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State Plan for Electric Vehicle Infrastructure Deployment

National Electric Vehicle Infrastructure Program (NEVI)

Objectives

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- ❑ Inform about the National Electric Vehicle Infrastructure(NEVI) program
  - ✓ Program objectives
  - ✓ Eligibility criteria
- ❑ Inform about the Designation of Alternative Fuel Corridors
  - ✓ Selection criteria
  - ✓ Designation proposal on the island
- ❑ Inform about the process of the development of the State Plan for Electric Vehicle Infrastructure Development

NEVI – National **E**lectric **V**ehicle **I**nfrastructure

EV – Electric **V**ehicles

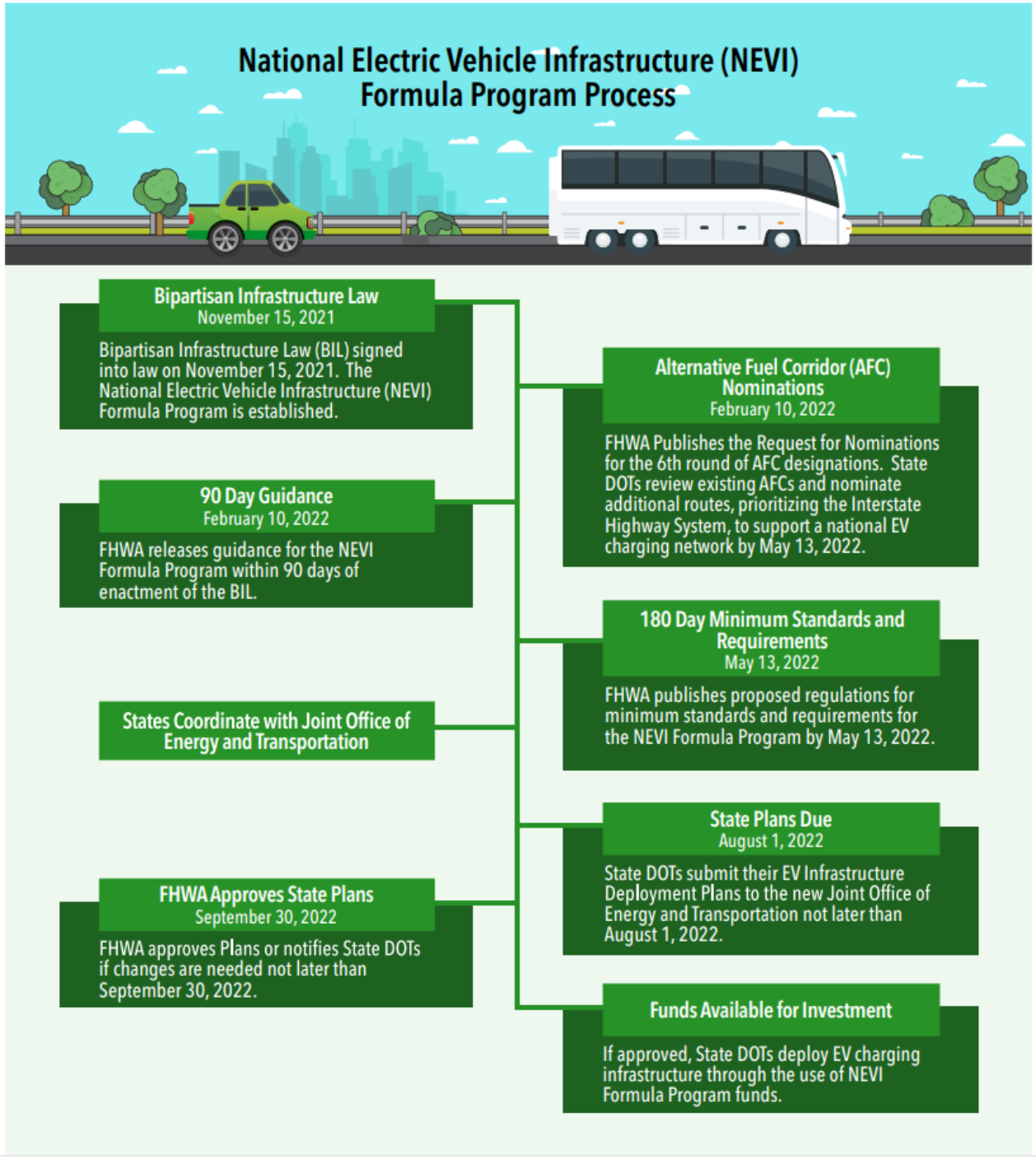
PRHTA – Puerto **R**ico **H**ighway and **T**ransportation **A**uthority

