Transportation Electrification Opportunities September 28, 2022





# Electrification Coalition Founding

The **Electrification Coalition** is a nonpartisan, nonprofit organization dedicated to driving the policies and actions that will electrify all modes of transportation to protect economic and national security, public health, and American jobs.



# **Electrification Coalition Business Council**

The United States' transition to an electrified transportation future isn't a question of if – it's when. ECBC creates a strategic alliance that can supercharge support for the policies and actions needed to accelerate transportation electrification at a mass scale.













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**Electrifying Freight**: Pathways to Accelerating the Transition





Explore more resources at www.electrificationcoalition.org

Version 4.0, August 2020

# The Opportunity

- Attract customers
- Increase in-store sales from customers spending more time at restaurants
- Direct revenue from charging station use fees/advertising revenue
- Demonstrates or improves an environmentally conscious corporate branding
- Gain a competitive edge over other businesses
- Improve marketability on travel search engines that have filters for EV friendly
- Future-proof



Source: American Public Power Association, A Public Power Guide to Understanding the U.S. Plug-in Electric Vehicle Market

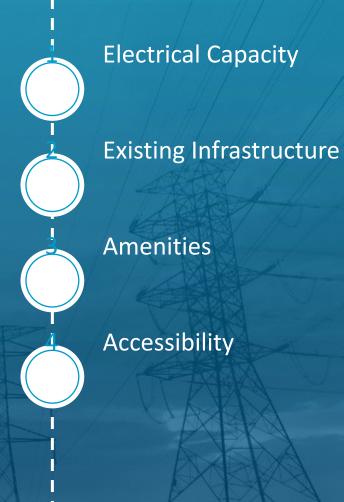




# Understanding the Challenges & Creating Opportunities

| Budget Constraints                    | Capital vs operational expenses; dependency on grants                           |
|---------------------------------------|---|
| Difficulty in equity planning         | Limited knowledge, tools and capacity to assess needs and deploy infrastructure |
| Conflicting transportation priorities | Single occupancy/transit/carsharing   |
| Permitting hurdles and delays         | Zoning, access  |
| Conflicting Ownership                 | Siting jurisdiction   |

# Siting Considerations



### **Forward-Thinking Planning**



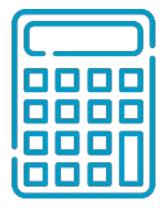
Hosts must be able to afford electricity as well as network fees and warranties Hosts may collect feedback and data to understand how their charging infrastructure is performing Hosts must hire people who are capable of charger maintenance or budget for a manufacturer maintenance plan



## **Electrical Capacity Considerations**

#### **Electrical Load Capacity**

The term "electrical load capacity" refers to the total amount of power provided by the main source of electricity for use by the building's circuits and the lights, outlets, and appliances connected to them.



Most homes have an average of 100 – 200 amperage capacity. Small, older buildings may have 200 – 400 amperage capacity.

Level 1 Charging = 110-120V, 15-30 amps Level 2 Charging = 240V, 30-50 amps DC Fast Charging = 480V



## **Case Studies**

#### San Antonio Zoo

- Blink and the city installed 202
  Level 2 charging stations and 3 DC
  fast- chargers furthering the city's
  Electric Vehicle San Antonio
  Program (EV-SA).
  - Installed on City property to serve as an amenity and "visible sign" of their committment to clean transportation choices."

#### Melrose, Mass.

 installed 15 mounted EV chargers in 2021, and early data suggests that mounting EVSE chargers on existing utility poles will reduce installation costs by as much as 55% -70%.10

#### Los Angeles

 Installed more than 430 chargers on streetlights, and as of November 2021, at least five other cities had installed charging infrastructure on utility poles or streetlights or were planning pilots for this purpose.



# LIBRARY Partnerships

CHARGING

ONLY

| VEHICLE              |   |   |
|----------------------|---|---|
| Company              | Number of Stations and Locations                                | Charging Station Service<br>Provider Partners |
| Walmart              | 120+ stations in 34 states                                      | Electrify America                             |
| Target               | Plants to install stations at 600+ parking spaces in 20+ states | ChargePoint, Electrify America,<br>Tesla      |
| IKEA                 | Stations at 37 stores worldwide                                 | Blink   |
| Walgreens            | Stations at 400 stores  | EVgo, SemaConnect                             |
| Wawa                 | Stations at 47 stores   | Tesla   |
| Sheetz               | 21 stations   | Electrify America, EVgo                       |
| Simon Property Group | 645 stations at 110 properties across 20 states                 | Electrify America, EVgo                       |
| General Motors       | 3,250 nationwide at FlyingJ                                     | EVgo  |

ONLY

### Things to Consider





Develop suitability analyses to understand neighborhood needs and best use cases for projects, including infrastructure mapping, including an equity score index combined with community feedback. Electrification

oalition





Grant research and outreach City workshops, participate in workshops; develop funding partnerships A diverse array of stakeholders move the needle by building momentum around electric mobility and filling funding gaps.

**Partnerships** 

Community Engagement

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Partner with community members, equity experts focused on ensuring equity is integrated in deploying public charging infrastructure, engage community groups, chambers, Site Planning

Careful and extensive site planning supports the efficiency of the network by ensuring projects are not held up by ambiguous external processes.



# Inflation Reduction Act

#### **EV-Specific Benefits**

- Light duty EV tax credits: up to \$7,500
- Used EV tax credit: up to \$4,000
- Commercial EV tax credit: 30% of vehicle, up to \$40,000
- EV charging equipment tax credit: up to \$1,000
- 30C Alternative Fuel Refueling Property Credit

#### **Community-Specific Benefits**

- Cities near ports may receive port decarbonization grants for planning and equipment
- Emerging clean energy jobs
- Unlocks new clean energy funding in the form of direct payments
- Opens grant programs supporting GHG reduction, pollution reduction, and electrification

# Thank you!

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### What's Next for NEVI?



- □ All 52 jurisdictions have been approved!
- With approval states can now unlock funding to be reimbursed for state staffing and planning activities and can also start deploying funding to build charging stations and execute their plans.
- □ Charging Station "rules" expected to be finalized "expeditiously"
- Details for the \$2.5 billion NEVI competitive grant program expected soon!



## **Utility EV Programs**

35 States 64 Utilities

| Approved                  |                           |
|---------------------------|---------------------------|
| 34                        | 138                       |
| States                    | Filings                   |
| 55                        | \$3,552,312,517           |
| Utilities                 | Investment                |
| 7,839                     | 304,428                   |
| DC Fast Charging Stations | Level 2 Charging Stations |

| Pending/Filed             |                           |  |
|---------------------------|---------------------------|--|
| 25                        | <mark>62</mark>           |  |
| States                    | Filings                   |  |
| <mark>36</mark>           | \$2,920,392,613           |  |
| Utilities                 | Investment                |  |
| 3,816                     | 273,428                   |  |
| DC Fast Charging Stations | Level 2 Charging Stations |  |

| Denied/Withdrawn          |                           |  |
|---------------------------|---------------------------|--|
| 22                        | <mark>47</mark>           |  |
| States                    | Filings                   |  |
| 28                        | \$718,953,126             |  |
| Utilities                 | Investment                |  |
| 854                       | 90,543                    |  |
| DC Fast Charging Stations | Level 2 Charging Stations |  |

