



# Preparing for Electric Vehicles and Alternative Fuels

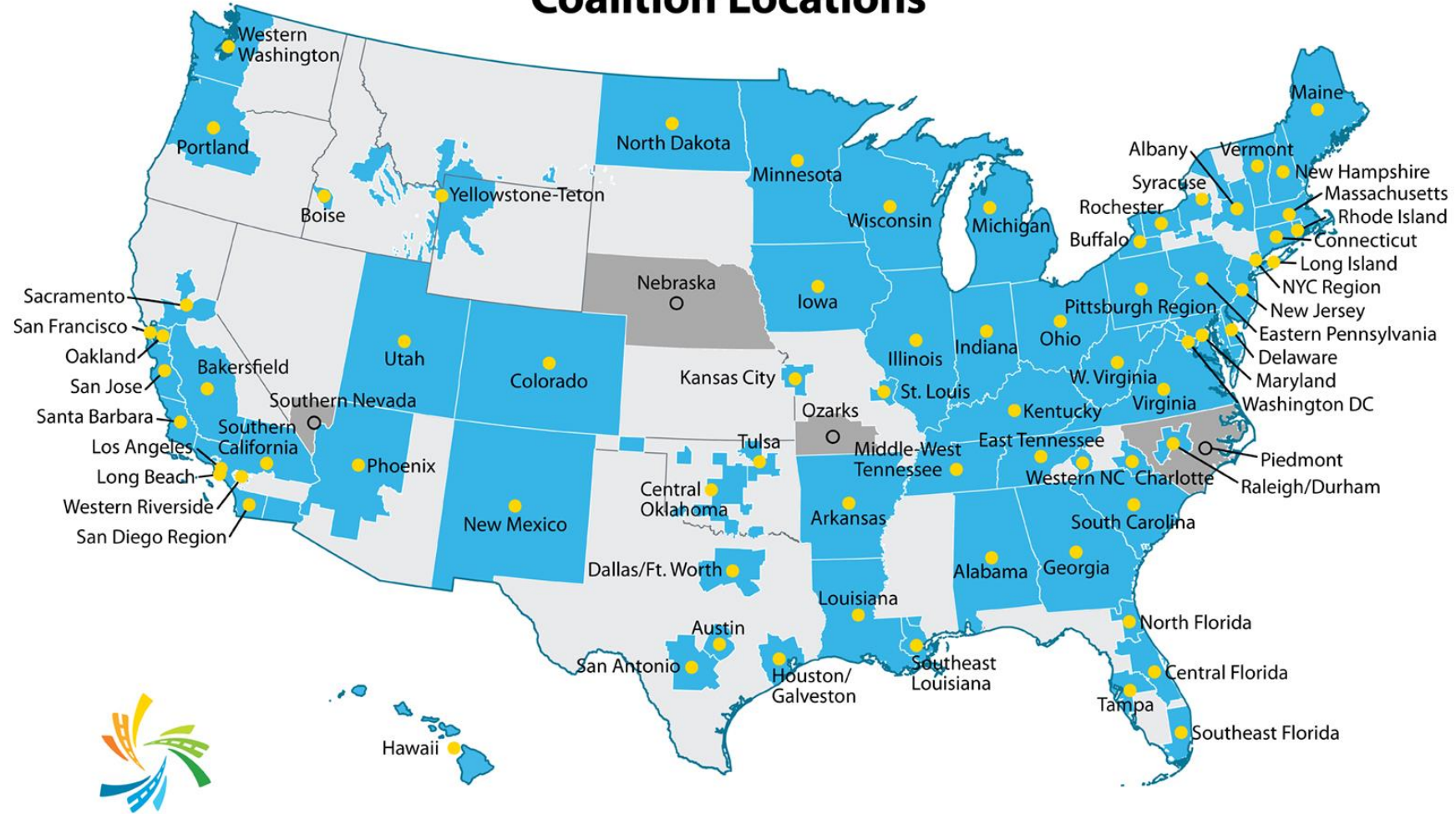
*NADO 2024 National Regional Transportation Conference  
Greenville, SC*

Centralina Clean Fuels Coalition  
Megan Upchurch, Coalition Director  
July 30, 2024





