Kentucky's Electric Vehicle Infrastructure Deployment Plan

Better Kentucky Plan





National Electric Vehicle Infrastructure (NEVI) Formula Funding Program



Goal

• Convenient, reliable, affordable, and equitable national EV charging network

Initial Focus

Charging stations on interstates to support long distance travel

Funding for Kentucky

• \$69.5M over 5 years; \$10.3M in 2022; Total with match is \$86.9M

Non-Federal Match

• 20% match required; Potential state and/or private match opportunities

Use of Funds

- Build-out Alternative Fuel Corridors (AFCs) first, then other locations
- Charging Station Requirements
- DC Fast Charging; Spaced at <50 miles; Requires 4 ports at 150kW each

Plan Required to Secure Funds

• Statewide plan must be approved by the Joint Office of USDOT and USDOE



Types of EV Charging Stations



Level 1

AC Level One



- Standard Outlet
- Slowest Charging
- 250 miles in 48-72 hrs (~5 miles/hr of charge)

Level 2



- "Dryer Outlet"
- Slow Charging
- 250 miles in 10 hours

Level 3



- Direct Current Fast Charging (DCFC)
- Fastest Charging
- 250 miles in 30 min

Initial Years of NEVI Funding are for Level 3 DCFCs

Note: Proprietary stations (e.g., Tesla Superchargers) are NOT part of the NEVI Formula Program



KY's EV Infrastructure Deployment Plan (EVIDP)



Developed by:



In Coordination with:













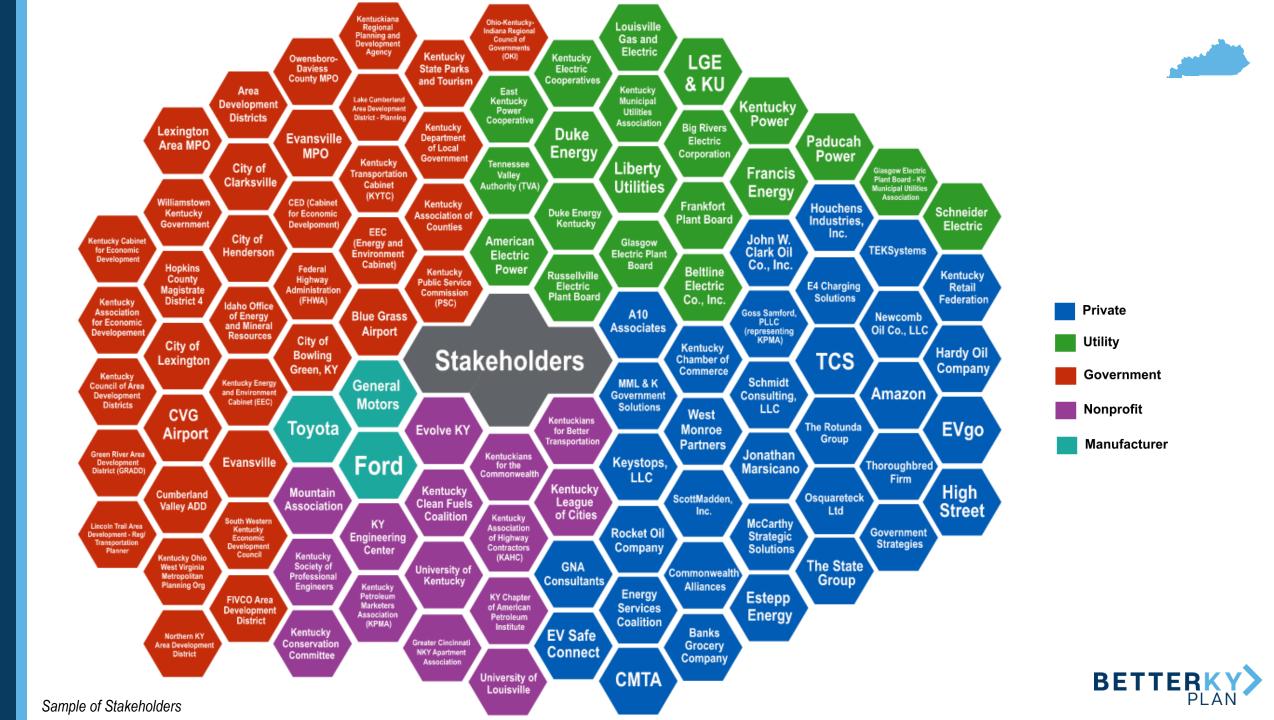


- Engaged in over 90 Meetings (>800 people)
- Meets the Federal Requirements
- Will be Submitted Before the August 1 Deadline

