

Governor's Local Issues Conference: Team Kentucky EV Charging Program

August 8, 2024

TEAM
KENTUCKY

EVCHARGING
PROGRAM



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EV OVERVIEW



EV Overview – Types of Vehicles



BEV

Battery Electric Vehicle

- + Battery Power Only
- + Typical Range 150-400 miles
- + Must use charging stations to recharge



PHEV

Plug-In Hybrid Electric Vehicle

- + Battery Power and Internal Combustion Engine (ICE)
- + Typical Battery Range 20-40 miles
- + When battery depleted, ICE kicks in

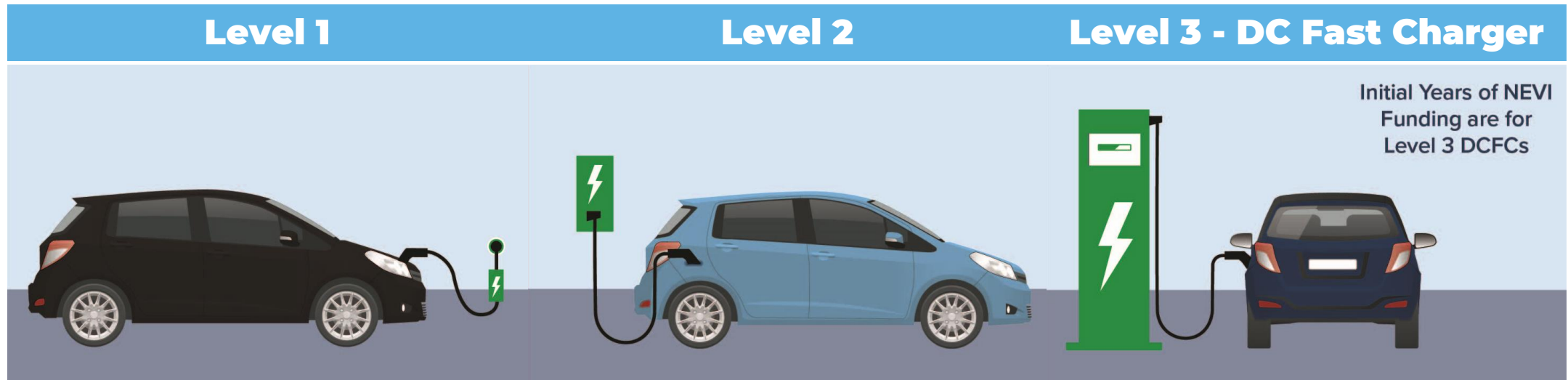


HEV

Hybrid Electric Vehicle

- + Internal Combustion Engine (ICE) Only
- + Battery Charges by Regenerative Braking or Using Engine as a Generator
- + Battery Allows for Smaller Engine and Reduces idling

EV Overview – Types of Plugs



Level 1 chargers can be used at home with a standard outlet. This is the slowest charging method.

+ 250 Miles in 48-72 Hours

Level 2 chargers require more amps and can be wired at home or found around your community.

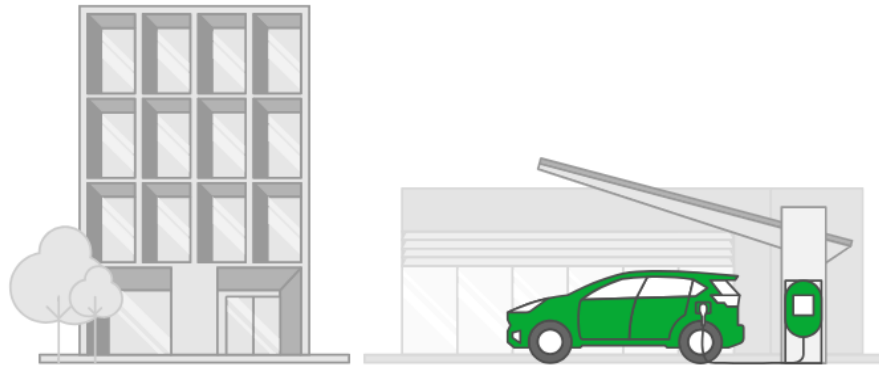
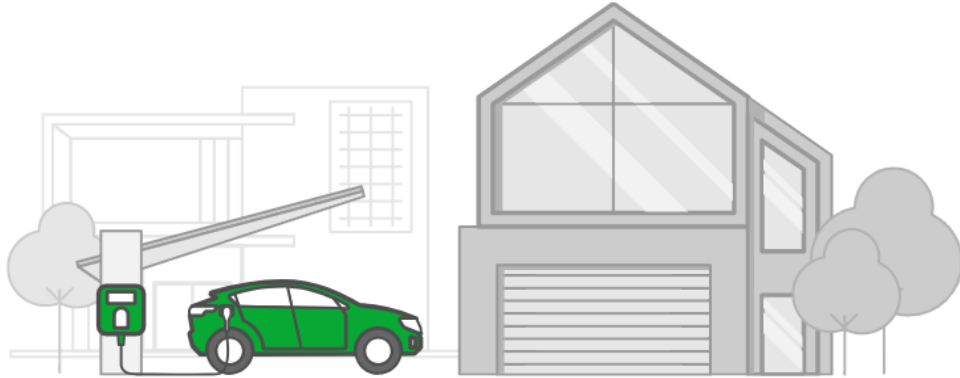
+ 250 Miles in 10 Hours