## Coalition Locations



Clean Cities and Communities

■ DOE-Designated Coalitions

■ DOE-Designated Apprentice Coalitions

Map Date: 4/1/24



# Federal Policy

Decarbonization of the  
Transportation Sector

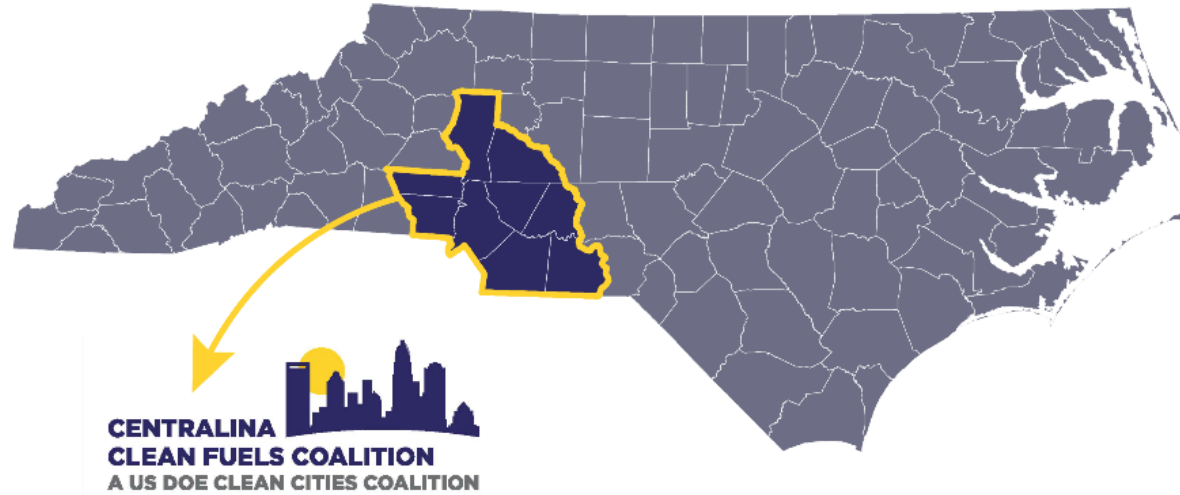


Clean Cities and  
Communities





# Centralina Clean Fuels Coalition



The coalition is housed at the Centralina Regional Council, a state-designated lead regional organization in North Carolina comprised of: **Anson, Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union counties**