FHWA –Federal **H**igh**w**ay **A**dministration

NHS – National **H**ighway **S**ystem

Introduction

- The National Electric Vehicle Infrastructure (NEVI) Program is authorized under the Highway Infrastructure Program of the Bipartisan Infrastructure Law (BIL).
- States are required to submit an EV Infrastructure Deployment Plan that describes how it intends to use its apportioned formula funds.
- Any EV charging infrastructure acquired or installed with NEVI Formula Program Funds shall be located along a designated Alternate Fuel Corridor.
- PRHTA submitted PR-2, PR-52, and PR-22 as "corridor pending" in May 2022. **FHWA approved on July 6, 2022.**



NEVI Objectives

EQUITABLE Adoption of Electrical Vehicles

- Reduce transportation related greenhouse gas emissions
- Goal of 2050 Net Zero Emissions
- Position US Industries to lead global transportation electrification
- Help create family sustaining union jobs

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Funding Available

Formula Program

+

Discretionary Grant

=

$7.5 Billion

$5 Billion Nationwide
($2 Million/Yr for 5 Years for PR)

$1.25 Billion for Corridor Charging Grant
$1.25 Billion for Community Charging Grant

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Funds Use Eligibility

- **Construction and installation** of EV Charging Infrastructure including parking facilities and utilities
- **Workforce development and training** related to EV Infrastructure
- EV **acquisitions** and engine conversions
- **Planning** for EV Charging Infrastructure related projects
- **Construction and installation** of EV charging infrastructure to support operational, resiliency, national energy security, environmental, and community goals for freight transportation.

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Funds Use Eligibility (Cont.)

- **Installation** of EV Charging infrastructure as part of transit capital projects eligible under Chapter 53 of title 49 USC.

- **Maintenance and operation** of EV Charging Infrastructure (minimum standards and requirements associated will be provided)

- **Renewable energy generation and storage**, such as on-site solar panels would be considered directly related if it leads to lower overall construction and operation costs, and therefore would be eligible.

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Eligible Locations

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- Because NEVI Formula Program funds are directed to designated Alternative Fuel Corridors to build out a convenient, reliable, affordable, and equitable public charging network, States should first prioritize investments along the **Interstate Highway System.**

- As necessary, States may also use NEVI Formula Program funding elsewhere on designated corridors along the National Highways System (NHS) to ensure a convenient, affordable, reliable, and equitable national network.

- The objective is to ensure a convenient, affordable, reliable, and equitable network.

Alternative Fuel Corridors

Those corridors, as approved by FHWA, where alternative fueling facilities are or will be located.