Level 3 chargers are the fastest and can be found along interstates and near populated public areas.

+ 250 Miles in 30 Min. or less

Where Do People Charge?

85% Charge at Home/Work



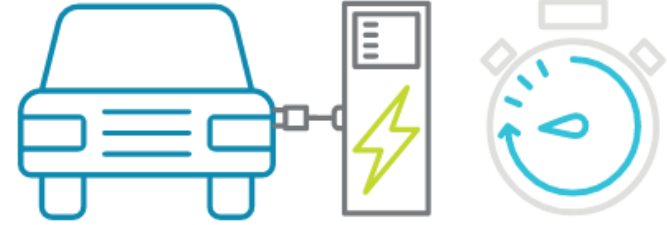
15% Charge Elsewhere



Barriers to EV Adoption



Range Anxiety for Long Trips



Long Recharging Times



Lack of Charging Infrastructure



Higher Vehicle Costs and Battery Cost

Barriers to EV Infrastructure Deployment



Low Customer Base



Awareness of Charging Locations



EV Charging Speed



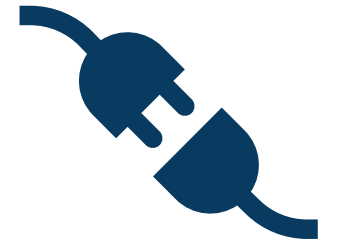
Lack of Utility Infrastructure



Rural/Underserved Infrastructure Gaps

How Much Does An Electric Vehicle Cost?

- + New EVs average around \$55,000, compared to other new vehicles at around \$47,000, according to Kelly Blue Book data.
 - + EV costs are down nearly 11% in 2024 from 2023.
 - + Many manufacturers offer sedans, SUVs and trucks in hybrid and fully electric versions.
- + Home charging stations can be installed for around \$1,000. A tax credit for up to 30% the cost of a Level 2 charger and installation is available.





NEVI FORMULA PROGRAM

Building a National Charging Network

- + NEVI is the National Electric Vehicle Infrastructure Formula Program
- + Established through the Bipartisan Infrastructure Law (BIL)
- + Funding to states to strategically deploy charging stations
- + Goal is to build an interconnected network
- + Kentucky expected to receive nearly \$70 million



Federal Funds for EV Infrastructure

2021 Infrastructure Investment and Jobs Act (IIJA)

also known as **Bipartisan Infrastructure Law (BIL)**

National Electric Vehicle Infrastructure (NEVI) Program

NEVI Formula Funds

Kentucky's Share - \$69.5M
\$5.0 Billion Nationally (over 5 years)

NEVI Discretionary Grant Funds

Competitive Grants
\$2.5 Billion Available Nationally (over 5 years)

KY: Federal Funds and Schedule

*All numbers in millions

| EV Infrastructure Plan Elements | Build-Out AFC Network (Phase 1 - Ongoing) | | | | Other Priority Corridors (Phase 2) | Community Charging (Phase 3) |
|---------------------------------|---|-----------------------|---------|---------|------------------------------------|------------------------------|
| | Fiscal Year | To-Date (FY2022-2024) | FY 2025 | FY 2026 | Total | |
| Federal Funds Available | \$39.9 | \$14.8 | \$14.8 | \$69.5 | | |
| Federal Funds Awarded | \$27.2 | - | - | \$27.2 | | |
| Federal Funds Remaining | \$12.7 | \$14.8 | \$14.8 | \$42.3 | | |

Per FHWA guidance, the Alternative Fuel Corridor (AFC) network must be operational before KYTC may allocate funding to Phases 2 and 3.