Formed in 1997

Designated in  
2004

Redesignated in  
2013

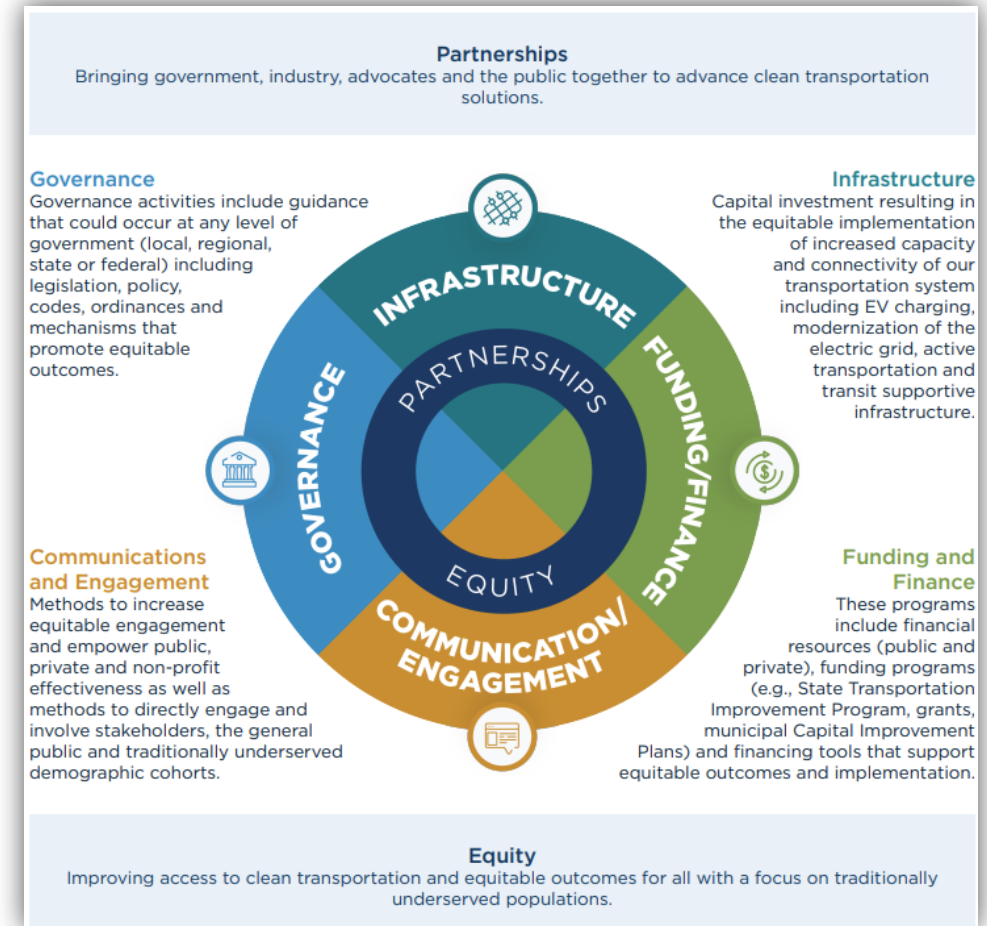
2<sup>nd</sup> Redesignation  
2021



# NC Clean Transportation Plan

## Key Recommendations:

- Create a dedicated clean transportation team
- Align statewide policy through and interagency task force
- Increase equitable outcomes in transportation planning projects
- Ensure access and affordability to clean transportation
- Evaluate and update project prioritization programs
- Partner with utilities to promote clean transportation
- Maximize existing funding to support clean transportation outcomes
- Evaluate and apply for new funding that advances clean transportation outcomes
- Evaluate and deploy clean transportation infrastructure to support all types of fleet vehicles and applications
- Expand transportation demand management strategies
- Establish a coordinated clean transportation communication strategy



Source: NCDOT



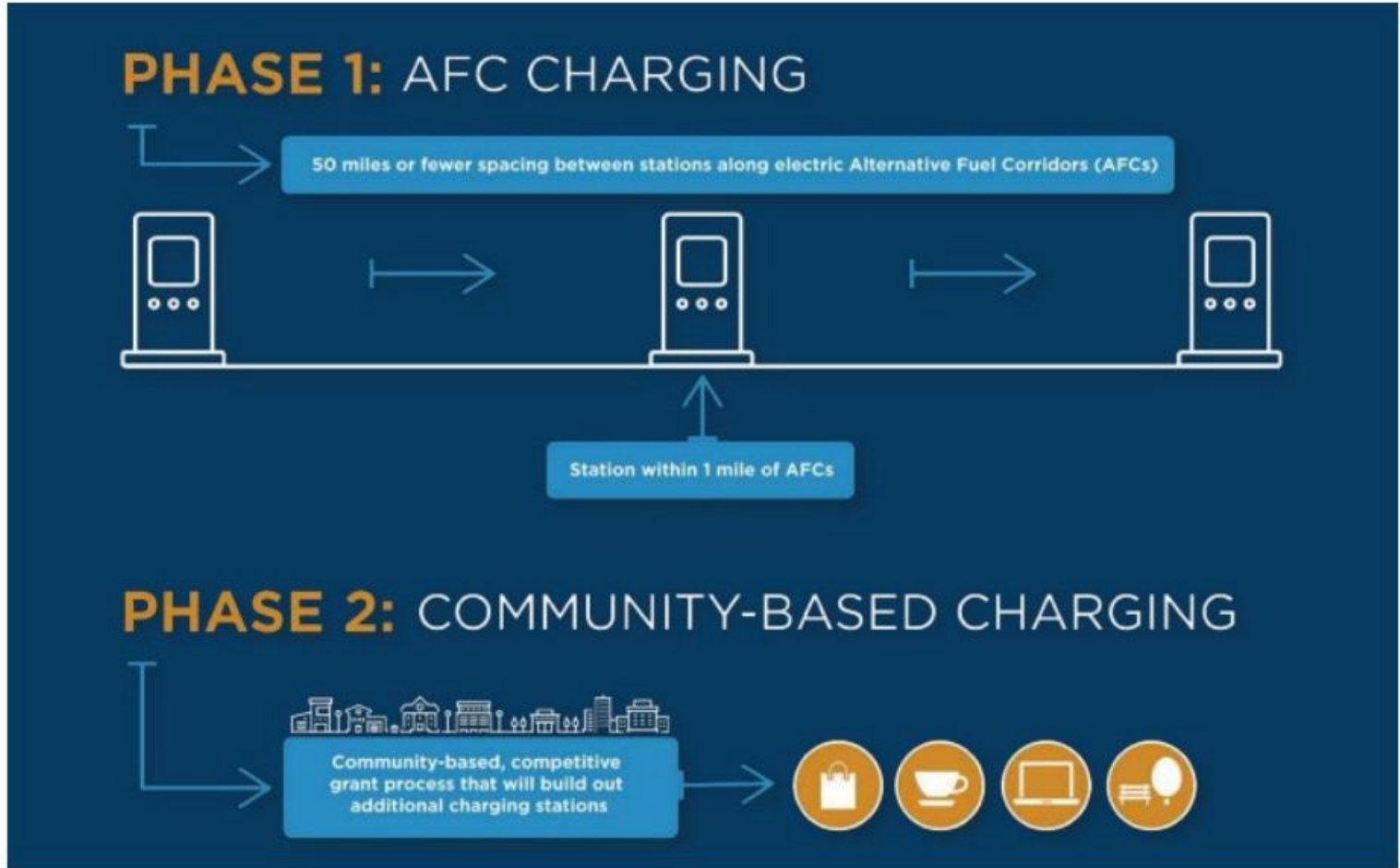
# National Electric Vehicle Infrastructure (NEVI) Program Overview

