Dupont Highway	Dover	19901	8	Tesla	7/28/2023
301931	DCFC	J1772COMBO	DE-13	2181 S. Dupont Highway	Dover	19901	1	EV Connect	7/28/2023
234939	Level 2	J1772	DE-13	1387 N. Dupont Highway	Dover	19901	1	Non-Networked	7/28/2023
134940	Level 2	J1772	DE-13	591 S. Dupont Highway	Dover	19901	2	Non-Networked	7/28/2023
299244	DCFC	CHADEMO J1772COMBO	DE-13	591 S. Dupont Highway	Dover	19901	1	ChargePoint Network	7/28/2023
299245	DCFC	CHADEMO J1772COMBO	DE-13	591 S. Dupont Highway	Dover	19901	1	ChargePoint Network	7/28/2023
299342	Level 2	J1772	DE-13	591 S. Dupont Highway	Dover	19901	1	ChargePoint Network	7/28/2023
234951	Level 2	J1772	DE-1	1501 Coastal Highway	Fenwick Island	19944	2	Non-Networked	7/28/2023
200977	Level 2	J1772	DE-113	21583-21619 Vaughn Rd	Georgetown	19947	2	ChargePoint Network	7/28/2023
23493	Level 2	J1772	DE-113	40 Bridgeville Road	Georgetown	19947	1	Non-Networked	7/28/2023
261139	DCFC	J1772COMBO	DE-113	22694 Dupont Blvd.	Georgetown	19947	2	EV Connect	7/28/2023
304724	DCFC	TESLA	DE-113	20983 Dupont Blvd.	Georgetown	19947	8	Tesla	7/28/2023
201168	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	7/28/2023
201169	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	7/28/2023
201209	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	7/28/2023
185561	Level 2	J1772	DE-1	36916 Crooked Hammock Way	Lewes	19958	4	SemaCharge Network	7/28/2023
189819	Level 2	J1772	DE-1	17644 Coastal Hwy	Lewes	19958	2	ChargePoint Network	7/28/2023
190783	Level 2	J1772	DE-1	17644 Coastal Hwy	Lewes	19958	2	ChargePoint Network	7/28/2023
102102	DCFC	TESLA	DE-1	17663 Dartmouth Drive	Lewes	19958	8	Tesla	7/28/2023
193101	Level 2	J1772	DE-1	DE-1	Milford	19963	2	ChargePoint Network	7/28/2023

State EV Charging	Charger						Number of EV		
Location Unique ID	Level	Charger Type (DCFC, L2)	Route	Location	City	Zip	Connectors	EV Network (If Known)	As of
193102	Level 2	J1772	DE-1	DE-1	Milford	19963	2	ChargePoint Network	7/28/2023
218244	Level 2	J1772	DE-1	955 Bay Road	Milford	19963	2	SemaCharge Network	7/28/2023
234941	Level 2	J1772	DE-1	1427 Bay Road	Milford	19963	1	Non-Networked	7/28/2023
234942	Level 2	J1772	DE-1	793 Bay Road	Milford	19963	2	Non-Networked	7/28/2023
166734	Level 2	J1772	DE-113	25939 John J. Williams Highway	Millsboro	19966	2	Volta	7/28/2023
234944	Level 2	J1772	DE-113	28380 Dupont Blvd	Millsboro	19966	1	Non-Networked	7/28/2023
195179	Level 2	J1772	195	1 Vavala Way	New Castle	19720	4	SemaCharge Network	7/28/2023
196520	DCFC	TESLA	DE-13	4000 North Dupont Highway	New Castle	19720	8	Tesla	7/28/2023
165405	DCFC	CHADEMO J1772COMBO	DE-13	4000 North Dupont Highway	New Castle	19720	6	Electrify America	7/28/2023
46556	Level 2	J1772	DE-13	114 S. Dupont Highway	New Castle	19720	1	Non-Networked	7/28/2023
62939	Level 2	J1772	195	530 John F Kennedy Memorial Hwy	Newark	19702	3	Non-Networked	7/28/2023
166731	Level 2	J1772	DE-1 / I95	132 Christiana Mall	Newark	19702	4	Volta	7/28/2023
166732	Level 2	J1772	DE-1 / 195	132 Christiana Mall	Newark	19702	4	Volta	7/28/2023
202282	Level 2	J1772	195	80 Chapman Road	Newark	19713	2	SemaCharge Network	7/28/2023