Corridor Designation Process

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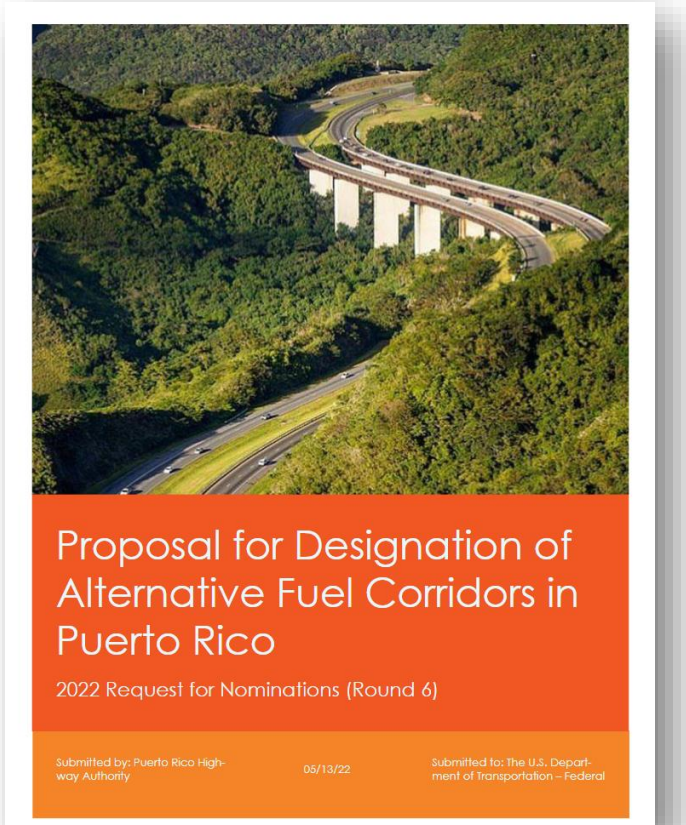
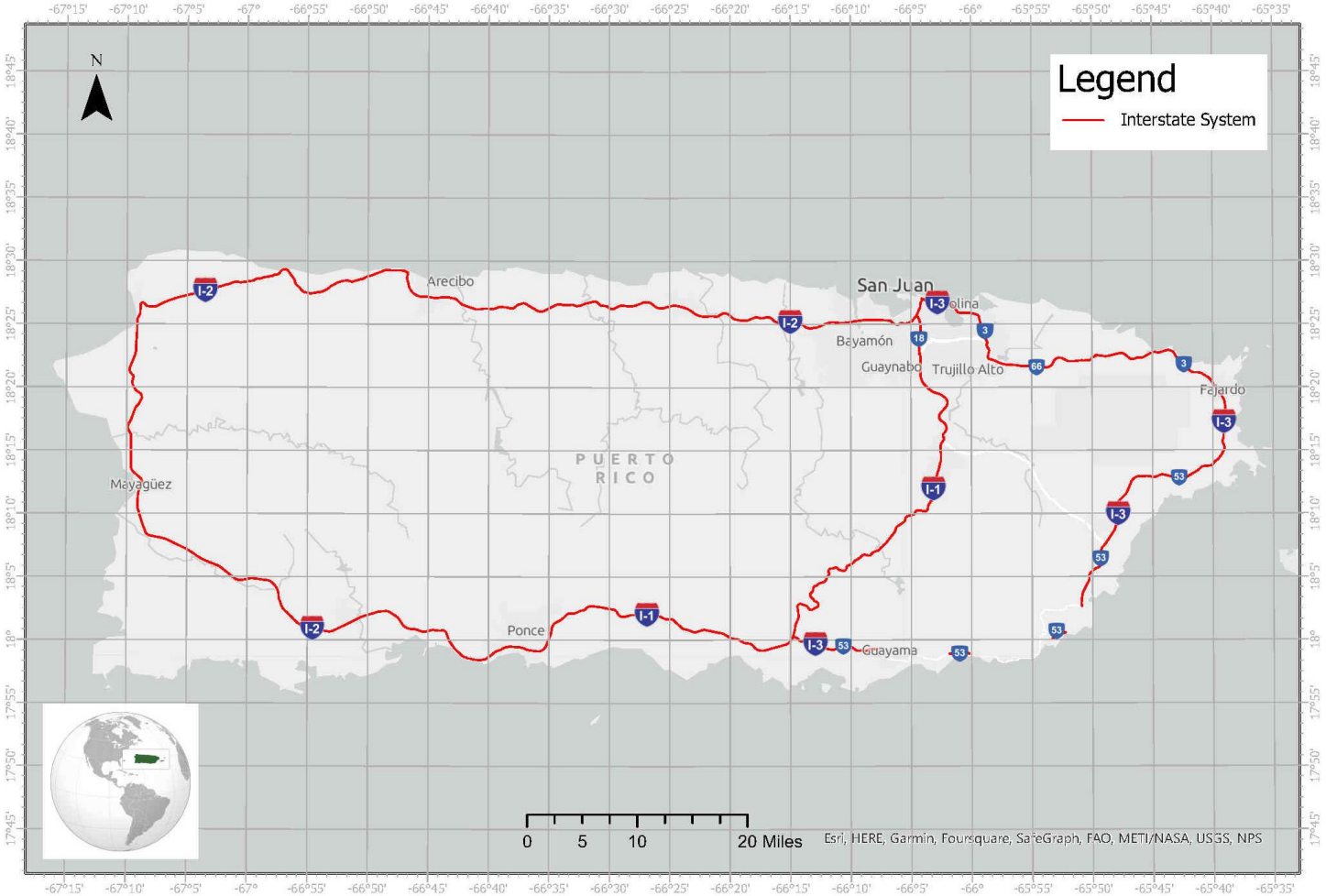
Designation Approved on July 6



PUERTO RICO INTERSTATE HIGHWAY SYSTEM



Corridor Selection requisites

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- ❑Corridor designated as Interstate Highway System
- ❑Requires DC Fast Charging
- ❑Separated by no more than 50 miles
- ❑Location of station/site no more than 1 mile from Interstate exits or highway intersections along the corridor
- ❑Exceptions are permitted if justified

Corridors by Categories

Corridor Ready
A segment that currently has several alternative fueling facilities that allow for travel along the corridor.

Corridor Pending
A segment that currently does not have enough alternative fueling facilities to allow travel along the corridor.

Corridor Selection requisites

All funding distributed under the NEVI Formula Program shall be for projects directly related to the charging of a vehicle and only to support EV Charging infrastructure that is open to the general public or to authorized commercial motor vehicle operators from more than one company.

Public Accessible locations may include public parking facilities, parking at public buildings, public transportation stations, park and rides, public schools, public parks, private parking facilities available for public use, visitors' centers, and other public locations on federal lands.