- **Provides funding** to states to **deploy EV charging stations**
- Funds made available **through FY 2026**
- Must **submit plans annually**
- Funds must be used initially on **federally-designated Alternative Fuel Corridors**
- DC fast charge station to have a **minimum of four 150 kW Combined Charging System (CCS) connectors** and **a minimum total station power of 600 kW.**
- Must be located **no more than 50 miles apart** - freeways and highways and **located within 1 mile of the exit**
- Required to **emphasize equity**, with **at least 40 percent of benefits** going to disadvantaged, low income, rural and tribal communities





# State of NC NEVI Program Overview





# NC NEVI Program Public Engagement

## • Key Stakeholders:

- Clean Cities and Communities Coalitions
- Environmental Advocates
- Metropolitan and Rural Planning Organizations o Minority and women-owned small businesses
- Retail membership associations
- State agencies: N.C. Department of Environmental Quality, N.C. Department of Commerce, N.C. Department of Agriculture, N.C. Utilities Commission
- Utilities: Investor-owned utilities and electric membership cooperatives

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PRESENTS

ELECTRIC VEHICLE INFRASTRUCTURE **TOUR**  
NORTH CAROLINA

**NEVI STAKEHOLDER INVITATION**

**MONDAY, JANUARY 30**

**CHARLOTTE**  
UTILITIES 11AM • EVSE PROVIDERS 1PM • SITE HOSTS 3PM  
PUBLIC OPEN HOUSE 5-6PM  
CENTRALINA REGIONAL COUNCIL  
10735 DAVID TAYLOR DRIVE, STE 250  
CHARLOTTE, NC 28262

**TUESDAY, JANUARY 31**

**ASHEVILLE**  
UTILITIES 11AM • EVSE PROVIDERS 1PM • SITE HOSTS 3PM  
PUBLIC OPEN HOUSE 5-6PM  
LAND OF SKY REGIONAL COUNCIL  
339 NEW LEICESTER HWY, STE 140  
ASHEVILLE, NC 28806

**WEDNESDAY, FEBRUARY 1**

**RALEIGH**  
UTILITIES 11AM • EVSE PROVIDERS 1PM • SITE HOSTS 3PM  
PUBLIC OPEN HOUSE 5-6PM  
WAKE TECHNICAL COMMUNITY COLLEGE, HENDRICK BUILDING - ROOM 328  
6851 PERRY CREEK ROAD  
RALEIGH, NC 27616

**THURSDAY, FEBRUARY 2**

**GREENVILLE**  
UTILITIES 8AM • SITE HOSTS 9AM  
PUBLIC OPEN HOUSE 10-11AM  
IMMANUEL BAPTIST CHURCH  
1101 S. ELM STREET  
GREENVILLE, NC 27858

**WILMINGTON**  
UTILITIES 2:30PM • SITE HOSTS 3:30PM  
PUBLIC OPEN HOUSE 5-6PM  
NORTHEAST REGIONAL LIBRARY, PINE ROOM  
1241 MILITARY CUTOFF ROAD  
WILMINGTON, NC 28405

