NEW JERSEY'S NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) DEPLOYMENT PLAN

August 1, 2022

GANNETT FLEMING

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ABBREVIATIONS

AA	Affirmative Action	MFR	Minimum Filing Requirement
ACE	Atlantic City Expressway	MHD, LD	Medium & Heavy-Duty, Light Duty (vehicles)
ADA	Americans with Disabilities Act	MPO	Metropolitan Planning Organization
AFC	Alternative Fuel Corridor	MUD	Multi-Unit Dwelling
AQES	Air Quality Energy and Sustainability	NAICS	North American Industry Classification System
BEV	Battery Electric Vehicle	NEVI	National Electric Vehicle Infrastructure
DAC	Disadvantaged Communities	NHFN	National Highway Freight Network
DCFC	Direct Current Fast Charger	NJAC	New Jersey Access Network
DER	Distributed Energy Resource	NJBPU	New Jersey Board of Public Utilities
EJ	Environmental Justice	NJDEP	New Jersey Department of Environmental Protection
EV	Electric Vehicle	NJDOT	New Jersey Department of Transportation
EVITP	Electric Vehicle Infrastructure Training Program	NJEDA	New Jersey Economic Development Authority
EVSE	Electric Vehicle Supply Equipment	NJTP	New Jersey Turnpike
FR	Federal Regulation	NJZIP	New Jersey Zero Emission Incentive Program
FWHA	Federal Highway Administration	OBC	Overburdened Communities
FY	Fiscal Year	OEM	Office of Energy Management
GHG	Greenhouse Gas	PEV	Plug-in Electric Vehicle
GSP	Garden State Parkway	PHFS	Primary Highway Freight System
ICE	Internal Combustion Engine	RGGI	Regional Greenhouse Gas Initiative
IOU	Investor-Owned Utilities	SBE, DBE	Small Business Enterprise, Disadvantaged Business Enterprise
IPPI	It Pay$ to Plug In (Grant program)	TCO	Total Cost of Ownership
kW	Kilowatt	VMT	Vehicle Miles Traveled
L2	Level 2 (charging station)	ZEV	Zero Emission Vehicle
LEP	Limited English Proficiency		

INTRODUCTION

New Jersey is proud to be a leader in advancing a cleaner future for all. Our policies and public law have established the vision and goals for our future: 330,000 light duty plug-in electric vehicles registered in New Jersey, 400 fast chargers for electric vehicles and over 1000 Level 2 chargers by 2025, 2 million light duty plug-in electric vehicles registered by 2035, and 85% of light duty vehicle sales shall be plug-in electric vehicles by 2040.

New Jersey has created a multi-agency task force to take on this challenge. The Department of Transportation, the Department of Environmental Protection, the Board of Public Utilities, the Economic Development Authority, and others have joined forces to leverage their expertise to achieve our common and crucial goals of clean, equitable energy, and transportation. New Jersey's National Electric Vehicle Infrastructure Deployment Plan (or Plan) supports the electrification of the transportation sector through installation of electric vehicle charging infrastructure and workforce development for all.

Our Plan is a significant step toward reducing greenhouse gas emissions by electrifying the transportation sector in New Jersey, providing access to electric vehicle infrastructure for all, including underserved and overburdened communities, embracing the emerging technology market of electric vehicles in our workforce and businesses, and establishing New Jersey as a clear leader in a cleaner, more equitable transportation future.

The NJ EV Plan proposes an initial strategy, prescribed by the National Electric Vehicle Infrastructure (NEVI) Program, to install fast chargers every 50 miles along our nominated corridors, and simultaneously proposes that all of our State's stakeholders need to be heard from, particularly those in disadvantaged communities, where energy, transportation and pollution burdens have historically been greatest. A robust outreach program is a critical part of this Plan and an immediate next step toward developing an equitable future for all New Jersey residents. New Jersey's proposed NEVI Deployment Plan is a part of and aligns with the State's broader EV Charging Strategic Plan.

MILESTONES OF STATE PLAN FOR ELECTRIC VEHICLE INFRASTRUCTURE DEVELOPMENT

This Plan establishes three phases for EV infrastructure development. Phase 1 focuses on developing EVSE along AFCs toward achieving fully built out status. Phase 2 focuses on addressing DC fast chargers on New Jersey's main corridors every 25 miles, as established by State law and recognizing NJ as the most densely populated state. Phase 3 implements EVSE flexibly and in accordance with community needs. Each phase will progress with planning, community outreach, stakeholder engagement and Justice40 initiatives. While initial focus will be on Phase 1, our Plan allows for all phases to progress simultaneously.

Looking ahead to the work that needs to be completed, the New Jersey team will continue developing the NJ EV Plan, engaging the community, and implementing all the elements identified in the NJ EV Plan in conjunction with the requirements of the program. The approach of the implementation of the program is envisioned with critical milestones defined within three phases (fiscal years mentioned are federal fiscal years):

- Phase 1: 50 and 25-mile Spacing for EVSE Chargers
    - **Milestone:** NJ submitted its Alternate Fuel Corridor (AFC) Round 6 nominations on May 13, 2022. These nominations were designated as AFCs on July 5, 2022, by the FHWA.
    - **Milestone:** NJ submits this deployment plan on August 1, 2022.

- **Milestone:** Upon approval of the deployment plan, NJ will undertake planning, outreach, and workforce training to develop a competitive process to utilize federal fiscal years 2022 through 2024 funds to fully build out the nominated corridors with four, 150 kW chargers at least every 50-miles and located less than or equal to one mile from the corridor exit.

• Phase 2: Address Gaps on Nominated Corridors

- **Milestone:** NJ estimates that the build out of the nominated corridors to "fully built out" status will be accomplished with funds from fiscal years 2023 through 2025. While accomplishing that build out, we will continue with planning and deployment strategies to achieve gap filling on nominated corridors (i.e., install at 25-mile spacing). We will incentivize locating charging stations at corridor interchanges to achieve our goal of EVSE chargers at a spacing of 25 and 50 miles. The 25-mile spacing provides opportunities to install one EVSE location at the intersection of two corridors and potentially serve both corridors which in some instances may save on installation costs.

• Phase 3: Flexible Implementation Based on Community Needs

- **Milestone:** NJ anticipates utilizing the balance of funding through FY 2026 to address NJ specific transportation electrification needs which could include community-centric charging as well as fast charging hubs near multi-unit dwellings (MUD) and in disadvantaged & overburdened communities to enable electric ride sharing and ride hailing.

An initial schedule of the proposed phases is provided below.

Table 1: Initial Schedule for Proposed Implementation Phases

Federal Fiscal Year	2022	2023	2024	2025	2026
50 and 25-Mile Spacing	✓	✓	✓		
Address Gaps		✓	✓	✓	
Flexible Implementation			✓	✓	✓

STATE AGENCY COORDINATION

As noted in the Introduction, New Jersey has created a multi-agency task force to take on the challenge of implementing this Plan. The Department of Transportation, the Department of Environmental Protection, the Board of Public Utilities, the Economic Development Authority, and others have joined forces to leverage their expertise toward achieving a convenient, reliable, affordable, and equitable charging network in NJ.

New Jersey's ambitious path requires a whole of government approach to create an EV ecosystem that can reshape transportation patterns and encourage cleaner transportation, invigorate economic development, create employment opportunities in new sectors, and reduce emissions to lessen the devastating impacts of climate change. It also needs to establish accountability and assess results in transparent and measurable ways. To this end, Governor Murphy established the Partnership to Plug In, a multi-agency partnership co-led by NJBPU, NJDEP and NJEDA; bolstered by support from Treasury, NJ TRANSIT and NJDOT; and guided by the people, communities, and businesses we serve.

This is a sector ripe for innovation, sitting at the intersection of environment, health, and the economy – especially at a time when residents are redefining their transportation choices. We are not only going to create healthier, safer communities by supporting the adoption of zero-emission transportation; we are also supporting the massive transformative growth of one of the largest sectors in the economy by promoting access to clean, equitable transportation options. To achieve our zero-emission transportation goals requires investment into an ecosystem that supports the electrification of the most used vehicles on the roadway and supports the people and businesses that will purchase plug in trucks, buses, and cars. Upgrades to the electric grid, enhancement of a workforce to support EV infrastructure and vehicles, as well as policy and regulatory framework that supports the transition from fossil fuel vehicles to zero-emission vehicles will all be achieved in New Jersey.

Creating that ecosystem takes collaboration across government, embodied by the multi-agency initiative, Partnership to Plug In. By combining the missions and strengths of NJDOT, NJDEP, NJEDA, NJBPU, and other agencies, the State continues to develop and implement action items that will achieve our 2050 goals and will be the basis for allocating federal funding. These action items are the next steps to implementing the transportation recommendations in the Energy Master Plan and Global Warming Response Act 80x50 Report. The implementation of the action items and recommendations of our shared vision puts New Jersey on the path to becoming stronger and fairer.

Development of this plan occurred through a robust collaboration among NJDOT, NJDEP, NJBPU, NJEDA and stakeholders. These discussions ensured that each agency's areas of expertise were fully understood and used to inform the content of the plan.

PUBLIC ENGAGEMENT

New Jersey has commenced engagement with diverse stakeholders on key issues to collaborate on the development and implementation of this plan. Public engagement is a key component in planning New Jersey's EVSE infrastructure. Input from stakeholders is summarized below, as is our long-term public outreach plan.

The virtual stakeholder meetings were specifically tailored to advocates representing the following areas of interest: environmental, environmental justice, workforce and labor, transportation, local government and business, Metropolitan Planning Organizations (MPOs) and Transportation Management Associations (TMAs), EVSE vendors, and utilities. These sectors provided valuable feedback toward drafting the corresponding sections of the deployment plan.

Stakeholders Involved in Plan Development and Public Outreach

The virtual stakeholder meetings began with an overview of NJ's overall strategic plan for a statewide EV ecosystem, followed by an explanation of NJ's deliberative process for nominating corridors, and the required contents of the deployment plan. Emphasis was placed on the fact that the NEVI funding is part of an overall strategy of achieving NJ's climate change goals and will be complementary to that

larger EV ecosystem. NJ specific requirements and goals, such as those in P.L. 2019, c. 362, were layered on top of NEVI formula funding goals to ensure that we are futureproofing and addressing goals holistically and simultaneously; the NEVI funding complements existing and future NJ specific incentive programs. Equity was a common theme in all the stakeholder discussions. NJ believes equity applies not just to environmental benefits but also to labor, workforce, and mobility. For example, although NEVI funding must initially be used on corridors, we requested input on how to use the funds to leverage improved access to clean mobility options (e.g., ride sharing) in communities. Additionally, we asked: How can the NEVI funding provide economic growth and/or workforce development opportunities for towns, businesses, and residents?

Input Received from Stakeholder Groups (Justice40 Opportunities are Bolded):

Best Practices

- NJ should: fund Level 2 stations; allow stacking of State and utility funds with federal funds; promote proper signage; implement standards for equipment and payment to ensure customer needs are being met.
- Challenges of FHWA process means standardization is important.
- Buy America Requirements can be a major barrier to implementation.
- NEVI funding should go towards programs already in place or being developed at the State level.
- Consider how electric vehicle infrastructure can be both incentivized and mandated in light of the Municipal Land Use Law and Uniform Construction Code, which historically have been barriers to "make ready" construction.

Outreach and Engagement

- Work with the Metropolitan Planning Organizations to help with educating the public and working with the Transportation Management Associations.
- Engage with the public on a consistent basis to provide education and transparency. An online dashboard with consistent updates would be ideal.
- Customer education programs are needed to inform consumers about the availability and benefits of EVs, vehicle rebate and tax credit programs, plans for expanding charging infrastructure, EV rates where available, and opportunities for savings and revenue available from managed charging and vehicle-grid integration (VGI) more broadly.

Grid Impacts & Utility Considerations

- Discourage Investor-Owned Utilities (IOUs) from overbuilding infrastructure upgrades.
- Encourage the use of distributed renewables, energy management software, dynamic pricing, and storage to provide alternative and more cost-effective solutions compared to massive infrastructure service upgrades when more cost effective and timely.
- Project out future grid upgrades to support the EV EcoSystem.
- Utility internal planning processes and cost recovery system (tariff based) need to be reformed to align with timing and quantity of vendor applications for charging sites, which is likely to overwhelm current processes for service feasibility studies.
- Utilities need a comparison tool for storage/renewables at sites versus service upgrades, to evaluate cost, time and rate payer impacts.

- Utilities need to develop tools/detailed mapping to help EVSE vendors determine which locations are best suited to provide the necessary load requirements for charging sites
- Streamline planning, permitting, grant-making, and regulatory processes by disseminating, adopting, and scaling up early actors' best practices and successful models.
- Utilities should build internal capacity and implement process improvements as needed to expedite EVSE installation, interconnection, and grid upgrades.
- **Federal funds should be designed to minimize the need for ratepayer funding to build grid infrastructure wherever possible.**

Workforce and Labor

- **Give Environmental Justice (EJ) groups and local community members a seat at the table in developing job training that focuses on their needs; ensure training is provided for the right type of jobs and high demand skills.**
- **Incorporate a job pipeline into the installation and maintenance of these facilities to ensure local hiring in EJ communities.**
- Identify where these clean energy jobs are throughout the State and connect openings to local employees as part of job placement programs.
- **Use NEVI funding for workforce development activities, particularly in EJ communities.**
- Connect educational institutions with companies to ensure schools are providing the right type of training, apprenticeship, and employment opportunities. Tesla has a program with local communities to provide training which could be an example to follow.
- Help community colleges develop and implement the proper curriculum for EVSE installation, operation, and maintenance training.
- **Prioritize for employment: underserved and disinvested communities, previously incarcerated people, veterans, and persons whose jobs are eliminated by the electrification process.**
- **Embrace workforce development initiatives to cultivate skills and create opportunities for workers from low-income communities, rural America and neighborhoods impacted by air pollution and provide pathways for veterans and previously incarcerated people to enter the workforce.**
- Ensure that there are sufficient trained electricians to provide prompt, affordable and timely installation, and maintenance of chargers at homes, businesses and other venues.

Equity/Local Economic Benefits

- Locate charging sites near local businesses that would benefit from additional foot traffic.
- **Diverting traffic into EJ areas by adding DCFC may be undesirable and become a traffic burden with little benefit to the local community unless additional incentives are provided to ensure access to EVs by EJ area residents.**
- **Ensure that EJ communities are receiving 40% of the benefits using clear and quantitative metrics.**
- New Jersey's goal for at least 200 DCFC charging locations by 2025 should be dramatically increased to provide sufficient access for charging in EJ areas and larger EV fleets.
- **Prioritize electrification of buses and large trucks in EJ areas since they are a major source**

of emissions in those locations.

- **Provide support not only to large, national fleet operators, but also access to chargers and vehicles for local small business.**
- **Provide bonus points to EVSE companies that train and use local businesses and employees from EJ areas.**
- **Involve housing authorities in EJ areas in the planning process.**
- **Require businesses receiving the funds to achieve diversity targets and/or provide parallel funding for training.**
- **Provide bonus points for companies that localize supply chain for their equipment to NJ.**
- Use a holistic approach for the deployment plan that takes into consideration other work that needs to be done, particularly in EJ areas.
- **Provide opportunity for local investment in infrastructure, such that local businesses may be competitive in solicitations for ownership and operation of charging station facilities.**
- **Use funding authorized under NEVI to fund key staff positions to develop community benefits plans in coordination with all stakeholders.**
- Equity as both a process and outcome should be a central focus of all community engagement work.
- Conduct community needs assessments and engage local civic leaders and community-based organizations at all levels of program development, design, implementation, and evaluation.
- **Ensure that funding for needs assessments, planning, and increasing awareness and technical capability is available to all communities that need it.**
- **Ensure that public and utility investments attract additional capital to build infrastructure in historically underserved and disinvested communities.**
- **Ensure that utilities and all stakeholders are working together to serve the needs of underserved and disinvested communities and that utilities have a robust set of low-income programs.**

<u>Site Selection</u>

- Select charging sites based on the location of nearby commercial fleets that might also be able to use them to increase utilization rates and decrease pollution burden.
- Don't dual purpose chargers for public and private fleets because that doesn't effectively use funds or decrease barriers to electrification or access to affordable transportation.
- Place chargers in areas with new commercial construction and residential development that allow for public access.
- **Consider electric rideshare as a factor in site selection. Community charging as a secondary use case for site location is important. Engage and allow local communities to propose sites that would provide multiple local benefits.**
- Site chargers in areas that allow for greater access to public transport and walking/biking access nearby.
- Prioritize high-foot-traffic locations with high public visibility.
- Recognize Main Street locations, not just big box store parking lots.
- Prioritize tourist locations.
- Prioritize chargers near multi-unit dwellings.

- Use travel demand modeling to assist with charger siting.
- Prioritize siting at nodes on more-local corridors since interstates get used like local roads in the State.
- **Use equity as a primary guiding principle in charger location**.
- Prioritize improved transportation access such as ride hailing and public transit, as well as medium and heavy-duty electrification.
- In prioritizing charging station locations, NJ will conduct a demographic analysis of the corridors, consider local environmental and environmental justice impacts, and understand the land use characteristics of the zones that are within one mile of the corridors.
- Locate charging infrastructure in areas with high-density housing and without access to a private driveway or garage.
- Consider already existing carpool areas for charging sites
- Prioritize the placement of charging infrastructure where warehouses and other truck-attracting facilities are located.
- Prioritize the placement of charging infrastructure where trucks are parking, idling, or traveling slowly on local roads and arterials.
- Prioritize the placement of charging infrastructure where residents are visiting the emergency room or being hospitalized for asthma, or children are being diagnosed with asthma at a higher rate than the State average
- Ensure that there are electric vehicle charging stations on public roads and at public locations that are accessible to residents of and businesses in rural communities.
- **Target charging locations where there is still not a viable business case for private investment.**
- **Develop programs to make it less expensive for private companies to build and maintain EV charging stations in low utilization areas.**

Vendor Selection Process

- Prioritize EVSE vendors or subcontractors that are NJ-based businesses and woman/minority owned by using a point system-based bidding process.
- Apply an objective scoring rubric in selecting vendors that includes cost-efficacy.
- Do not use a single statewide contract because redundancy is important and would be bad for consumers in many ways; use a competitive solicitation process because transparency is essential to make the program successful. Redundancy will be important in vendor selection and there is already a consumer preference model that needs to be kept in mind.

Medium & Heavy-Duty Vehicle (MHDV) Considerations

- Where possible and appropriate, support dual-purpose charging hubs that serve a wide range of vehicle types, sizes, and operations.
- Locate EVSE near known fleet operating routes or hubs to help encourage them to convert to electric.
- Recommend chargers above 150kW for MHD vehicles.
- At least 10% of funding be geared towards medium- and heavy-duty vehicles.

Future Proofing

- Don't be too prescriptive regarding futureproofing; provide maximum flexibility to EVSE vendors to determine how best to future proof since it's very site dependent and should focus on maximizing user experience and versatility.
- 350kW chargers may not be useful in the short to medium term if equipment manufacturers (OEMs) throttle back the KW with software or don't produce more vehicles that can support higher powered charging.

Cost Reduction Strategies

- Be flexible about when infrastructure equipment is purchased. If companies must wait until after award to buy equipment, then they are left to pre-buying inventory which would be very expensive and challenging to manage.
- Allow for various payment options for EV drivers.
- Encourage load management software which allows installation of more kW capacity than the current utility service allows.
- Allow for storage solutions where there is a long-term savings to rate payers and where there is a significant time savings.
- Allow for creative financing and ownership strategies.

EVSE Reliability

- Reliability is very important to effectively support substantial growth in EVs ownership rates; Use a benchmark for uptime/reliability of at least 95% but ideally 98%.
- Set a requirement that for each charger location at least one charger must be operational 99% of the time even if the NEVI minimum requirement is 97% uptime per port.

Long-term Public Outreach Plan:

Open and transparent public engagement is a critical part of our planning process. Our Plan will engage the public in the electric vehicle infrastructure buildout throughout the process and will adhere to the best practices utilized by NJ's agencies in full compliance with federal funding requirements. Public outreach will include a focus on Justice40 initiatives, disadvantaged communities, and overburdened communities. Disadvantaged transportation communities are identified by disadvantage in these categories: transportation access, health, environmental, economic, resilience, and equity. NJ's designation of overburdened communities includes and expands upon these categories. NJ views all our communities, traveling public and businesses among our critical stakeholders to hear from and to inform our planning and implementation. To meet our objectives, a variety of engagement opportunities may be utilized, including:

- Resource Portal (website)
- Public Meetings
- Stakeholder Outreach
- Surveys

Public outreach is a continuous effort and will provide insights into the public's needs throughout the NEVI funding process. NJ will listen and incorporate input received from the general public throughout the outreach process to benefit the overburdened and disadvantaged communities. We will also incorporate further NEVI guidance issued by the FHWA and Joint Office.

PLAN, VISION AND GOALS

New Jersey has established goals to achieve a cleaner environment for its residents and to do its part in addressing the global climate challenge. Establishing a vision of cleaner transportation through law and policy, NJ now has meaningful goals to achieve by 2025, 2030, 2035, and more. This EV implementation Plan is a valuable tool to integrate toward achieving those goals. Outlined below you will see that electrifying the transportation sector is a crucial step toward achieving these goals and establishing a healthier environment for all. Discussed in this section are the State climate goals, EV & EVSE adoption goals, utility participation, data collection and sharing requirements, economic development goals and deployment plan goals.

State Climate Goals

Governor Phil Murphy has set New Jersey on the critical path of achieving 100% clean energy by 2050 and reducing State greenhouse gas emissions 80% below 2006 levels by 2050. In November 2021, Governor Murphy signed Executive Order No. 274, which establishes an interim greenhouse gas reduction target of 50 percent below 2006 levels by 2030. Like states and communities around the world, New Jersey is grappling with the dual crises of climate change, which is threatening our residents and businesses with rising seas, increasingly severe storms, and more intense heat waves, and the worsening public health impacts of air pollution, which is disproportionately felt by overburdened communities and communities of color. In New Jersey, the transportation sector accounts for 42% of the State's net greenhouse gas (GHG) emissions (see Figure 1: NJ 2018 GHG Inventory) and is a major contributor to NOx, SOx, and PM2.5 emissions, making it the largest source of aggregate emissions in the State.

