STATE OF DELAWARE

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE PLAN

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

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

Table of Contents

Tables

Appendices

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 (DelDOT) 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 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 we will be able complete parts of the 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.

Under the National Electric Vehicle Infrastructure Funding Program, Delaware will receive a total of $17.5 million over Fiscal Years 2022-2026, beginning with $2,617,339 in the first year.[2] With Delaware's Statewide EV 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.

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

[2] 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) https://www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm

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 Infrastructure Plan
- **August 1, 2022:** Delaware's NEVI Plan submitted to US DOT
- **September 2022:** US DOT approves Delaware's NEVI Plan
- **November 2022:** Request for Proposals for NEVI projects released
- **March 2023:** Request for Proposals Due
- **April 2023:** Review and select projects for funding
- **May 2023:** Initiate contracting process
- **June 2023:** Selected vendors begin site preparation and permitting
- **September 2023:** Quarterly progress reports due from vendors every 3 months
- **June 2023:** Anticipated opening date for NEVI funded stations
- **September 2023:** Quarterly progress reports will include usage reports

Concurrent with the development of this NEVI plan, the state of Delaware is developing its Statewide Electric Vehicle 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 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 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
- **January 2023:** Delaware Statewide EV Infrastructure Plan Published

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 will work 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 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.

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 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 is working 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 Infrastructure Plan Public Engagement

Delaware is in the unique position of having initiated the process of developing a Statewide EV 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 Infrastructure Plan is 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 will be an important feature of the public engagement components of the Statewide EV 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. There will also be three workshops in the fall of 2022 where the public will be able to learn about the plan and engage its creation. The advisory group for the plan will help spread the word about these public workshops in 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 will seek to engage this important audience in the workshops. The workshops will focus on disseminating information regarding the NEVI funding

opportunity, explaining the current status of EV infrastructure and opportunities for growth and receiving stakeholder feedback and input on EV charging infrastructure types and locations, equity provisions and opportunities for small businesses, among others.

The webpage for the Statewide EV Infrastructure Plan and the NEVI Formula Funding opportunity launched in June 2022: https://deldot.gov/Programs/NEVI. A virtual room for the public workshops is under development. In addition to being convenient for workshop participants, the virtual room will aid in collecting public feedback and hosting information to provide to the public about both the NEVI funding opportunity and the Statewide EV Infrastructure Plan.

3.2 Stakeholders Involved in Plan Development

In developing the Statewide EV 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 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 Infrastructure Plan are aligned with the NEVI plan goals, and public comment on those goals will help inform our NEVI program planning process.

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

Table 1: Delaware Statewide EV Infrastructure Plan Group

Organization	Organization Type
DNREC, Climate and Sustainability	State Agency
DNREC, Energy Office	State Agency
DelDOT, Transportation Resiliency and Sustainability	State Agency
Delaware Transit Corporation	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

Organization	Organization Type
Delaware Hispanic Commission	Community Organization
La Esperanza	Community Organization
First State Community Action Agency	Community Organization
Latin American Community Center	Community Organization
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 Infrastructure Plan and the NEVI Formula Funding plan, DelDOT and DNREC will 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 can be engaged during the development of these plans:

Counties and Large Municipalities:

- Wilmington
- Newark
- New Castle
- Middletown
- Georgetown
- Dover
- Lewes
- Rehoboth Beach
- Seaford
- Milford
- New Castle County
- Kent County
- Sussex County

State Public Utility Commissions and other Energy Groups

- New Castle Municipal Service Commission
- Delaware Public Service Commission
- Delaware Sustainable Energy Utility/Energize Delaware

State and Federal Land Management Agencies

- DNREC Division of Parks & Recreation
- DNREC Division of Fish & Wildlife
- US National Wildlife Refuge System
- Dover Air Force Base

Responsible Disaster Preparedness Functions in the State

- Delaware Emergency Management Agency

Port and Freight Authorities

- Port of Wilmington
- Delaware River and Bay Authority

Unions and other Labor Organizations

- IBEW Local 313
- Delaware AFL-CIO

Freight Industry Groups

- Delaware Motor Transport Association

Community Development Organizations

- First State Community Action
- Milford Housing Development Corporation
- Delaware State Housing Authority
- Reach Riverside
- Neighborhood House, Inc.
- Central Baptist Community Development Corporation

Governmental Organizations

- Lenape and Nanticoke Tribal Governments
- Delaware Prosperity Partnership
- Delaware Division of Small Business
- Delaware Department of Agriculture
- Delaware Fire Marshal and First Responders

Educational Institutions

- University of Delaware
- Delaware State University
- Wilmington University
- Delaware Technical Community College
- Delaware School Districts

Advocacy Organizations

- Sierra Club Delaware
- Citizens Climate Lobby
- Bike Delaware
- AAA Mid-Atlantic
- League of Women Voters

3.4 Public Outreach

Development of Delaware's Climate Action Plan included a robust public engagement process. Mitigation measures related to the transportation sector are a focal point of the plan, with the transportation sector making up the highest proportion of emissions in the state. Stakeholders and the public who were engaged on the plan learned about Delaware's clean transportation programs and goals that will help achieve emissions reductions. To further accomplish the transportation decarbonization goals of the Climate Action Plan, the state began the process of developing a Statewide EV Infrastructure Plan shortly after the Climate Action Plan was published.

The Statewide EV Infrastructure Plan will address both highway corridor charging needs as well as more local needs including multi-unit dwellings, townhomes, and on-street parking. Development of this plan will include three public workshops, milestone meetings with the planning group, and online participation opportunities. DelDOT also developed the *Delaware's Vehicle Electrification Future* website[3] 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] Delaware Department of Transportation, *Delaware's Vehicle Electrification Future* (Dover, DE: 2022) https://deldot.gov/Programs/NEVI/index.shtml

4 Plan Vision and Goals

The guiding principle for Delaware's Statewide EV Infrastructure Plan will be to install infrastructure in places that maximize the benefit 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.[4]

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).