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Alternative Fuel Corridors

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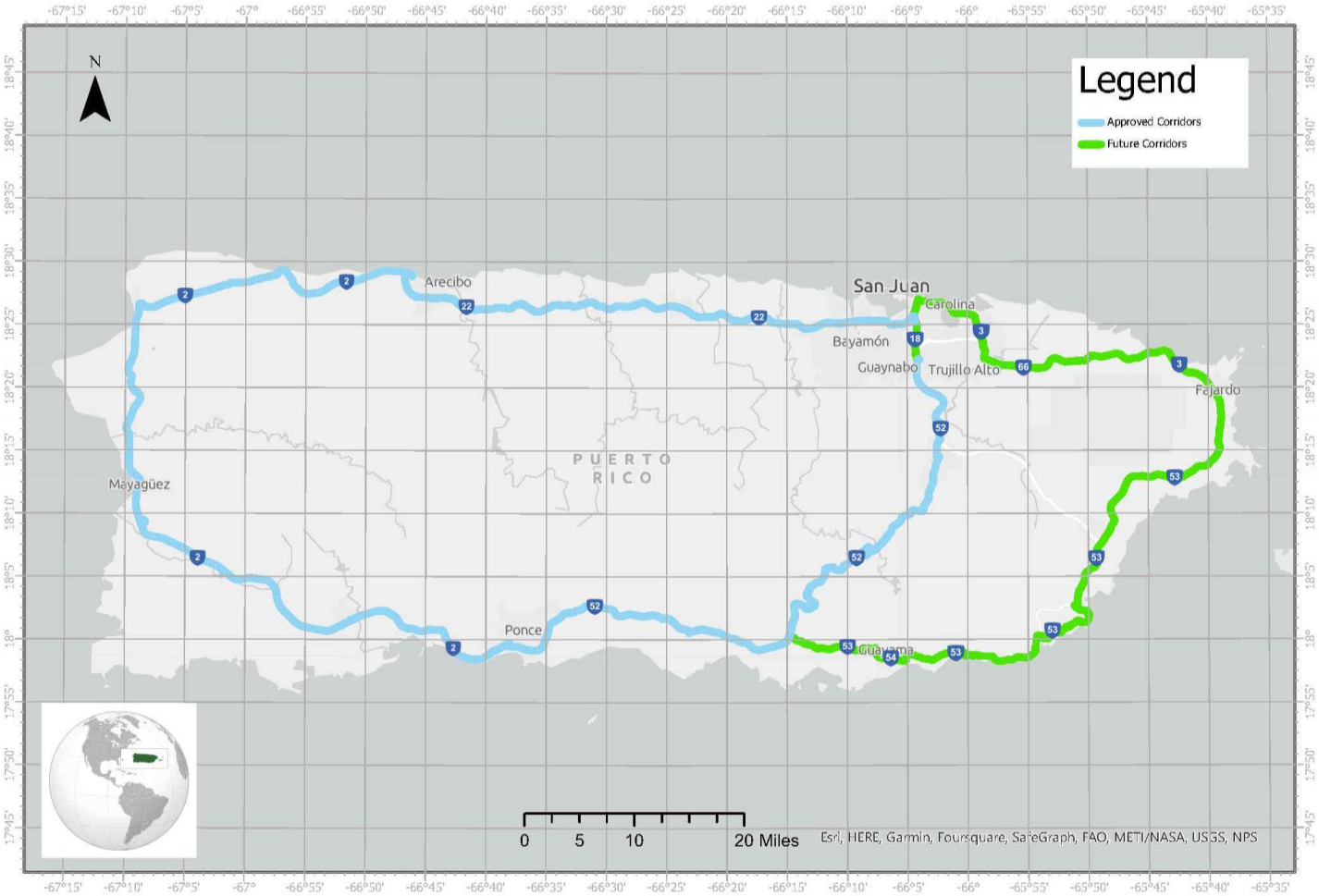
- ❑ **Approved Corridors** (as corridor pending):
  - ✓ PR-2
  - ✓ PR-22
  - ✓ PR-52

- ❑ In future rounds will nominate the following :
  - ✓ PR-18
  - ✓ PR- 3
  - ✓ PR-53
  - ✓ PR-54
  - ✓ PR-66

ALTERNATIVE FUEL CORRIDOR APPROVED AND TO BE SUBMITTED



EV Charging Requirements

- ❑ Each EV Charging infrastructure includes at least four (4) 150kW Direct Current (DC) Fast Chargers with Combined Charging System (CCS) ports capable of **simultaneously DC charging 4 electrical vehicles.**
  - ✓ EV Charging infrastructure has minimum station capability at or above **600kW and supports at least 150kW per port** simultaneously across four ports for charging.
- ❑ Maximize opportunities for US-made EV supply equipment.
- ❑ High level % of reliability > 97%

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Existing Charging Stations within 1 mile radius of PR-22