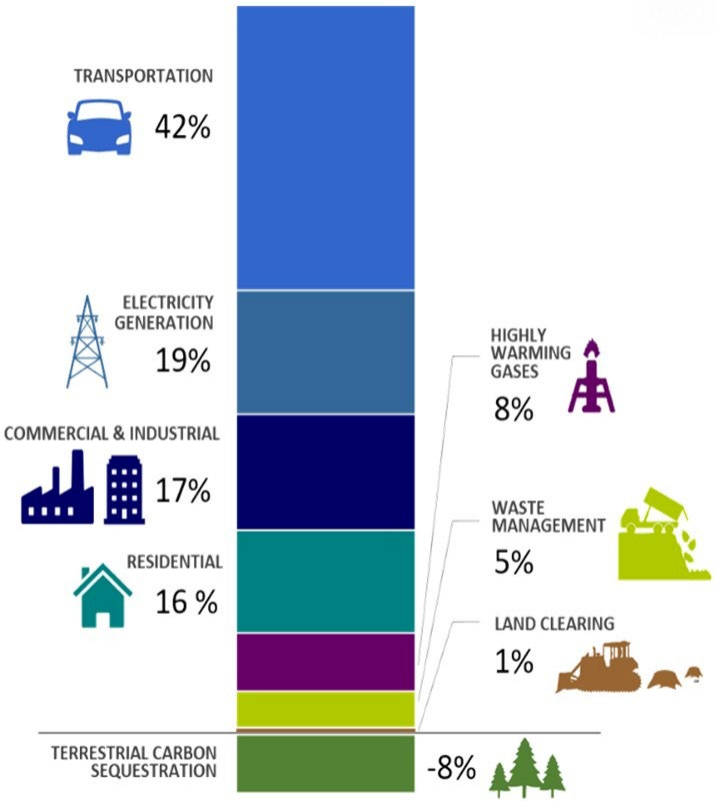


Figure 1: NJ 2018 GHG inventory

Decarbonizing our transportation infrastructure – predominantly through adoption of electric vehicles – is a critical component of achieving these goals. New Jersey has been a leader in advancing a cleaner and equitable environment including enabling the future of transportation. New Jersey's vision is captured in:

- **New Jersey 2019 Energy Master Plan**.
- **New Jersey 2020 Global Warming Response Act 80x50.**
- **Signing Executive Order No. 274 (2021), establishing an interim greenhouse gas reduction target of 50 percent below 2006 levels by 2030**.

Importantly, State action alone is neither sufficient nor sustainable; the State has worked with local government, industry, and community stakeholders to formulate strategies and programs the State can effectively implement to influence the market and drive sustained change. In developing an EV ecosystem that works for all of New Jersey, this effort will seek to balance the needed investment and incentives with an eye towards minimizing costs for New Jersey residents and businesses and ensuring that everyone has an opportunity to benefit from a cleaner and more equitable transportation system.

New Jersey has responded to climate threats by:

- **Rejoining RGGI via Executive Order 7 (EO 7, 2018).**
- **Launching his economic plan, The State of Innovation: Building a Stronger and Fairer Economy in New Jersey (2018).**
- **Signing into law P.L. 2019, c. 362.**
- **Joining, through NESCAUM, the multi-state medium and heavy-duty zero emission vehicle MOU.**
- **Creating the 2019 Energy Master Plan Establishing MFR for utilities to provide incentives for public light duty charging.**
- **Adopting the Advanced Clean Truck rule**.
- **Signing into law the Environmental Justice Act (P.L.2020, c.92).**

New Jersey's commitment to a clean transportation future and reducing greenhouse gas emissions prioritizes the electrification of the transportation sector. The National Electric Vehicle Infrastructure (NEVI) Formula Program is seen as an extension of New Jersey's vision and a synergistic catalyst to achieve our future goals. The funding will be used to further the State's existing vision to strategically deploy electric vehicle charging infrastructure and to establish an interconnected network to facilitate data collection and support the development of convenient, accessible, reliable, and equitable EV charging.

The COVID-19 pandemic has also underlined the importance of this work, hastening a changed economy, highlighting the need for resilient transportation systems, spotlighting the criticality of improving community health, and providing a real-world demonstration of fewer vehicles on the road. The pandemic has also highlighted the inextricable link between public health and economic development, a relationship that drives the Murphy Administration's efforts to reduce the public health risks from pollution and climate change while building upon New Jersey's innovation economy.

Figure 2: A whole of government approach to NJ's EV ecosystem

State EV & EVSE Adoption Goals

New Jersey's EV adoption goals have evolved over the last three and a half years as we work to better understand the impact such efforts will have on combatting climate change. Established through the EV Law, the 2019 Energy Master Plan and the 80 x 50 report, these goals will reduce transportation emissions and create a cleaner, greener New Jersey.

- 85% of light duty vehicle sales shall be electric by 2040.
- 400 fast chargers and 1000 Level 2 chargers by 2025.
    - To support plug-in electric vehicle sales, the State will need between 7,200 and 24,200 additional publicly accessible direct current fast charging ports by 2035.
- 30% of Medium- and Heavy-Duty-vehicle sales shall be zero emission by 2030 and 100% by 2050.
- 10% of new bus purchases made by NJ TRANSIT shall be electric by December 31, 2024, increasing to 50% by December 31, 2026, and 100% by December 31, 2032.
- 15% of all multifamily dwellings shall have Level 1, Level 2, and/or fast charging installed, or charger ready parking spaces, by December 31, 2025, increasing to 30% by 2030.
- 20% of all hotels shall have Level 2 charging stations by December 31, 2025, increasing to 50% by December 31, 2050.
- Convert 25% of the State's light duty fleet to electric by 2025 and 100% by 2035.

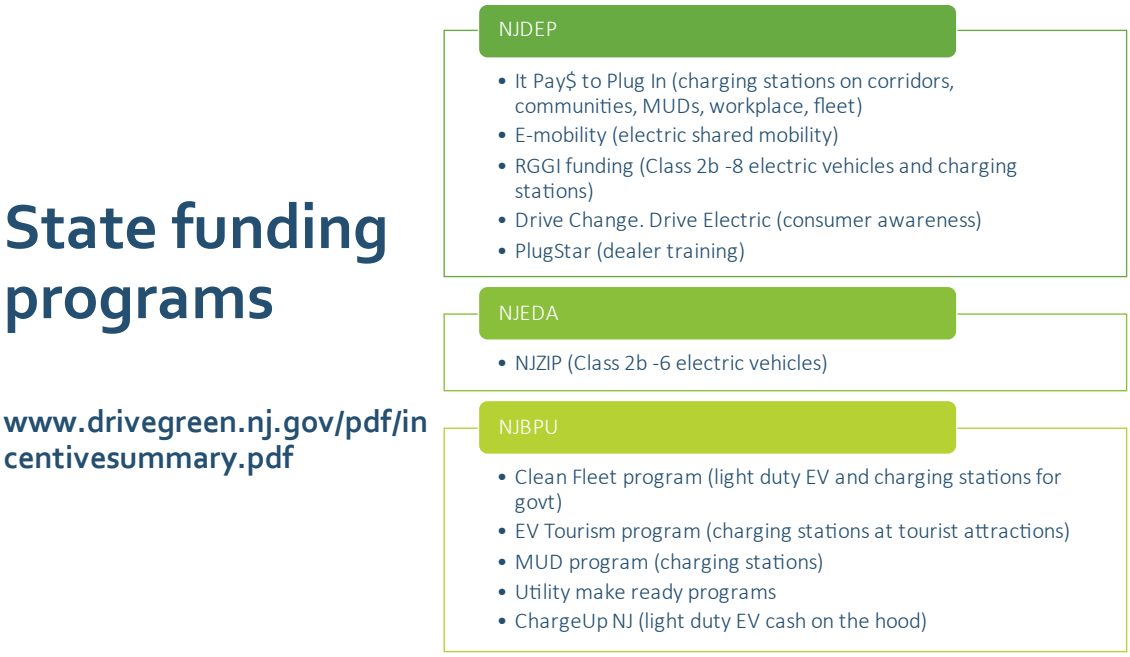


Figure 3: Summary of State Incentive Programs

The State has already implemented a wide range of **EV related funding programs** to accelerate the adoption of electrified vehicle transportation. The NEVI funding will complement these efforts. The NJDEP has three programs in place including: It Pay$ to Plug In which provides grants to offset the cost of purchasing electric vehicle charging stations for all charging levels and a wide range of applicant types, E-mobility grants for electric car-sharing and ride hailing services, and Regional Greenhouse Gas Initiative (RGGI) sourced grant funding used to replace old diesel trucks, buses, port equipment, marine vessels and trains with electric power and to offset the cost of associated charging infrastructure. Additionally, NJDEP has a leadership role in the EV consumer awareness campaign "Drive Change. Drive Electric" as well as the PlugStar EV dealer training program.

The NJEDA has implemented the New Jersey Zero Emission Incentive Program (NJZIP) which provides vouchers towards purchasing new, medium-duty zero emission vehicles to micro-and small business institutions that currently operate in the greater Newark, greater Camden, greater New Brunswick, and greater shore areas of the State.

NJBPU has robust programs in place including: the Clean Fleet program for government owned light-duty EVs and charging stations, the EV Tourism program for L2 and DCFC charging stations at tourist attractions, the Multi-Unit Dwelling Electric Vehicle Charging program that provides incentives for smart level 2 chargers and make-ready costs, and the ChargeUp NJ light duty EV cash on the hood program to reduce the cost of light duty EVs for residents. NJBPU has also approved utility make-ready incentive programs for 3 of the 4 electric utilities for a variety of use cases and applicant types.

Utility Participation in the EV Ecosystem

The NJBPU created MFR that established a shared responsibility model for the State's EV ecosystem. This model prioritizes private investment for the ownership and operation of EV charging stations and leverages utility incentives for the Make-Ready work associated with public, workplace, residential and

multi-unit dwelling chargers and State incentives for EV chargers for public, workplace, residential and multi-unit dwellings.

The filing requirements stipulate that no more than 90% of the total project costs can be covered by federal, State and utility funding. If the total funding exceeds 90%, the utility is required to reduce the amount of the incentive to 90%. New Jersey can capitalize on existing State and utility programs to meet the federal 80-20 match while continuing to prioritize private investment as part of every installation.

Data Collection and Sharing Requirements

All charging stations that receive State or utility funding for the charger or the make-ready infrastructure or participate in demand charge solutions funded with rate-payer dollars, are required to share charging data to be used in future rate setting. All stipulations with the utilities for their public charging programs included language outlining data collection requirements. Utilities and State agencies have harmonized their EVSE data collection specifications to create a New Jersey standard. In 2022 NJDEP, on behalf of itself and the NJBPU, published data sharing requirements for EVSE network vendors to become a Qualified Vendor **Home - Drive Green - Air Quality, Energy and Sustainability (AQES) | Department of Environmental Protection (nj.gov)**. Only vendors that have signed a Data Sharing Agreement and proven that they can meet all requirements thereafter will be listed as a Qualified Vendor and be able to receive State grant funding. New Jersey utilities follow a similar process and data requirement model in that only EVSE network vendors that meet the required data sharing requirements will be considered eligible for utility funding. All grantees receiving NEVI funding will also be required to comply with this standard, with possible updates to match Federal requirements. This will ensure a robust and reliable charging network.

Economic Development Goals

In his economic plan, Governor Murphy has underlined the criticality of responding to climate threats posed by emissions. As such, at the meeting point of the environment and economy, NJ will improve equitable economic opportunity inherent to the EV transition through access to training and market participation. This economic opportunity will not only benefit New Jerseyans' wallets, it will also rapidly launch an effective charging network. Safe equipment installation by local qualified electricians can be assured by providing access to electric vehicle charging station installation and maintenance education. Additionally, charging sites can be more reliably maintained by local forces trained in the appropriate testing, diagnostic, and maintenance protocols. By ensuring equitable access to financing, innovation support, and bid opportunities, we can support not only iterative improvement on business models for commercial charging depots, but also engage small business who may seek to own and manage such facilities. We can also minimize supply chain disruptions by supporting local diversification of equipment suppliers; not only supportive of Buy America requirements, but also for the job opportunity associated with such localized businesses. As such, the economic development goals are not simply a tangential benefit of this plan, but a core requirement to a successful roadmap.

Deployment Plan Goals

This NEVI deployment plan will build from the existing State goals and programs outlined above. While the NEVI funding alone is not sufficient to match the ambition of the State's zero emission goals, or to completely address all the barriers laid out by stakeholders, it is one of many interlocking efforts that must be developed and effectively deployed state-wide to serve as the foundation for New Jersey's zero emission transportation evolution.

One of the essential elements to achieving the State's zero emission goals is to eliminate the 'range anxiety' barrier to EV adoption in New Jersey. Current and potential EV drivers consistently list 'range anxiety,' as one of the major barriers to greater EV adoption. The State is focused on minimizing concerns over limited charging access by filling in gaps in coverage of public fast charging stations while also ensuring sufficient capacity to support higher EV adoption rates in future years. To address 'range anxiety' within the State, our aim is to achieve the 25-mile minimum distance requirement between public DCFC as specified in the EV Law, thereby ensuring that EV drivers with at least 250 miles of range (BEV250) can deplete 90% or more of their vehicle's battery capacity anywhere in the State and still be within range of a public DCFC. Therefore, while the primary goal of the NEVI Formula Funding is to develop a national charging network for interstate travel, the State of New Jersey's ambitious plans are aimed at ensuring sufficient public charging access for both interstate and intrastate travel.

CONTRACTING

Effective contracting is crucial to the success of our Plan. Outlined in this section you find criteria to be used in our contracting strategy and development; planning and outreach will refine the contracting approaches. Also, in this section is the description of equitable workforce training opportunities and educational outreach programs to promote EV adoption. Our contracting approach will also include programs to benefit small and disadvantaged owned businesses.

Disbursement of funds will be through multiple competitive solicitations that use a transparent scoring rubric and meet the following guiding principles:

1. Ensure NEVI corridors will be 'fully built-out' as early as possible (maximize the number of segments funded).
2. Identify priority areas/segments while allowing flexibility for site choice to ensure maximum viability of sites.
3. Avoid over-reliance on any single entity (site host, developer, EVSE manufacturer, Network, etc.) using guidance from the utility make-ready programs which have limits on site hosts.
4. Maximize coordination with utilities and promote private investment by allowing utility incentives to count towards the required 20% match (NJBPU requires that utilities ensure all federal and state funding is reported and calculated into funding as part of EV infrastructure deployment).
5. Provide incentives for workforce development and supply chain localization including small and disadvantaged business enterprises associated with emerging technology firms.
6. Provide incentives for strategies and technologies that mitigate grid impact.
7. Incentivize proposals that accommodate charging by medium and heavy-duty vehicles.
8. Encourage cost sharing beyond the required 20% and/or that contemplate financing rather than grant support.
9. Provide bonus points for sites located in overburdened communities or near high concentrations of multi-unit dwellings.
10. Ensure all FHWA requirements will be met.
11. Require proposals to include a Justice40 Compliance Plan.

In addition, the State will investigate the potential to use the funds for workforce training programs, including the Electric Vehicle Infrastructure Training Program (EVITP), in coordination with local

colleges. Further, outreach to communities and local authorities will include informative, educational, and training programs to foster an inclusive adoption of EV vehicles and infrastructure. Additionally, the State will pursue a pilot program, using NEVI funding, which coordinates with utilities to pre-qualify sites along nominated corridors based on projected grid capacity.

As part of the solicitation process, in addition to contract requirements, the State will incorporate opportunities for small and disadvantaged owned businesses by ensuring they have:

- Access to chargers that serve the commercial vehicle classes they own/operate, within reasonable distance of home or business.
- Access to education on electric vehicle-related fields.
- Access to financing to enable growth of ownership of chargers, either for own use or for a business model.
- Chargers within downtowns, to attract customers to small businesses.

EXISTING AND FUTURE CONDITIONS ANALYSIS

Outlined in this section are New Jersey's growing trends and projections for EV light duty registrations, a discussion on NJ's grid infrastructure as it relates to EV adoption, a detailed description of NJ's geography, terrain, climate and land use for consideration in the effective build out of EV infrastructure, a discussion of NJ's travel patterns, public transportation, freight and supply chain needs, an update on NJ's AFC nominations, and several known risks and challenges to the Plan implementation.

As shown in Figure 4 below, PEV registration grew from 41,097 (Dec 2020) to 64,307 (Dec 2021) – more than 56% growth in one year. From 2021 to 2025, projecting the registration growth pattern of EVs each year, the potential for over one million tons of greenhouse gas (GHG) reductions may be realized in New Jersey. Higher fossil fuel prices increase attractiveness of economical EV use. As shown in Figure 5 below, the State estimates that its goal of 100% PEV sales in 2035 equates to approximately 4.2 million registered EVs out of an estimated total of six million registered vehicles.

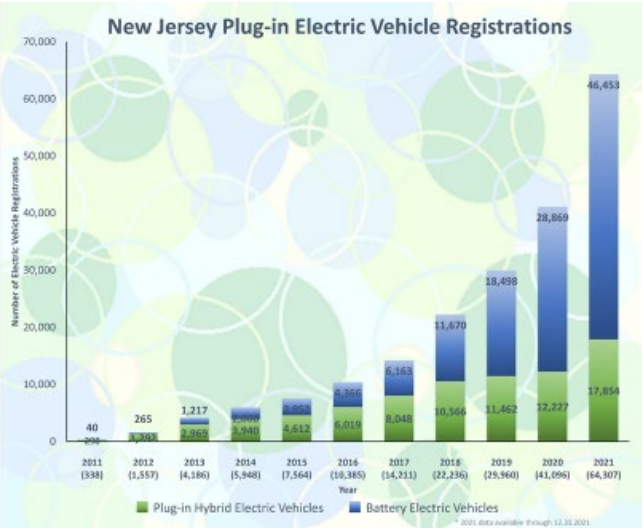


Figure 4: Historical PEV registrations

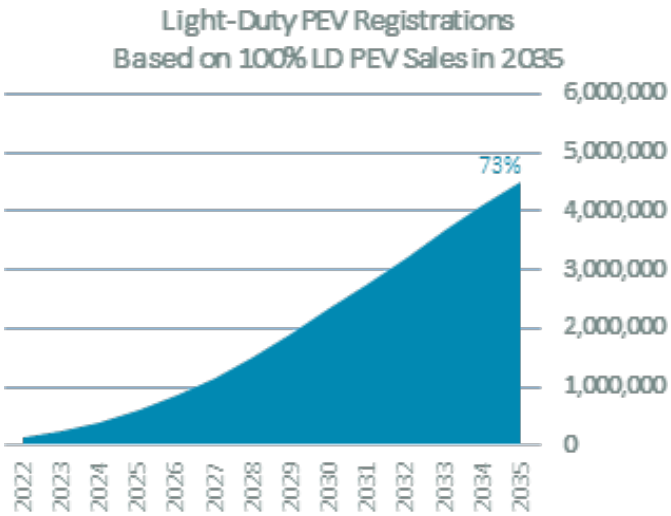


Figure 5: Projected PEV registrations

Figure 6: Map of New Jersey Utility Providers

To meet these EV registration goals, we estimate we will need between 1600 and 5600 additional publicly available fast charging sites throughout the State as depicted in Table 2 below.

Table 2: Estimated Number of DCFC Sites

Date	DCFC Sites in New Jersey
2022	126
2025 EV Law Requirement	200
2035 100% PEV Sales by 2035	1,600 to 5,600

The NJBPU has continued its work beyond light duty charging and has begun a framework outlining a more balanced public-private investment approach for utilities to cost effectively support Medium and Heavy duty (MHD) charging uses, including community charging for MHD EVs, MHD fleet charging and light-duty fleet charging. Rapid advances in power electronics, battery capacities, and communications networks are opening up more intensive charging uses, and the Board is exploring how best to address grid capacity concerns, including how to integrate renewables, storage, and managed charging into these demanding grid-edge solutions. While the NJBPU does this work, the utilities are also required to provide capacity maps to better inform where there is capacity to build EV charging stations in each utility's territory. These steps ensure that NJ will build out an efficient, convenient, accessible EV ecosystem, while also ensuring a reliable, resilient network without unfair cost allocations or stranded asset risk.

In parallel with the work on the EV Ecosystem, NJBPU is advancing a Grid Modernization to address the interconnection constraints that are deferring or delaying a more rapid integration of critical clean distributed energy resource (DER) assets. Grid Modernization aims at three critical goals: 1) providing relevant capacity and incentive information (and associated planning tools) to applicants such as future NEVI site developers, 2) assuring the highest processing efficiency to streamline evaluations, impact studies, and cost estimates, and 3) encouraging the utilities to work to identify prioritization for upgrades and resiliency measures that will do the most to continually lower barriers to future adoption. NJ anticipates requesting Integrated DER Plans from its utilities in the near future in accordance with our 2019 Energy Master Plan directive and develop methods to direct and accommodate proliferation of EV charging facilities that are aligned to NEVI goals.

Understanding the limitations on the existing grid, as well as the potential for costly grid upgrades, New Jersey is considering utilizing NEVI funding to address these obstacles through:

- A utility pre-certification program, which allows the utilities to do site analysis on specific sites along the AFCs prior to the start of the NEVI application process. The results of that analysis would be made available to potential applicants in an effort to streamline the application process.
- A matrix through which to consider not only the direct cost of upgrades versus storage but to consider cost versus time and any savings to the rate payer in the long run.
- A preference for temporary storage where appropriate to address immediate impacts on capacity but that can be addressed through long term upgrades to capacity.