Governor John Carney has announced plans to expand broadband and high-speed internet access and ensure every Delawarean has access to high-speed internet.[5] 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 Infrastructure Plan will include a timeline for building out NEVI infrastructure.

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.
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 is described in the Infrastructure Deployments and Upgrades section of this plan.

[4] 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 https://dnrec.alpha.delaware.gov/climate-plan/

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

4.1 Goals and Vision for Statewide EV Infrastructure Planning

The following goals were reviewed by the Statewide EV Infrastructure Plan advisory group (detailed above) and will be reviewed 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 Infrastructure Plan and in deployment of NEVI funds is to ensure that affordable, reliable and consistent charging reaches every Delawarean. The Statewide EV Infrastructure Plan will also help identify communities where public charging access could be a catalyst for increasing electric vehicle purchases.

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 Infrastructure Plan is an important first step in assessing the impacts of EV deployment on the grid. 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 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 will be 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. Following FHWA rulemaking, the language will be updated to meet NEVI minimum standards, and user experience standards especially including fee transparency, up time, open charge point protocol, and open charge point interface.

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.

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 do increasing temperatures. In addition, Delaware's population is growing and ageing. Understanding climatic risks and population growth are critical in planning EV infrastructure for the growing popularity of electric vehicles.

The Statewide EV 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. Delaware's Governor John Carney recently 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. According to the DMV, as of May 8, 2022, there were 10,868 EVs registered in the state of Delaware.

In 2018, DelDOT added two Ford Focus electric vehicles to their fleet as a part of a pilot program. These EVs were set to be stationed at Danner Campus in Dover, where there was electrical vehicle infrastructure available for use. At the time, Delaware already had three other electric vehicles that were a part of its fleet for the DNREC's Energy and Climate division.

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 two-thirds 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 much 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.[6]

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 2050.[7] 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.[8]

Permanent inundation because 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.[9]

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

[6] Delaware Climate Office, ***Delaware's Climate*** (Newark, DE: 2022) https://climate.udel.edu/delawares-climate/

[7] 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) https://www.dgs.udel.edu/sites/default/files/projects-docs/DE%202017%20SLR%20Technical%20Report_Mar2018.pdf

[8] 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

[9] 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.[10]

- 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 late-century, 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 Tool[11], which provides at-a-glance mapping of FEMA flood maps and sea level rise inundation, and the Climate Projections Portal[12] 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.[13]

Delaware's Office of State Planning Coordination's 2021 annual report describes recent land use trends in Delaware.[14] 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. Over the past 6 years, just under 22,000 building permits have

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

[11] Delaware Department of Natural Resources and Environmental Control, *Delaware Flood Planning Tool* (Dover, DE: 2022) https://floodplanning.dnrec.delaware.gov

[12] Delaware Department of Natural Resources and Environmental Control, *Delaware Climate Projections Portal* (Dover, DE: 2022) https://cema.udel.edu/declimateprojections

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

[14] Delaware Office of State Planning Coordination, *2021 Report on State Planning* (Dover, DE: 2021) https://stateplanning.delaware.gov/publications/documents/2021-annual-report.pdf

been approved compared to 11,565 in New Castle County and 6,877 in Kent County. Sussex County 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 two 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

Statewide Travel Patterns

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. Year-round traffic is most heavy from Delaware's capital city, Dover, up to the Delaware-Pennsylvania border. The I-95 on the northern end of Delaware serves as the passage between Philadelphia and Baltimore, likely the reason for the condensed traffic on this route. During the summer months, heavy traffic can be found on routes leading towards the coastal beaches, namely SR-1.

Public Transportation Needs

Currently, Delaware Transit Corporation (DTC), a Division of DelDOT, operates the Delaware Authority for Regional Transportation (DART). DTC has plans to reduce emissions by 50 percent by 2030. As a part of this plan, DTC has been transitioning diesel-powered buses to electric buses. By the end of 2022, 10% of DTC's fixed route buses will be all electric. Currently there are a total of 20 electric buses operating in Delaware: 10 are in New Castle, four are in Sussex, and six are in Kent. There are an additional six electric buses on delivery for New Castle and Sussex counties. In addition to electrification efforts, DTC has converted the entire paratransit fleet to propane.

Freight Analysis

Delaware is in the process of working on its Freight Analysis Plan. Thus far, the State has identified three main "emphasis areas:" growth, technology, and global disruption. Moreover, it is considering e-commerce, 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 pharmaceutical purposes 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.

Supply Chain Needs

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.

There are certain sections of State Route 1, and US Routes 13 and 113 that remain EV pending; the rest of the segments have adequate DC-Fast charging to be considered EV-Ready. Maps depicting the location and segments of these Alternative Fuel Corridors can be found in Appendix B.

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 fully built out in the first or second year of NEVI program funding.

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.

Table 2: Location and Description of Universal DC Fast Charging Stations along Delaware's AFC

State EV Charging Location Unique ID	Alt Fuel Corridor	Location	# and Type of Connectors	EV Network	kW of stations
082506, 172515	DE-13	304 N. Dupont Blvd, Smyrna, DE 19977	4 (2CCS, 2 CHAdeMO)	Chargepoint	50 kW each
080911, 172097	DE-13	6 W. Lebanon Road, Dover, DE 19901	4 (2CCS, 2 CHAdeMO)	Chargepoint	50 kW each
172396, 081354	DE-1	108 Silicato Parkway, Milford, DE 19963	4 (2CCS, 2 CHAdeMO)	Chargepoint	50 kW each
171573, 081449	DE-113	20579 Dupont Blvd, Georgetown, DE 19947	4 (2CCS, 2 CHAdeMO)	Chargepoint	50 kW each
172257, 082080	DE-13	11112 Laurel Road, Laurel, DE 19956	4 (2CCS, 2 CHAdeMO)	Chargepoint	50 kW each
165405	I95, DE-13	4000 N. Dupont Hwy, New Castle, DE 19720	6 (1CHadeMO, 11 CCS)	Electrify America	CHAdeMO: 50kW CCS: 350kW each
*202959	I95	1301 N. Grant Ave, Wilmington, DE 19806	1 CCS/CHAdeMO	Chargepoint	62.5 kW

*Station is at a local car dealership and is 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 infrastructure planning process will seek to highlight geographic areas where EV charging is needed but adequate power may not already exist. 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.[15] 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.