Plan Vision:

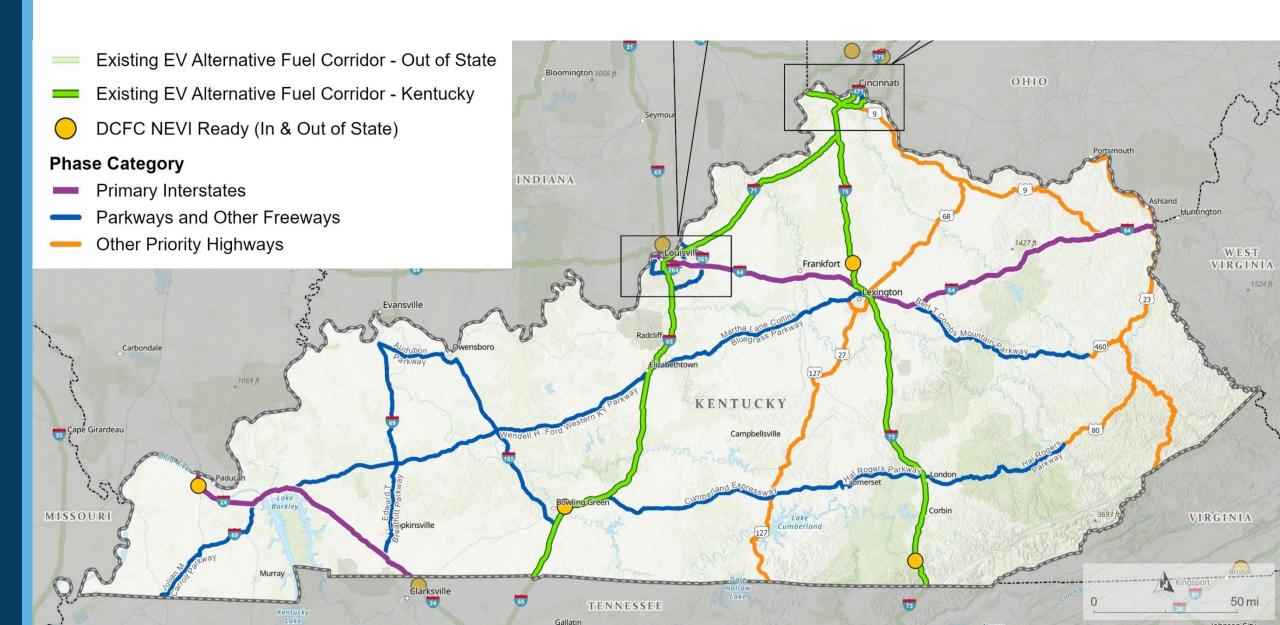
A reliable, accessible, convenient, and affordable EV charging network that supports transportation choices, energy diversification, economic development, and environmental sustainability for all Kentuckians.