State Geography, Terrain, Climate and Land Use Patterns

EVSE Vendors will be required to incorporate into their infrastructure installation, operations and maintenance plans, the coordination with local, regional, and State emergency response teams. EVSE vendors will be required to prepare emergency action plans, consistent with the New Jersey State Hazard Mitigation Plan (New Jersey Office of Emergency Management) and demonstrate the ability to implement that plan. Geography, Terrain, Climate and Land Use are necessary factors to incorporate into the EVSE's emergency action plans. As described in **Appendix E of the 2011 State Hazard Mitigation Plan**, New Jersey geography and climate zones that must be considered in each site specific EVSE implementation are as follows:

Geography

New Jersey was named for the island of Jersey in the English Channel and is also known as the "Garden State." The State is located in the Mid-Atlantic region of the U.S. It is bordered by New York State to the north, the Atlantic Ocean to the east, Delaware to the south, and Pennsylvania to the west. It is about 150 miles long and 70 miles wide, comprising 8,722 square miles. The Delaware River is the largest river in the State and defines the State's southern and western borders. New Jersey is the most densely populated State in the nation, and one of the most ethnically diverse. It is comprised of 21 counties and 564 municipalities. The largest municipality is Newark. The capital city is Trenton, which is located in Mercer County, which is also the geographic center of the State.

New Jersey is the 4th smallest State by land area and is occupied by four mainland regions: the Atlantic Coastal Plain, the Piedmont, the New England Upland, and the Appalachian Ridge and Valley Region. The largest land area, the Atlantic Coastal Plain, covers the southern 3/5 of New Jersey. More than half of this area, characterized by gently rolling hills, is less than 100 feet above sea level. In the east the landscape consists of pine forests and salt marshes. Closer to the Atlantic coast, the salt marshes are more plentiful and shallow lagoons and meadows characterize the area. Along the coast lie New Jersey's resort areas; including Atlantic City, Ocean City, and Cape May. In the west and southwest, along the Delaware River, the fertile soil supports farming.
The Piedmont lies northeast of the Atlantic Coastal Plain. About 20 miles wide, this area covers only about 1/5 of the State. The Piedmont includes the industrial cities of Elizabeth, Patterson, Jersey City, and Newark. New Jersey's major rivers (Hudson River, Passaic River, Ramapo River, Raritan River) are found in this area supporting the industrial development.

West of the Piedmont is the New England Upland. This area, sometimes called The Highlands, includes flat topped ridges of rock, and extends into Pennsylvania and New York. This area is characterized by the many beautiful lakes nestled among the ridges.

In the northwest corner of the State are the Appalachian Ridge and Valley Region. This mountainous area includes the Kittatinny Mountains that run parallel to New Jersey's northwestern border. The Delaware Water Gap is where the Delaware River has cut through the Kittatinny Mountains. The wide Appalachian Valley lies southeast of the Kittatinny Mountains. Shale and limestone formation can be found in the valley along with dairy cattle and apple orchards.

Climate Zones in New Jersey

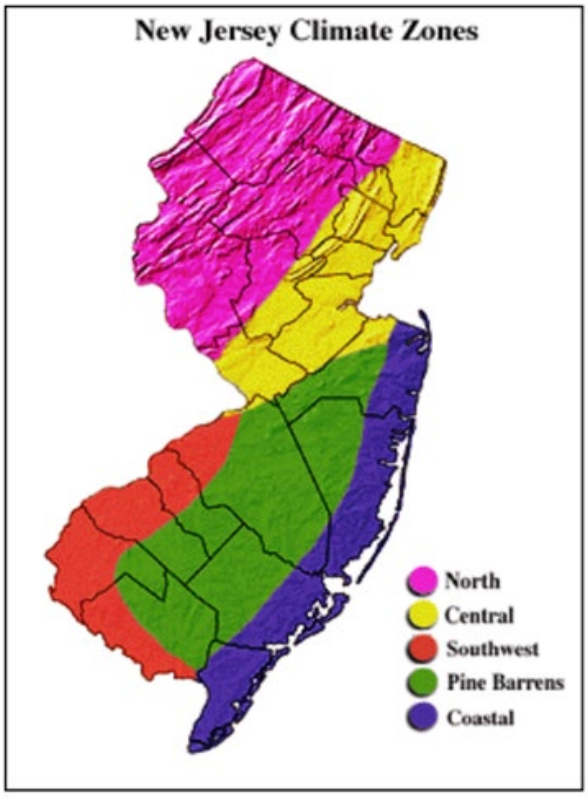


Figure 7: New Jersey Climate Zones

Northern Zone
The Northern climate zone covers about one-quarter of New Jersey and consists mainly of elevated highlands and valleys which are part of the Appalachian Uplands. Surrounded by land, this region can be characterized as having a continental type of climate with minimal influence from the Atlantic Ocean, except when the winds contain an easterly component. Prevailing winds are from the southwest in summer and from the northwest in winter.

Central Zone
The Central Zone has a northeast to southwest orientation, running from New York Harbor and the Lower Hudson River to the great bend of the Delaware River in the vicinity of Trenton. The northern edge of the Central Zone is often the boundary between freezing and non-freezing precipitation during wintertime.

Pine Barrens Zone
Scrub pine and oak forests dominate the interior southern portion of New Jersey, hence the name, Pine Barrens. Sandy soils, which are porous and not very fertile, have a major effect on the climate of this region. On clear nights, solar radiation absorbed during the day is quickly radiated back into space, resulting in surprisingly low minimum temperatures. Atlantic City Airport, which is surrounded by sandy soil, can be 15- 20 degrees cooler than the Atlantic City Marina on the bay, which is only about thirteen miles away.

Southwest Zone
The Southwest Zone lies between sea level and approximately 100 feet above sea level. The proximity to Delaware Bay adds a maritime influence on the climate of this region. The Southwest has the highest average daily temperatures in the State and without sandy soils, tends to have higher nighttime minimum temperatures than in the neighboring Pine Barrens.

Coastal Zone
In the Coastal Zone, continental and oceanic influences battle for dominance on daily to weekly basis. In autumn and early winter, when the ocean is warmer than the land surface, the Coastal Zone will experience warmer temperatures than interior regions of the State. In the spring months, ocean breezes keep temperatures along the coast cooler. Being adjacent to the Atlantic Ocean, with its high heat capacity (compared to land), seasonal temperature fluctuations tend to be more gradual and less prone to extremes.

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

New Jersey traffic may be described as follows in the four distinct regions of the State:

- Traffic in urban Northeastern New Jersey- New York area that serves major industries, warehousing, trucking, logistics and through-truck movements.
- Traffic in rural Northwestern section of New Jersey - Pennsylvania - New York area that serve local truck traffic, agricultural, retail and manufacturing with winter season recreational activities and various camping sites during summer.
- Traffic in Central and Southern New Jersey that serves pharmaceutical companies, retail, warehousing, agricultural and through-truck movements.
- Traffic serving the NJ shore, recreational and beach activities including fishing, boating and Atlantic City casinos. This region experiences high traffic typically during summertime and on summer weekends.

New Jersey is a hub of freight transportation activity serving local, regional, and national needs across multiple transportation modes. The State has more than 366 miles of roadway that are designated as part of the National Highway Freight Network (NHFN), including Primary Highway Freight System (PHFS) routes. In addition, there are an additional 66.5 miles of interstate highways that are not PHFS routes. One notable characteristic of the State's highway system is that the southernmost section of the New Jersey Turnpike (south of Exit 6) is a major limited-access highway that serves as a key roadway in the Mid-Atlantic region, but it is not part of the U.S. Interstate Highway System.

In addition to the NHFN, the State has also established a designated New Jersey Highway Freight Network that is based on the NJ Access Network defined by statute under NJAC 16:32. This State freight network includes more than 2,000 miles of state, county and local roadways that facilitate truck freight movement within New Jersey and neighboring states and provide access to the NHFN.

In addition to serving metro areas that are among the largest consumer markets in North America (New York City and Philadelphia), the state is also home to major facilities of international freight gateways such as the Port of New York and New Jersey, the Port of Philadelphia, and Newark Liberty International Airport. More than 70% of the state-to-state freight tonnage transported in New Jersey in 2015 was moved by truck, according to the most recent New Jersey Statewide Freight Plan (December 2017). That mode share is projected to remain consistent through the 2045 forecast year for the Plan.

NJ has approximately 39,000 miles of public roads which experienced 78.2 million vehicle miles of travel in the year 2019. In 2020, total vehicle miles traveled reduced to 66.3 million vehicle miles of travel because of the COVID pandemic.

Table 3: New Jersey's Annual Public Road Mileage and Vehicle Miles Travelled

New Jersey's Annual Certified
Public Road Mileage and VMT Estimates

Year	Certified Public Mileage		Annual VMT		TOTAL OFF-SYSTEM, NON_TOLL LOCAL PUBLIC ROADS	PERCENT OF LOCAL TO ALL PUBLIC ROADS
	Miles	% Increase	VMT (x1,000)	% Increase		
1995	35,646	#REF!	61,013,000	#REF!		
1996	35,921	0.77%	62,164,000	1.89%		
1997	35,921	0.00%	63,278,000	1.79%		
1998	35,921	0.00%	64,616,000	2.11%		
1999	35,943	0.06%	65,920,000	2.02%		
2000	36,020	0.21%	67,172,000	1.90%		
2001	36,175	0.43%	68,497,000	1.97%		
2002	36,557	1.06%	69,812,000	1.92%		
2003	38,951	6.55%	71,262,000	2.08%		
2004	38,123	-2.13%	72,678,435	1.99%		
2005	38,553	1.13%	74,122,740	1.99%		
2006	38,562	0.02%	75,602,815	2.00%		
2007	38,752	0.49%	76,072,935	0.62%		
2008	38,752	0.00%	73,237,615	-3.73%	28431	73.37%
2009	38,837	0.22%	72,848,890	-0.53%	28516	73.42%
2010	39,241	1.04%	73,027,659	0.25%	28922	73.70%
2011	39,213	-0.07%	73,093,771	0.09%	28905	73.71%
2012	39,272	0.15%	74,022,574	1.27%	28347	72.18%
2013	39,293	0.05%	74,529,792	0.69%	28368	72.20%
2014	39,042	-0.64%	74,856,385	0.44%	28118	72.02%
2015	39,065	0.06%	75,393,419	0.72%	28141	72.04%
2016	39,071	0.02%	76,881,997	1.97%	28151	72.05%
2017	38,896	-0.45%	77,508,602	0.82%	27978	71.93%
2018	38,919	0.06%	77,538,911	0.04%	28005	71.96%
2019	38,950	0.08%	78,205,297	0.86%	28035	71.98%
2020	38,991	0.10%	66,341,150	-15.17%	28076	72.01%

Note-Annual VMT is in Thousand

Prepared By: NJDOT; Bureau of Transportation Data and Support, Roadway Systems Section

AFC - Corridor Networks

In its May 13, 2022, submission to the Joint Office of Energy and Transportation, NJ nominated the roadways identified in Table 4 as electric vehicle corridors; with this Round 6 nomination, all of NJ's interstate roadways are now included for EV designation. All of NJ's nominations were accepted and designated as AFCs on July 5, 2022, by the FHWA. New Jersey's AFCs are I-76, I-676, I-78, I-278, I-80, I-280, I-287, I-95, I-195, I295, the Garden State Parkway, the New Jersey Turnpike, and the Atlantic City Expressway. Existing Locations of Charging Infrastructure Along AFCs are provided in Appendix A.

Table 4: Round 6 AFC nominations

NHS Segment Name	Page	Nomination Type	Extent of Change
Interstate 76	5	New Nomination	I-295 to PA State Line
Interstate 676	6	New Nomination	I-76 to PA State Line
Interstate 78	7	Extension	I-95 to NY State Line
Interstate 278	9	New Nomination	NJ 1/9 to NY State Line
Interstate 80	10	Upgrade	PA State Line to Exit 38
Interstate 280	11	New Nomination	I-80 to I-95
Interstate 95	12	Extension	PA State Line to I-195
Interstate 195	13	New Nomination	I-295 to NJ 34
Interstate 295	15	Clarification	PA State Line to US 1
NJ 444 Garden State Parkway	16	New Nomination	Cape May to NY State Line
NJ 446 Atlantic City Expressway	18	New Nomination	Atlantic City to NJ 42
NJ 700 New Jersey Turnpike	19	New Nomination	I-295 to I-95

Known Risks and Challenges

As our Plan continues to be developed, we will identify risks and challenges in the implementation of EVSE infrastructure per the NEVI Program guidance. As the Nation's most densely populated State, we have identified these challenges specific to New Jersey: Utility Grid Availability, flexibility in the Buy America provisions, establishment of Rights of Way, and Short Length Roadways / End of Corridor Conditions.

Utility Capacity

As part of the light duty utility proceedings, NJBPU requires capacity maps to be made public. There are areas with little to no existing capacity to accommodate the minimum 600 kW required. In addition, based on the dense population of the State there are certain locations along AFCs where there may not be grid capacity or site hosts within 1 mile from the exit ramp.

Buy America

Utilities and EVSE vendors have expressed concerns that if the Buy America requirement is 100% and immediate, it may delay implementation by several years. These concerns were raised to the FHWA in 2021; the response was that the Buy America provisions remained in force. As numerous states seek to simultaneously procure and install EVSE equipment, we find that this will be a significant impediment to the rapid deployment of DC fast chargers.

Rights of Way

Establishment of new rights of way will be a significant impediment to the rapid deployment of EVSE infrastructure. Per NEVI guidance and good planning practice, locations that achieve a category exclusion, and locations that do not require establishment of new rights of ways will be sought, but this may not be possible at all potential EVSE sites.

Short Length Roadways and End of Corridor Conditions

Several nominated roads terminate within New Jersey, are short length roadways, and/or cross into another state. An available guidance as of June 14, 2022, indicates an interpretation that a charging station be installed within one driving mile of the end of the roadway. An exemption from this 1-mile requirement is needed in order to reach "fully built-out" status in a reasonably cost-effective, timely manner. NJ is currently seeking seven (7) locations for exceptions, as noted in the section Discretionary Exceptions.

EV CHARGING INFRASTRUCTURE DEPLOYMENT

The overarching strategy for EV charging infrastructure installations is to deploy EVSEs along nominated AFCs toward achieving fully built out status along New Jersey's interstate roadways. This will include a focus on New Jersey's public law requirement to provide DC fast chargers every 25 miles along NJ's main roads. The intersections of main roadways may be an opportunity to achieve these goals simultaneously. Planning and outreach in all phases will focus on the needs of underserved, overburdened and disadvantaged communities. Following "fully built out" status on New Jersey's interstate highways, EVSE infrastructure installations will focus on community needs, as prescribed under current NEVI guidance. New Jersey has established public law and policies to meet the vision and goals of this plan, including:

- **Signing into law P.L. 2019, c. 362.**
- **New Jersey 2019 Energy Master Plan.**
- **New Jersey 2020 Global Warming Response Act 80x50.**
- **Signing Executive Order No. 274 (2021), establishing an interim greenhouse gas reduction target of 50 percent below 2006 levels by 2030**.
- **Adopting the Advanced Clean Truck rule.**
- **Rejoining RGGI via Executive Order 7 (EO 7, 2018).**
- **Launching the State of Innovation: Building a Stronger and Fairer Economy in New Jersey (2018).**
- **Joining, through NESCAUM, the multi-state medium and heavy-duty zero emission vehicle MOU.**
- **Signing into law the Environmental Justice Act (P.L.2020, c.92).**

Covered further in this section are discussions on minimum requirements, funding sources, EV freight considerations, public transportation, state/regional & local policy, and education and outreach.

Minimum Requirements

NJ will incorporate all minimum requirements related to NEVI formula funding once adopted by the FHWA and USDOT. Under the current draft Notice of Proposed Rule Making for NEVI minimum requirements, comments are due by August 22, 2022, to be followed by updated minimum requirements. It is expected that there will be further updates in the future.

Funding Sources

In 2020 NJBPU established minimum filing requirements (MFRs) for the utilities to fund the make ready elements for public EV charging. Each utility was required to have programs established to meet those MFRs. The underlying value of the Board's action was to ensure private investment while offering incentives in a nascent market. This is a similar approach to NJEDA's in that the State has provided incentives to encourage early adopters but requires private investment in all projects. Each utility

program must ensure that no more than 90% of the project is paid for by federal, State and utility funds. These rules were created in anticipation of federal investment and ensures that those interested in accessing the programs may stack utility, federal and State funding for projects but ensures that there is a minimum of 10% of the total project cost borne by private investment.

New Jersey also, in its RGGI Strategic Funding Plan (2020 – 2022), set aside a portion of its RGGI proceeds for the development of a green bank. NJEDA engaged with an external consultant in 2021 – 2022 to develop a roadmap for the development of such an entity. Inclusive in this design was consideration for project financing for charging infrastructure or business development as appropriate to the Fund's mission. As such, the New Jersey Green Fund, once launched, and regardless of the source of the capitalization (i.e., sources other than RGGI), could serve as an entity through which financing (rather than grant) support could flow and/or as a source of funding match – not only to meet the requirements of the NEVI monies, but also to foster the growth of a self-sustaining and profitable charging industry. While grant funding is a critical 'shot in the arm' for the growth of a reliable, nationwide network, the future state of charging is one in which businesses must find it to be profitable. As such, concessionary financing can lower the barriers to entry while requiring a reasonable return on investment, sufficient to repay loans with interest and foster a burgeoning market.

2022 Infrastructure Deployments/Upgrades

The National Electric Vehicle Infrastructure Program provides instructive guidance on initial implementation: provide four (4) direct current fast chargers every 50 miles along Alternative Fuel Corridors (AFCs), prioritizing Interstate highways. This infrastructure will be a priority in the first funded fiscal year. Concurrently, intensive planning toward 1) achieving" Fully Built Out" status and 2) engaging, attaining feedback, and incorporating same from stakeholders and affected communities are primary activities to continue in the first year of funding. These EVSE opportunities are in all of New Jersey's major utility territories (PSE&G, ACE, JCP&L, REC); each utility has been tasked with developing "Make-Ready" plans to support light duty EVSE infrastructure.

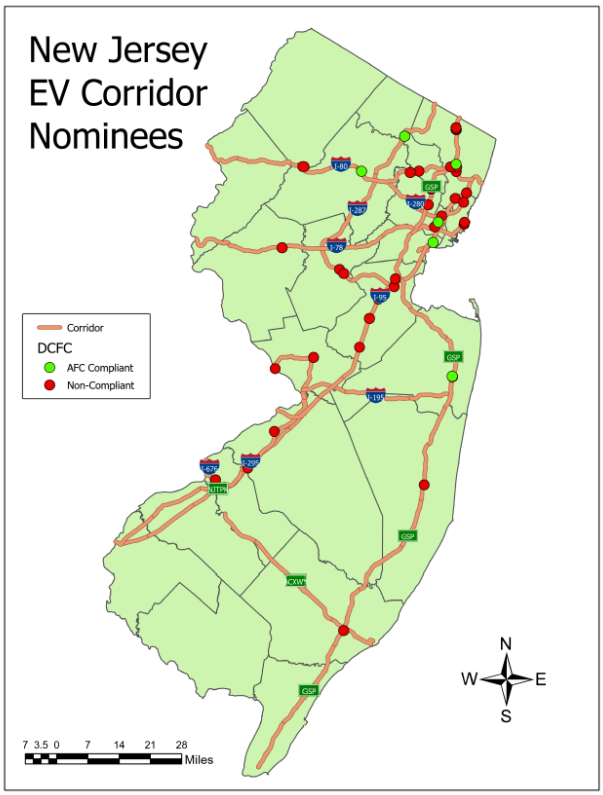


Figure 8: New Jersey EV AFC Corridors DCFC Within 1 Mile of Alternative Fuel Corridors (NEVI Compliant DCFCs and non-Compliant DCFCs as opportunities to upgrade)

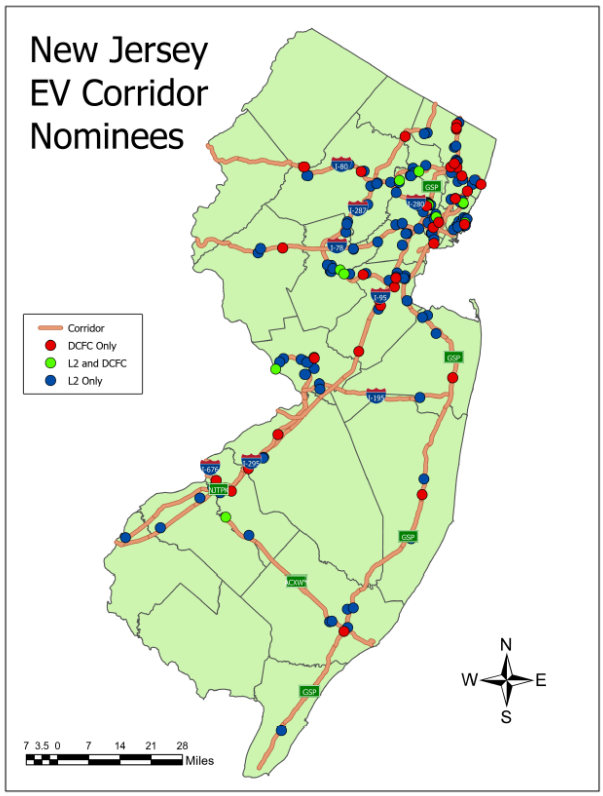


Figure 9: New Jersey EV Charger types and locations. All DCFC and L2 Chargers Within 1 Mile of Alternative Fuel Corridors

FY23-26 Infrastructure Deployments

Informed by the engagement and feedback from stakeholders and affected communities, the Fiscal Year 23 through 26 plans will be flexible and responsive. It is expected that considerations specific to disadvantaged communities, rural communities, underserved & overburdened communities, and more, will be identified in outreach sessions, which will enable our plan to define measurable success parameters toward EVSE infrastructure deployment and toward Justice40. In keeping with New Jersey Law, a continued focus will be on achieving DC fast charger installations at no more than 25-mile spacing.