Currently, individual counties have the authority to pass ordinances requiring EV charging readiness for certain land use plans. For example, in New Castle County, any new residential construction, both single and multi-unit dwellings, must have the capacity for EVSE installation[16].

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. 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; this problem can get more challenging as all states work to accelerate the speed of infrastructure deployment. DelDOT and DNREC will ensure flexibility in the contracting process to address the potential for supply chain delays.

[15] 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) https://depsc.delaware.gov/wp-content/uploads/sites/54/2019/06/19-0377.06.19.19-PUBLIUC-NOTICE-EV-CHARGING-.pdf

[16] New Castle County Code, *Ordinance No.21-094* (New Castle, DE: 2021) https://www.newcastlede.gov/DocumentCenter/View/43614/21-094

7 EV Charging Infrastructure Deployment

As Delaware works to achieve the goals set in the state's Climate Action Plan, actions have been taken across the state to build the state's capacity to deploy electric vehicle charging stations quickly, effectively, and equitably.

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.

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 will soon 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 2022 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. A few of these have recently been reported as broken and out-of-service. 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.

Table 3: Goal 1 locations every 50 miles.

City/Town	Alternative Fuel Corridor	EV Ready or Pending	Station Upgrade or New?	Existing AFDC Station ID
Newark (Biden Welcome Center Rest Area)	I-95	Ready	New	N/A
Dover	US 13	Ready	Upgrade	080911, 172097
Rehoboth Beach	SR 1	Pending	New	N/A
Selbyville	US 113	Pending	New	N/A
Laurel	US 13	Pending	Upgrade	082080, 172257

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.

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

City/Town	Alternative Fuel Corridor	EV Ready or Pending	Station Upgrade or New?	Existing AFDC Station ID
Middletown	SR 1 and US 13	Ready (US 13) and Pending (SR 1)	New	N/A
Smyrna	US 13	Ready	Upgrade	082506, 172515
Milford	SR 1	Ready	Upgrade	081354, 172396
Harrington	US 13	Ready	New	N/A
Bridgeville	US 13	Ready	New	N/A
Georgetown	US 113	Pending	Upgrade	171573, 081449

Please see Appendix B for a map depicting the potential locations for new and upgraded station locations every 25-50 miles.

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 J40 Electric Vehicle Charging Infrastructure Map.[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 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 2024.

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 to be awarded in 2022 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

DNREC administers the state's rebate program for medium- and heavy-duty propane and compressed natural gas vehicles. In 2021, DNREC contracted with CalStart to lead a technical analysis of the medium- and heavy-duty 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 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. DTC is also in the process of incorporating EV charging at all transit centers, as well as park and ride facilities. This will provide charging access for those who do not have the financial or spatial ability to charge at home. As a component to their program support non-profit agencies by providing them with vehicles to support their mission. The establishment of NEVI funds in Delaware will provide more opportunities for these agencies to switch to battery electric vehicles in the future. Developing a national EV charging network will also provide the opportunities for interstate bus companies to switch to battery electric buses as well.

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 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 described 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.[17] 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.[18] 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.

[17] New Castle County Code, *Ordinance No. 21-094 (*New Castle, DE: 2021) https://www.newcastlede.gov/DocumentCenter/View/43614/21-094

[18] 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&sessionLawName=chp309

8 Implementation

8.1 Strategies for EVSE Operations & Maintenance

Per the NEVI Program Guidance and subsequent Notice of Proposed Rulemaking, the operations and maintenance requirements will be specified to ensure a consistent user experience nationwide, but some aspects may be left to the states. Rulemaking related to number of chargers, connection type, power level, payment method, technician qualifications, customers service, and data privacy will guide Delaware's operations and maintenance requirements for NEVI funded stations.

DNREC's 2022 grant for DC Fast charging through the VW Mitigation Trust included requirements for operation and maintenance. The state plans to repeat this process to solicit project proposals for NEVI funded stations. DelDOT's contracting office may make changes to this language based on specific contract requirements to meet NEVI minimum standards. The language below for Operation and Maintenance Requirements and Operations and Maintenance Plans was used by DNREC in this grant process and can be used as a starting template for the NEVI program:

Operation and Maintenance Requirements

- Each connector on each public DC fast charging station pedestal shall be operational at least 95 percent (95%) of the time based on a 24 hour 7-day week.
- The operator must provide a customer support service number that is accessible to customers during hours of operation through a toll-free telephone number clearly visible and posted on the charging stations. A customer who calls the toll-free number must get immediate assistance, including rebooting the system if necessary.
- All applicants must include an Operations and Maintenance Plan with their application. The Operation and Maintenance Plan should outline how the owners and operators will manage the installed equipment and ensure that it remains in good working order.

The Operation and Maintenance plan must include:

- Designation of the party responsible for operating and maintaining the electric vehicle charging equipment.
- Plans for inclement weather that cause access issues such as snow removal and flooding.
- A schedule for regular inspection and maintenance of each charging station and all ancillary equipment.
- A succession plan for how future Owners and Operators will manage the facility in the future.
- Repairs must be initiated within 24 hours following notice of a malfunction or other operational issue; repairs should be made in accordance with the provisions of the approved operations and maintenance plan.
- A signage plan that is adequate, robust and demonstrates how the facility will be signed and promoted.