NEVI-Funded Fast Charging Stations

- + KYTC will not own, operate, or maintain stations
- + Industry partners will be responsible for:



**Construction/
Installation**



Ownership



Operations



Maintenance



Team Kentucky's EV Program



Kentucky's EV Plan Vision

A reliable, accessible, convenient, and affordable EV charging network that supports transportation choices, energy diversification, economic development, and environmental sustainability for all Kentuckians

Kentucky's EV Plan Vision

GOAL 1

A corridor-based EV charging system that supports interstate and regional travel

GOAL 2

A local EV ecosystem that serves Kentucky's communities and travelers

GOAL 3

A comprehensive system that supports transportation choices for all of Kentucky's residents

GOAL 4

An interconnected, reliable, and resilient vehicle fueling system that can adapt to changes in market conditions and transportation technologies

GOAL 5

A transportation system that reduces tailpipe emissions and promotes clean air in Kentucky

Team Kentucky: Leading the Charge

- + First EV fast charging station built with NEVI funds to open soon in Richmond
- + Not only the first federally funded station in KY, but in the southeast US
- + 41 additional fast charging stations on the way in KY
- + All located along Kentucky's 11 interstates and 8 parkways



Team Kentucky: Progress to Date

- + 2 Requests for Proposals (RFPs) and 3 rounds of awards to date
- + 42 fast charging stations from 11 developers approved in KY
- + Totaling \$27.2 million in federal formula funds to date
- + Annual Plan update in progress





42 SITES

Follow Our Progress



Active Charging Site



Awarded Charging Site



Future NEVI Site
(Awarded by other states)



Alternative Fuel Corridor



Other High Priority
EV Corridor



Kentucky: Leading the EV Charge

- + Leader in EV manufacturing and EV battery production
- + Two largest economic development projects ever in KY
- + Ford and SK battery park: \$5.8 billion investment creating 5,000 jobs in Hardin County
- + AESC battery plant: \$2 billion investment creating 2,000 jobs in Warren County





Deployment Phases



Powering the KY EV Charging Program



FY 2022

FY 2023

FY 2024

FY 2025

FY 2026

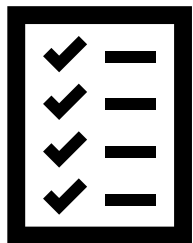
FY 2027

EV
Infrastructure
Plan Elements

Build-Out Interstates and Parkways
Phase 1 – Alternative Fuel Corridors (AFCs), ongoing

Other Priority Corridors (Phase 2)

Community Charging (Phase 3)