<b>UTILITIES</b> Municipal-Owned Utilities Rural Cooperative Utilities Investor-Owned Utilities	<b>EV EQUIPMENT PROVIDERS</b> Companies/orgs that manufacture, supply, install, own, operate, or maintain EV Supply Equipment	<b>SITE HOSTS</b> Businesses or property owners that may want a public DCFC charger built and operated on their property	<b>PUBLIC OPEN HOUSE</b> Members of the general public wanting to learn more about the NEVI Program
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During the week of January 30, 2023, the North Carolina Department of Transportation will travel across North Carolina to discuss the NEVI Program with stakeholders. We hope to see you there!







# Proposed NEVI Stations





# Charging and Fueling Infrastructure Grant Program

- **Key Dates and Deadlines:**
  - **Grant Applications** Due:
    - 11:59 pm (EST) on **August 28, 2024**
    - Opportunity Number: 693JJ324NF00017
- **EV Charging and Other Alternative Fueling Infrastructure**
  - Electric Vehicle (EV) Charging
  - Hydrogen Fueling
  - Natural Gas Fueling
    - Compressed Natural Gas
    - Liquefied Natural Gas
  - Propane Fueling\*





# Charging and Fueling Infrastructure Grant Program

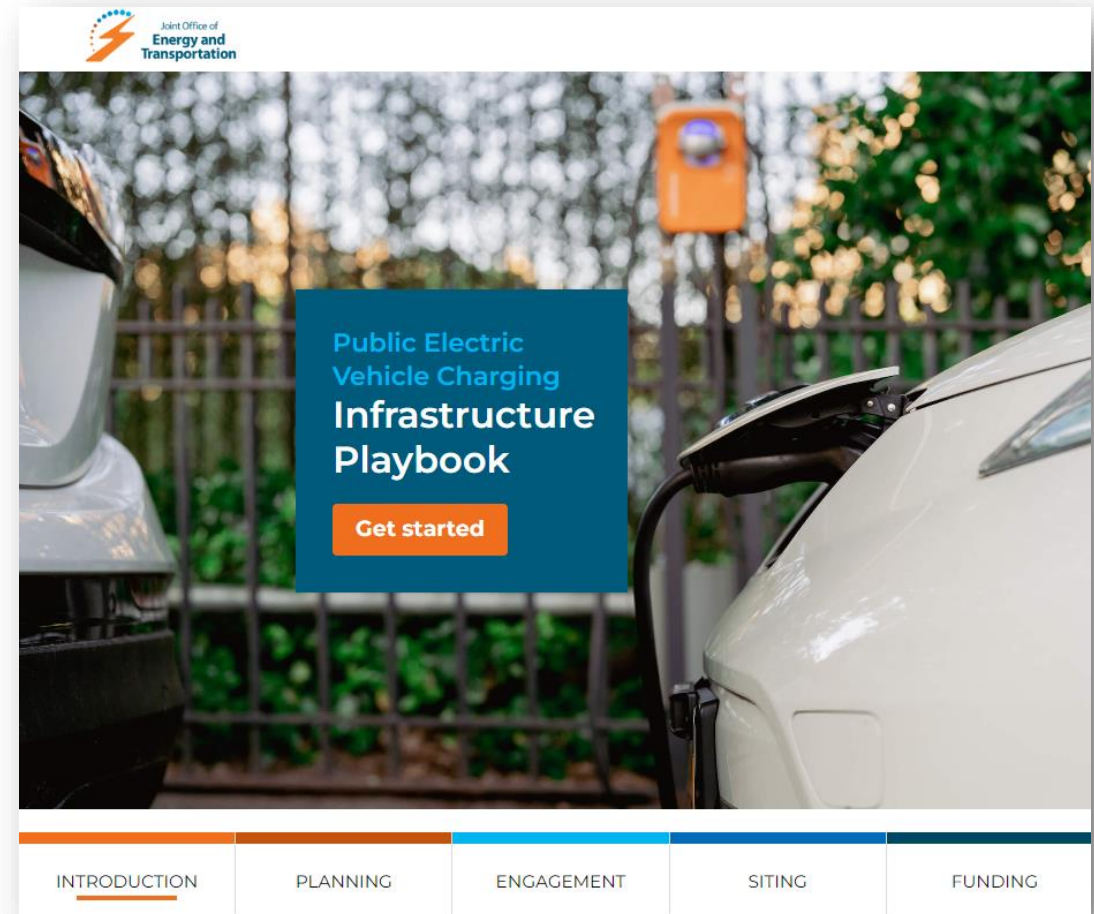


- **Eligible Applicants:**
  - State governments
  - County governments
  - Public housing authorities/Indian housing authorities
  - City or township governments
  - Special district governments
  - Native American tribal governments
  - Public and State controlled institutions of higher education
- **Cost-Share:** 80:20
- **\$800 million** from CFI funding **for new applications**