- The signage plan should detail how signage will assist customers in locating EVSE and identify the refueling sites, emergency contact information, and other pertinent information.

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 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.

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 website 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 will be 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 will be included in the operation and maintenance section of the proposal requirements as discussed above.

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 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 potential rulemaking which would require EVITP training for NEVI installations. 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.

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

The Statewide EV 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 will adhere to the final rulemaking provided by FHWA and promote 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. 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.
49 CFR Subpart 26 and 23 CFR Subpart A §635.107	The federal DBE regulations contained within the referenced portions of the code require that all projects that are federally funded in part or whole be reviewed for potential DBE participation. All NEVI projects will be reviewed for DBE participation and shall be required to meet the requirements outlined in these portions of the regulations.
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. 42 U.S.C. 794, et seq., provides: No qualified handicapped person shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity that receives or benefits from Federal financial assistance.

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.[19] 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 work of this committee is on-going, and a report is due at the end of 2022. Any delineations of disadvantaged communities that arise from this effort will be incorporated into plans for electric vehicle infrastructure investments.

In a related effort, DelDOT 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 that the census track 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.

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

Detailed in the public engagement section above, the Statewide EV Infrastructure Plan development process includes a focus on engaging underserved and disadvantaged communities and receiving

[19] U.S. Department of Transportation, *Justice40* Initiative (Washington, DC: 2022) https://www.transportation.gov/equity-Justice40

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 is planned for early fall, 2022; a key goal for this first workshop is to ensure broad participation and feedback from disadvantaged communities.

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 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
- Electric vehicle registrations within disadvantaged communities
- Air quality factors with known public health implications including ozone, PM 2.5 and carbon monoxide

The framework for robust data collection and reporting is already in place. The state hosts an Open Data Portal, where data on EV registrations, EV charging infrastructure and EV rebates are served and updated routinely. [20] In addition, the Delaware Department of Health and Social Services

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

maintains the My Healthy Community web portal, which serves relevant environmental and public health data including air quality and asthma hospitalizations.[21]

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.[22]

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.

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

[22] 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 challenge of preparing and qualifying our workforce for this industry transition is one that Delaware is not taking lightly, instead the State is making efforts to engage with the appropriate groups and increase existing investment in meaningful training programs. Specifically, the state plans to 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 its expansion into new industries and across population segments. Delaware intends to continue these strategies through a pre-apprenticeship and registered apprenticeship pipeline integrated into 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.

There are approximately 1,000 youth in construction related pathways across the state with a growing number of high school youth engaged in work-based 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.

12 Cybersecurity

The NEVI program and other federal and state funding opportunities plan to rapidly increase the number of publicly available EV charging stations. This raises cybersecurity concerns both for grid operators and electric vehicle drivers.

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.

Robust 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 has identified includes:

- 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)

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. 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.

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. If a need arises, 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 is ready to initiate a competitive grant solicitation for the first round of NEVI funding as soon as this plan is approved by US DOT.

Over the next six months, the state will complete its Delaware Statewide Electric Vehicle Infrastructure Plan, including robust 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 "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.

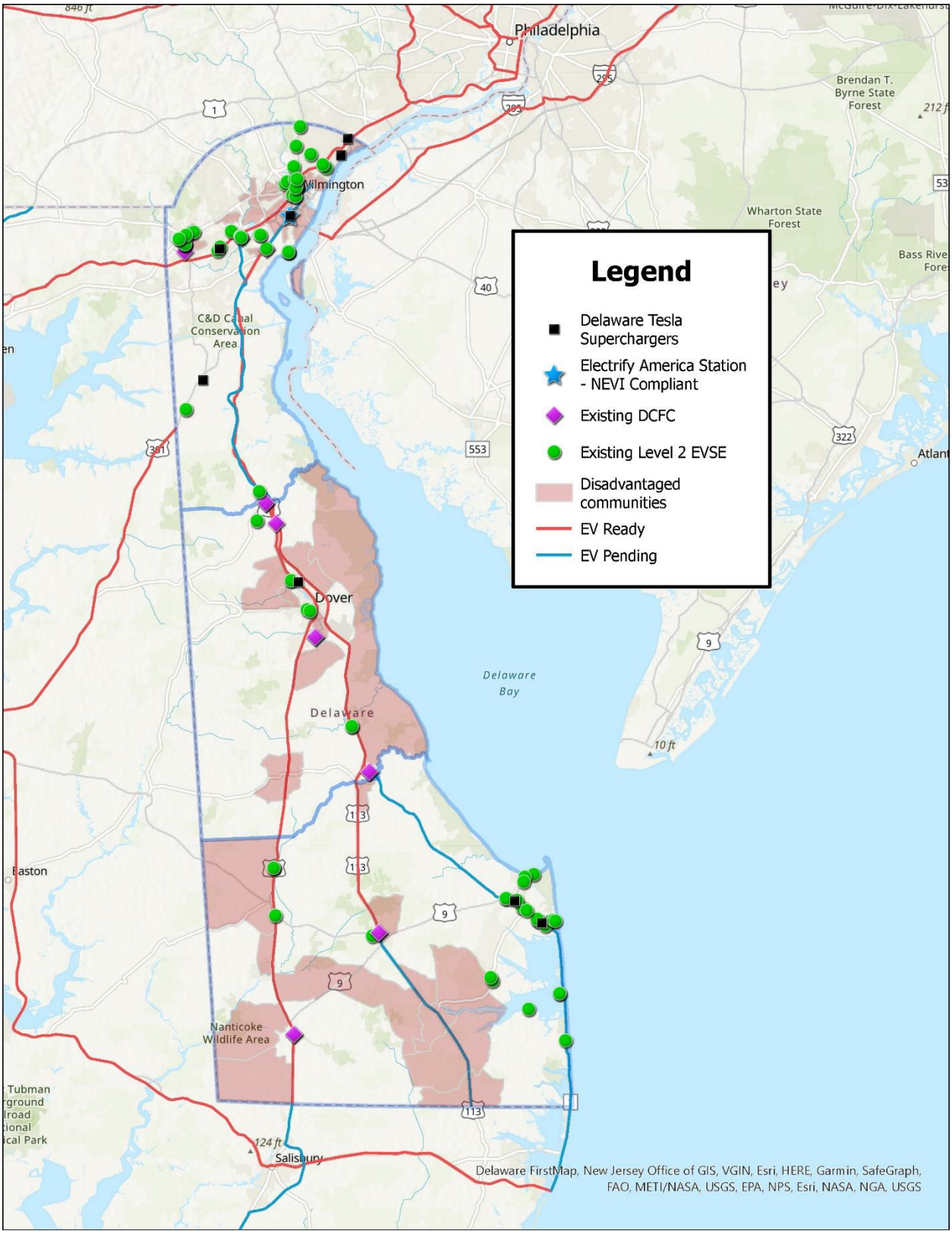
Site: The location where one or more charging stations are placed.