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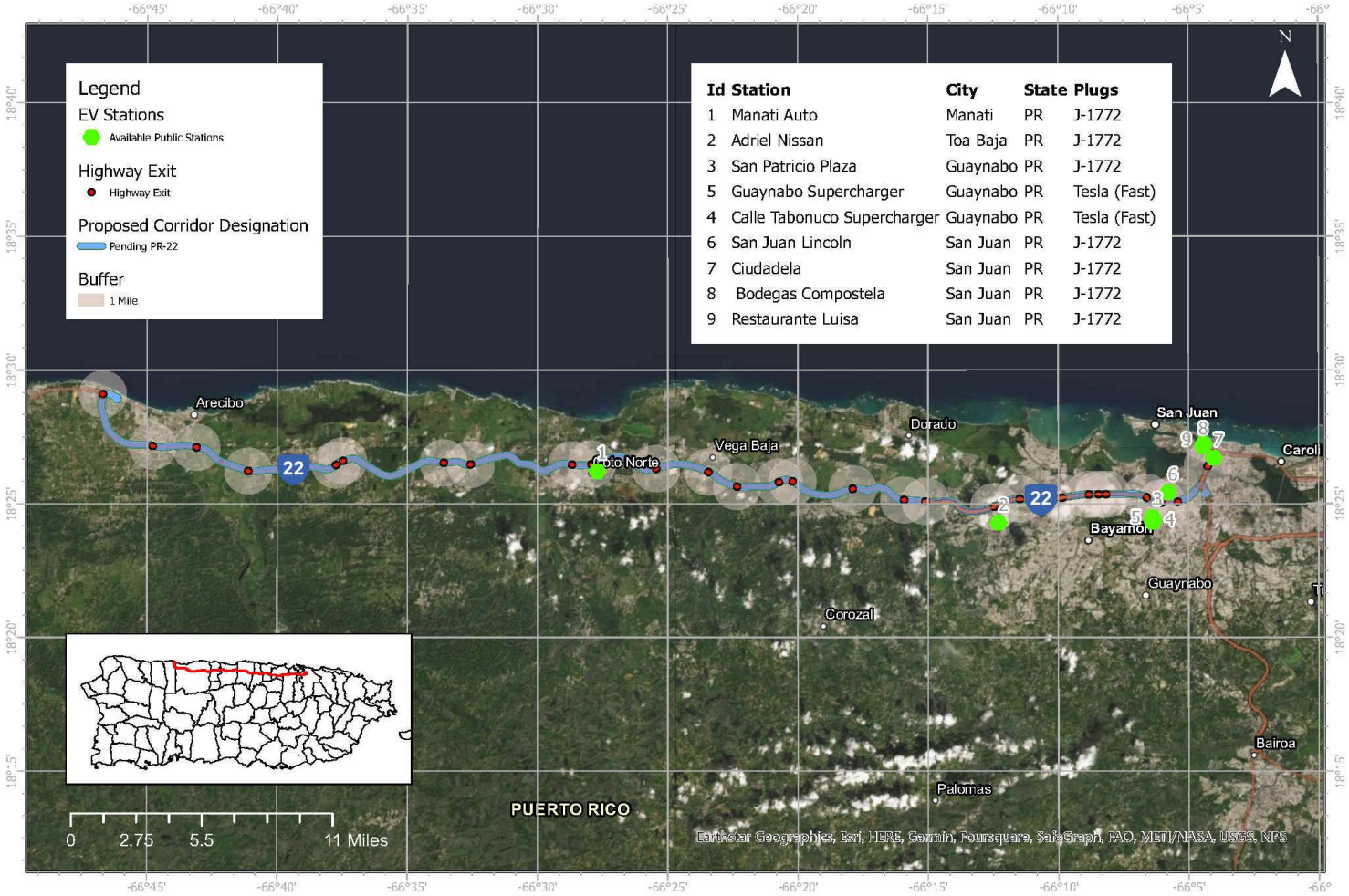
Note: Existing stations do not meet program requirements because they are not DC Fast chargers.

Tesla chargers do not qualify because they are considered a proprietary network that does not meet the criteria for public access designation.

PUERTO RICO ELECTRIC VEHICLE (EV) CHARGING CORRIDORS



Id	Station	City	State	Plugs
1	Manati Auto	Manati	PR	J-1772
2	Adriel Nissan	Toa Baja	PR	J-1772
3	San Patricio Plaza	Guaynabo	PR	J-1772
5	Guaynabo Supercharger	Guaynabo	PR	Tesla (Fast)
4	Calle Tabonuco Supercharger	Guaynabo	PR	Tesla (Fast)
6	San Juan Lincoln	San Juan	PR	J-1772
7	Ciudadela	San Juan	PR	J-1772
8	Bodegas Compostela	San Juan	PR	J-1772
9	Restaurante Luisa	San Juan	PR	J-1772

Existing Charging Stations within 1 mile radius of PR-52

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Note: Existing stations do not meet program requirements because they are not DC Fast chargers.