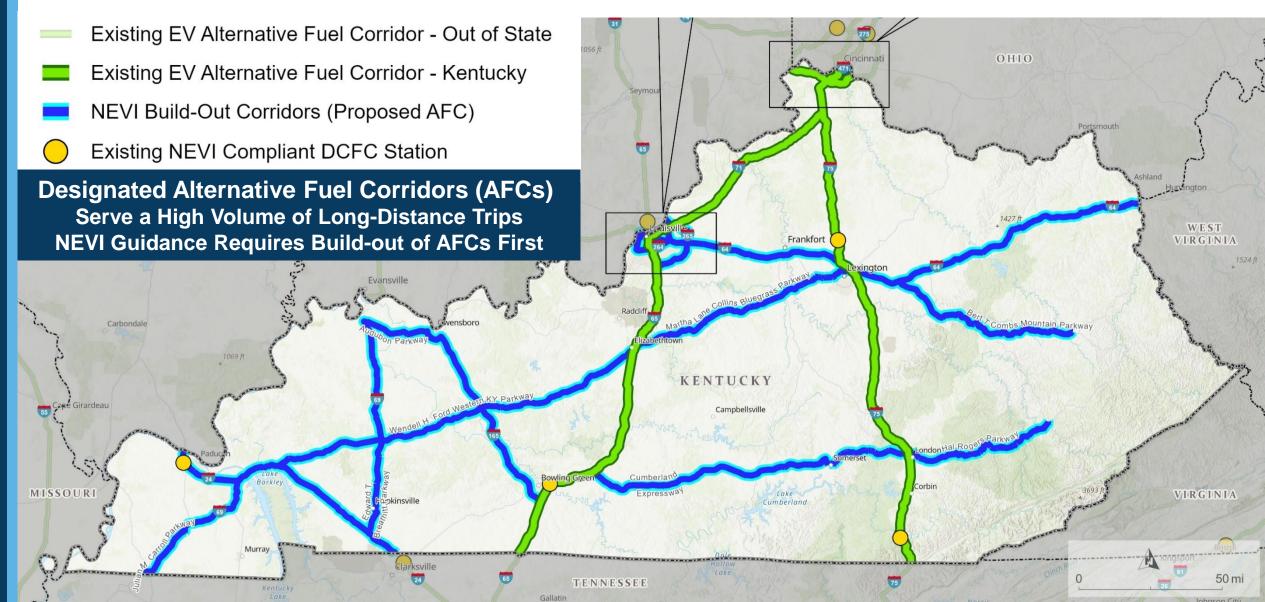
Kentucky's Priority EV Corridors





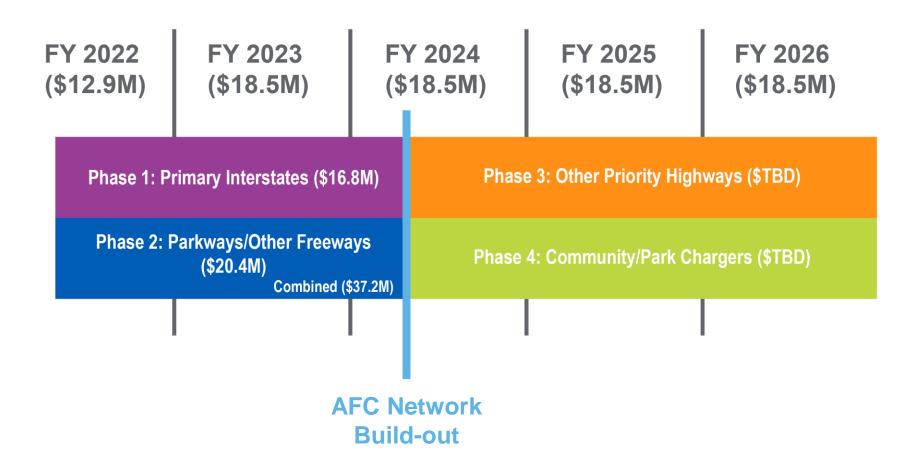
The First Steps: Electrify our Interstates and Parkways





Kentucky's EV Network – Draft Funding Plan





Total (\$86.9M)

Federal \$69.5M Non-federal match \$17.4M



Kentucky's Implementation Strategy



- Meet demand and provide statewide coverage
- Meet NEVI requirements on major Interstates
- Size other stations based on projected charging demand
 - Install equipment (above ground) based on 2026 demand
 - Install utilities (below ground) based on 2030 demand
 - Allows upgrades to be made cost-effectively
- Requires a discretionary exception from Joint Office.



Note: All stations on the AFC network will be DC Fast Charging Stations (Level 3)



Locating Charging Stations in Kentucky



- DOES NOT identify specific locations for sites
- Evaluated the suitability and priority of interchanges
- Private sector will be involved during contracting to optimize the site selection



Note: Most states are doing very high-level planning and not identifying any types of locations while very few are identifying specific sites.



Kentucky's EV Network – Factors to Consider for Deployment

Factors:

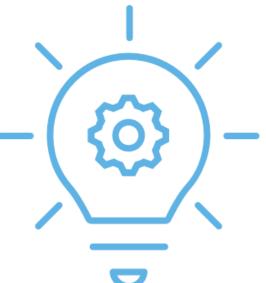
- Distance to Existing DCFC/NEVI compliant Stations
- Rural Designation
- Justice40 Designation
- Miles of Corridor Coverage
- Intersecting Road Traffic

- Predicted Long-Distance Trips in 2026
- Presence of Amenities
- Power Availability and Reliability
 - 3-Phase Power Avail.
 - Maximum Voltage
 - No. of Substations



Kentucky's Plan – Ownership and Contracting

- Vast majority of states do not plan to own or operate charging stations.
- NEVI funds are intended to jumpstart the EV Industry rather than build-out public EV Infrastructure.
- With the critical role of private entities Public-Private
 Partnerships may be most effective
 - KYTC has initiated a process to select a method
 - KYTC is reaching out to industry for feedback



Note: Some states use grant programs to deploy VW Settlement funding and are re-thinking that approach due to oversight requirements.



Next Steps