Statewide EV 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.

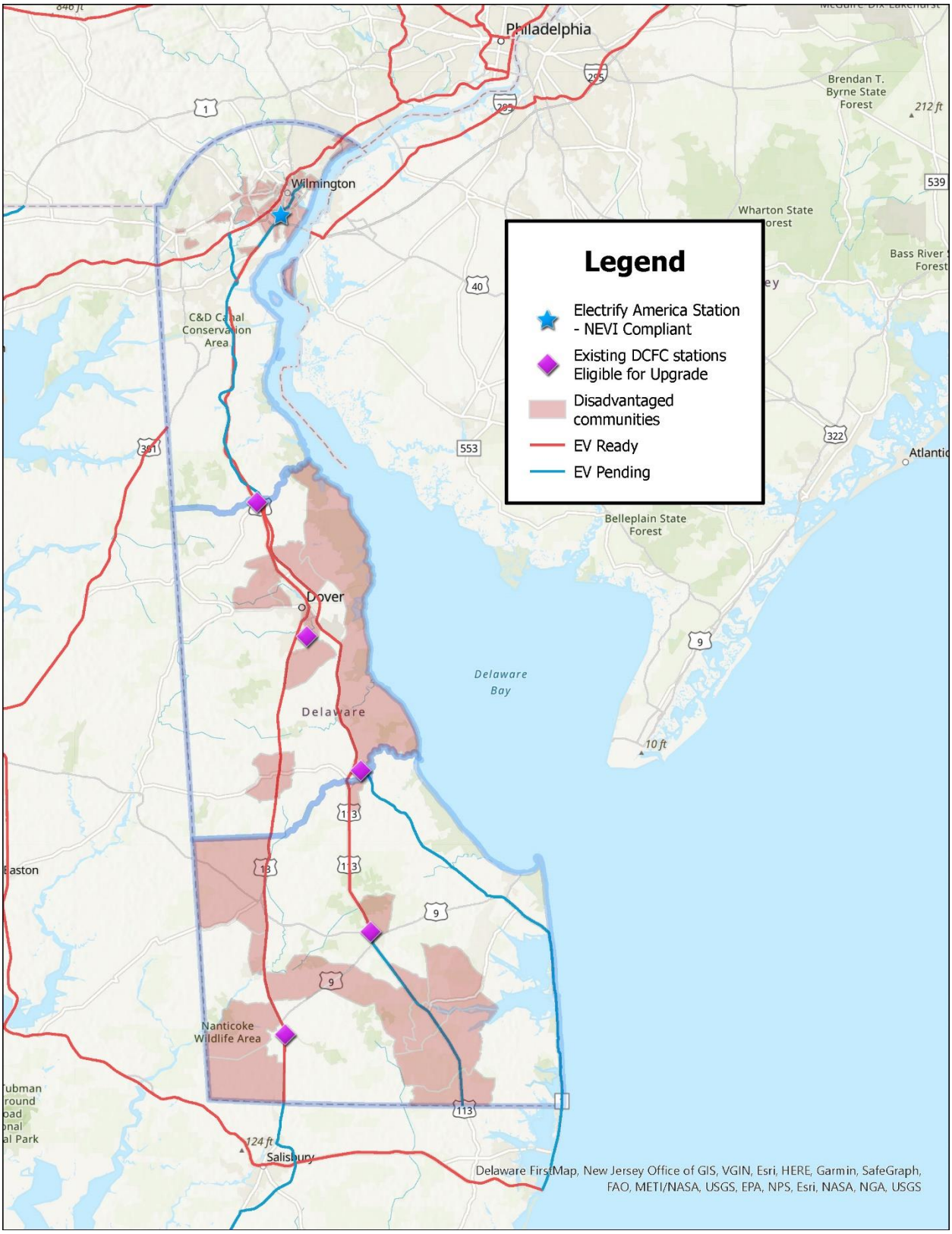
Station: The unit that connects electric vehicles to an electricity source and can collect payment.