+More flexibility with Phases 2 and 3

+ Will need to follow future federal guidance

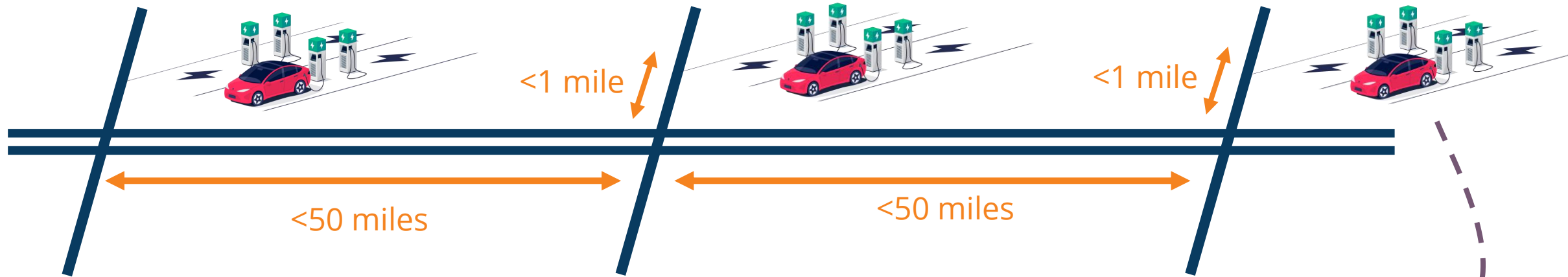
+Public input will be important

Phase 1 – AFC Network

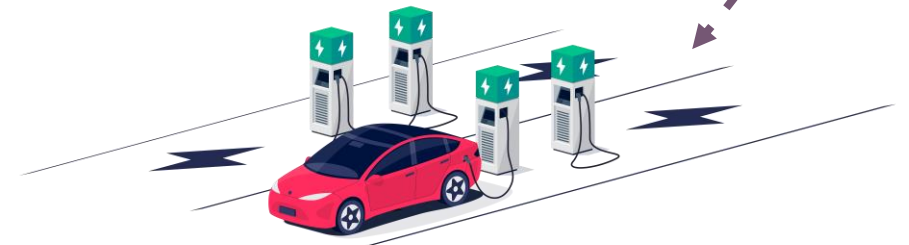


- Alternative Fuel Corridors
- Other High Priority EV Corridors

Phase 1 – AFC Network

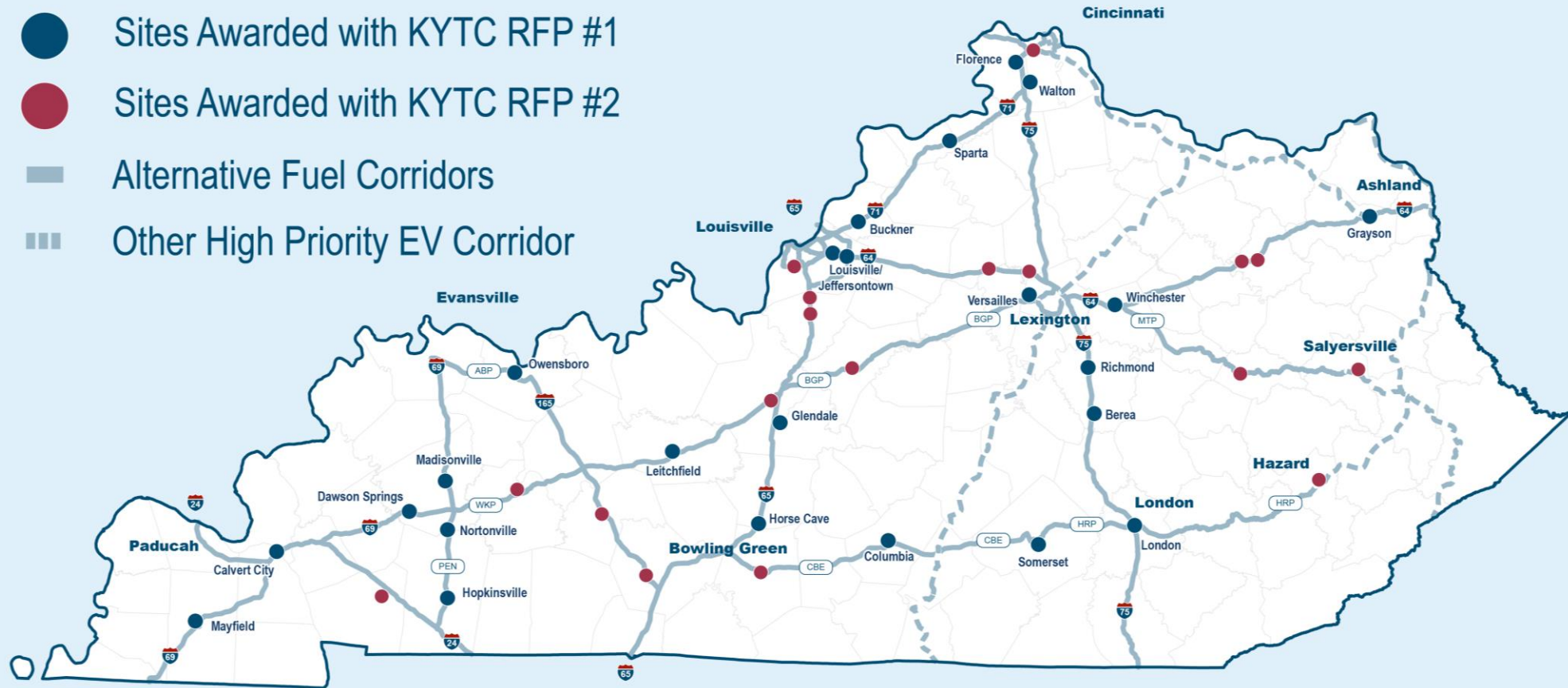


- + Fewer than 50 miles between stations with stations within a mile from the corridor
- + At least 4 150 kW DC Fast Charging Ports (600kW Total)
- + Open to General Public 24/7