Electric Vehicle Freight Considerations

EV adoption in the trucking industry is a challenging undertaking, due to the complexity of supply chains and the diverse needs of different freight intensive industries such as trucking, warehousing & distribution, manufacturing, wholesale/retail trade, agriculture, and mining. Key considerations for EV implementation for trucks include the following:

- Vehicle purchase decisions for truck fleets are driven heavily by overall life cycle costs. Users have been hesitant to adopt EV technology until the total cost of ownership (TCO) for a battery-powered truck is comparable to (if not lower than) that of a conventional vehicle. Incentive programs that reduce the upfront cost and allow more rapid returns on investments, are a means to assist users in the transition to new technologies, with the goal to support a TCO comparable or lower than an ICE.
- Battery weight is a critical factor for EV trucks, since EV batteries for Class 8 tractors can weigh thousands of pounds more than the powertrain for an internal combustion engine (ICE). The battery weight for an EV is particularly important in any industry where the cargo capacity of a truck is governed by weight instead of volume. This would include the handling of dry or liquid bulk commodities, building materials, and many types of heavy equipment. Industries that transport these cargoes may incorporate EV trucks into their operations as the battery technology advances to the point where an EV truck battery weight is comparable to a conventional ICE powertrain. These weight considerations may impact where such vehicles can travel and may delay adoption for specific uses.
- Battery weight for MHDVs is also a factor for roadway and bridge asset management. Planning needs to include impacts of increased vehicle weights and possibly establishing additional

vehicle classes. Planning also needs to include evaluation of existing and future structure capacities. The additional weight will increase the wear and tear on roadways, while the increase adoption of EVs will also reduce funding available to address such impacts, as EVs currently do not contribute to the TTF which is funded through collection of the gas tax.

- New Jersey's economy depends on a well-maintained network of roads and bridges. As more electric vehicles replace internal combustion engine vehicles, funding for maintenance and capital improvement for New Jersey's roads must be considered. Currently, revenue from the gas tax is relied upon for roadway upkeep and enhancement. Planning and future policy must consider new revenue streams to replace gas tax revenue.
- Certain types of vehicle fleets may be more conducive to EV adoption because their use cases are well aligned with battery capabilities. For example, light- and medium-duty trucks or vans engaged in "last mile" delivery trips are particularly well suited for EV use since their cargoes are lighter, and they tend to operate in defined geographic regions and routes.
- Charging infrastructure considerations are of paramount importance in truck transportation. Charging infrastructure falls into two general categories: (1) terminal-based electrification (i.e., chargers located at the home terminal of a fleet owner or at customer locations), and (2) route chargers (chargers located at third-party charging stations or at locations along public roadways). Currently, truck operators overwhelmingly prefer depot-based charging infrastructure because they have more control over the charging process and can more easily work the down time of a vehicle and driver into its business operations when the charging is done on-site.
- Battery charging time is also a major consideration for truck fleet owners. An EV truck is ideally suited for use in a company or industry where vehicles are used for deliveries within a defined geographic area, returning to a central terminal for hours of down time when they can be charged while the truck is not being used. Delivery operations for the U.S. Postal Service, UPS, FedEx, and Amazon are good examples of this. Long-haul trips where trucks travel long distances, and the drivers may be spending days on the road before returning home are the most challenging for EV adoption; this is a challenge that the NEVI funding is working to address, recognizing the criticality of our interstates. For long-haul truck drivers, who are often paid by the mile, extended battery charging time creates a financial cost associated with the driver's down time and presents a logistical challenge in incorporating charging time into the structured driving and rest schedules mandated under Federal Motor Carrier Safety Administration hours of service rules.

Class 4 through Class 8 vehicles may require high clearances, pull-through stalls, and/or DCFC power levels greater than 150kW. While most medium- and heavy-duty vehicles will primarily rely upon depot charging, large-scale freight transport with electric vehicles will require readily available and suitable fast-charging options for these vehicles. Even today's high-power 350kW DC fast chargers will not be adequate to provide regular fast charging to long-haul trucks, and new solutions are needed before the long-haul segment can electrify. However, 350kW ports can provide up to 150 miles of range per hour to even the largest trucks. By establishing a network of MHD-accessible DCFC stations that can provide top-offs, New Jersey can facilitate the electrification of its numerous return-to-base regional haul operations by providing a recharging option to reduce range anxiety as technologies - and comfort with those technologies - evolve. NJBPU is currently working through policy proposals as to the correct

role for utilities and ratepayer funding to encourage MHD EV adoption. This work will help inform future MHD charging investment.

NJ's existing freight network is shown in Figure 11 below. NJ will further address freight considerations following the release of guidance from the Joint Office later in 2022 but in the meantime, as mentioned in the contracting section, will aim to incentivize charging stations sites that can accommodate MHD use.

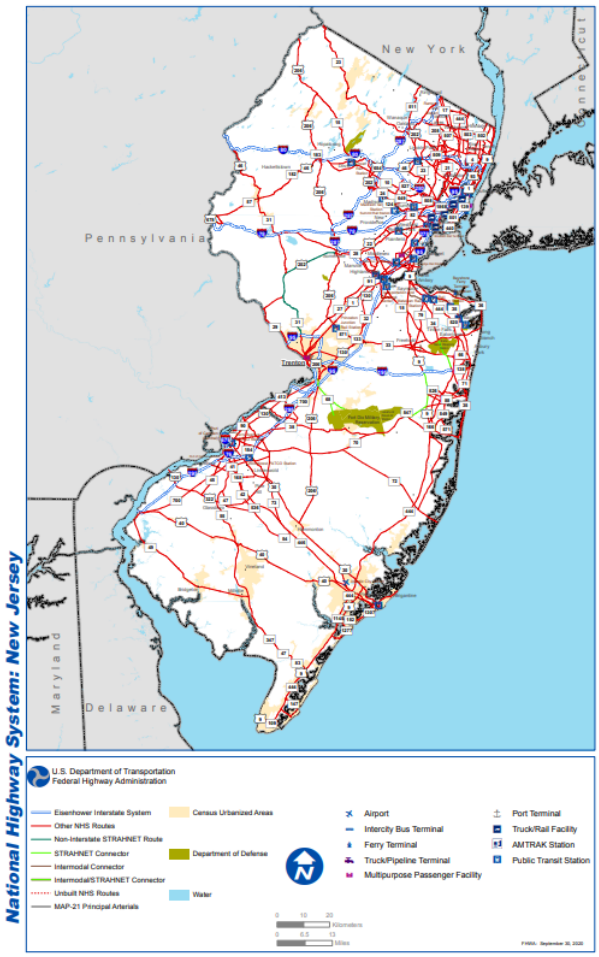


Figure 10: National Highway System in New Jersey

Figure 11: National Highway Freight Network in New Jersey

Public Transportation Considerations

Decarbonizing the transportation sector through electrification is one of seven key strategies outlined in Governor Murphy's 2020 Energy Master Plan to achieve the State's 100% clean energy goal by 2050. In New Jersey, transportation accounts for 41% of greenhouse gas (GHG) emissions, and NJ TRANSIT is critical to reducing those emissions.

The transition to zero-emissions vehicles advances one of NJ TRANSIT's five overarching goals outlined in the 10-year Strategic Plan, NJT 2030 to "Promote a More Sustainable Future for Our Planet." As

required by P.L. 2019, c. 362, by December 31, 2024, at least 10 percent of the new bus purchases made by the New Jersey Transit Corporation shall be zero-emission buses. The percentage of zero-emission bus purchases shall increase to 50 percent by December 31, 2026, and shall be at 100 percent by December 31, 2032, and thereafter. Deployment of the zero-emission buses shall be prioritized for low-income, urban, or environmental justice communities.

The Bus Garage Modernization project is part of NJ TRANSIT's 5-Year Capital Plan and aligns with the agency's commitment to achieving a 100% zero-emissions buses by 2050. The project also meets the schedule required in Governor Murphy's Zero-Emissions-Bus Initiative.

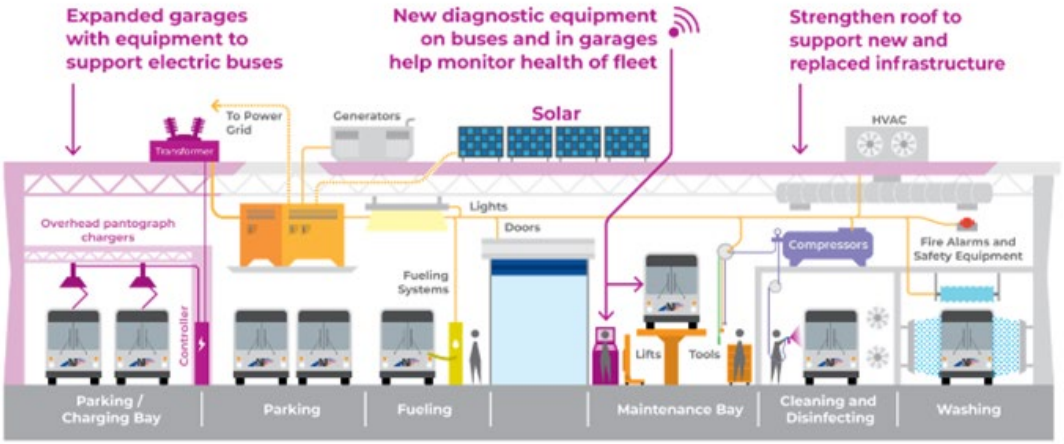


Figure 12: Proposed New Jersey Transit Bus Garage Modernization
Source: **https://njtransit.com/zero-emission-buses**

In 2020, NJDEP provided NJ Transit with $8 million in funding from the Volkswagen Settlement to purchase 8 electric buses to be operated in Camden, NJ. NJ TRANSIT's Board of Directors then approved a $9.4 million contract, plus five percent for contingencies, with New Flyer of America for the purchase of eight 40-foot battery electric buses. The contract calls for eight buses to be delivered over a one-year period with options allowing the purchase of up to 75 additional zero-emissions buses. Funding for associated charging stations was received through a federal Low/No Emission Grant.

New Jersey Transit's Camden project is a first-of-its-kind initiative designed to test electric buses under real-world conditions on specific routes. It will provide invaluable data on how the weather, passenger volume, road conditions, and other factors affect the performance of electric buses, including the travel distance between recharging. The project will also examine the infrastructure resources and work necessary to modernize NJ TRANSIT's bus garages to accommodate new charging stations, as well as the significantly greater power requirements to keep them charged.

In June 2021, the Federal Transit Administration awarded NJ TRANSIT $5.15 million to purchase four zero-emission articulated buses that will serve the Newark region on the No. 25 route based out of the Hilton garage in Maplewood. NJ TRANSIT plans to modernize the Hilton Garage in Maplewood to accommodate sixteen (16) battery-electric buses in the Newark region.

Modern, state-of-the-art infrastructure is needed to support a zero-emissions bus fleet and ensure a smooth transition. Garage modernization is a prerequisite for operation of a zero-emissions bus fleet.

Later stages of the program will include design work for five selected garages for full scale modernization to accommodate zero-emissions buses followed by design work at the remaining 11 garages.

Transitioning to a zero-emission fleet will require a major transformation of infrastructure, routes, and operations. The bus garage modernization project will involve the extensive upgrading of existing garage facilities and infrastructure, including power utilities, to ensure they can accommodate a zero-emissions fleet.

State, Regional, and Local Policy

Permit Streamlining

P.L. 2021, c. 171, signed on July 9, 2021, requires permit streamlining to encourage simplified EVSE site development. The law requires that EVSE and Make-Ready parking spaces be designated as a permitted accessory use in all zoning or use districts and establishes associated installation and parking requirements related to EVSE in New Jersey's municipalities. In addition, the State released a guide for municipalities: **Best Management Practices to Ensure Your Town is EV Ready (nj.gov)** which covers all aspects of EV charging, from the basics of charging levels to specifics such as lighting, signage, and accessibility for charging station sites.

Regional Coordination and Best Practices

The Multi-State ZEV Task Force was formed in 2013 when the governors of eight states—California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont—signed a Memorandum of Understanding committing to coordinated action to support successful implementation of state zero-emission vehicles (ZEV) programs. These programs require automakers to deliver increasing numbers of ZEVs to the states between 2017 and 2025. The decision to form a collaborative multi-state initiative sprung from the states' recognition that regulations alone would not be sufficient to achieve rapid expansion of the market for electric vehicles. The first Multi-State ZEV Action Plan **Multi-State ZEV Action Plan (nescaum.org)**, released in May 2014, guided many initiatives to support growth in the early market for ZEVs—from consumer purchase incentives, to grant programs that fund deployment of charging and hydrogen fueling stations, to a new partnership with automakers to educate consumers about the many benefits of driving electric. The Task Force states also formed important international partnerships to promote transportation electrification. The states were founding members of the International ZEV Alliance, a collaboration of 14 North American and European national and subnational governments formed in 2015 to accelerate the global transition to ZEVs. A refreshed action plan, developed by nine states, including NJ, was released in 2018 and addresses priorities for action through 2021. **Multi-State ZEV Action Plan: 2018-2021 -- Accelerating the Adoption of Zero Emission Vehicles (nescaum.org)**

NJ participated with other Northeast states in the development of **"EVSE interoperability recommendations"**. **These best practices will be incorporated into the NEVI formula funding disbursement.**

In addition, as it relates to MHD, Governor Murphy signed the **Multi-state Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding** in 2020, agreeing alongside sixteen other states and the District of Columbia, to target converting 30% of all MHDV sales to zero emission by 2030, and 100% of sales to zero emission by 2050. In each of these policies, equity in program planning,

access, and impact is cited as a core pillar to meaningfully accomplish the stated goals – and coordination of charging planning as a critical need to ensure such goals come to fruition.

Education and Outreach

NJ has actively engaged with a number of municipalities to provide education and outreach on electric vehicles and charging stations. NJDEP has been a leading member of **"Drive Change. Drive Electric"** which represents a unique public-private partnership between auto manufacturers and US Northeast states to advance consumer awareness, understanding, consideration and adoption of electric cars, including battery electric, plug-in hybrid electric, and fuel cell electric vehicles." As part of this effort, NJ has three cities, Princeton, Jersey City, and Red Bank, designated as "Destination Electric" communities where there are plenty of EV-friendly businesses and amenities within walking distance of EV charging stations. NJDEP also supports Plug In America's "Plug Star" program, which offers in-person and web-based electric vehicle dealer training, plus tools for dealers to sell EVs and to support the specific needs of EV customers. It is envisioned that education and outreach will include informational and educational community sessions to promote EV adoption and EVSE installations.

In addition, NJBPU is currently working to develop policies to define the role of utilities and rate payer funding in the technical assistance for EV fleet adoption and MHD charging planning, optimization, and implementation. NJEDA is also developing a technical assistance program to ensure that knowledge is not a barrier for business and institutions that are considering the transition to EVs.

IMPLEMENTATION

This section describes the strategies for: identifying and selecting experienced EV service providers, station owners including operation and maintenance: data collection & sharing; addressing resilience, emergency evacuation, snow removal/seasonal needs; and promoting strong labor, safety, training, and installation standards.

Strategies for EVSE Operations & Maintenance

It is expected that EVSE infrastructure installed under the NEVI Program will be operated and maintained by private-entity EVSE vendors with demonstrated experience and qualifications. All potential vendors will be required to submit as part of their proposal to install EVSE, a plan to operate and maintain the EVSE to all criteria specified in the (NEVI Minimum Requirements) FHWA's NEVI Formula Program Notice of Rule Making RIN 2125-AG10 issued June 9, 2022 (undergoing a 60-day comment period), in its most current version document, which shall be incorporated into the vendor's obligations. Operations and maintenance shall include but not be limited to level of service, availability, data collection and updated cybersecurity measures for the life of the EVSE infrastructure. The EVSE operator / maintainer shall provide a commitment to response to notices of cure, in the event of failing to meet the required operating and maintenance provisions. The EVSE vendor performing the maintenance and operations may be required to provide a maintenance bond or other document (for example, letter of credit) as commitment to ensure the appropriate level of service, maintenance, and operation. Further, the State may require or, in the case of a competitive solicitation, may provide bonus weighting to EVSE vendors who provide training to local workforce and hire locally to conduct operations or maintenance activities.

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

NJ will use existing solicitation methods to advertise, select, and award contracts to electric vehicle charging equipment service providers and/or property owners. NJ believes it is prudent to rely on the

EVSE providers and/or property owners' expertise and ability to locate suitable locations for charging stations within NJ's recommended siting zones. To incorporate small and/or disadvantaged business opportunities in the electric vehicle charging infrastructure implementation process, such solicitations will include detail such that any potential participant is provided with sufficient publicly available information to create a competitive bid and that final facility owners will be selected without bias as to years of experience, given the proposals meet all other requirements. Additionally, educational materials on charging infrastructure will be developed and shared during stakeholder outreach. The State agencies will conduct outreach but may utilize the New Jersey MPOs' networks to provide stakeholder outreach at the local level. Existing outreach materials may be used/updated to include information pertinent to electric vehicle charging and the various types, location selection criteria, the benefits to businesses with electric vehicle infrastructure on site and the funding opportunities available. The funding opportunities may include information on the NEVI funding and other electric vehicle charging infrastructure grant programs. Further, financing support may be available to assist businesses in the pursuit of new ventures.

Strategies for EVSE Data Collection & Sharing

Vendors receiving NEVI funding will be required to comply with existing NJ specific EVSE data specifications, with possible updates to match Federal requirements. All charging stations that receive State or utility funding for the charger or the make ready or participate in demand charge solutions funded with rate payer dollars, are required to share charging data to be used in future rate setting. All stipulations with the utilities for their public charging programs included language outlining data collection requirements. Utilities and State agencies have harmonized their EVSE data collection specifications to create a New Jersey standard.

Beginning Fiscal Year 2023 (July 1, 2022), funding programs for EV charging stations that are managed by New Jersey State agencies, including NJDEP and NJBPU, will require grantees to select a Pre-Qualified Network Service Provider from the list posted on the It Pay$ to Plug In website. Grants using NEVI formula funds will include the same requirements.

Network Service Providers allow charging stations to be connected via the Internet to a centralized software control system. This software control system typically offers an online portal for owners of networked charging stations to manage their equipment. Typically, the portal allows for remote diagnostics and troubleshooting, turning equipment on and off, managing access, and reporting data on usage, among other functions. Many Network Service Providers offer a system for setting user fees and collecting payments.

Pre-qualified Network Service Providers have demonstrated that they are willing and able to report detailed, anonymized charging session data to the Program. A Program Manager will be contracted to collect, store, aggregate, and analyze the data provided by participating Network Service Providers, allowing for detailed analysis of charging behavior patterns.

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

Resiliency of the electric vehicle charging network is one of the keys to the success of electric vehicle adoption in NJ as extreme weather events increase in intensity and frequency. Electric Vehicle charging stations availability and reliability are always needed but are critical during emergency events. NJDOT will require all grant and/or contract awardees to coordinate electric vehicle infrastructure operations and maintenance with local and State emergency operations plans. Considerations will be taken to

ensure that local and State emergency evacuation routes have the proper charging infrastructure to ensure timely evacuation. Coordination with the New Jersey Office of Emergency Management (NJOEM) will be critical in this effort. In conjunction with this effort, considerations to address redundant electrical systems along key points of the electric vehicle charging network will be explored. The reliability of the charging network during extreme weather events will be important to the efforts of the NJDOT and NJOEM in partnership with the service providers and station owners. The NJOEM will explore the reevaluation of emergency action plans to incorporate electric vehicle charging stations in the planning process.

Resilience planning is critical at the local level as EVSE Vendors will be required to incorporate into their infrastructure installation, operations and maintenance plans, the coordination with local, regional, and State emergency response teams. EVSE vendors will be required to prepare emergency action plans, consistent with the New Jersey State Hazard Mitigation Plan (NJOEM) and demonstrate the ability to implement that plan. Station owners in conjunction with NJDOT, NJOEM, local offices of emergency management, and other agencies will provide considerations to address routine weather events such as snow and heavy rain events. Maintenance responsibilities for charging infrastructure will be established to ensure that all charging infrastructure can be accessed by the public during a weather event. Proper site location criteria will be established, along with charging infrastructure standards, to mitigate the risks of flooding during heavy rain events. The need for clear, unobstructed access to vehicle charging infrastructure during routine weather events is crucial to gain and hold the public trust in the technology.

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

New Jersey has been a leader in promoting safe, qualified labor in the broad range of industry that thrives here. To achieve this, establishing a well-trained labor force working in a Safety Culture has been a hallmark. We see emerging technology fields as opportunities to progress this culture. The Electric Vehicle Infrastructure Training Program (EVITP) was designed to provide installers with comprehensive classroom and hands-on training in the safe and qualified installation of EVSE infrastructure. EVITP Certified Installers must pass a certification exam for proof of knowledge and skill. In the NEVI Minimum Standards guidance issued June 22, 2022 (in draft for comments by August 22, 2022) the EVITP training is noted as a minimum requirement. Following this finalized guidance, we plan to specify this training as a standard for contractors installing EVSE infrastructure. An opportunity exists to train an emerging workforce in EVSE technology, installation, maintenance, operation, and programming. A skilled and educated workforce fosters a safe, knowledgeable work environment.

It is further envisioned that EV and EVSE awareness and safety training be conducted for local and State authorities who regularly interface with EVSE installations, including first responders and emergency preparedness personnel.

CIVIL RIGHTS

NJDOT provides its employees, its contractors, the business community and the public with equal employment opportunities, environmental justice, business development opportunities for the disadvantaged and fair wage rate practices in a suitable work climate. NJDOT is responsible for meeting these goals and complying with federal and State anti-discrimination and anti-harassment policies and regulations. Through its **Title VI Nondiscrimination** office, NJDOT monitors the nondiscrimination policy with positive environmental effects in its projects. Disadvantaged business owners (minorities and women) who want to bid on federal or State projects can benefit through the **Disadvantaged Business Enterprise** (DBE) office that channels small business information for the **U.S. Department of**

Transportation. Applicants can access specific contact and application information, **forms**, instructions, and a checklist online. The Contract Compliance office ensures that contractors will follow mandated federal and State Equal Employment Opportunity provisions; the Wage Rate office ensures they will comply with federal and State wage rate laws, rules, and regulations. NJDOT **publications** about Civil Rights/Affirmative Action (AA) programs and policies are available in the Table below.