256573	DCFC	TESLA	195	274 E. Chestnut Hill Road	Newark	19713	8	Tesla	7/28/2023
166733	Level 2	J1772/CCS	DE-1 / 195	132 Christiana Mall	Newark	19702	3	Volta	7/28/2023
194538	Level 2	J1772	DE-1 / 195	132 Christiana Mall	Newark	19702	4	Volta	7/28/2023
189820	Level 2	J1772	195	468 S. College Ave.	Newark	19702	2	ChargePoint Network	7/28/2023
190786	Level 2	J1772	195	468 S. College Ave.	Newark	19702	2	ChargePoint Network	7/28/2023
190788	Level 2	J1772	195	468 S. College Ave.	Newark	19702	2	ChargePoint Network	7/28/2023
190789	Level 2	J1772	195	468 S. College Ave.	Newark	19702	2	ChargePoint Network	7/28/2023
117601	Level 2	J1772	195	10 Mopar Drive	Newark	19713	10	ChargePoint Network	7/28/2023
257002	DCFC	TESLA	195	865 Old Baltimore Pike	Newark	19702	8	Tesla Destination	7/28/2023
150603	DCFC	TESLA	DE-1	502 Rehoboth Ave	Rehoboth Beach	19971	2	Tesla Destination	7/28/2023
171469	DCFC	TESLA	DE-1	30155 Veterans Way	Rehoboth Beach	19971	8	Tesla	7/28/2023
68162	Level 2	J1772	DE-1	34980 Midway Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
68163	Level 2	J1772	DE-1	36461 Seaside Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
68808	Level 2	J1772	DE-1	19744-19798 DE-1	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
148483	Level 2	J1772	DE-1	82 Sussex Street	Rehoboth Beach	19971	1	SemaCharge Network	7/28/2023
154132	Level 2	J1772	DE-1	39415 Inlet Road	Rehoboth Beach	19971	1	SemaCharge Network	7/28/2023
171835	Level 2	J1772	DE-1	19744-19798 DE-1	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
171950	Level 2	J1772	DE-1	36461 Seaside Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
171951	Level 2	J1772	DE-1	34980 Midway Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
186103	Level 2	J1772	DE-1	20276 Bay Vista Road	Rehoboth Beach	19971	2	SemaCharge Network	7/28/2023
191034	Level 2	J1772	DE-1	123 2nd St	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
191035	Level 2	J1772	DE-1	105 2nd St	Rehoboth Beach	19971	2	ChargePoint Network	7/28/2023
191341	Level 2	J1772	DE-1	18949 Coastal Highway	Rehoboth Beach	19971	2	SemaCharge Network	7/28/2023
214243	Level 2	J1772	DE-1	20184 Phillips Street	Rehoboth Beach	19971	4	SemaCharge Network	7/28/2023
253553	Level 2	J1772	DE-1	36470 Seaside Outlet Drive	Rehoboth Beach	19971	2	Volta	7/28/2023
255609	Level 2	J1772	DE-1	35006 Warrington Road	Rehoboth Beach	19971	1	SemaCharge Network	7/28/2023
301710	DCFC	TESLA	DE-1	19791 Coastal Highway	Rehoboth Beach	19971	12	Tesla Destination	7/28/2023

State EV Charging	Charger	Charger Type (DCFC 12)	Route	Location	City	Zin	Number of EV	EV Network (If Known)	As of
113680	Level 2		DE-1	6 Christian St	Rehoboth Beach	19971	2	Tesla Destination	7/28/2023
202708	Level 2	J1772	DF-13	405 High Street	Seaford	19973	2	SemaCharge Network	7/28/2023
207549	DCFC	TESLA	DE-13	22932 Sussex Highway	Seaford	19973	8	Tesla	7/28/2023
68575	Level 2	J1772	DE-1 / DE-13	5500 DuPont Pkwy	Smyrna	19977	2	Non-Networked	7/28/2023
225471	Level 2	.11772	DE-13	22 S Main Street	Smyrna	19977	2	SemaCharge Network	7/28/2023