RFP 1 and 2 Sites Awarded

- Sites Awarded with KYTC RFP #1
- Sites Awarded with KYTC RFP #2
- Alternative Fuel Corridors
- Other High Priority EV Corridor





| | Submissions Received | Charging Stations | Developers | Federal Funding Allocated (millions) |
|-----------------|----------------------|-------------------|------------|--------------------------------------|
| RFP 1 | 150 | 24 | 7 | \$15.4 |
| RFP 2 | 55 | 18 | 8 | \$11.8 |
| Combined | 205 | 42 | 11 | \$27.2 |

Phase 2 – Other High Priority Corridors

- + AA Hwy / KY 9
- + US 68
- + US 27
- + US 127
- + US 23
- + KY 80
- + Mtn Pkwy Extension





-  Alternative Fuel Corridors
-  Other High Priority EV Corridors



Phase 2 – Other High Priority Corridors

- + Danville
- + Paintsville
- + Greenup
- + Paris
- + Jenkins
- + Pikeville
- + Louisa
- + Prestonsburg
- + Maysville
- + Vanceburg
- + Nicholasville



-  Alternative Fuel Corridors
-  Other High Priority EV Corridors



Phase 3 – Community Charging



Workplace



Retail and
Commercial Centers



Multifamily Housing



Rural and Disadvantaged
Communities



Fueling Stations



Hotels and Lodging



Public Facilities
(libraries, parks, gov. buildings)



Tourism Destinations



Downtown Centers



Other Initiatives



Charging and Fueling Infrastructure (CFI) Discretionary Grant Program

- + Competitive Discretionary Grant Program
- + Funding for publicly accessible EV charging and other alternative fueling infrastructure
- + Two funding categories
 1. Community Charging and Fueling Program Grants
 2. Alternative Fuel Corridor Grants
- + \$2.5 billion over five years
- + Local governments and MPOs eligible

- **Must register on [Grants.gov](https://www.grants.gov) to apply**
- **FHWA's CFI website: [CFI Website](#)**
- **Deadline:
Aug. 28 - 11:59 p.m.**

State Opportunities

Future Energy and Environment Cabinet (EEC) VW Settlement Funding Program

- + \$2.2 Million for fast charging
- + \$715,000 remaining from Level 2 rebate program

Government Resources Accelerating Needed Transformation (GRANT) Program of 2024

- + Cabinet for Economic Development (CED) Program
- + Potential to obtain state matching funds
- + Link - <https://ced.ky.gov/grant>