Table 5: Civil Rights/Affirmative Action Programs and Policies

Civil Rights/Affirmative Action
Your Guide to Civil Rights
Title VI - Environmental Justice (EJ) /Limited English Proficiency (LEP) /Americans with Disabilities Act (ADA)
Language Assistance Cards **2008 Limited English Proficiency (LEP) Implementation Plan** **Limited English Proficiency (LEP) Guidelines** **Title VI Assurances** **Your Guide to Title VI Environmental Justice** **New Jersey Department of Transportation's Title VI Nondiscrimination Plan** **2008 Self-Evaluation for Americans with Disabilities (ADA) Implementation Plan** **Nondiscrimination Policy Statement** **Statewide Traffic Operations LEP Plan** **Your Guide to Limited English Proficiency (LEP) under Title VI**
Wage-Rate Unit
How to File a Wage Claim

Additionally, NJDEP, in collaboration with the NJ Department of Community Affairs, developed **guidelines for accessible EVSE installations** in combination with its It Pay$ to Plug In (IPPI) program. Grantees of the IPPI program must certify compliance with the accessibility guidelines. The guidelines define the size of the ADA-compliant EVSE parking space, access aisles, reach range to the EVSE so it can be operated from a wheelchair, and required signage. If the grantee chooses to install EVSE in an ADA-compliant parking space or chooses to make an EV parking space ADA-compliant, they must do so in accordance with the guidelines. Since IPPI requires that EVSE parking spaces must be used for EV charging only, ADA-compliant EVSE parking may not be used to satisfy local ADA parking space requirements. ADA-compliant EVSE parking spaces must include signage indicating that the spaces are for EV charging *and* ADA accessibility *only*. In other words, parking spaces so designated may not be used for ADA parking of non-EVs, nor may they be used for EV charging by non-ADA permitted EVs.

EQUITY

Ensuring that benefits of the EV charging infrastructure flow to underserved, overburdened, rural and disadvantaged is crucial to the success of this Plan. Consistent with the NEVI guidance, this Plan acknowledges the combined US Department of Transportation (USDOT) and US Department of Energy (USDOE) distinct interim definitions of disadvantaged communities, facing high rates of environmental pollutions, those whose economies are highly dependent on fossil energy sources, and those with high rates of social vulnerability. The four categories and 36 indicators from the USDOE methodology along with the six categories and 22 indicators from the USDOT methodology are also acknowledged in the identification of disadvantaged communities by census tracts as provided in the Justice40 mapping tool. This section discusses utilizing tools such as the Justice40 Mapping, outreach to overburdened and disadvantaged communities and, through effective engagement, identifying and measuring benefits.

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

Interstates and Highways/Freeways are approximately 2% of NJ roadways and represent almost 40% of vehicle miles traveled in NJ, therefore they are an effective focus to electrifying the transportation sector.

Signed into law by Governor Phil Murphy on September 18, 2020, New Jersey's groundbreaking **Environmental Justice Law, N.J.S.A. 13:1D-157, (Law)** requires the NJDEP to evaluate the contributions of certain facilities to existing environmental and public health stressors in overburdened communities when reviewing certain permit applications (see Figure 14.)
An Overburdened Community (OBC), as defined by the law, is any census block group, as determined in accordance with the most recent United States Census, in which:

- At least 35 percent of the households qualify as low-income households (at or below twice the poverty threshold as determined by the United States Census Bureau); or
- At least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or
- At least 40 percent of the households have limited English proficiency (without an adult that speaks English "very well" according to the United States Census Bureau).

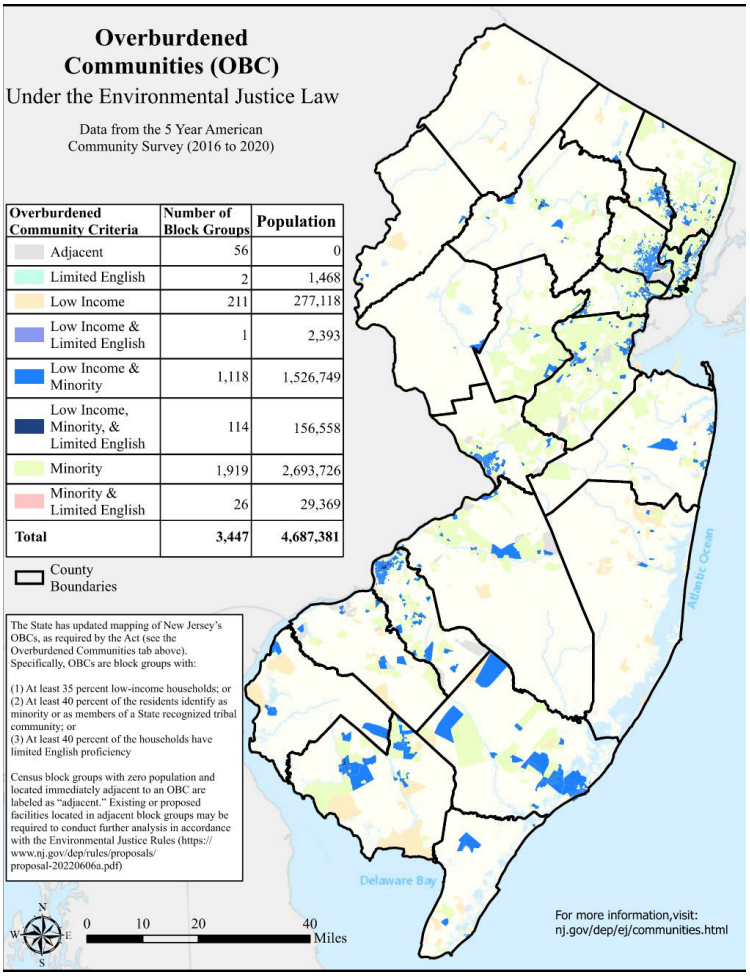


Figure 13: Map of Overburdened Communities

Census block groups with zero population and located immediately adjacent to an OBC are labeled as "adjacent." Existing or proposed facilities located in adjacent block groups may be required to conduct further analysis in accordance with the **Environmental Justice Rules**.

NJ has 3447 block groups that meet the definition of OBC, encompassing 1462 census tracts, 348 municipalities, and a population of 4,687,381 people as shown in Figure 13.
In comparison, the Justice40 tool has identified 779 Disadvantaged Communities (census tracts). The vast majority are adjacent to or within a few miles of the designated AFCs.

Overlaying Justice40 communities with NJ's overburdened community designations reveals some overlap but generally, NJ's definition is more expansive as shown in Figure 15.

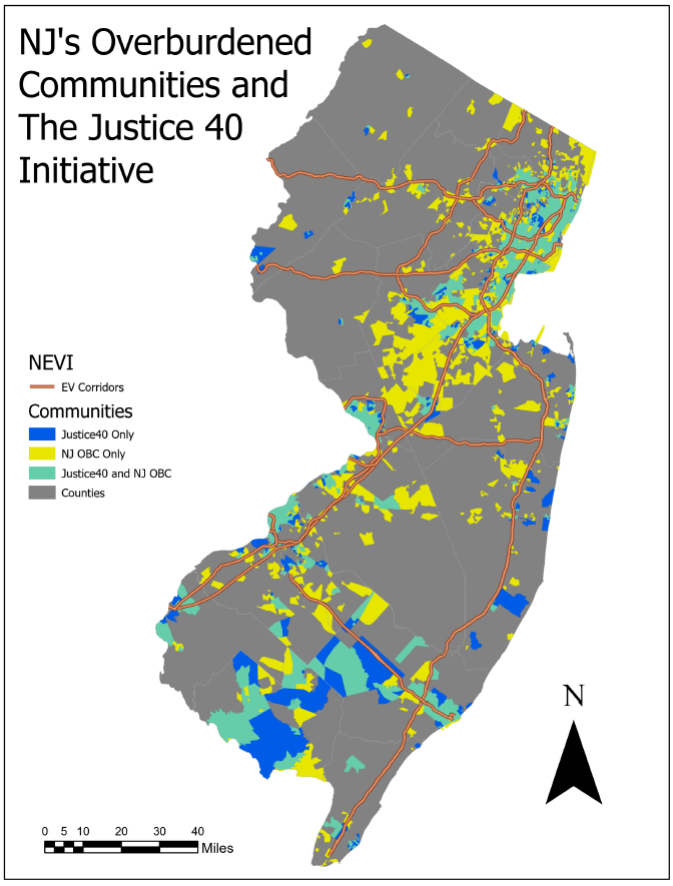


Figure 15: Map of Overburdened Communities and the Justice 40 Initiative

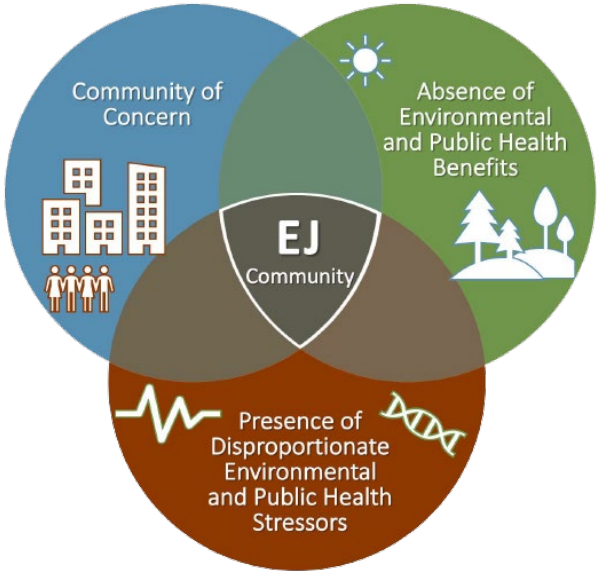


Figure 14: EJ Communities

EJMAP tool allows users to visualize where OBCs, in accordance with the New Jersey Environmental Justice Law, N.J.S.A. 13:1D-157, are throughout the State, where existing facilities regulated under the EJ Law are located and what existing environmental and public health stressors currently impact these OBCs.

NJ has regular conversations with its EJ communities through a variety of forums including the Environmental Justice Advisory Council. **NJDEP | Environmental Justice | EJ Advisory Council**

Additionally, E.O. 23 directed NJDEP to develop guidance for all State departments to incorporate environmental justice considerations into their actions. **Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government** pdf provides a framework for Executive Branch agencies and departments on how to consider environmental and health impacts of their programs and policies in overburdened communities. It seeks to bring

State agencies and departments together to tackle the many complex environmental justice issues related to quality of life, including housing, health, transportation, and strategic enforcement actions.

As part of the stakeholder engagement process outlined under "Public Engagement" above, the State reached out to numerous advocacy groups to determine how to best address equity in this Deployment Plan.

Process to Identify, Quantify, and Measure Benefits to DACs

The guidance for the NEVI Formula Program recognizes that many of the burdens from the transportation and energy systems have historically been disproportionately borne by disadvantaged communities, and therefore it is important to emphasize equity considerations when planning investments in electric vehicle charging stations and avoid furthering any existing disparities in the transportation system. The Justice40 Initiative, established in January 2021, states a goal that at least 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities (DACs). The associated interim guidance in July 2021 identifies clean transportation as a Justice40 covered program and identifies access to electric vehicle charging stations as an example benefit of a covered program.

During this initial phase, New Jersey met with and solicited feedback from stakeholders including community and environmental justice leaders, EVSE vendors, utilities, regional planning organizations and more. Their feedback was taken into consideration when drafting this plan. Continuing discussions, feedback and brainstorming with community leaders and other stakeholders is critical to ensure equity remains a measurable focus during the implementation of the plan and its subsequent iterations. Potential equity benefits from EVSE charging infrastructure, and measures, include but may not be limited to:

- **Improving Clean Transportation Access**
  - Measure: Using mapping tools, identify opportunities to locate EVSEs in DACs
- **Provide EVSEs that can serve transit and ride-share vehicles**
  - Measure: Develop flexible programs that meet the varying needs of our communities, based on feedback and brainstorming sessions
- **Reduce Environmental Exposures to Transportation Emissions**
  - Measure: Use mapping tools to identify DACs along AFC toward supporting focus on clean transportation
- **Increase the Clean Energy Pipeline**
  - Measure: Implement job training and build on current programs for enterprise creation in DACs
- **Utilize Disadvantaged Business Enterprises (DBEs)**
  - Measure: Establish performance goals in EVSE procurements
- **Decrease Transportation Energy Burden & Increase Energy Resilience**
  - Measure: Develop and implement plans with utilities, EVSE vendors, etc. that work for communities
- **Increase Access to Low-cost Capital for Clean Energy Opportunities**

    - Measure: Meet with community & EJ leaders to build on our current NJ economic development programs
- **Minimize Gentrification-induced Displacement**
    - Measure: Continuous synergy meetings with community and EJ leaders to develop opportunities that work for all
- **Technical Assistance and Educational Support**
    - Measure: Meet with community & EJ leaders to collaborate on emerging technologies

Benefits to DACs through this Plan

New Jersey's Environmental Justice goals call for equity in the electrification of the transportation sector. New Jersey has approximately 39,000 miles of roads, comprised of interstates/freeways/ expressways, arterial/collector roadways, and minor collector/ local roads. According to New Jersey Department of Transportation data collected in 2019, New Jersey's interstates/ freeways/ expressways made up approximately 2 percent of the total roadway miles, yet handled almost 40% of the traffic, measured in vehicle miles traveled (VMT). These major roadways also traverse and connect every metropolitan area, and the majority of Disadvantaged Communities in NJ, as identified in the US DOT's Justice40 mapping tool, are adjacent to or within a few miles of our major roadways as shown in the Figure 16.

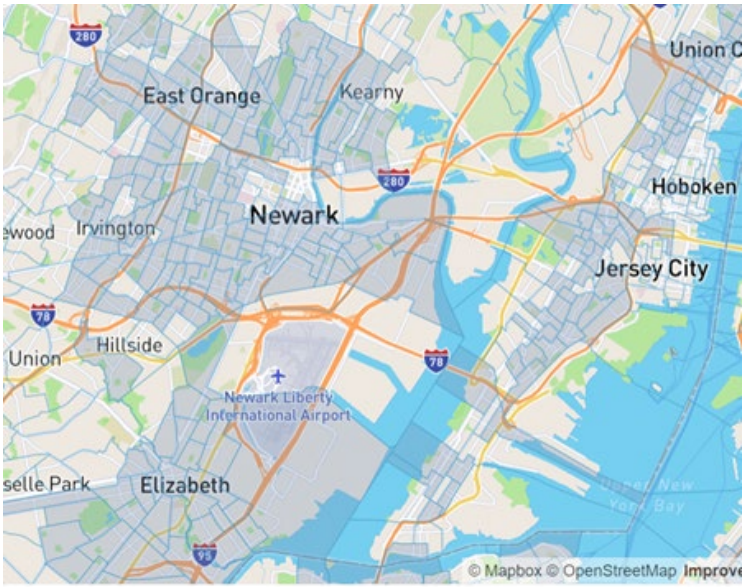


Figure 16: Disadvantaged Communities in the Newark Metropolitan area

Ensuring benefits of EV charging flow to rural, underserved, overburdened, and disadvantaged communities is vital. In the absence of the NEVI Formula Program, the market will not prioritize the installation of important EV chargers in densely populated urban communities where the cost of real estate is relatively higher or in sparsely populated rural areas lacking access to transportation alternatives. If access to EV chargers is dictated by these market forces, then rural areas, underserved communities, and disadvantaged communities will experience delayed and diminished access to this clean energy technology and the transportation infrastructure that is vital to a healthy economy.

In disbursing the NEVI funding, we will incentivize and promote equitable access toward:

- Clean transportation options.
- A reliable and clean electric grid across all communities.
- Clean energy technology access and adoption; and
- Economic opportunity related to the clean transportation transition.

Over the long-term, according to the US Department of Energy, electric vehicle ownership is typically less expensive than ownership of gasoline-powered vehicles. The low cost of operation makes some electric vehicles less expensive, monthly, than similar gasoline powered vehicles, when vehicle purchase price is financed. Further, increased adoption in communities may lead to a community-wide decrease in transportation energy cost burdens. Communities that experience a mode shift from internal combustion engine vehicles to electric vehicles, particularly along transportation corridors, may realize a marked reduction in environmental exposures to transportation emissions. Widespread adoption of EVs in the U.S. would also increase our energy resilience by increasing the share of vehicles that operate on energy sources that are domestically produced and assisting in creating energy independence and domestic job creation. The emerging electric vehicle industry creates potential for new business models, career paths, and local jobs.

Progressive registration of electrical vehicles (EVs) in NJ from the current level of approximately 64,000 to the 2025 goal of 330,000 EVs yields a projected reduction in greenhouse gas emissions of approximately 1 million tons toward a healthier environment for New Jerseyans.

NJ will use the Justice40 map and the NJ specific OBC designations to identify and quantify benefits to these communities. Continuing outreach to community leaders and environmental justice advocates will identify specific benefits and allow brainstorming on efforts that may be incorporated into the EVSE procurements; for example, requirements for the workforce hired to own, install, or maintain these charging stations. EVSE vendors will be required to demonstrate their Justice40 goals and initiatives, with the goal of creating synergistic relationships between our EVSE installations and our communities, which address all phases of work from initial installation to operations and maintenance, to fostering the emerging technologies associated with the electrification of the transportation sector.

Continuing outreach and dialogue with community leaders and stakeholders will further inform us of opportunities that could be part of the NEVI program after achieving fully built out status. Fully Built Out status is attained when New Jersey's achieves DCFCs every 50 miles along its interstates per current NEVI guidance. Informed by the outreach and community interaction, and by updated guidance from the Joint Office, additional benefits in electrification of transportation in New Jersey's DACs could be incorporated into the updates to this NEVI plan.

Plans will be developed through engagement with rural, underserved, and disadvantaged communities to ensure that diverse views are heard and considered throughout the planning process, and to ensure that the deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution of benefits and services.

LABOR AND WORKFORCE CONSIDERATIONS

Electric vehicles and their charging infrastructure offer a tremendous opportunity to develop an emerging technologies pipeline in New Jersey's trade & technology schools, universities, workforce, and communities. This section outlines some of the numerus opportunities to promote EV adoption and EV readiness through labor and workforce training, and outreach programs.

Inherent in the development of a cleaner transportation ecosystem is the workforce that enables it. This transition does not simply create a tremendous opportunity for job growth but will be impossible without such jobs. Furthermore, the equity in access to these jobs, the quality of these jobs, and the diversity of the workforce who engages in this work are all centrally important to the effectiveness of our charging infrastructure build out.

First, the State is conducting, through its Council on the Green Economy, an assessment of and roadmap for employment related to, among many other facets, clean transportation. The Council's roadmap will include recommended approaches for further development of good, well-paying jobs in this nascent field, and the support structures necessary to enable hiring.

Further, the State engaged and will continue to engage with representatives from communities, labor organizations, chambers of commerce, community colleges, technical schools, universities, training organizations, and industry. The goal of such engagement was to understand existing structures for training and workforce development in this space, as well as to ideate on potential areas where funding or support from the State could expand access, improve outcomes, or accelerate development. Several institutions across the State and in a variety of communities have already begun to create such programs for EVSE installers. The State anticipates that, in order to provide prompt access to training resources, these existing or under development programs may be leveraged as appropriate. Such support may include, but is not limited to, direct funding to enhance these programs, requirements, or competitive consideration for selected EVSE bidders that work with or hire from such institutions, coordination of training activities, and provision of assistance to physically access training. While the final form of this support will be further matured during detailed program design, it is anticipated that such support will be front-loaded to ensure the workforce is available to meet the infrastructure build-out requirements. Such support may be included either as a directly funded portions of solicitations and/or as separate sister programs, intended to run in parallel but independently from the competitive solicitations.

For example, the NEVI Formula Program also addresses the acknowledgement in **E.O. 14008** that the path to a net-zero emissions economy provides opportunities to create well-paying, union jobs to build a modern sustainable infrastructure. **86 FR 7622**. This proposed rule would outline minimum qualifications for technicians working on-site at charging stations. Minimum skill, training, and certification standards for technicians ensures that the deployment of charging infrastructure will support stable career-track employment for workers across the country, creating more openings for workers to pursue training in the electrical trades, software development trade, or as network operators — critical occupations for the clean energy transition. By requiring on-site installation, maintenance, and operations to be performed by a well-qualified, highly skilled, and certified, licensed, and trained workforce, the proposed regulation would also increase the safety and reliability of charging station function and use and mitigate project delivery issues such as cost overruns and delays.

We have repeatedly heard from stakeholders that local jobs should be available to the local community. Access to training is one part of this equation, but so too is clear and repeated outreach to ensure awareness of upcoming bid opportunities. Importantly, while there is a deep appreciation for historically underserved communities or communities that have experienced bias in hiring or access to opportunity, the State is currently undertaking a **state-wide disparity study** to quantitatively document its impact specific to New Jersey. Once that study is completed, specific minimum levels will be set relating to the hiring of, for example, contractors registered as Women-, Minority-business Enterprises or Disabled Veteran Owned Businesses. In the case the study is not complete at time of initial solicitation development, the State may rely on established standards initially, such as those utilized on other State programs, to ensure equitable hiring or selection practices. The NJEDA previously enacted such a policy for its design and construction of the New Jersey Purpose-built Wind Port; this was specifically cited by stakeholders as an example of a positive, transparent, and measurable process to ensure equitable access to opportunity.

Though much of the discussion around workforce development revolves around the design, installation, and maintenance of charging facilities, just as critical to meeting the NEVI requirements and harnessing the economic engine of the clean transportation transition is the localization of the supply chain. There are currently no EVSE manufacturers who produce their equipment wholly within the US, which is a requirement of the NEVI funds. As such, the State anticipates continuing to leverage its existing resources (e.g., tax incentive, grant/forgivable loan programs, etc.) to attract such suppliers to New Jersey; where allowable by NEVI funding, provide innovation support to companies pursuing novel charging solutions developed and/or manufactured in New Jersey; and, where appropriate, provide extra consideration (e.g., bonus points in competitive scoring rubrics) to those projects that can guarantee such localization.

CYBERSECURITY

This section addresses the importance of implementing and keeping current proper cybersecurity protocols in EVSE operations and maintenance. New Jersey will also require the EVSE operators to abide by more stringent NJ cybersecurity requirements.

The integrity and availability of the energy grid and cyber networks in New Jersey are of critical importance. With each EVSE installation, safeguarding of the energy grid which supplies the EVSE, especially from cyber threats, must be a primary and continuing priority. The EVSE vendor will be required to coordinate with the energy service provider for cybersecurity requirements and meet the requirements of New Jersey's Office of Information Technology. Cybersecurity must be a part of every EVSE plan and included in every procurement for installation, operation, and maintenance for the life of the EVSE service, and in no case less than a 5-year period. Adherence to the FHWA's NEVI Formula Program Notice of Rule Making RIN 2125-AG10 issued June 22, 2022 (undergoing a 60-day comment period), in its most current version, shall be a requirement of EVSE infrastructure installations and operations; this Notice of Rule Making identifies minimum requirements for EVSE charging infrastructure.