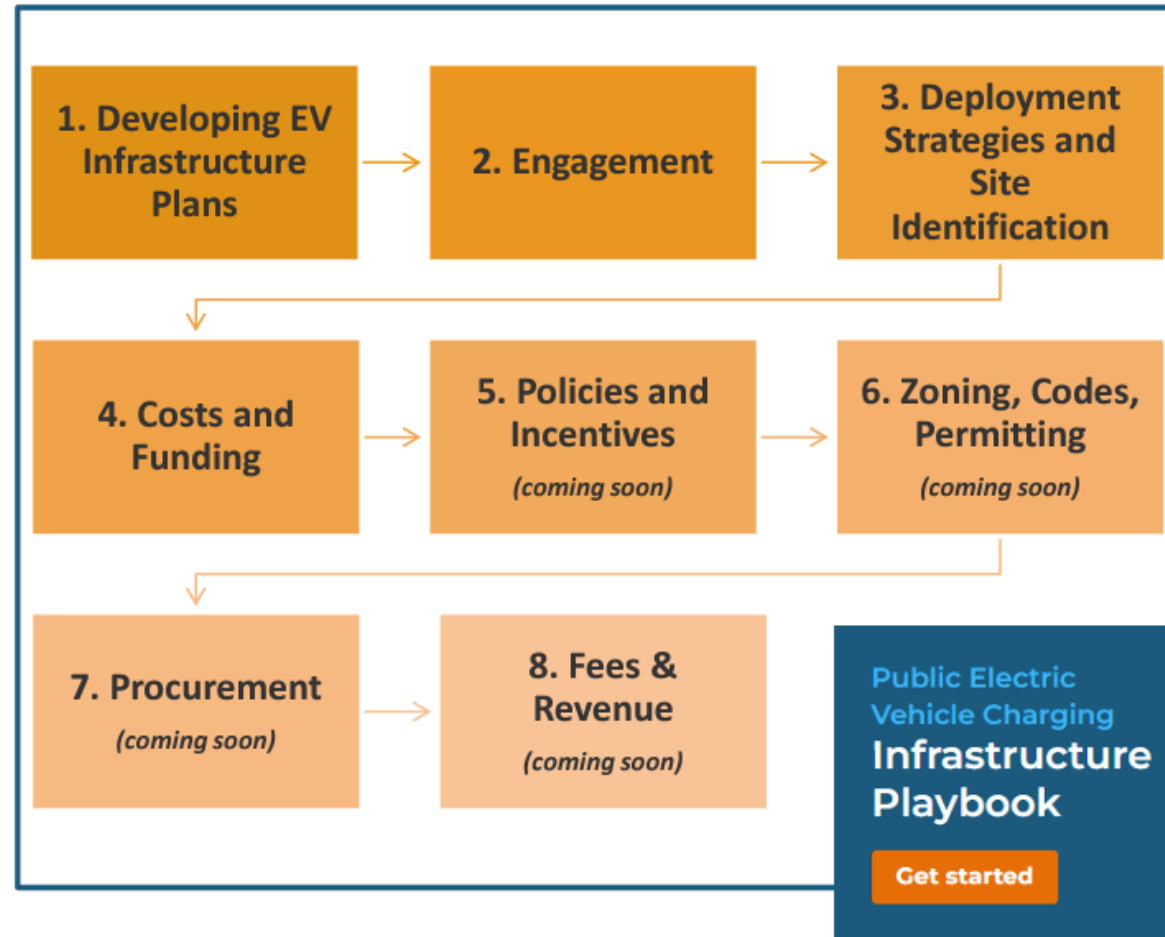
# PUBLIC EV CHARGING INFRASTRUCTURE PLAYBOOK

- Provides **interactive resources** to help communities plan and build the infrastructure needed to **support a zero-emission** transportation goals
- **User friendly** for any community
- Modules **include guiding questions, videos, worksheets, and additional resources to drive local progress**





# Eight Modules for EV Readiness Planning





# Climate Pollution Reduction Program



**\$1  
million**

Centralina Regional Council is the lead agency tasked by EPA to develop a regional Climate Action Plan with consensus-based strategies that address local needs.