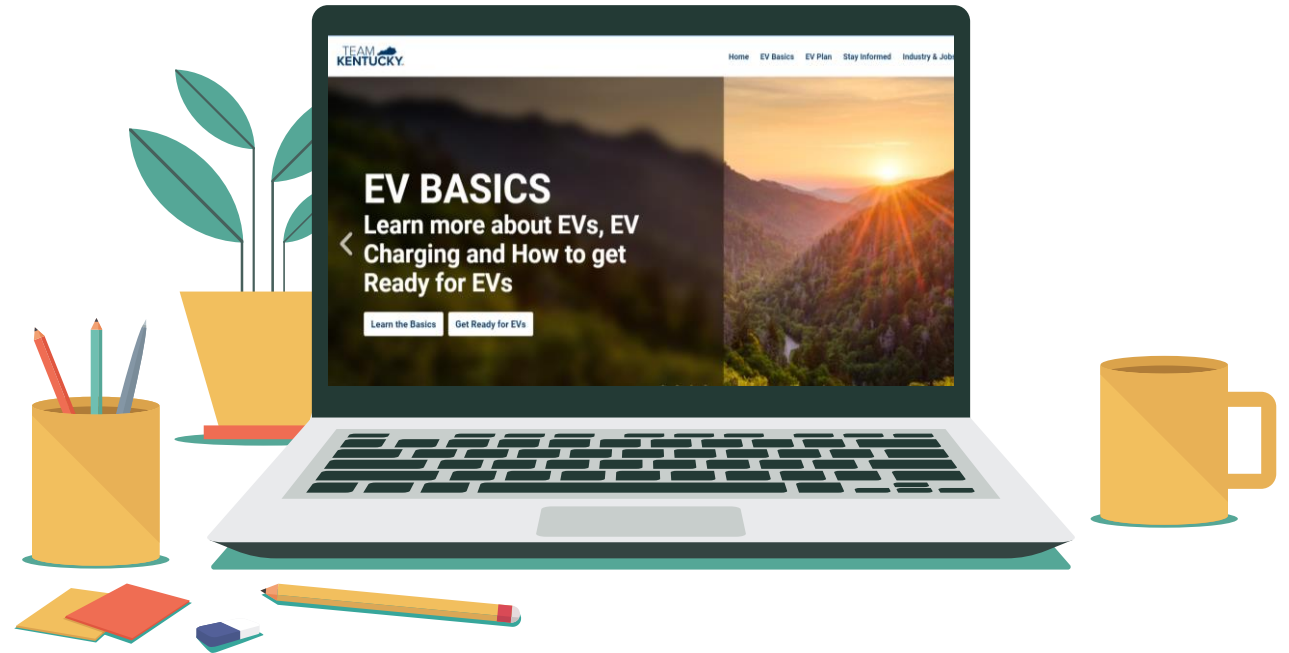


Outreach & Engagement



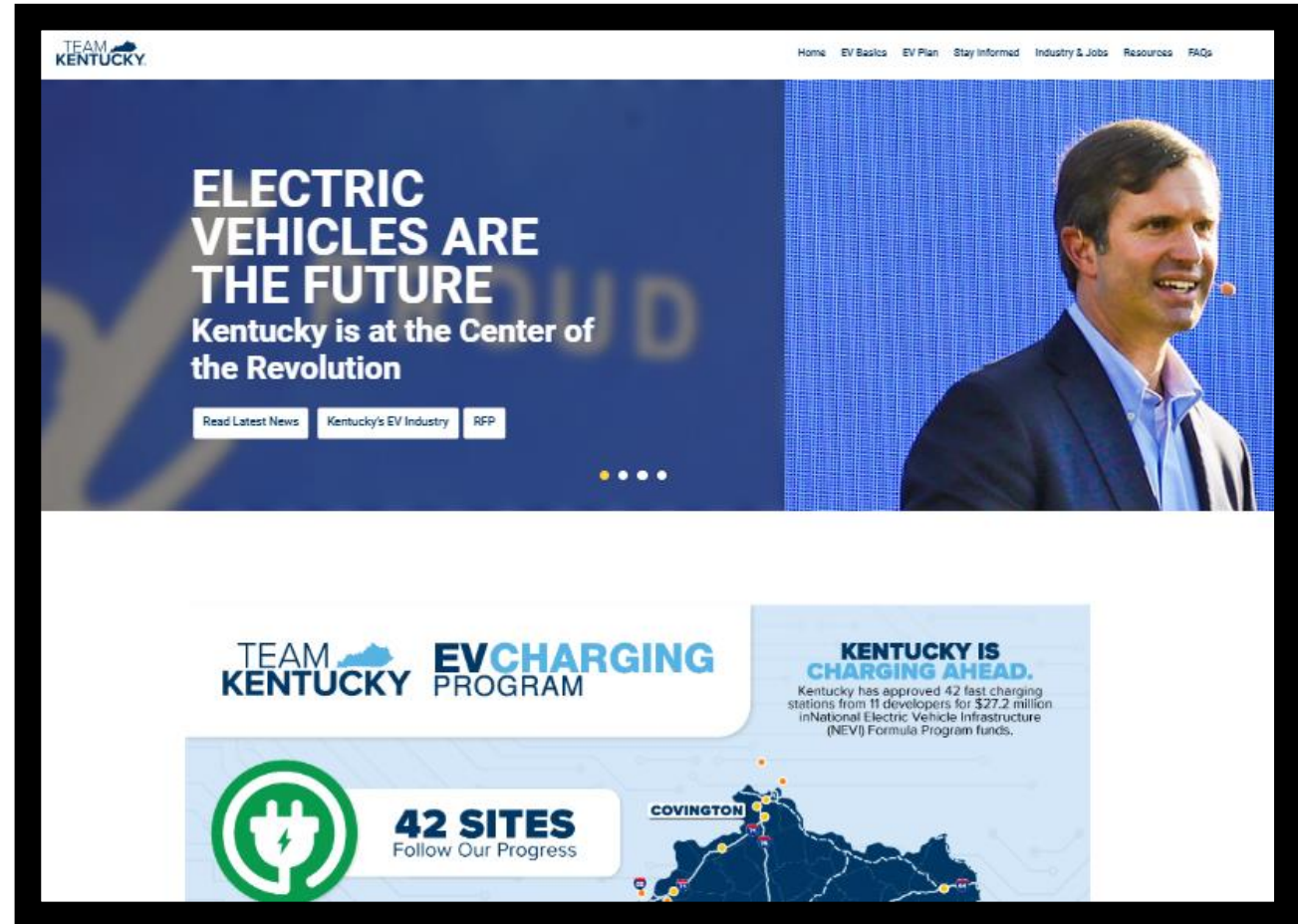
EV Charging Program Engagement

- + Four large group virtual meetings in 2024
- + In-person meetings are being planned
- + Engagement Goals
 - + Input on EV Program implementation
 - + Educate the public about the EV Program
 - + Provide information about funding opportunities