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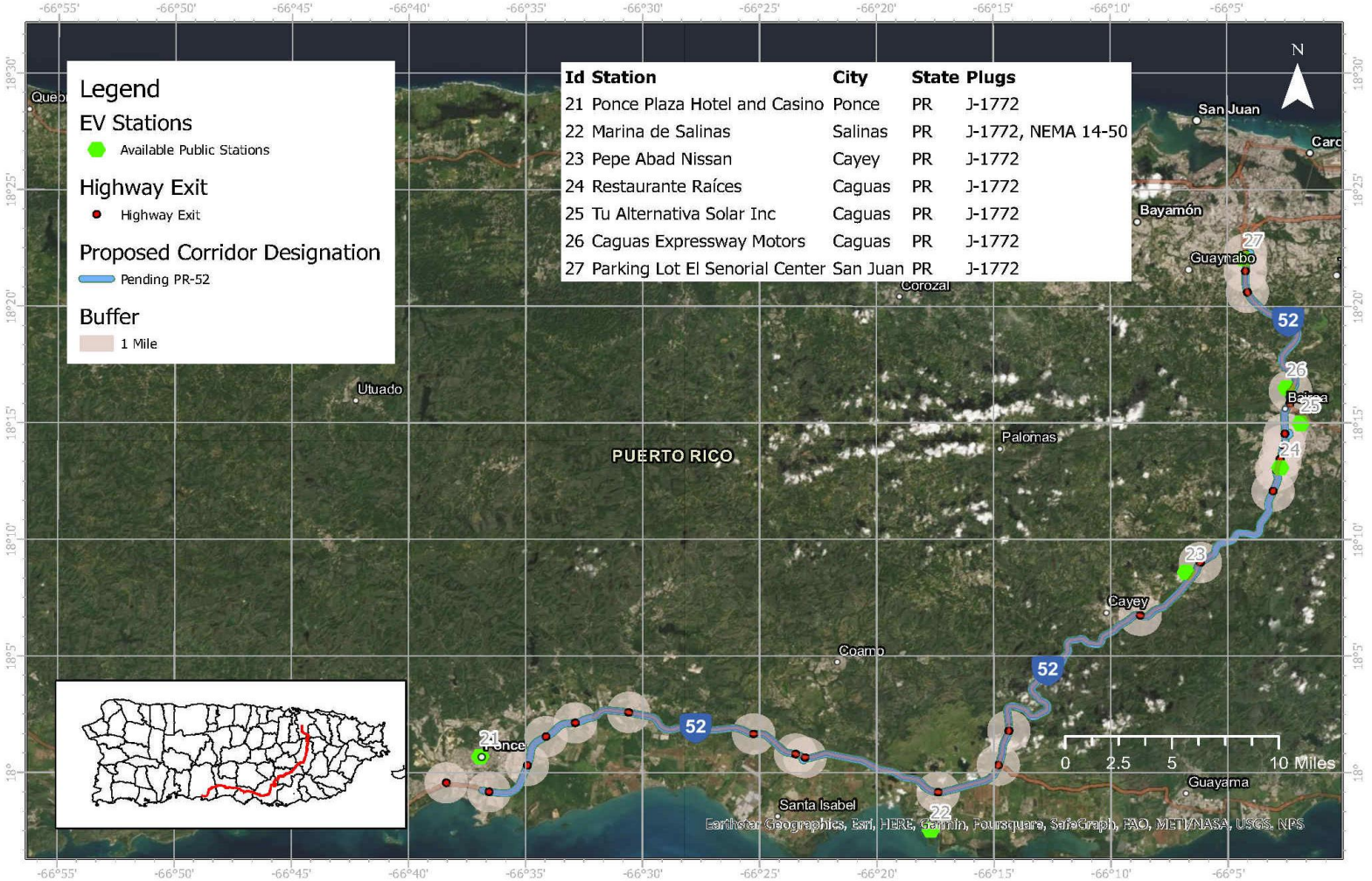
PUERTO RICO ELECTRIC VEHICLE (EV) CHARGING CORRIDORS



Id	Station	City	State	Plugs
21	Ponce Plaza Hotel and Casino	Ponce	PR	J-1772
22	Marina de Salinas	Salinas	PR	J-1772, NEMA 14-50
23	Pepe Abad Nissan	Cayey	PR	J-1772
24	Restaurante Raíces	Caguas	PR	J-1772
25	Tu Alternativa Solar Inc	Caguas	PR	J-1772
26	Caguas Expressway Motors	Caguas	PR	J-1772
27	Parking Lot El Senorial Center	San Juan	PR	J-1772