EVSE sites require numerous communications between vehicles, charging infrastructure, patrons, and the energy grid, which must be protected against cyberattack. Some examples are communications related to battery charging levels and battery health, payment information, charging data collection, and energy demand response programs. EVSE sites may involve distributed energy systems (solar arrays) or storage facilities which further communicate with the EVSE infrastructure and possibly the energy grid. EVSE installers, operators and maintainers must identify, design, implement and validate for their specific site appropriate cyber protective measures for these and all other potential avenues of cyberattack.

PROGRAM EVALUATION

This section discusses program evaluation which will include EVSE data collection and monitoring, workforce reporting such as certified payroll and regular updates on planning, procurement, installation, and operations & maintenance.

Data sharing will be a requirement for each entity receiving NEVI funding. Through collection of this data, the State will be able to report on EV reliability and usage. Data received from NEVI funded chargers will be aggregated with data received from other State and utility funded EVSE to determine trends and develop projections. We will use AFLEET to estimate the GHG reductions associated with various rates of usage of the EVSE installed on corridors. Lessons learned during the contracting,

installation, and ongoing operation of EVSE will be recorded and the path forwarded will be adjusted as necessary and appropriate. Continuous coordination with other State funded EVSE programs, such as the utility programs, NJBPU's programs and NJDEP's It Pay$ to Plug In program, will ensure that NEVI funding can be used to leverage, and not duplicate, existing funding programs. The State will publicize all locations funded by its grant programs to help site hosts with planning and avoid duplication of efforts.

In order to assess the economic impact of the NEVI funding, the State will utilize a standard economic model, with mutually agreed upon assumptions (e.g., reasonable industry relationships such as expenditures per job, gross state product (GSP) per job, or labor income per job; or mapping of existing NAICS codes to new industries). Utilizing existing models of the New Jersey economy and, where appropriate, proxies to this new economy to determine multiplied impact, direct, indirect, and induced jobs will be assessed and weighted by the model. Additionally, the State will collect information directly from training providers to determine the number of graduates and hiring results; and from the winning EVSE vendors responsible for installation and ownership on the counts of hired staff per project. Such reporting will be compared against projections from bid submissions. Further, as required by the NEVI funds, all projects will be subject to the Davis-Bacon Act and the prevailing wage requirements therein. As such, reporting of certified payrolls on all projects will be required.

Monitoring and evaluation of each phase will be done at least quarterly. Elements for monitoring and evaluation may include:

- Planning
    - First Year: NEVI Program implementation supporting goal of Fully Built Out
        - Continuing Outreach Efforts
        - Incorporate Stakeholder Inputs
    - Years 2 through 5: Updating the Plan
        - Finalizing accomplishment of Fully Built Out
        - Continuing Outreach / Stakeholder Coordination
        - Defining & Implementing Broader Strategies for Electric Vehicle Charging Infrastructure
- Procurement
    - First Year: Finalize & Implement Procurement Strategy Toward Fully Built Out
    - Years 2 through 5: Tracking Progress
        - Solicitation
- Installation
    - Monitor All Funded Projects
        - Schedule adherence
        - Funding criteria compliance
- Operations & Maintenance
    - Data Collection from All Funded Projects
        - Support Quarterly Data Reporting Requirements
        - Monitor Level of Service
- Program Reporting
    - Quarterly Summary Reports

    - Capture All Program Elements
    - Evaluate Area of Success and Opportunities to Improve
- Annually
    - Summarize Yearly Accomplishments
    - Evaluate Area of Success and Opportunities to Improve
    - Validate Program Compliance

DISCRETIONARY EXCEPTIONS

New Jersey requests the following discretionary exceptions based on grid capacity, geography, equity, and extraordinary costs. Several locations have been identified where it is impractical to conform to the 1-mile proximity to the AFC end or within 1-mile of an AFC crossing into another state. Coordination with the adjacent states of Pennsylvania, New York and Delaware has commenced and will be an ongoing effort. Recognizing these exceptions will be fiscally responsible, by avoiding unnecessary, and likely impractical, EVSE locations; the long-term viability of each EVSE location is critical. Importantly, most of the exceptions are for roadways in disadvantaged and overburdened communities; outreach and community feedback will help inform the location of EVSE in these areas. Each exception is supported with a narrative toward achieving a convenient, affordable, reliable, and equitable EV charging network. New Jersey's exceptions request has been coordinated with the FHWA and the Joint Office, including providing information on the exceptions in advance of submitting this Plan.

One Mile from End of Corridor

Several nominated roads terminate within New Jersey or at the state crossing. In these cases, the available guidance as of June 14, 2022, indicates that a charging station is required within one driving mile of the end of the roadway. In most cases, this creates the need for an exception to the 1-mile requirement in order to reach "fully built-out" status in a reasonably cost-effective, timely manner. Specific challenging corridor terminations include:

- I-76 in NJ is a short length roadway with limited exits; it is within a disadvantaged community; grid capacity may be limited.
- I-676 in NJ is a short length roadway with limited exits; it is within a disadvantaged community; grid capacity may be limited.
- I-78 (east terminus) in NJ ends at the Holland Tunnel, an area that is highly developed; it is within a disadvantaged community; grid capacity may be limited.
- I-278 in NJ is a short length roadway with limited exits; it is within a disadvantaged community; grid capacity may be limited.
- I-280 ends mid-freeway on I-95; it is within a disadvantaged community; grid capacity may be limited.
- I-195 (west terminus) starts at a freeway interchange; it is within a disadvantaged community; grid capacity may be limited.
- I-195 (east terminus) ends at a point with limited commercial activity; the last 2 miles of roadway traverse a NJ State park with no exits; grid capacity may be limited.

Included in Appendix B are the exceptions summary chart, maps and narratives supporting these exceptions.

APPENDIX A

Existing Locations of Charging Infrastructure Along AFCs

In addition to the existing locations identified above, numerous other sites have been funded by NJBPU's MUD program and EV Tourism program, NJDEP's It Pay$ to Plug In program, and the utilities' make -ready programs.

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
49912	446	ACXWY	3400 Route 42	Turnersville	39.727845	-75.031104	1	1	Non-Networked
62427	446	ACXWY	6037 Black Horse Pike	Egg Harbor Township	39.435912	-74.613812	1		ChargePoint Network
187550	446	ACXWY	2500 English Creek Ave	Egg Harbor Township	39.436861	-74.605444	2		Blink Network
187551	446	ACXWY	2500 English Creek Ave	Egg Harbor Township	39.435002	-74.606	2		Blink Network
217250	446	ACXWY	100 Erial Road	Sicklerville	39.712379	-74.950658	2		Blink Network
45664	444	GSP	318 Bloomfield Ave	Bloomfield	40.784797	-74.193494	2	1	Non-Networked
64974	444	GSP	200 Chestnut Ridge Rd	Woodcliff Lake	41.028392	-74.072444		1	ChargePoint Network
64973	444	GSP	250 Chestnut Ridge Rd	Woodcliff Lake	41.028292	-74.073326		1	ChargePoint Network
64975	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034229	-74.073055		1	ChargePoint Network
74182	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.0349328	-74.0730244		1	Non-Networked
143188	444	GSP	6754 Washington Ave	Egg Harbor Township	39.4046	-74.55359		1	ChargePoint Network
171910	444	GSP	250 Chestnut Ridge Rd	Woodcliff Lake	41.03009	-74.073251		1	ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
171967	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034303	-74.073071		1	ChargePoint Network
171975	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034269	-74.07306		1	ChargePoint Network
192308	444	GSP	1 Premium Outlet Blvd	Tinton Falls	40.226247	-74.093142		2	eVgo Network
193584	444	GSP	1 PREMIUM OUTLETS BLVD	Tinton Falls	40.227339	-74.094326		4	Electrify America
198420	444	GSP	Garden State Parkway	Forked River	39.874026	-74.214351		2	eVgo Network
198927	444	GSP	Garden State Parkway	Bloomfield	40.836184	-74.180578		2	eVgo Network
199021	444	GSP	Garden State Parkway	Bloomfield	40.837541	-74.178587		2	eVgo Network
205887	444	GSP	1 Garden State Plaza Blvd	Paramus	40.916117	-74.073939		6	Electrify America
45664	444	GSP	318 Bloomfield Ave	Bloomfield	40.784797	-74.193494	2	1	Non-Networked
45686	444	GSP	435 Route 72 W	Manahawkin	39.701442	-74.271282	1		Non-Networked
45684	444	GSP	111 State Route 36	Keyport	40.42832	-74.192387	1		Non-Networked
48406	444	GSP	6700 Delilah Rd	Egg Harbor Township	39.417467	-74.53968	4		Non-Networked
63619	444	GSP	525 Stone Harbor Blvd	Cape May	39.082387	-74.811638	2		Non-Networked
76928	444	GSP	2155 US-22	Union	40.692284	-74.285499	1		Non-Networked
87574	444	GSP	33 S Wood Ave	Woodbridge Township	40.565018	-74.328801	2		ChargePoint Network
105308	444	GSP	1 Garden State Plaza Blvd	Paramus	40.915687	-74.076599	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
119028	444	GSP	2285 US-22	Union	40.692288	-74.290742	2		ChargePoint Network
153600	444	GSP	300 W Grand Ave	Montvale	41.049171	-74.060106	2		ChargePoint Network
156077	444	GSP	304 Glenwood Ave	Bloomfield	40.793087	-74.19871	1		ChargePoint Network
156078	444	GSP	300 Glenwood Ave 68 Washington St	Bloomfield	40.79301	-74.198906	1		ChargePoint Network
156079	444	GSP	304 Glenwood Ave 68 Washington St	Bloomfield	40.792942	-74.198814	1		ChargePoint Network
165143	444	GSP	40 W Century Rd	Paramus	40.93046	-74.074564	2		Non-Networked
166678	444	GSP	499 Bloomfield Ave	Bloomfield	40.7912267	-74.1962611	6		EV Connect
168474	444	GSP	1 W Jockish Square	Paramus	40.92613	-74.069482	2		ChargePoint Network
171455	444	GSP	4 S Union Ave	Cranford	40.654871	-74.305423	2		ChargePoint Network
171824	444	GSP	200 Chestnut Ridge Rd	Woodcliff Lake	41.028421	-74.07246	2		ChargePoint Network
171825	444	GSP	200 Chestnut Ridge Rd	Woodcliff Lake	41.028455	-74.072404	2		ChargePoint Network
171826	444	GSP	200 Chestnut Ridge Rd	Woodcliff Lake	41.02849	-74.072397	2		ChargePoint Network
171911	444	GSP	250 Chestnut Ridge Rd	Woodcliff Lake	41.028322	-74.073322	2		ChargePoint Network
171912	444	GSP	250 Chestnut Ridge Rd	Woodcliff Lake	41.030055	-74.073251	2		ChargePoint Network
171968	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034163	-74.073067	2		ChargePoint Network
171969	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034273	-74.072787	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
171970	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034039	-74.073054	2		ChargePoint Network
171972	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034322	-74.072802	2		ChargePoint Network
171971	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.033998	-74.073046	2		ChargePoint Network
171973	444	GSP	300 Chestnut Ridge Rd	Woodcliff Lake	41.034407	-74.07329	2		ChargePoint Network
172071	444	GSP	33 S Wood Ave	Woodbridge Township	40.564998	-74.328823	2		ChargePoint Network
173627	444	GSP	1 Garden State Plaza Blvd	Paramus	40.915558	-74.076824	2		ChargePoint Network
173628	444	GSP	1 Garden State Plaza Blvd	Paramus	40.915766	-74.076665	2		ChargePoint Network
173629	444	GSP	1 Garden State Plaza Blvd	Paramus	40.915763	-74.076876	1		ChargePoint Network
181720	444	GSP	1 W Jockish Square	Paramus	40.92671	-74.0688	2		ChargePoint Network
182508	444	GSP	Bell Laboratories Rd	Holmdel	40.364615	-74.165556	2		ChargePoint Network
182510	444	GSP	Bell Laboratories Rd	Holmdel	40.364539	-74.165458	2		ChargePoint Network
182533	444	GSP	Bell Laboratories Rd	Holmdel	40.364559	-74.165576	2		ChargePoint Network
186694	444	GSP	65 W Jimmie Leeds Rd	Pomona	39.480326	-74.542733	2		Blink Network
194272	444	GSP	627 Pinewald Keswick Rd	Forked River	39.904443	-74.233008	2		ChargePoint Network
201359	444	GSP	100 Parsonage Rd	Edison	40.552019	-74.33217	2		ChargePoint Network
201355	444	GSP	755 NJ-17	Paramus	40.971234	-74.081007	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
202994	444	GSP	201 S Wrangleboro Rd	Galloway	39.480061	-74.516889	2		ChargePoint Network
202995	444	GSP	201 S Wrangleboro Rd	Galloway	39.480194	-74.516942	2		ChargePoint Network
205921	444	GSP	1101 Schindler	Aberdeen	40.420153	-74.221685	2		ChargePoint Network
206881	444	GSP	469 New Jersey 17	Paramus	40.9528556	-74.0736601	3		SemaCharge Network
207282	444	GSP	8 Franklin St	Bloomfield	40.78322763	-74.18453369	2		Volta
207462	444	GSP	100 Ikea Dr	Paramus	40.924242	-74.073728	1		ChargePoint Network
207463	444	GSP	100 Ikea Dr	Paramus	40.924243	-74.073812	1		ChargePoint Network
207464	444	GSP	100 Ikea Dr	Paramus	40.924214	-74.073749	1		ChargePoint Network
207508	444	GSP	100 Ikea Dr	Paramus	40.924101	-74.073649	1		ChargePoint Network
207507	444	GSP	425 Bloomfield Ave	Bloomfield	40.789218	-74.194224	2		ChargePoint Network
213491	444	GSP	328 Parker Ave	South Amboy	40.473998	-74.286075	2		ChargePoint Network
213493	444	GSP	328 Parker Ave	South Amboy	40.474051	-74.286105	2		ChargePoint Network
213492	444	GSP	611 Bordentown Ave	South Amboy	40.474274	-74.285934	2		ChargePoint Network
219890	444	GSP	379 Bloomfield Ave	Bloomfield	40.78727	-74.193835	2		Blink Network
82504	195	I-195	200 Clocktower Dr	Hamilton Township	40.205246	-74.659446	2		ChargePoint Network
197191	195	I-195	530 US-130	Trenton	40.186684	-74.65693	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
220428	195	I-195	Us-9 at Stanley Blvd	Howell Township	40.160451	-74.233163	2		ChargePoint Network
152423	280	I-280	150 Harrison Ave.	Kearney	40.748633	-74.13629	1	3	Electrify America
194698	280	I-280	311 Ferry Street	Newark	40.728411	-74.151295		4	Electrify America
123252	280	I-280	9 S Orange Ave	Newark	40.737011	-74.182259	3		EV Connect
148152	280	I-280	211 Main St	West Orange	40.7840653	-74.2340225	4		SemaCharge Network
152388	280	I-280	1200 Frank E Rodgers Blvd S	Harrison	40.735767	-74.15482	2		ChargePoint Network
152423	280	I-280	150 Harrison Ave.	Kearney	40.748633	-74.13629	1	3	Electrify America
154275	280	I-280	16-84 W Market St	Newark	40.739129	-74.181671	2		ChargePoint Network
154044	280	I-280	220 Route 46 West	Parsippany-Troy Hills	40.858585	-74.35517	2		ChargePoint Network
158242	280	I-280	621 Eagle Rock Ave	Roseland	40.825764	-74.33314	2		ChargePoint Network
175309	280	I-280	16-84 W Market St	Newark	40.73895	-74.181735	2		ChargePoint Network
175310	280	I-280	16-84 W Market St	Newark	40.739013	-74.181706	2		ChargePoint Network
183240	280	I-280	1100 Frank E Rodgers Blvd S	Harrison	40.735935	-74.154854	2		ChargePoint Network
185539	280	I-280	60 Passaic Ave	Kearny	40.755843	-74.161866	2		ChargePoint Network
185540	280	I-280	60 Passaic Ave	Kearny	40.755927	-74.161754	2		ChargePoint Network
185544	280	I-280	60 Passaic Ave	Kearny	40.755558	-74.160575	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
186716	280	I-280	33 Ashland Ave	West Orange	40.782283	-74.234393	2		ChargePoint Network
192996	280	I-280	33 Ashland Ave	West Orange	40.782364	-74.234307	2		ChargePoint Network
195889	280	I-280	555 S 1st St	Harrison	40.741954	-74.162394	2		ChargePoint Network
195890	280	I-280	555 S 1st St	Harrison	40.742081	-74.162294	2		ChargePoint Network
196428	280	I-280	555 S 1st St	Harrison	40.742075	-74.162436	2		ChargePoint Network
204449	280	I-280	50 S Clinton St	East Orange	40.762493	-74.21597	2		ChargePoint Network
212025	280	I-280	1 Harrison Ave	Harrison	40.745221	-74.164255	2		ChargePoint Network
221169	280	I-280	2 Center Street	Newark	40.738989	-74.167338	3		Blink Network
49900	287	I-287	1400 Route 22	Bridgewater	40.575337	-74.571677	2	1	Non-Networked
76682	287	I-287	63 Rd 1	Piscataway	40.515163	-74.433665		1	Non-Networked
168270	287	I-287	119 Promenade Blvd	Bridgewater	40.561843	-74.55387	1	3	Electrify America
171746	287	I-287	125 Raritan Center Pkwy	Edison	40.519056	-74.339596		1	ChargePoint Network
191742	287	I-287	125 Raritan Center Pkwy	Edison	40.519036	-74.339718		1	ChargePoint Network
206715	287	I-287	55 Wanaque Ave	Pompton Lakes	41.00742	-74.29353		4	Electrify America
49900	287	I-287	1400 Route 22	Bridgewater	40.575337	-74.571677	2	1	Non-Networked
67043	287	I-287	1 Becton Dr	Franklin Lakes	41.016356	-74.211628	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
100265	287	I-287	225 US-202	Basking Ridge	40.730666	-74.539645	2		ChargePoint Network
123253	287	I-287	99 Jefferson Rd	Parsippany	40.8574023	-74.4128071	1		Non-Networked
144130	287	I-287	1 Pearl St	Metuchen	40.5405	-74.36233	4		Non-Networked
145736	287	I-287	480 DeKorte Drive	Franklin Lakes	41.019176	-74.19886	2		ChargePoint Network
147148	287	I-287	43 W High St	Somerville	40.569871	-74.613992	2		ChargePoint Network
147019	287	I-287	14 Sylvan Way	Parsippany-Troy Hills	40.846592	-74.44111	2		ChargePoint Network
152487	287	I-287	1 Collyer Ln	Basking Ridge	40.697132	-74.546585	2		ChargePoint Network
153229	287	I-287	1 Vogt Dr	Bridgewater Township	40.58798	-74.60765	2		ChargePoint Network
153722	287	I-287	45 E High St	Somerville	40.568905	-74.608882	2		ChargePoint Network
154046	287	I-287	100 Commons Way	Bridgewater Township	40.591714	-74.625642	2		ChargePoint Network
168270	287	I-287	119 Promenade Blvd	Bridgewater	40.561843	-74.55387	1	3	Electrify America
171306	287	I-287	303 E Main St	Bound Brook	40.561482	-74.530677	1		ChargePoint Network
171307	287	I-287	6 Maiden Ln	Bound Brook	40.561491	-74.530736	1		ChargePoint Network
171308	287	I-287	228 E Main St	Bound Brook	40.561492	-74.530768	2		ChargePoint Network
172123	287	I-287	1 Becton Dr	Franklin Lakes	41.016328	-74.211641	2		ChargePoint Network
172122	287	I-287	1 Becton Dr	Franklin Lakes	41.016346	-74.211628	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
182244	287	I-287	303 E Main St	Bound Brook	40.561485	-74.530708	1		ChargePoint Network
187081	287	I-287	300 N Maple Ave	Basking Ridge	40.724263	-74.540525	4		Non-Networked
197958	287	I-287	1028 US-22	Somerville	40.57963	-74.60303	2		ChargePoint Network
204304	287	I-287	339 Jefferson Rd	Parsippany-Troy Hills	40.85403	-74.41473	2		ChargePoint Network
204305	287	I-287	339 Jefferson Rd	Parsippany-Troy Hills	40.8541	-74.414696	2		ChargePoint Network
205922	287	I-287	67 Old New Brunswick Rd	Piscataway	40.56341	-74.460423	2		ChargePoint Network
212028	287	I-287	67 Old New Brunswick Rd	Piscataway	40.563452	-74.460475	2		ChargePoint Network
214723	287	I-287	200 Madison Ave	Morristown	40.787039	-74.45358	4		Blink Network
76882	295	I-295	856 River Rd	Trenton	40.252324	-74.840182	2	1	Non-Networked
184915	295	I-295	150 Quakerbridge Mall	Lawrenceville	40.288689	-74.680611		4	Electrify America
198755	295	I-295	3320 US Highway 1	Lawrence Township	40.289407	-74.681724	1	2	eVgo Network
36368	295	I-295	1000 Sam Weinroth Rd	Ewing	40.286518	-74.807516	1		Non-Networked
76882	295	I-295	856 River Rd	Trenton	40.252324	-74.840182	2	1	Non-Networked
82315	295	I-295	3500 Quakerbridge Rd	Hamilton Township	40.256056	-74.681242	2		ChargePoint Network
88292	295	I-295	2034 Wheldon Shivers Drive	Ewing Township	40.276372	-74.823103	2		ChargePoint Network
165268	295	I-295	2207 US-206	Lawrence Township	40.282269	-74.733296	1		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
181021	295	I-295	2207 US-206	Lawrence Township	40.28227	-74.73331	1		ChargePoint Network
192881	295	I-295	2931 Brunswick Pike	Lawrence Township	40.274143	-74.70842	2		ChargePoint Network
194120	295	I-295	18 Fairgrounds Rd	Hamilton Township	40.236744	-74.71967	2		ChargePoint Network
198755	295	I-295	3320 US Highway 1	Lawrence Township	40.289407	-74.681724	1	2	eVgo Network
202997	295	I-295	18 Fairgrounds Rd	Hamilton Township	40.236755	-74.719666	2		ChargePoint Network
212203	295	I-295	460 Hollywood Ave	Carneys Point Township	39.701443	-75.47006	2		ChargePoint Network
122783	76	I-76	926 E Black Horse Pike	Mt Ephraim	39.889663	-75.090522		1	ChargePoint Network
145080	78	I-78	1100 US-22	Lebanon	40.64508	-74.812904		1	ChargePoint Network
170137	78	I-78	160 Frontage Rd	Newark	40.71295	-74.16612		2	Blink Network
171767	78	I-78	160 1st St	Jersey City	40.721433	-74.040165		1	ChargePoint Network
198762	78	I-78	30 Mall Dr W	Jersey City	40.7273791	-74.0386831	1	2	eVgo Network
76538	78	I-78	160 1st St	Jersey City	40.721471	-74.040485	2		ChargePoint Network
143354	78	I-78	281 Marin Blvd	Jersey City	40.71709	-74.04249	2		ChargePoint Network
148163	78	I-78	350 Warren ST	Jersey City	40.719871	-74.0381811	2		SemaCharge Network
150434	78	I-78	16 Frontage Dr	Clinton	40.628918	-74.917559	2		Non-Networked
153235	78	I-78	250 Connell Dr	Berkeley Heights	40.662554	-74.416264	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
154045	78	I-78	1638 NJ-31	Clinton	40.643956	-74.907453	2		ChargePoint Network
154582	78	I-78	3 Journal Square Plaza PATH-JSTC	Jersey City	40.732185	-74.062432	2		ChargePoint Network
155320	78	I-78	1 Jackson Square	Jersey City	40.710438	-74.07823	2		ChargePoint Network
165144	78	I-78	250 Connell Dr	Berkeley Heights	40.66229	-74.417195	3		Non-Networked
166984	78	I-78	207 Fulton Ave	Jersey City	40.704683	-74.087169	2		ChargePoint Network
171387	78	I-78	190 Muhammad Ali Ave	Newark	40.72759	-74.195724	2		ChargePoint Network
171408	78	I-78	8000 Fellowship Rd	Basking Ridge	40.655437	-74.58226	1		ChargePoint Network
171764	78	I-78	160 First St.	Jersey City	40.721482	-74.04064	2		ChargePoint Network
171765	78	I-78	160 1st St	Jersey City	40.721476	-74.040557	2		ChargePoint Network
171766	78	I-78	160 1st St	Jersey City	40.721463	-74.040446	2		ChargePoint Network
174235	78	I-78	281 Marin Blvd	Jersey City	40.717124	-74.042493	2		ChargePoint Network
175407	78	I-78	3 Journal Square Plaza PATH-JSTC	Jersey City	40.732169	-74.062443	2		ChargePoint Network
175084	78	I-78	250 Connell Dr	Berkeley Heights	40.662501	-74.416335	2		ChargePoint Network
181334	78	I-78	207 Fulton Ave	Jersey City	40.704715	-74.087128	2		ChargePoint Network
182279	78	I-78	190 Muhammad Ali Ave	Newark	40.727516	-74.195755	1		ChargePoint Network
185617	78	I-78	778 Morris Turnpike	Short Hills	40.72204	-74.334161	2		Volta