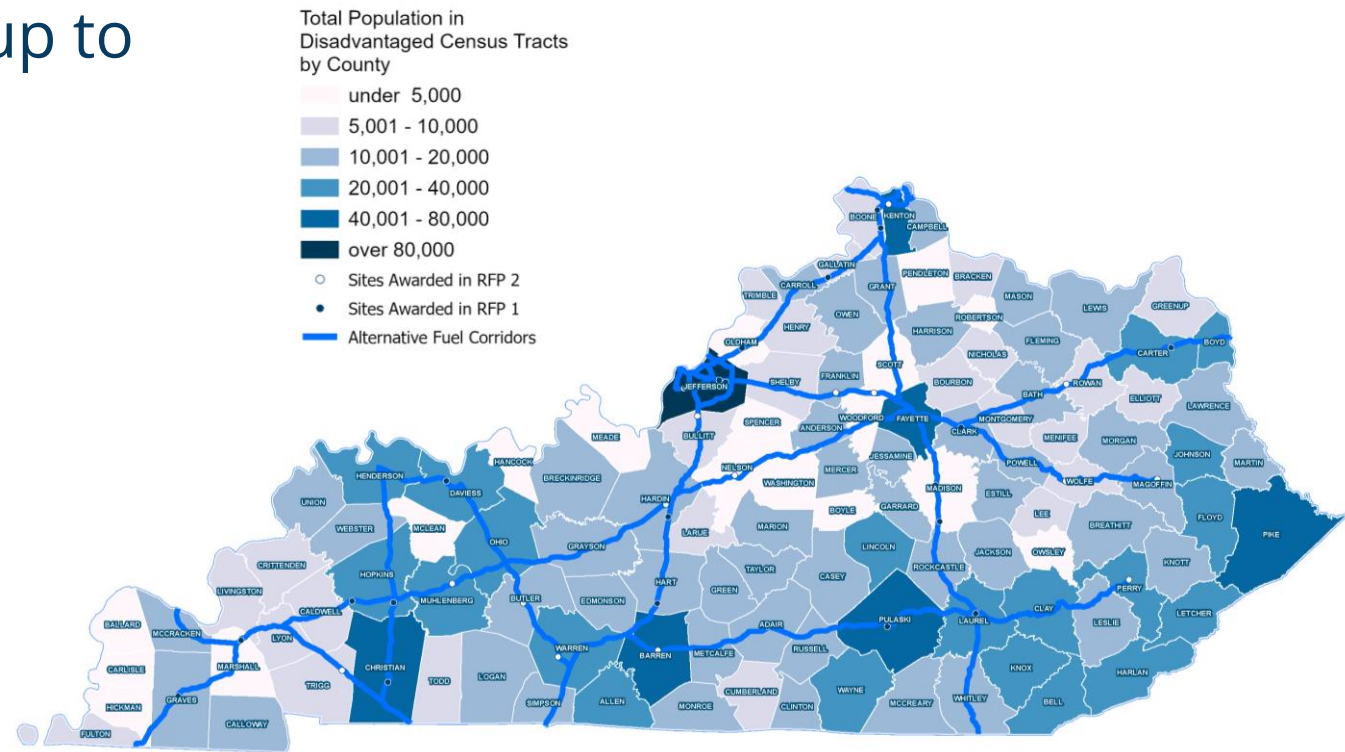
Outreach and Engagement Tools

- + Website: <https://EVCharging.ky.gov>
 - + Resource for project news and info
- + Stakeholder meetings
- + Public meetings
- + Newsletters
- + Coordination with MPOs and ADDs
- + Steering Committee
- + Speaking engagements
- + Surveys



Disadvantaged Community (DAC) Working Group

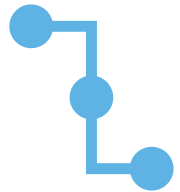
- + We're forming a Disadvantaged Community (DAC) Working Group to help understand priorities in communities statewide.
- + Representatives of local, regional and statewide groups like:
 - + Community foundations
 - + Service agencies
 - + Urban Leagues
 - + NAACP Chapters
 - + Clean Cities Coalitions
 - + Ride share groups