Existing Charging Stations within 1 mile radius of PR-2

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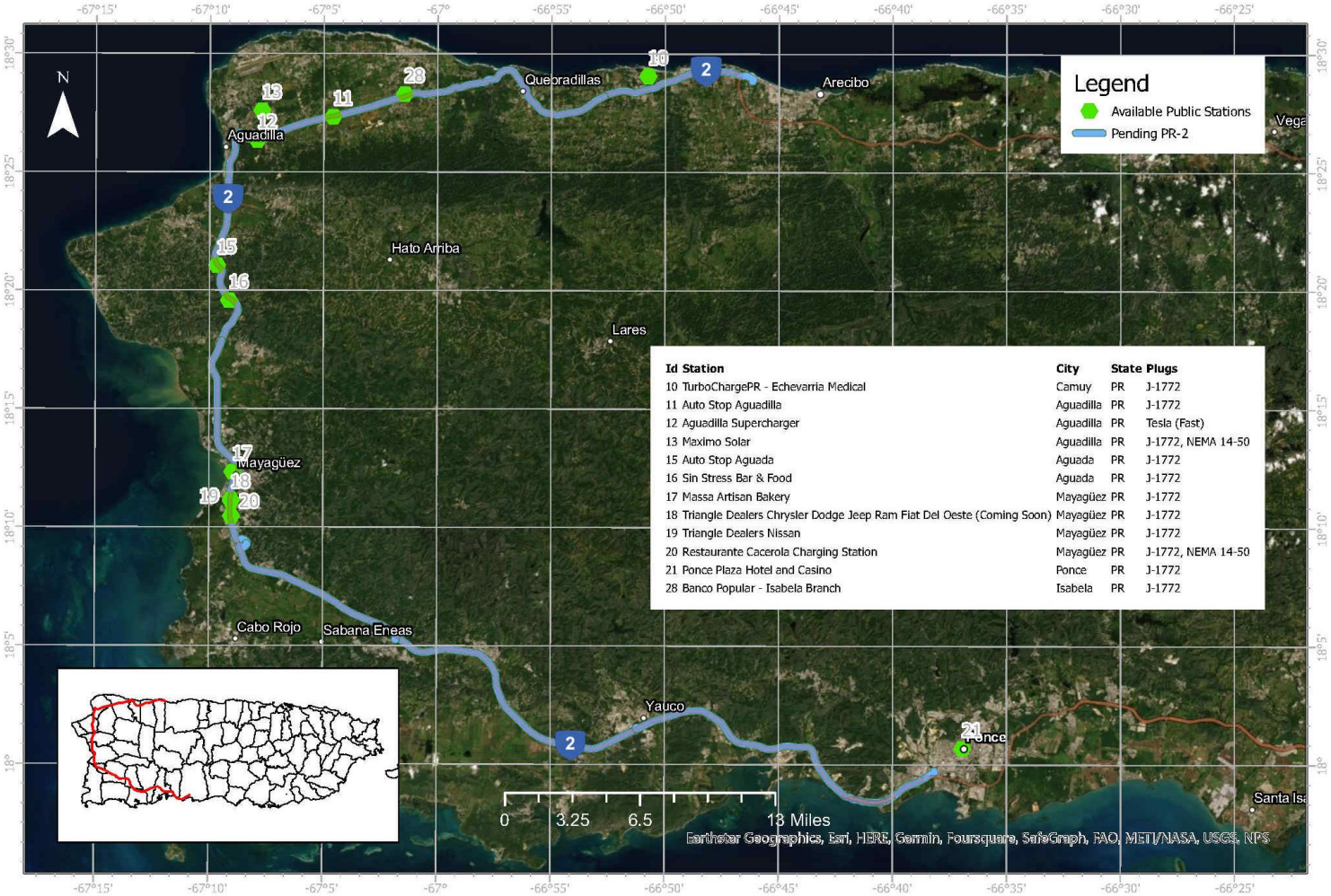
PUERTO RICO ELECTRIC VEHICLE (EV) CHARGING CORRIDORS



Id	Station	City	State	Plugs
10	TurboChargePR - Echevarria Medical	Camuy	PR	J-1772
11	Auto Stop Aguadilla	Aguadilla	PR	J-1772
12	Aguadilla Supercharger	Aguadilla	PR	Tesla (Fast)
13	Maximo Solar	Aguadilla	PR	J-1772, NEMA 14-50
15	Auto Stop Aguada	Aguada	PR	J-1772
16	Sin Stress Bar & Food	Aguada	PR	J-1772
17	Massa Artisan Bakery	Mayagüez	PR	J-1772
18	Triangle Dealers Chrysler Dodge Jeep Ram Fiat Del Oeste (Coming Soon)	Mayagüez	PR	J-1772
19	Triangle Dealers Nissan	Mayagüez	PR	J-1772
20	Restaurante Cacerola Charging Station	Mayagüez	PR	J-1772, NEMA 14-50
21	Ponce Plaza Hotel and Casino	Ponce	PR	J-1772
28	Banco Popular - Isabela Branch	Isabela	PR	J-1772

Note: Existing stations do not meet program requirements because they are not DC Fast chargers.