**\$4.6  
billion**

Competitive implementation grants to help put plans into action.

**Key  
dates**

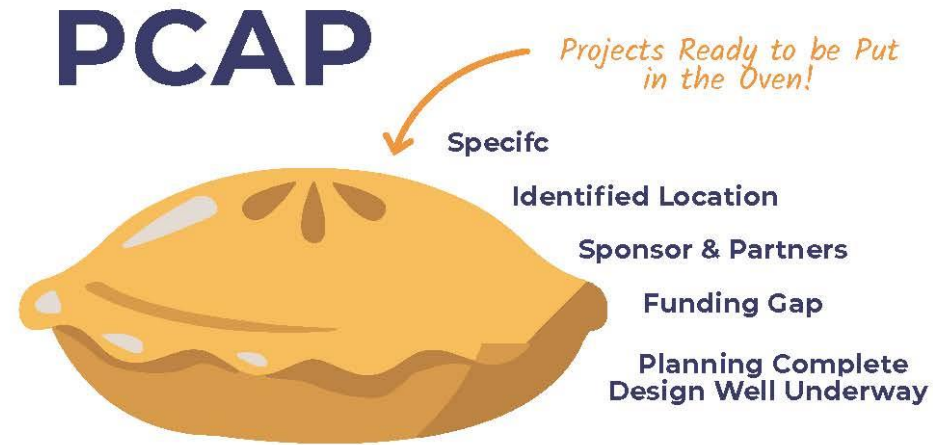
**March 1, 2024 – Priority Climate Action Plan submitted**

**April 1, 2024 – Implementation grants submitted**

**Summer 2025 – Comprehensive Climate Action Plan due**



# Plan Ingredients



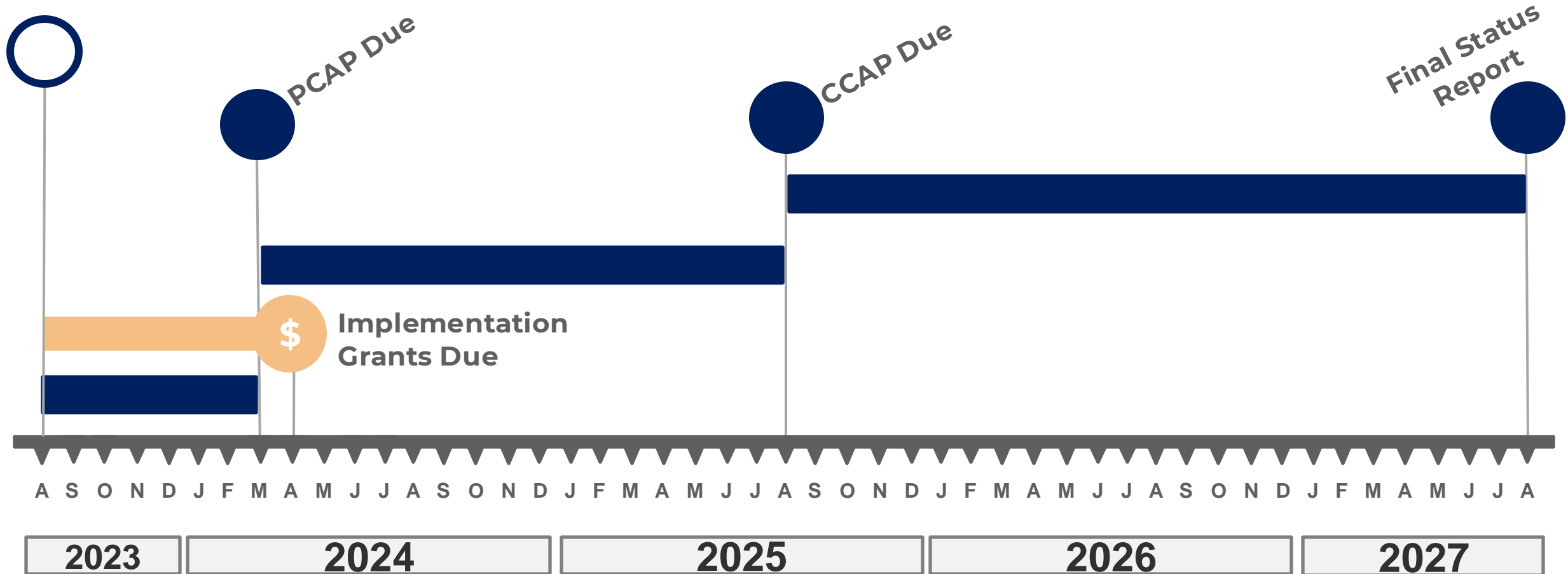
Example: Construct a new 10 miles of greenway connecting City A and City B.