Appendix B: Maps

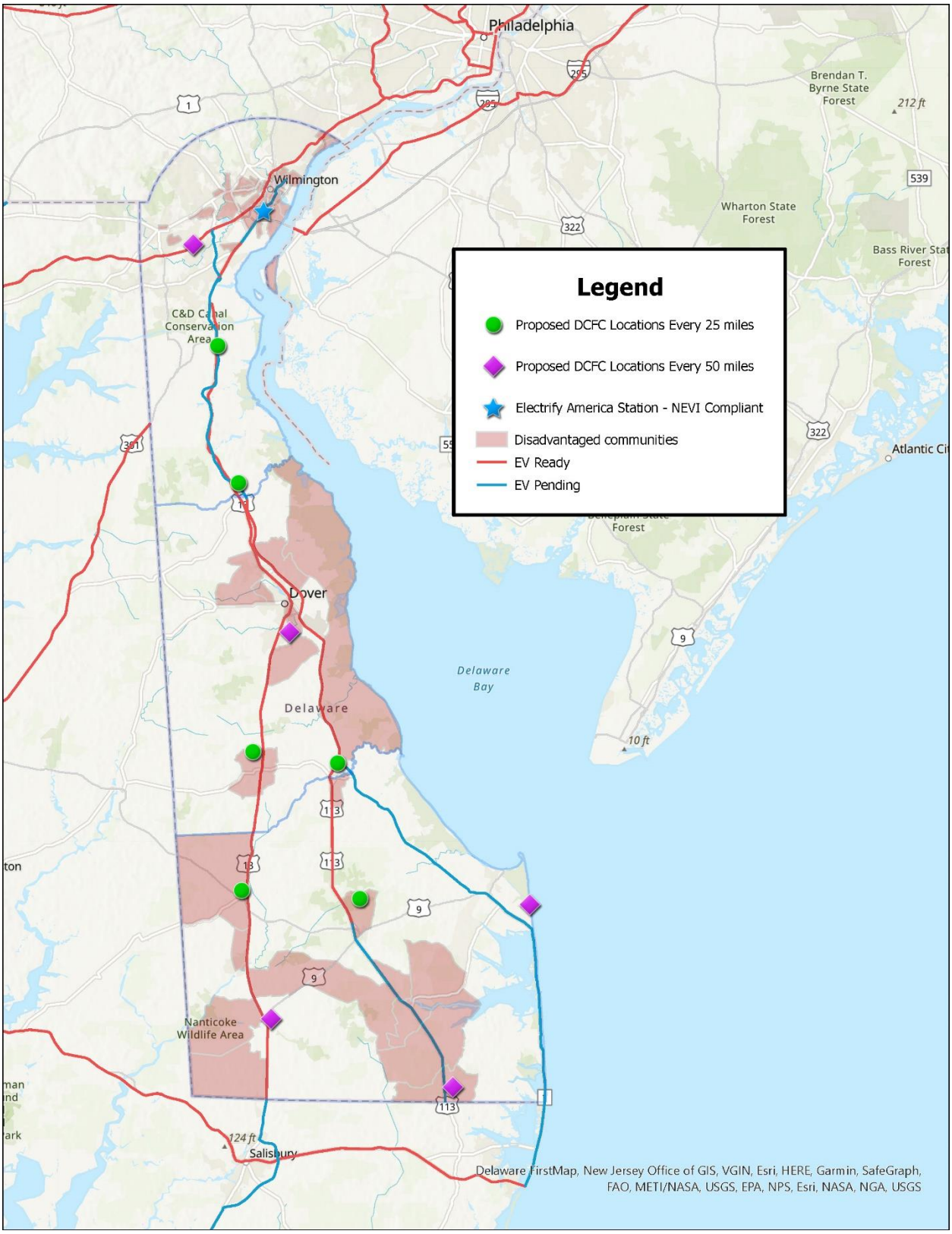
Delaware's Ready and Pending AFC



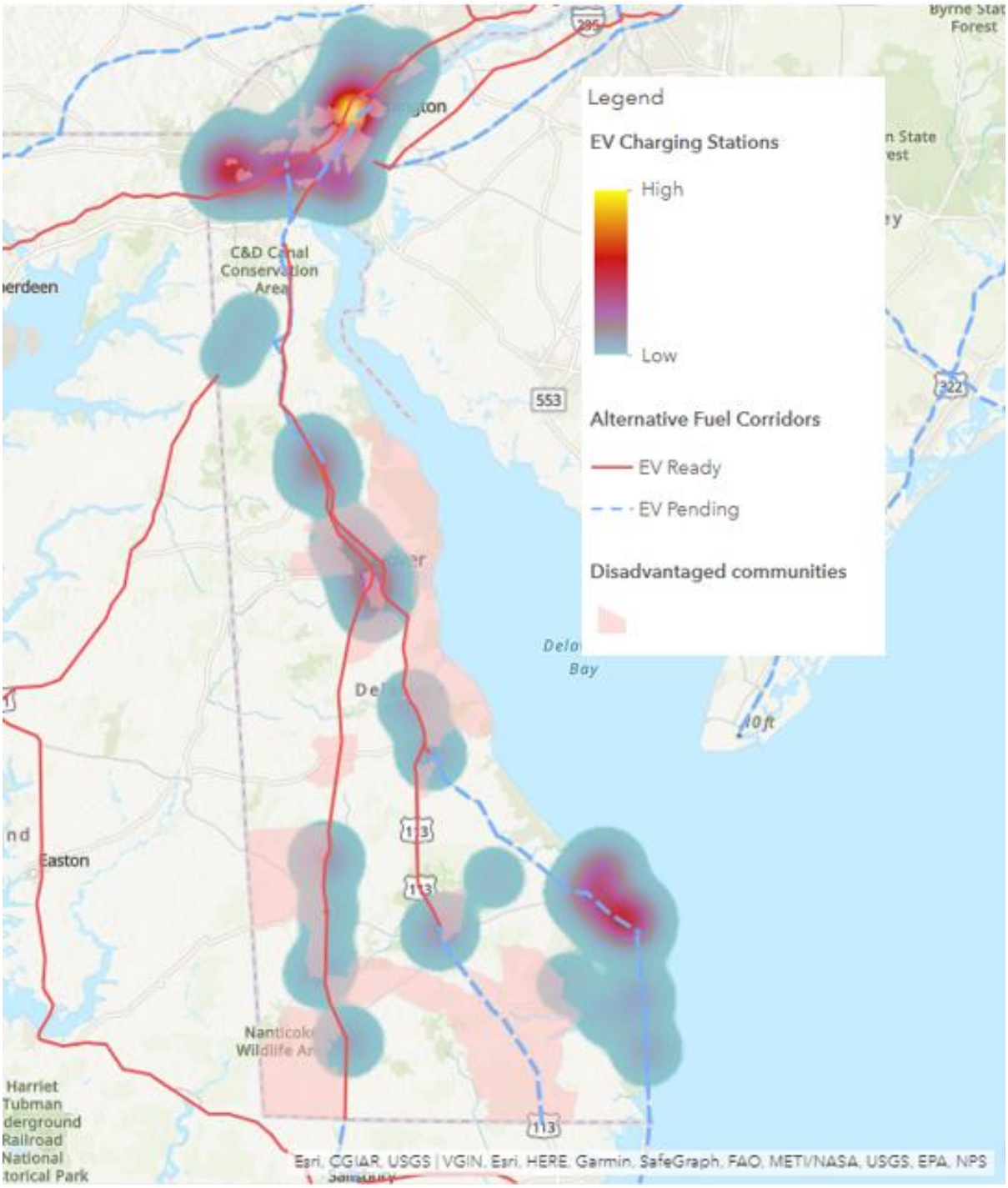
Delaware's AFC and existing public DCFC/level 2 locations