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
187973	78	I-78	255 Brunswick St	Jersey City	40.729559	-74.050301	2		ChargePoint Network
189131	78	I-78	150 1st St	Jersey City	40.721395	-74.039716	2		ChargePoint Network
189132	78	I-78	154 1st St	Jersey City	40.721415	-74.039876	2		ChargePoint Network
189133	78	I-78	160 1st St	Jersey City	40.72142	-74.039976	2		ChargePoint Network
189134	78	I-78	154 1st St	Jersey City	40.721401	-74.039823	2		ChargePoint Network
189136	78	I-78	255 Brunswick St	Jersey City	40.729541	-74.050149	2		ChargePoint Network
189135	78	I-78	160 1st St	Jersey City	40.721418	-74.039944	2		ChargePoint Network
192715	78	I-78	28 2nd St	Hoboken	40.738277	-74.02907	2		ChargePoint Network
192717	78	I-78	215 Hudson St	Hoboken	40.73913	-74.028824	2		ChargePoint Network
192718	78	I-78	215 Hudson St	Hoboken	40.739123	-74.028827	2		ChargePoint Network
192716	78	I-78	28 2nd St	Hoboken	40.738262	-74.029045	2		ChargePoint Network
195439	78	I-78	266 King George Road	Warren	40.6415378	-74.5150386	1		SemaCharge Network
195511	78	I-78	274 King George Road	Warren	40.6430734	-74.515243	4		SemaCharge Network
195582	78	I-78	689 Ramsey Avenue	Hillside	40.7072601	-74.23581	1		SemaCharge Network
195737	78	I-78	387 8th St	Jersey City	40.7275	-74.05121	2		ChargePoint Network
195738	78	I-78	1017 Garfield Ave	Jersey City	40.713074	-74.06836	2		ChargePoint Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
196219	78	I-78	Ogden Ave	Jersey City	40.743721	-74.043112	2		ChargePoint Network
196380	78	I-78	68 1st St	Hoboken	40.737427	-74.03049	2		ChargePoint Network
198762	78	I-78	30 Mall Dr W	Jersey City	40.7273791	-74.0386831	1	2	eVgo Network
202706	78	I-78	135 Greene Street	Jersey City	40.7176775	-74.0363064	2		SemaCharge Network
211924	78	I-78	101 Essex St	Millburn	40.725793	-74.30657	2		Non-Networked
220312	78	I-78	570 Washington Blvd	Jersey City	40.728914	-74.033992	2		ChargePoint Network
220313	78	I-78	570 Washington Blvd	Jersey City	40.728912	-74.03404	2		ChargePoint Network
220327	78	I-78	326 Clinton St	Hoboken	40.741856	-74.03474	2		ChargePoint Network
220328	78	I-78	326 Clinton St	Hoboken	40.74186	-74.03474	2		ChargePoint Network
220329	78	I-78	326 Clinton St	Hoboken	40.74189	-74.03474	2		ChargePoint Network
220967	78	I-78	215 Hudson St	Hoboken	40.73928	-74.028656	2		ChargePoint Network
220968	78	I-78	28 2nd St	Hoboken	40.73831	-74.029076	2		ChargePoint Network
45698	80	I-80	440 Route 46	Totowa	40.894133	-74.232511	1	1	Non-Networked
121570	80	I-80	124 Essex St	Rochelle Park	40.892506	-74.073138		1	ChargePoint Network
153239	80	I-80	US HWY 46	Fairfield	40.889748	-74.269891	1	3	Electrify America
170173	80	I-80	1000 International Dr	Budd Lake	40.908788	-74.72488		2	Blink Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
173102	80	I-80	210 NJ-17	Rochelle Park	40.906502	-74.071117		1	ChargePoint Network
189545	80	I-80	129 Pehle Ave	Saddle Brook	40.90728	-74.097557		2	Blink Network
206121	80	I-80	28 West Main Street	Denville	40.894025	-74.478218		4	Electrify America
45698	80	I-80	440 Route 46	Totowa	40.894133	-74.232511	1	1	Non-Networked
74693	80	I-80	12 Church Street	Denville	40.894258	-74.47802	2		ChargePoint Network
92502	80	I-80	210 NJ-17	Rochelle Park	40.906523	-74.071136	2		ChargePoint Network
117271	80	I-80	160 Gold Mine Rd	Flanders	40.879619	-74.711475	3		EV Connect
148150	80	I-80	283 State Route 17 South	Hasbrouck Heights	40.8605497	-74.0672785	4		SemaCharge Network
149136	80	I-80	19 Pocono Rd	Denville	40.89466	-74.46977	2		ChargePoint Network
153239	80	I-80	US HWY 46	Fairfield	40.889748	-74.269891	1	3	Electrify America
195725	80	I-80	264 Passaic Avenue	Fairfield	40.8800783	-74.2710259	2		SemaCharge Network
197982	80	I-80	189 Route 46 West	Saddle Brook	40.89049169	-74.0942403	4		Blink Network
201437	80	I-80	557 Route 23 South	Wayne	40.904581	-74.258953	1		FLO
202903	80	I-80	100 Shepherds Ln	Totowa	40.914703	-74.204185	2		ChargePoint Network
202904	80	I-80	100 Shepherds Ln	Totowa	40.914536	-74.20409	2		ChargePoint Network
204836	80	I-80	1400 Willowbrook Mall	Wayne	40.89011281	-74.26004623	2		Volta

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
204837	80	I-80	1400 Willowbrook Mall	Wayne	40.88764996	-74.25936815	3		Volta
204838	80	I-80	1400 Willowbrook Mall	Wayne	40.88848574	-74.25784402	3		Volta
205091	80	I-80	22 Florence Street	South Hackensack	40.86782286	-74.04611237	2		FLO
212482	80	I-80	363 Mt Hope Ave	Rockaway	40.90928624	-74.5576047	2		Volta
211953	80	I-80	1220 Bloomfield Ave	Fairfield	40.85637	-74.313761	2		ChargePoint Network
214351	80	I-80	10 Kingsbridge Rd	Fairfield	40.879733	-74.268648	2		ChargePoint Network
214352	80	I-80	10 Kingsbridge Rd	Fairfield	40.879622	-74.268646	2		ChargePoint Network
220791	80	I-80	100 Julia Drive	Wharton	40.91822	-74.59974	8		OpConnect
74275	95	I-95	2 Meadowlands Plaza	East Rutherford	40.805031	-74.07776		1	ChargePoint Network
164538	95	I-95	651 Kapkowski Road	Elizabeth	40.662442	-74.173276		10	Electrify America
167270	95	I-95	400 Park Plaza Dr.	Secaucus	40.792148	-74.041933	1	3	Electrify America
167237	95	I-95	290 NJ-18	East Brunswick	40.457318	-74.399229		10	Electrify America
190458	95	I-95	4 Tower Center Blvd	East Brunswick	40.478991	-74.406911		2	Blink Network
198233	95	I-95	MM 71.7 New Jersey Tpke	Cranbury	40.322467	-74.48688		2	eVgo Network
198418	95	I-95	116E 115W New Jersey Turnpike	Ridgefield	40.822746	-74.029216		2	eVgo Network
198423	95	I-95	55 Parsonage Rd	Edison	40.54438	-74.334418		6	eVgo Network

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
221265	95	I-95	154 Main Street	Fort Lee	40.85037	-73.968231		4	Electrify America
87965	95	I-95	800 Plaza Dr	Secaucus	40.786973	-74.046449	2		Non-Networked
87983	95	I-95	1535 Paterson Plank Rd	Secaucus	40.79902	-74.058645	1		ChargePoint Network
94823	95	I-95	200 Roosevelt Pl	Palisades Park	40.850926	-74.005143	2		EV Connect
92466	95	I-95	1379 Paterson Plank Rd	Secaucus	40.793752	-74.059168	1		ChargePoint Network
104634	95	I-95	1200 Koelle Blvd	Secaucus	40.799955	-74.047792	1		ChargePoint Network
122620	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696413	-74.183656	2		ChargePoint Network
148155	95	I-95	120 Chubb Ave	Lyndhurst	40.8023357	-74.0960077	4		SemaCharge Network
151841	95	I-95	250 Woodbridge Center Dr	Woodbridge	40.555129	-74.300223	2		Volta
152206	95	I-95	250 Woodbridge Center Dr	Woodbridge	40.557784	-74.299584	2		Volta
167270	95	I-95	400 Park Plaza Dr.	Secaucus	40.792148	-74.041933	1	3	Electrify America
167921	95	I-95	250 Woodbridge Center Dr	Woodbridge	40.555178	-74.297753	4		Volta
174011	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696453	-74.183581	1		ChargePoint Network
174012	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696494	-74.18357	1		ChargePoint Network
174010	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696425	-74.183688	2		ChargePoint Network
174013	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.69647	-74.183691	2		ChargePoint Network

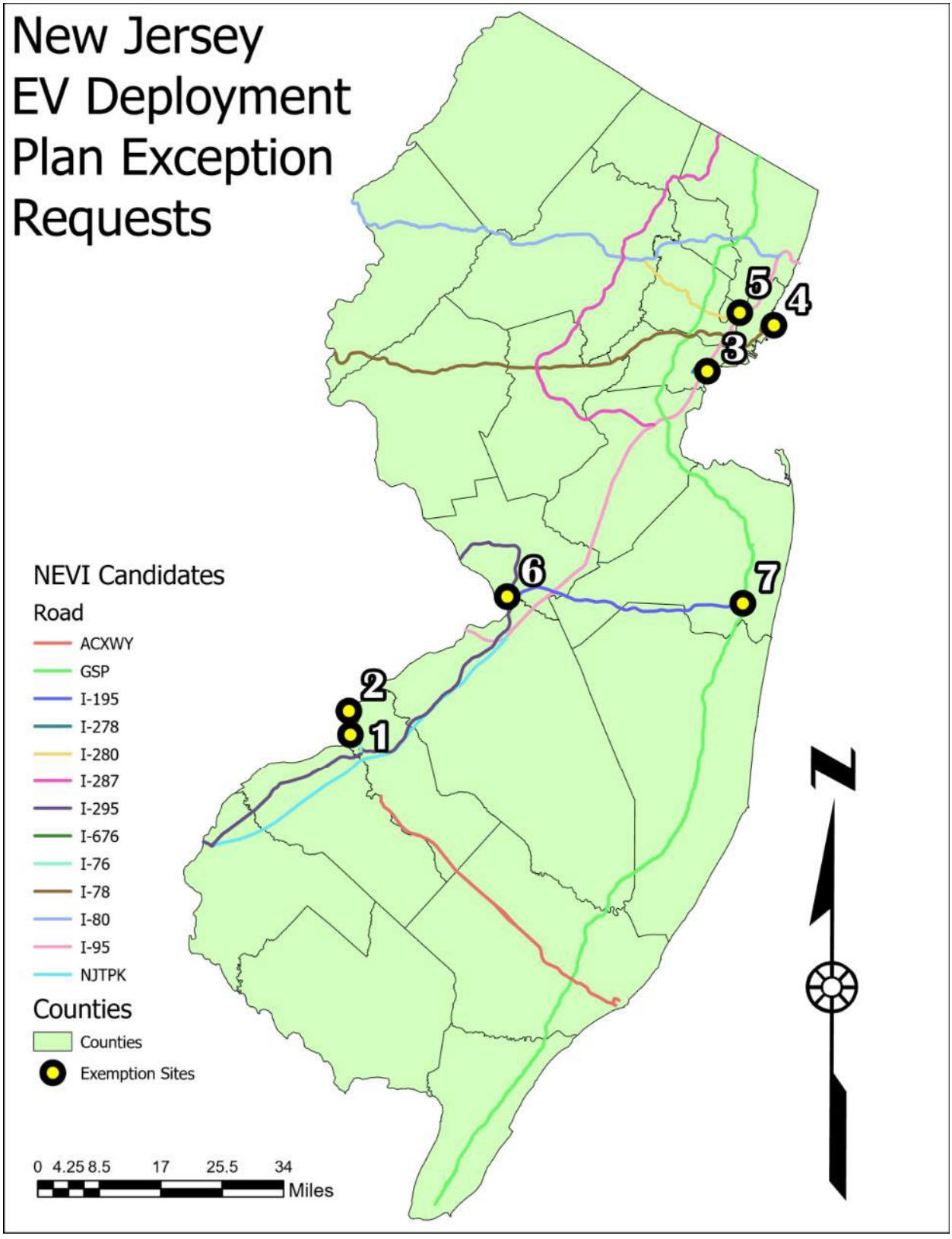
AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
174014	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696463	-74.18382	1		ChargePoint Network
174015	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696515	-74.183765	2		ChargePoint Network
174016	95	I-95	EWR Station P4 Daily Parking Garage Newark Li	Newark	40.696435	-74.18385	2		ChargePoint Network
195260	95	I-95	231 Main St	Fort Lee	40.8517854	-73.9714503	6		SemaCharge Network
196533	95	I-95	40 Fort Lee Rd	Leonia	40.86199985	-74.00813607	4		Volta
207678	95	I-95	4 Harts Ln	East Brunswick	40.444768	-74.409185	2		ChargePoint Network
207679	95	I-95	4 Harts Ln	East Brunswick	40.444845	-74.409195	2		ChargePoint Network
207809	95	I-95	1000 Ikea Dr	Elizabeth	40.674697	-74.169813	1		ChargePoint Network
207811	95	I-95	1000 Ikea Dr	Elizabeth	40.67468	-74.169726	1		ChargePoint Network
207812	95	I-95	1000 Ikea Dr	Elizabeth	40.674695	-74.169755	1		ChargePoint Network
207813	95	I-95	1000 Ikea Dr	Elizabeth	40.674686	-74.169757	1		ChargePoint Network
212212	95	I-95	6000 Vermella Way	Woodbridge Township	40.546364	-74.295372	2		ChargePoint Network
212213	95	I-95	13 Plaza Dr	Woodbridge Township	40.547214	-74.300706	2		ChargePoint Network
220414	95	I-95	1 Meadowlands Plaza	East Rutherford	40.806244	-74.0794	2		ChargePoint Network
88121	700	NJTPK	2106 Mt Holly Rd	Burlington	40.048523	-74.842584		1	ChargePoint Network
153204	700	NJTPK	1 Coopertowne Blvd	Somerdale	39.854095	-75.022869		8	Electrify America

AFDC USER ID	Route No.	Route Name	Street Address	City	Latitude	Longitude	L2 Count	DCFC Count	EV Network
191566	700	NJTPK	1111 Route 73 North	Mount Laurel	39.928647	-74.954393		2	Blink Network
45704	700	NJTPK	439 Mantua Ave	Woodbury	39.83206	-75.1581	3		Non-Networked
145113	700	NJTPK	101 Village Green Dr	Woolwich Township	39.735954	-75.324425	2		ChargePoint Network
186133	700	NJTPK	24 N Black Horse Pike	Runnemede	39.8498	-75.07254	2		ChargePoint Network
195513	700	NJTPK	100 Essex Avenue	Bellmawr	39.86681913	-75.10436898	1		SemaCharge Network
193160	700	NJTPK	14000 Stark Way	Mt Laurel Township	39.9655737	-74.8896523	1		SemaCharge Network
195009	700	NJTPK	3000 Knox Way	Mt Laurel Township	39.9620729	-74.8945016	1		SemaCharge Network

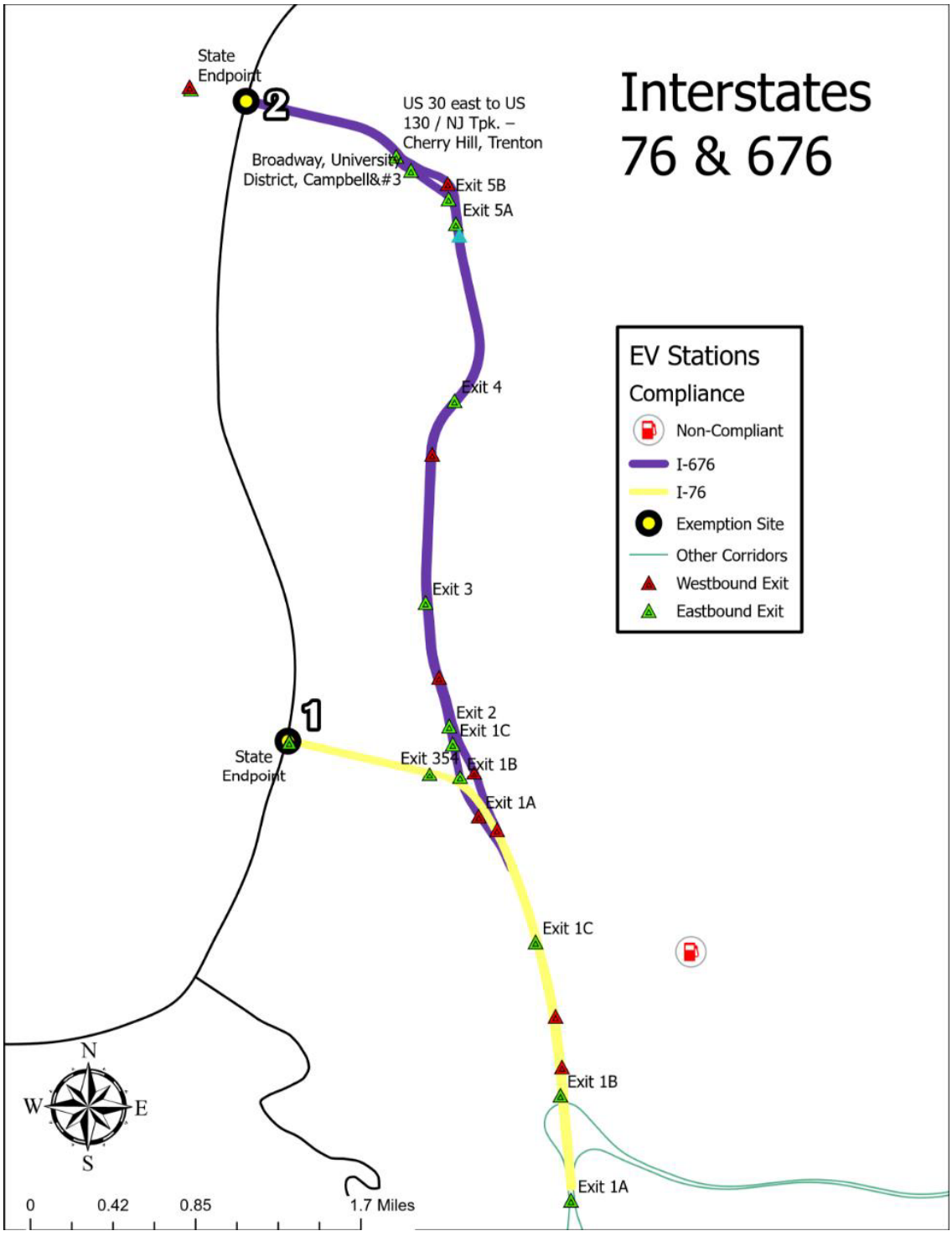
APPENDIX B

Exception #[1]	Type[2]	Distance of Deviation[3]	Included in Round 6 AFC Nomination	Reason for Exception Request[4]
1	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
2	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
3	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
4	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
5	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
6	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography X Equity X Extraordinary Cost
7	1 mile from start or termination of a nominated corridor within the state or at the border with another state	N/A	X Yes No	X Grid Capacity X Geography Equity X Extraordinary Cost