Example: Create more opportunities for bicycle and pedestrian travel in the region.



# Climate Pollution Reduction Grant Timeline







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# Thank you!

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Megan Upchurch, AICP  
Centralina Clean Fuels Coalition Director  
mupchurch@centralina.org

Visit <http://www.4cleanfuels.com/> for CCFC updates.



Clean Cities and  
Communities



**CENTRALINA**  
REGIONAL COUNCIL



# Potential Solutions by Parking Type

Parking Type	Use Case or Subtype	Unique Characteristics
<b>Dedicated Charging Hub</b>	<ul style="list-style-type: none"> <li>Fast-charging hub</li> <li>Charging hub with amenities</li> <li>Destination-oriented charging hub</li> <li>Pop-up charging hub</li> </ul>	<ul style="list-style-type: none"> <li>Reliable location for fast charging away from home</li> <li>Resembles stopping by a gas station, a familiar fueling location for most drivers</li> <li>Can support electric rideshare vehicles. Hub managers may set fees based on user type and charging level.</li> <li>Can be combined with other mobility options—such as bikeshare and transit service—to form a multimodal hub</li> <li>Could provide other onsite amenities or be sited next to key destinations</li> </ul>
<b>Public Garage or Lot</b>	<ul style="list-style-type: none"> <li>Public surface lot</li> <li>Public parking garage</li> <li>Non-permanent charging</li> </ul>	<ul style="list-style-type: none"> <li>Garages may be conducive to wall- or ceiling-mounted chargers as well as top-level solar canopies with battery integration</li> <li>Signage is important to increase visibility and utilization and specify policies for use</li> <li>Compatible with mobile charging services and valet services</li> </ul>
<b>Curbside (On-Street)</b>	<ul style="list-style-type: none"> <li>Residential / overnight charging</li> <li>Metered / hourly charging</li> <li>Non-permanent charging</li> </ul>	<ul style="list-style-type: none"> <li>Pole-mounted chargers are a relatively low-cost, quick-to-deploy mounting solution that tap into existing power sources (utility poles, streetlights)</li> <li>Local regulations dictate site selection and ease of permitting.</li> <li>Parking policies for street sleeping, snow removal, emergency access, and other services affect access to chargers</li> <li>Competing curb uses include loading zones, outdoor dining, and bus and bike lanes. Planners should consider potential future uses of the curb before installing permanent chargers.</li> </ul>
<b>Communal On-Site</b>	<ul style="list-style-type: none"> <li>Surface lot</li> <li>Parking garage</li> <li>Non-permanent charging</li> </ul>	<ul style="list-style-type: none"> <li>Private charging for building residents</li> <li>Flexibility to cluster chargers near an existing electrical source</li> <li>Few chargers can serve multiple residents. Resident surveys are important for estimating demand.</li> <li>Property manager or condominium board should specify payment plans and policies for use</li> <li>Text alerts and dwell time restrictions can help ensure sufficient access among EV-driving residents</li> <li>Compatible with mobile charging services and valet services</li> </ul>
<b>Assigned On-Site</b>	<ul style="list-style-type: none"> <li>Surface lot</li> <li>Parking garage</li> <li>Non-permanent charging</li> </ul>	<ul style="list-style-type: none"> <li>Private charging for individual units</li> <li>Allows for low-level charging without time restrictions</li> <li>Can distribute private EV charging spaces via lottery, waiting list, or at a price premium.</li> <li>May need approval from property manager or condo board to install independently. Less feasible for renters.</li> <li>Compatible with mobile charging services</li> </ul>