Delaware's existing EV charging locations targeted for upgrade



Delaware's Planned EV Charging Locations



Delaware's Existing EV Charging Infrastructure Density

Appendix C: Full List of All Charging Stations along AFC

State EV Charging Location Unique ID	Charger Level	Charger Type (DCFC, L2)	Route	Location	City	Zip	Number of EV Connectors	EV Network (If Known)	As of
171573	DCFC	CCS/SAE	DE-113	20579 DuPont Blvd	Georgetown	19947	2	ChargePoint Network	4/5/2022
172257	DCFC	CCS/SAE	DE-13	11112 Laurel Road	Laurel	19956	2	ChargePoint Network	4/5/2022
172369	DCFC	CCS/SAE	DE-1	108 Silicato Parkway	Milford	19963	2	ChargePoint Network	4/5/2022
71195	DCFC	CCS/SAE	I95	640 S College Ave	Newark	19713	1	ChargePoint Network	4/5/2022
80911	DCFC	CHADEMO J1772COMBO	DE-13	6 W Lebanon Rd	Dover	19901	2	ChargePoint Network	4/5/2022
172097	DCFC	CHADEMO J1772COMBO	DE-13	6 W Lebanon Rd	Dover	19901	2	ChargePoint Network	4/5/2022
81449	DCFC	CHADEMO J1772COMBO	DE-113	20579 Dupont Blvd	Georgetown	19947	2	ChargePoint Network	4/5/2022
82080	DCFC	CHADEMO J1772COMBO	DE-13	11112 Laurel Road	Laurel	19956	2	ChargePoint Network	4/5/2022
81354	DCFC	CHADEMO J1772COMBO	DE-1	108 Silicato Parkway	Milford	19963	2	ChargePoint Network	4/5/2022
165405	DCFC	CHADEMO J1772COMBO	I95	4000 N. DuPont Hwy	New Castle	19720	6	Electrify America	4/5/2022
82506	DCFC	CHADEMO J1772COMBO	DE-13	304 N DuPont Blvd	Smyrna	19977	2	ChargePoint Network	4/5/2022
172515	DCFC	CHADEMO J1772COMBO	DE-13	304 N DuPont Blvd	Smyrna	19977	2	ChargePoint Network	4/5/2022
202959	DCFC	CHADEMO J1772COMBO	I95	1301 N Grant Ave	Wilmington	19806	1	ChargePoint Network	4/5/2022
169362	Level 2	J1772	DE-1	163 Scannell Blvd	Bethany Beach	19930	2	SemaCharge Network	4/5/2022
69735	Level 2	J1772	DE-13	18657 Sussex Hwy	Bridgeville	19933	2	Non-Networked	4/5/2022
47361	Level 2	J1772	DE-13	Scarborough Rd	Dover	19901	2	ChargePoint Network	4/5/2022
143650	Level 2	J1772	DE-13	21 Jerusalem Way	Dover	19901	2	ChargePoint Network	4/5/2022
148461	Level 2	J1772	DE-13	130 West Water Street	Dover	19904	2	SemaCharge Network	4/5/2022
167664	Level 2	J1772	DE-13	100 Campus Drive	Dover	19904	2	Blink Network	4/5/2022
205693	Level 2	J1772	DE-13	900 Public Safety Blvd	Dover	19901	2	ChargePoint Network	4/5/2022
205694	Level 2	J1772	DE-13	900 Public Safety Blvd	Dover	19901	2	ChargePoint Network	4/5/2022
205978	Level 2	J1772	DE-1 / DE-13	800 South Bay Road	Dover	19901	2	SemaCharge Network	4/5/2022
200977	Level 2	J1772	DE-113	21583-21619 Vaughn Rd	Georgetown	19947	2	ChargePoint Network	4/5/2022
201168	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	4/5/2022
201169	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	4/5/2022
201209	Level 2	J1772	DE-13	14198 Sussex Hwy	Greenwood	19950	2	ChargePoint Network	4/5/2022
185561	Level 2	J1772	DE-1	36916 Crooked Hammock Way	Lewes	19958	4	SemaCharge Network	4/5/2022
189819	Level 2	J1772	DE-1	17644 Coastal Hwy	Lewes	19958	2	ChargePoint Network	4/5/2022
190783	Level 2	J1772	DE-1	17644 Coastal Hwy	Lewes	19958	2	ChargePoint Network	4/5/2022
193101	Level 2	J1772	DE-1	DE-1	Milford	19963	2	ChargePoint Network	4/5/2022
193102	Level 2	J1772	DE-1	DE-1	Milford	19963	2	ChargePoint Network	4/5/2022
195179	Level 2	J1772	I95	1 Vavala Way	New Castle	19720	4	SemaCharge Network	4/5/2022
62939	Level 2	J1772	I95	530 John F Kennedy Memorial Hwy	Newark	19702	3	Non-Networked	4/5/2022
166731	Level 2	J1772	DE-1 / I95	132 Christiana Mall	Newark	19702	4	Volta	4/5/2022
166732	Level 2	J1772	DE-1 / I95	132 Christiana Mall	Newark	19702	4	Volta	4/5/2022
202282	Level 2	J1772	I95	80 Chapman Road	Newark	19713	2	SemaCharge Network	4/5/2022
68162	Level 2	J1772	DE-1	34980 Midway Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
68163	Level 2	J1772	DE-1	36461 Seaside Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
68808	Level 2	J1772	DE-1	19744-19798 DE-1	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022