234950	Level 2	.11772	DE-1	1 York Beach Mall	South Bethany Beach	19930	2	Non-Networked	7/28/2023
202959	DCFC		195	1301 N Grant Ave	Wilmington	19806	1	ChargePoint Network	7/28/2023
100487	Level 2	J1772	195	800 Carr Rd	Wilmington	19809	1	Non-Networked	7/28/2023
154129	Level 2	J1772	195	800 Carr Road	Wilmington	19809	1	SemaCharge Network	7/28/2023
158229	Level 2	.11772	195	1300 N Union St	Wilmington	19806	3	Blink Network	7/28/2023
169376	Level 2	.11772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
181749	Level 2	.11772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
181750	Level 2	.11772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
189070	Level 2	J1772	195	Washington St @ 13th St	Wilmington	19801	2	ChargePoint Network	7/28/2023
189765	Level 2	.11772	195	101 West St	Wilmington	19801	2	ChargePoint Network	7/28/2023
189766	Level 2	J1772	195	101 West St	Wilmington	19801	2	ChargePoint Network	7/28/2023
190921	Level 2	J1772	195	100 South French St	Wilmington	19801	2	ChargePoint Network	7/28/2023
193100	Level 2	J1772	195	100 South French St	Wilmington	19801	2	ChargePoint Network	7/28/2023
201571	Level 2	J1772	195	501 W 11th St	Wilmington	19801	2	ChargePoint Network	7/28/2023
201813	Level 2	J1772	195	1801 N Broom St	Wilmington	19802	2	ChargePoint Network	7/28/2023
227778	DCFC	CHADEMO J1772COMBO	195	2101 Pennsylvania Ave.	Wilmington	19806	1	ChargePoint Network	7/28/2023
256762	Level 2	J1772	195	802 Delaware Ave.	Wilmington	19801	2	ChargePoint Network	7/28/2023
298580	DCFC	CHADEMO J1772COMBO	195	1600 W. Newport Pike	Wilmington	19804	4	Evgo	7/28/2023
100487	Level 2	J1772	195	800 Carr Rd	Wilmington	19809	1	Non-Networked	7/28/2023
154129	Level 2	J1772	195	800 Carr Road	Wilmington	19809	1	SemaCharge Network	7/28/2023
158229	Level 2	J1772	195	1300 N Union St	Wilmington	19806	3	Blink Network	7/28/2023
169376	Level 2	J1772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
181749	Level 2	J1772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
181750	Level 2	J1772	195	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	7/28/2023
189070	Level 2	J1772	195	Washington St @ 13th St	Wilmington	19801	2	ChargePoint Network	7/28/2023
189765	Level 2	J1772	195	101 West St	Wilmington	19801	2	ChargePoint Network	7/28/2023
189766	Level 2	J1772	195	101 West St	Wilmington	19801	2	ChargePoint Network	7/28/2023
190921	Level 2	J1772	195	100 South French St	Wilmington	19801	2	ChargePoint Network	7/28/2023
193100	Level 2	J1772	195	100 South French St	Wilmington	19801	2	ChargePoint Network	7/28/2023
201571	Level 2	J1772	195	501 W 11th St	Wilmington	19801	2	ChargePoint Network	7/28/2023
201813	Level 2	J1772	195	1801 N Broom St	Wilmington	19802	2	ChargePoint Network	7/28/2023
227778	DCFC	CHADEMO J1772COMBO	195	2101 Pennsylvania Ave.	Wilmington	19806	1	ChargePoint Network	7/28/2023
256762	Level 2	J1772	195	802 Delaware Ave.	Wilmington	19801	2	ChargePoint Network	7/28/2023
298580	DCFC	CHADEMO J1772COMBO	195	1600 W. Newport Pike	Wilmington	19804	4	Evgo	7/28/2023