Tesla chargers do not qualify because they are considered a proprietary network that does not meet the criteria for public access designation.

Plan Development Strategy

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- Plan has fourteen (14) sections
- Sections have been prioritized based on:
  - ✓ level on effort required
  - ✓ stakeholders that are involved
  - ✓ Relevance to other sections

Review by Stakeholders

Section preparation

Data analysis

Data collection

Public Engagement

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PREB PUERTO RICO ENERGY BUREAU

- The Puerto Rico Energy Bureau, as the independent and specialized body created by Act 57-2014*, is responsible for regulating, monitoring, and enforcing the energy public policy of the Government of Puerto Rico.
- As part of the implementation of the energy policy, the Bureau initiated a citizen participation process to begin to identify the necessary requirements to promote the efficient and orderly deployment of electric vehicle charger infrastructure to allow and facilitate their proliferation on the island.
- These participation efforts will be incorporated into the development of the State Plan for the Development of Electric Vehicle Infrastructure.
- A public engagement Section will be developed in the Plan to continue with outreach efforts and information gathering from stakeholders and the general public.

1st Workshop	September 23, 2021
2nd Workshop	January 27, 2022
3th Workshop	May 11, 2022
Future Activities	Further participation activities will be coordinated.

* Know as Puerto Rico Energy Transformation and RELIEF Act, as amended.

Plan Content

- ❑ Introduction
  - ✓ Plan Overview
  - ✓ Plan Development Process
  - ✓ Plan Milestones
  - ✓ Plan Adoption Authority
- ❑ State Agency Coordination
  - ✓ Coordination with other state agencies
- ❑ Public Engagement
  - ✓ Public Involvement Plan
  - ✓ Involvement of Stakeholders
    - MPO/Regional Transportation Planning Organizations
    - State Energy and Environmental Departments
- ❑ Plan Visions and Goals
  - ✓ PR's vision to strategically deploy EV Charging Infrastructure
  - ✓ Goals: data collection, equitable access, and reliability
- ❑ Contracting
  - ✓ Contracts with Private entities
  - ✓ Contracting Strategies
  - ✓ Ongoing operation and maintenance
  - ✓ Community engagement
  - ✓ SBE/MBE participation
- ❑ Existing and Future Conditions Analysis
  - ✓ State Geography, terrain, climate (temperature and precipitation patterns)
  - ✓ Industry and market conditions
  - ✓ Land Use patterns (JP)
  - ✓ Extreme weather events (hurricanes)
  - ✓ State travel patterns, public transportation needs, Freight Chain Needs
  - ✓ AFC Corridor Pending information
  - ✓ Existing Locations

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Plan Content (cont.)

- ❑ EV Charging Infrastructure Deployment
  - ✓ Strategy for EV Charging Infrastructure Installations
  - ✓ State, Regional and Local Policies
  - ✓ Funding Sources: **Non-federal Match**
  - ✓ Infrastructure Deployment or Upgrades
  - ✓ Maps
  - ✓ Electric Vehicle Freight Considerations
  - ✓ Public Transportation Freight Considerations
  - ✓ FY23-26 Future Deployments

- ❑ Implementation
  - ✓ Ongoing operation and maintenance of EV
  - ✓ Strategies for identifying Vehicle Charger Services Providers and Station Owners
  - ✓ Data Collection and Sharing Strategies
  - ✓ Strategies to address resilience & seasonal needs
  - ✓ Strategies for Strong labor safety, training, and installation standards

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Plan Content (cont.)

- ❑ Civil Rights
  - ✓ Compliance with state and federal civil rights laws (Title VI)
- ❑ Equity Considerations
  - ✓ Justice 40 Initiative
  - ✓ Outreach and benefits to Disadvantaged Communities
- ❑ Labor and Workforce Considerations
  - ✓ Training Strategies/ Diversity of Workforce
- ✓ Cybersecurity
  - ✓ How to address cybersecurity at EV Stations
- ❑ Program Evaluation
  - ✓ Strategy to monitor and report progress of AFC network
- ❑ Discretionary Exceptions (if Any)
- ❑ Supporting Material
  - ✓ Support Letters
  - ✓ Contracts/Agreements

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Next Steps

Outreach and Public Engagement activities

Electrical system capabilities to meet the 600kW requirement

NEVI Plan Draft

Plan submission to FHWA

July 6, 2022

Currently

July 18, 2022

July 22, 2022

August 1st 2022

Initiatives currently in planning phase that meet the NEVI Requirements

Comments and review of Plan

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For further information and/or comments please write to the following e-mail address:

plan.nevi@dtop.pr.gov

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