Disadvantaged Community (DAC) Working Group Members



Discuss issues with the potential to impact low-income, minority or rural populations



Serve as a liaison between the community organization and the EV Charging Program Team



Share views and identify local concerns in two-way communications with the team

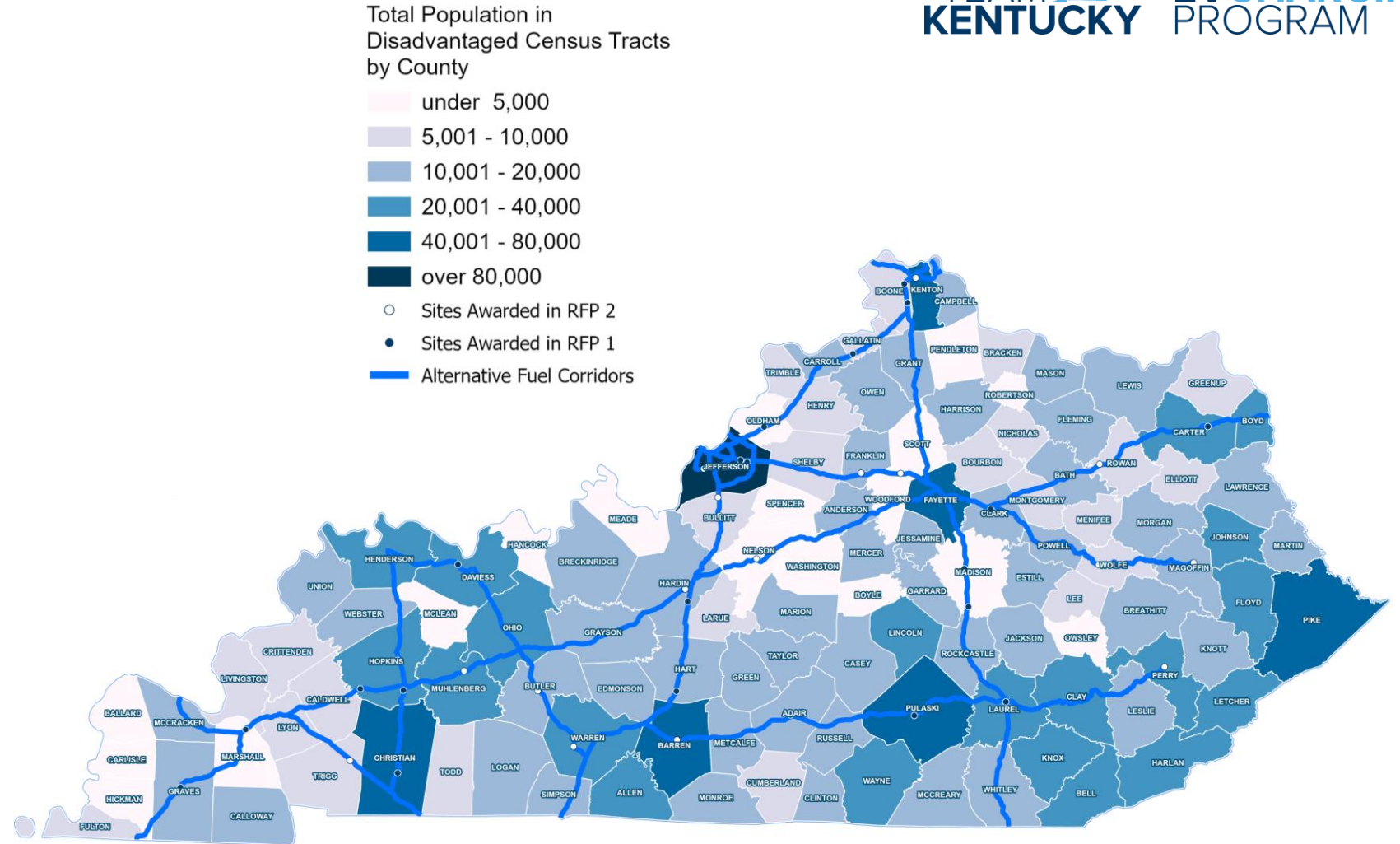


Act as an advisor and share project information with others

Equity

48% of sites in DACs

90% of sites within 3 miles of a DAC



*The Justice40 Initiative goal is that **at least 40 percent of the benefits** of the NEVI Program be distributed to disadvantaged communities*

For More Information



EV Program Email Address:
EVChargingProgram@ky.gov



Program Website
EVCharging.KY.gov





Questions?





Thank You