State EV Charging Location Unique ID	Charger Level	Charger Type (DCFC, L2)	Route	Location	City	Zip	Number of EV Connectors	EV Network (If Known)	As of
148483	Level 2	J1772	DE-1	82 Sussex Street	Rehoboth Beach	19971	1	SemaCharge Network	4/5/2022
154132	Level 2	J1772	DE-1	39415 Inlet Road	Rehoboth Beach	19971	1	SemaCharge Network	4/5/2022
171835	Level 2	J1772	DE-1	19744-19798 DE-1	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
171950	Level 2	J1772	DE-1	36461 Seaside Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
171951	Level 2	J1772	DE-1	34980 Midway Outlet Dr	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
186103	Level 2	J1772	DE-1	20276 Bay Vista Road	Rehoboth Beach	19971	2	SemaCharge Network	4/5/2022
191034	Level 2	J1772	DE-1	123 2nd St	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
191035	Level 2	J1772	DE-1	105 2nd St	Rehoboth Beach	19971	2	ChargePoint Network	4/5/2022
191341	Level 2	J1772	DE-1	18949 Coastal Highway	Rehoboth Beach	19971	2	SemaCharge Network	4/5/2022
202708	Level 2	J1772	DE-13	405 High Street	Seaford	19973	2	SemaCharge Network	4/5/2022
68575	Level 2	J1772	DE-1 / DE-13	5500 DuPont Pkwy	Smyrna	19977	2	Non-Networked	4/5/2022
100487	Level 2	J1772	I95	800 Carr Rd	Wilmington	19809	1	Non-Networked	4/5/2022
154129	Level 2	J1772	I95	800 Carr Road	Wilmington	19809	1	SemaCharge Network	4/5/2022
158229	Level 2	J1772	I95	1300 N Union St	Wilmington	19806	3	Blink Network	4/5/2022
169376	Level 2	J1772	I95	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	4/5/2022
181749	Level 2	J1772	I95	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	4/5/2022
181750	Level 2	J1772	I95	1 St Rocco Way	Wilmington	19802	2	ChargePoint Network	4/5/2022
189067	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189068	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189069	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189070	Level 2	J1772	I95	Washington St @ 13th St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189072	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189073	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189074	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189075	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189076	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189077	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189765	Level 2	J1772	I95	101 West St	Wilmington	19801	2	ChargePoint Network	4/5/2022
189766	Level 2	J1772	I95	101 West St	Wilmington	19801	2	ChargePoint Network	4/5/2022
190921	Level 2	J1772	I95	100 South French St	Wilmington	19801	2	ChargePoint Network	4/5/2022
193100	Level 2	J1772	I95	100 South French St	Wilmington	19801	2	ChargePoint Network	4/5/2022
196486	Level 2	J1772	I95	1200 Washington St	Wilmington	19801	2	ChargePoint Network	4/5/2022
201571	Level 2	J1772	I95	501 W 11th St	Wilmington	19801	2	ChargePoint Network	4/5/2022
201813	Level 2	J1772	I95	1801 N Broom St	Wilmington	19802	2	ChargePoint Network	4/5/2022
113680	Level 2	J1772 TESLA	DE-1	6 Christian St	Rehoboth Beach	19971	2	Tesla Destination	4/5/2022
166733	Level 2	J1772/CCS	DE-1 / I95	132 Christiana Mall	Newark	19702	3	Volta	4/5/2022
194538	Level 2	J1772COMBO	DE-1 / I95	132 Christiana Mall	Christiana	19702	1	Volta	4/5/2022
183094	Level 2	J1772COMBO	DE-1 / DE-13	450 Stadium St	Smyrna	19977	1	ChargePoint Network	4/5/2022
122345	DCFC	TESLA	I95	605 Naamans Road	Brandywine	19703	8	Tesla	4/5/2022
168041	DCFC	TESLA	I95	2621 Philadelphia Pike	Claymont	19703	8	Tesla	4/5/2022
113676	DCFC	TESLA	DE-1	1301 Coastal Hwy	Dewey Beach	19971	2	Tesla Destination	4/5/2022

State EV Charging Location Unique ID	Charger Level	Charger Type (DCFC, L2)	Route	Location	City	Zip	Number of EV Connectors	EV Network (If Known)	As of
117080	DCFC	TESLA	DE-13 / DE-1	2800 North Dupont Highway	Dover	19901	8	Tesla	4/5/2022
102102	DCFC	TESLA	DE-1	17663 Dartmouth Drive	Lewes	19958	8	Tesla	4/5/2022
196520	DCFC	TESLA	DE-13	4000 North Dupont Highway	New Castle	19720	8	Tesla	4/5/2022
150603	DCFC	TESLA	DE-1	502 Rehoboth Ave	Rehoboth	19971	2	Tesla Destination	4/5/2022
171469	DCFC	TESLA	DE-1	30155 Veterans Way	Rehoboth	19971	8	Tesla	4/5/2022
207549	DCFC	TESLA	DE-13	22929 Sussex Hwy	Seaford	19973	8	Tesla	4/5/2022