All Exceptions



Exception 1 and 2



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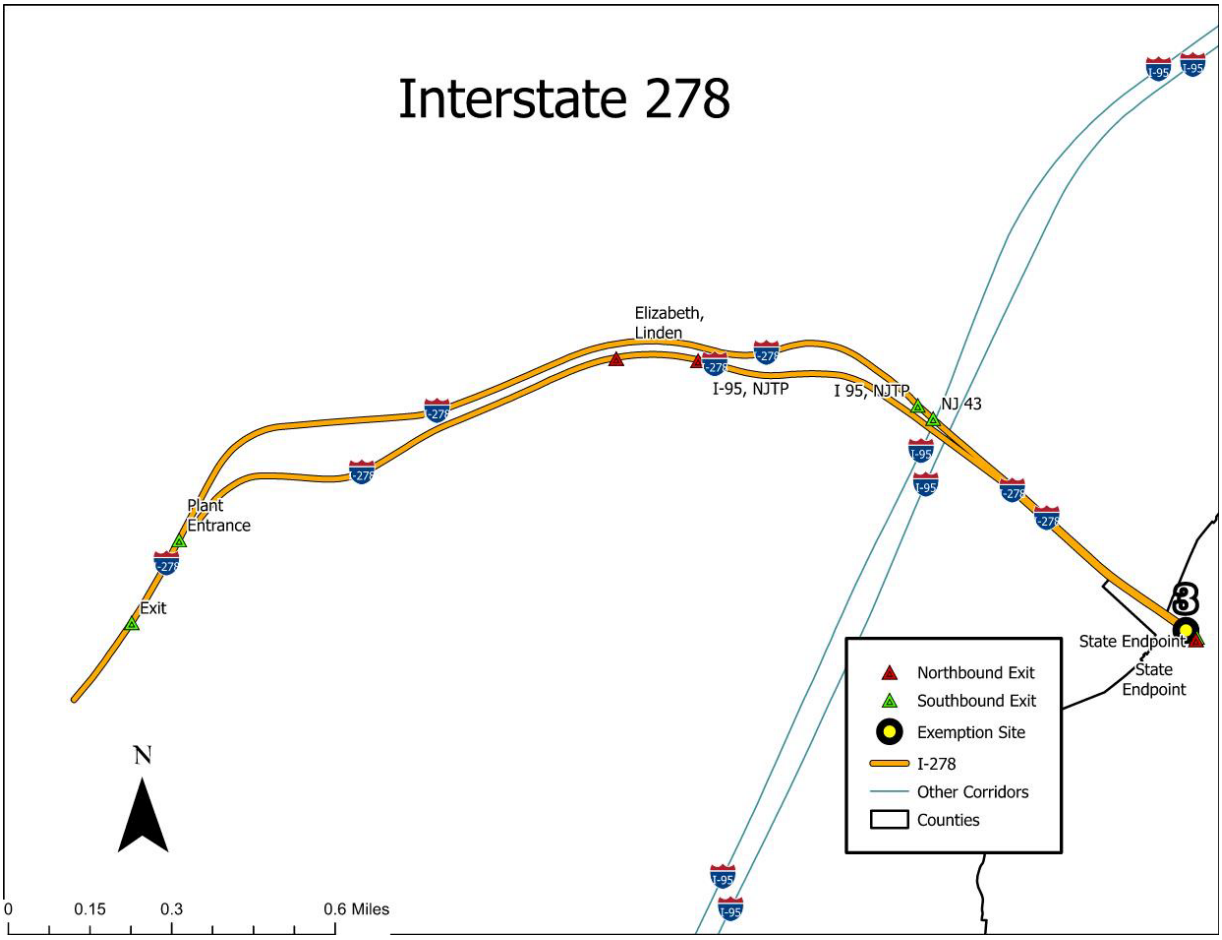
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Elizabeth,
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Plant
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State
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0.3
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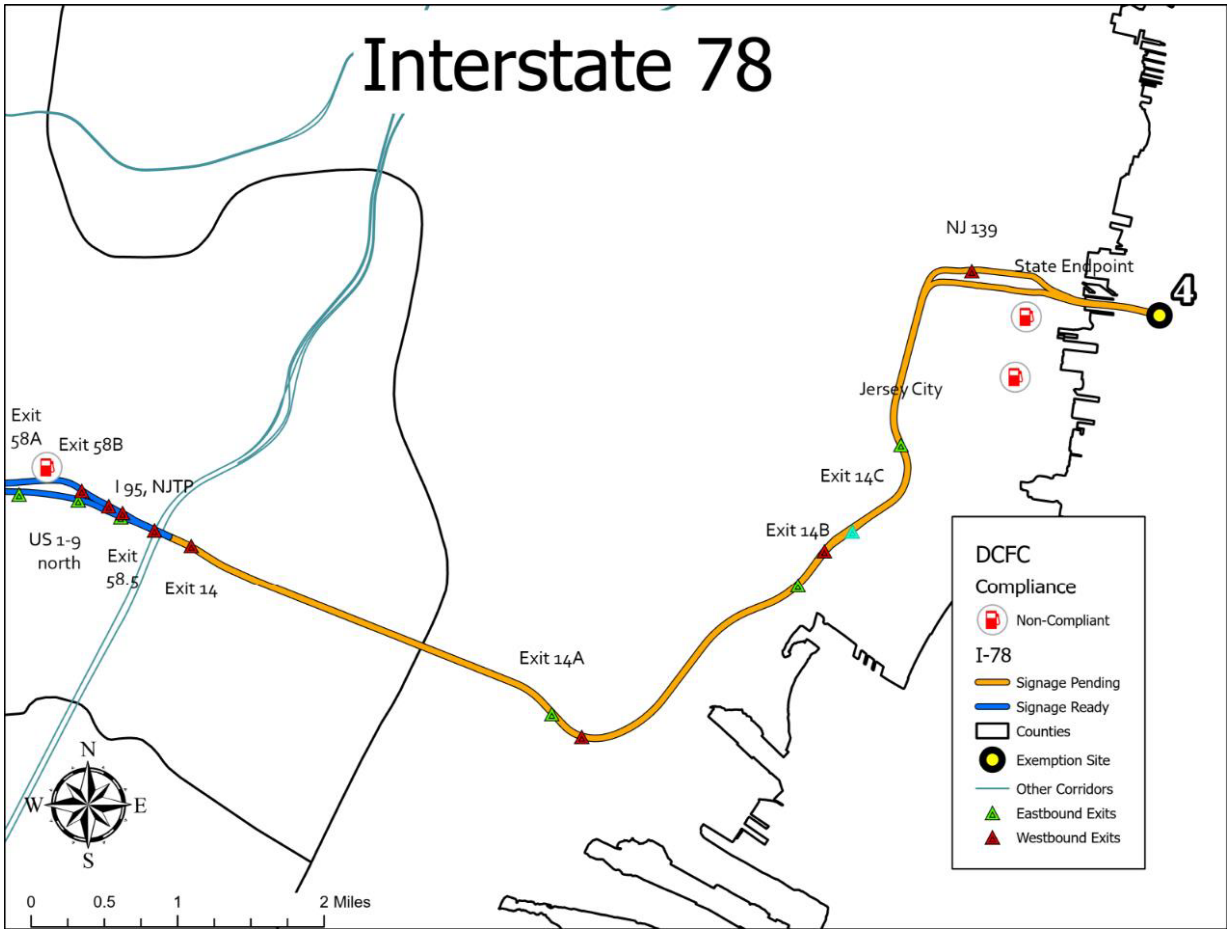
Southbound Exit
Exemption Site
I-278
Other Corridors
Counties

Exception 4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NJ 139
State Endpoint
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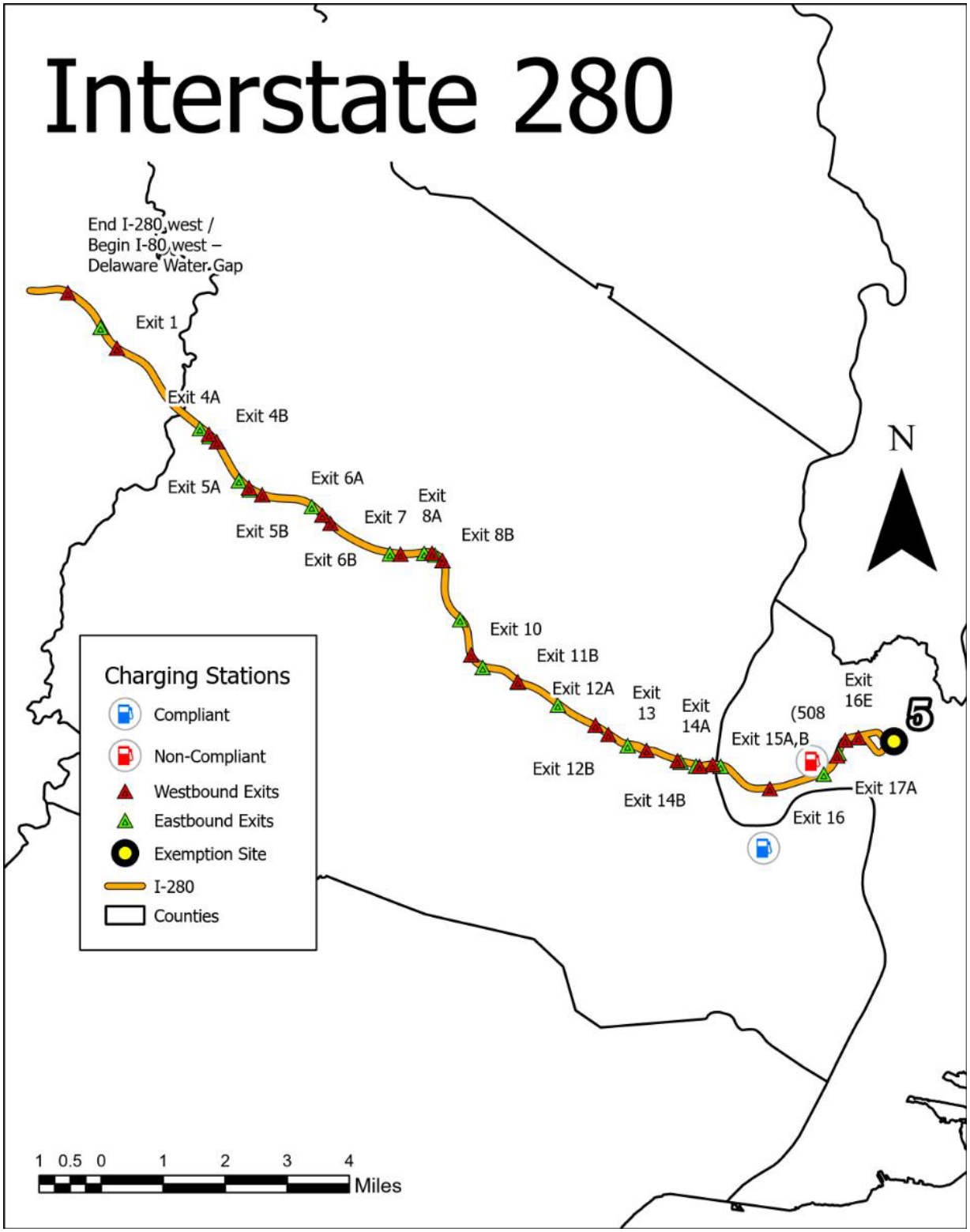
Jersey City
Exit 14C
Exit 14B
Exit 14A
Exit 14
Exit 58.5
US 1-9 north
I 95, NJTP
Exit 58B
Exit 58A
N
W
E
S
0
0.5
1
2 Miles
DCFC
Compliance
Non-Compliant
I-78
Signage Pending
Signage Ready
Counties
Exemption Site
Other Corridors
Eastbound Exits
Westbound Exits

Exception 5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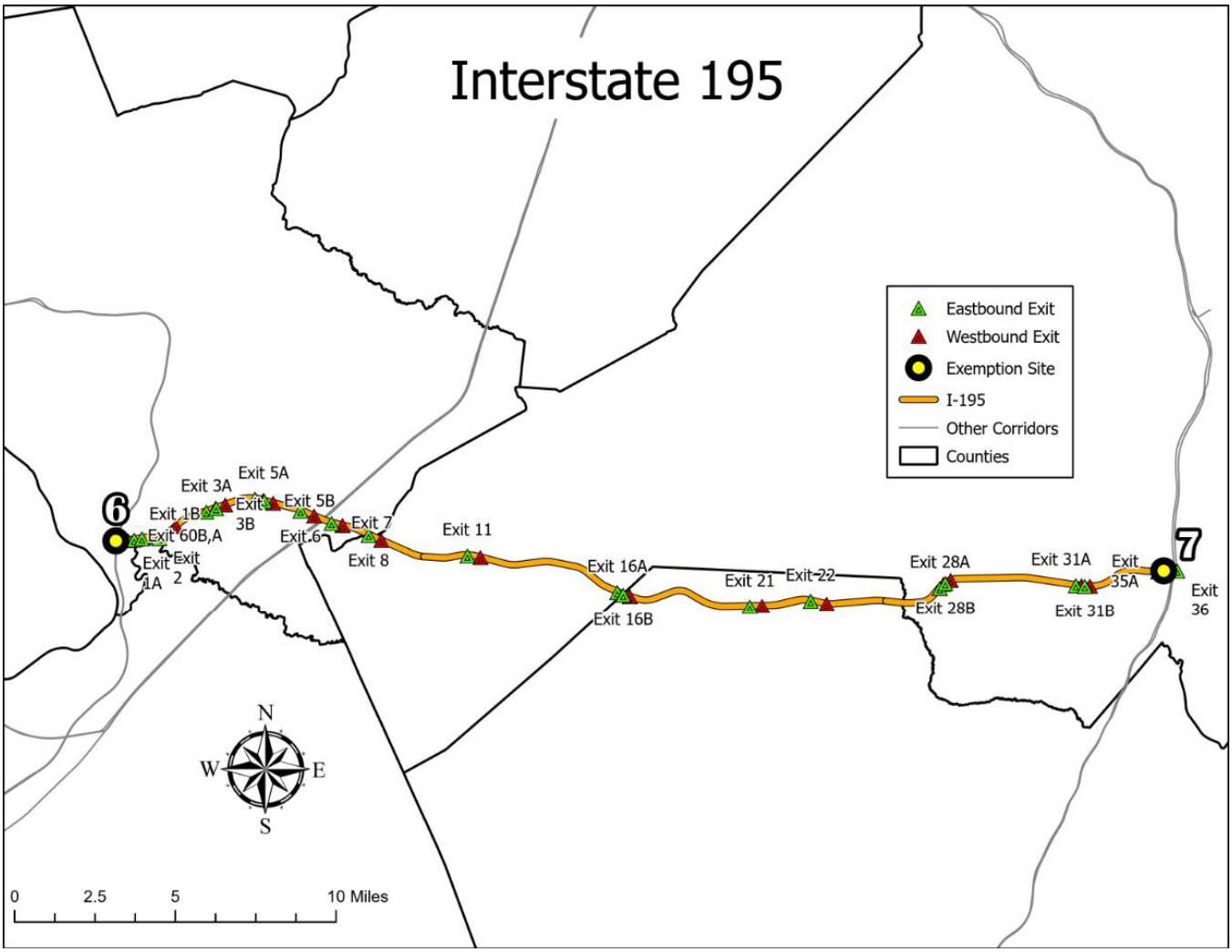
End I-280 west /
Begin I-80 west –
Delaware Water Gap
Exit 1
Exit 4A
Exit 4B
Exit 5A
Exit 5B
Exit 6A
Exit 6B
Exit 7
Exit 8A
Exit 8B
Exit 10
Exit 11B
Exit 12A
Exit 12B
Exit 13
Exit 14A
Exit 14B
Exit 15A,B
(508
Exit 16E
Exit 16
Exit 17A
5
N
Charging Stations
Compliant
Non-Compliant
Westbound Exits
Eastbound Exits
Exemption Site
I-280
Counties
1 0.5 0 1 2 3 4
Miles

Exception 6 and 7



Analyses to Support Exception 1 Through 7

1. **I-76** commences in NJ at the intersection with I-295 and ends at the State border with Pennsylvania on the Walt Whitman Bridge. In keeping with guidance given by the Joint Office in its preliminary review of New Jersey's exceptions request, NJDOT coordinated with the Pennsylvania Department of Transportation (PennDOT) regarding nominated alternative fuel corridors. PennDOT advised that all Interstates crossing the NJ/PA State line are PA nominated corridors (I-76, I-676, I-78, I-80, I-95 and I-295); this will be an ongoing coordination as EVSE infrastructure is built out along these corridors and will foster convenient and reliable EV interstate travel. I-76 in NJ is approximately 3 miles in length and has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, I-76 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to I-76 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that one charging station be installed to build out I-76 in NJ, within 1 mile or as close as practical to I-76, with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   US DOT Transportation Disadvantaged Mapping Tool
   https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

   PSE&G Hosting Capacity Map
   https://nj.myaccount.pseg.com/myservicepublic/hosting_capacity_map

2. **I-676** begins in NJ at the intersection with I-76 and ends at the State border with PA on the Benjamin Franklin Bridge. In keeping with guidance given by the Joint Office in its preliminary review of New Jersey's exceptions request, NJDOT coordinated with the Pennsylvania Department of Transportation (PennDOT) regarding nominated alternative fuel corridors. PennDOT advised that all Interstates crossing the NJ/PA State line are PA nominated corridors (I-76, I-676, I-78, I-80, I-95 and I-295); this will be an ongoing coordination as EVSE infrastructure is built out along these corridors and will foster convenient and reliable EV interstate travel. I-676 in NJ is approximately 4.75 miles in length and has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, I-676 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to I-676 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such

installation would be at an extraordinary cost. We recommend that one charging station be installed to build out I-676 in NJ, within 1 mile or as close as practical to I-676, with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

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https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

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3. **I-278** commences in NJ at the intersection with US Route 1&9 in Linden and ends in Elizabeth at the Goethals Bridge which crosses the Arthur Kill into Staten Island, New York. In keeping with guidance given by the Joint Office in its preliminary review of New Jersey's exceptions request, NJDOT coordinated with the New York State Department of Transportation (NYSDOT) regarding nominated alternative fuel corridors. NYSDOT advised that Interstate 278 was a NY nominated corridor; this will be an ongoing coordination as EVSE infrastructure is built out along these corridors and will foster convenient and reliable EV interstate travel. I-278 in NJ is 2 miles in length and has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, I-278 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to I-278 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that one charging station be installed to build out I-278 in NJ, within 1 mile or as close as practical to I-278, with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   US DOT Transportation Disadvantaged Mapping tool
   https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

   PSE&G Hosting Capacity Map
   https://nj.myaccount.pseg.com/myservicepublic/hosting_capacity_map

4. **I-78's** eastern end terminates at the Holland Tunnel which crosses the Hudson River into New York City. The east end of I-78 traverses a highly developed area in Jersey City as 12th Street (eastbound) and 14th Street (westbound), each approximately ¼ mile in length; this area has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, the east terminus of I-78 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to this section of I-78 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that an EV charging station be installed to build out this section of I-78 in NJ, as close as practical to east terminus of I-78 (which may be more than 1 mile), with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   US DOT Transportation Disadvantaged Mapping tool
   https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

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5. **I-280's** eastern end terminates at the intersection with I-95 in Kearny, NJ. This area has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, the east end of I-280 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to this section of I-280 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that an EV charging station be installed to build out this section of I-280, as close as practical to the east terminus of I-280 (which may be more than 1 mile), with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   US DOT Transportation Disadvantaged Mapping tool
   https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

   PSE&G Hosting Capacity Map
   https://nj.myaccount.pseg.com/myservicepublic/hosting_capacity_map

6. **I-195**'s western end terminates at the intersection with I-295 and Route 29 in Hamilton Township, NJ. This area has challenging geography for EVSE installations. As identified in the USDOT Transportation Disadvantaged Mapping tool, the west end of I-195 traverses a disadvantaged community. As noted in the utility grid capacity mapping from PSE&G, significant areas adjacent to this section of I-195 are identified with less than 500kW available capacity, which is insufficient; EVSE installations are expected to require 700kW to 1MW of power availability. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that an EV charging station be installed to build out this section of I-195, as close as practical to the west terminus of I-195 (which may be more than 1 mile), with the location of the EVSE being further informed through outreach with the community and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   US DOT Transportation Disadvantaged Mapping tool
   https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

   PSE&G Hosting Capacity Map
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7. **I-195's** eastern end terminates at the intersection with Route 34 in Wall Township, NJ. This area has challenging geography for EVSE installations. The last 2 miles of the eastern end of I-195 have no exits and a portion of this roadway section traverses Allaire State Park. Grid capacity in this area is not known at this time and will be a factor in planning EVSE installations. First Energy Corp Infrastructure Upgrade Project JC-121326 indicates the need to provide more capacity to Monmouth County, NJ – including locations immediately adjacent to Wall Township - which may also factor into planning EVSE locations. Without flexibility to strategically locate EVSE in this area, it is possible that such installation would be at an extraordinary cost. We recommend that an EV charging station be installed to build out this section of I-195, as close as practical to the east terminus of I-195 (which may be more than 1 mile), with the location of the EVSE being further informed through utility coordination and ongoing geographical analysis to determine exits with optimal site locations. Precise charger locations are expected to be determined by vendor responses to the competitive solicitation and prioritization factors for scoring bids. This flexibility would allow the selection of the most convenient, affordable, reliable, and equitable EV charging along the route. This analysis is supported by:

   First Energy Corp Infrastructure Upgrade Project
   https://firstenergycorp.com/about/transmission_projects/new_jersey/infrastructure-upgrade-project-jc-121326.html

   New Jersey State Park Service
   https://www.nj.gov/dep/parksandforests/parks/allairestatepark.html