



# Product Feature Webinar

December 06, 2022



# 2022 SFT Webinar Series Sponsors





**SUSTAINABLE  
FLEET  
TECHNOLOGY**

WEBINAR SERIES 2022

Sessions through December 06, 2022

<https://www.sustainablefleetexpo.com/>





**SUSTAINABLE  
FLEET  
TECHNOLOGY**

CONFERENCE & EXPO 2023

**SAVE THE DATE**

**August 14 – 16, 2023**

Raleigh Convention Center



# Format

- Q&A at the end
- Submit questions and comments to “Panelists”
- Scheduled for 2:00p-3:00p
- Handout
- Recording



# Today's Presenter



Allen Goetz  
Market Development Manager  
Fleet e-Mobility  
[Allen.Goetz@Gilbarco.com](mailto:Allen.Goetz@Gilbarco.com)

- Gilbarco Veeder-Root's e-Mobility solutions: A global leader in fueling technology representing the best in breed for EVSE & charge management / network software.
- **15+ years** of experience in the transportation industry with customers ranging from small businesses & municipalities to Fortune 500 companies.
- Featured in industry publications such as Automotive Fleet & guest speaker for podcasts including [Fleet FYIs](#) & [What the Truck](#).
- His current role allows him to focus on education as well as business development in the exciting EV charging market, a key element in the future of fueling.

2022

# e-Mobility Solutions

 EVerse

 Amps2Go

Fueling the future, today.

 **GILBARCO  
VEEDER-ROOT**

# Global Expertise to Serve Our Customers



**8,300+**

GLOBAL TEAM MEMBERS



**500+**

COMBINED YEARS INNOVATION



**150+**

GLOBAL LOCATIONS



GLOBAL TRAFFIC TECHNOLOGIES



**~\$2.8B**

2019 REVENUE



**2020**

LAUNCH



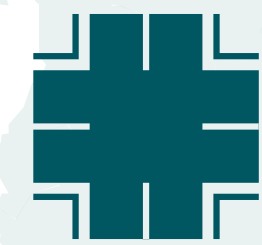
**20**

MANUFACTURING FACILITIES

**1,800+**

MATCO FRANCHISES

TELETRAC NAVMAN



**90,000+**

GTT CONTROLLED INTERSECTIONS



**41 of 50**

TOP U.S. CITIES SERVED BY GTT

**HUBS**

GREENSBORO, NC  
GARDEN GROVE, CA  
NASHVILLE, TN  
ST. PAUL, MN  
STOW, OH

**HQ**

RALEIGH, NC



**480,000+**

VEHICLES MONITORED BY TELETRAC NAVMAN



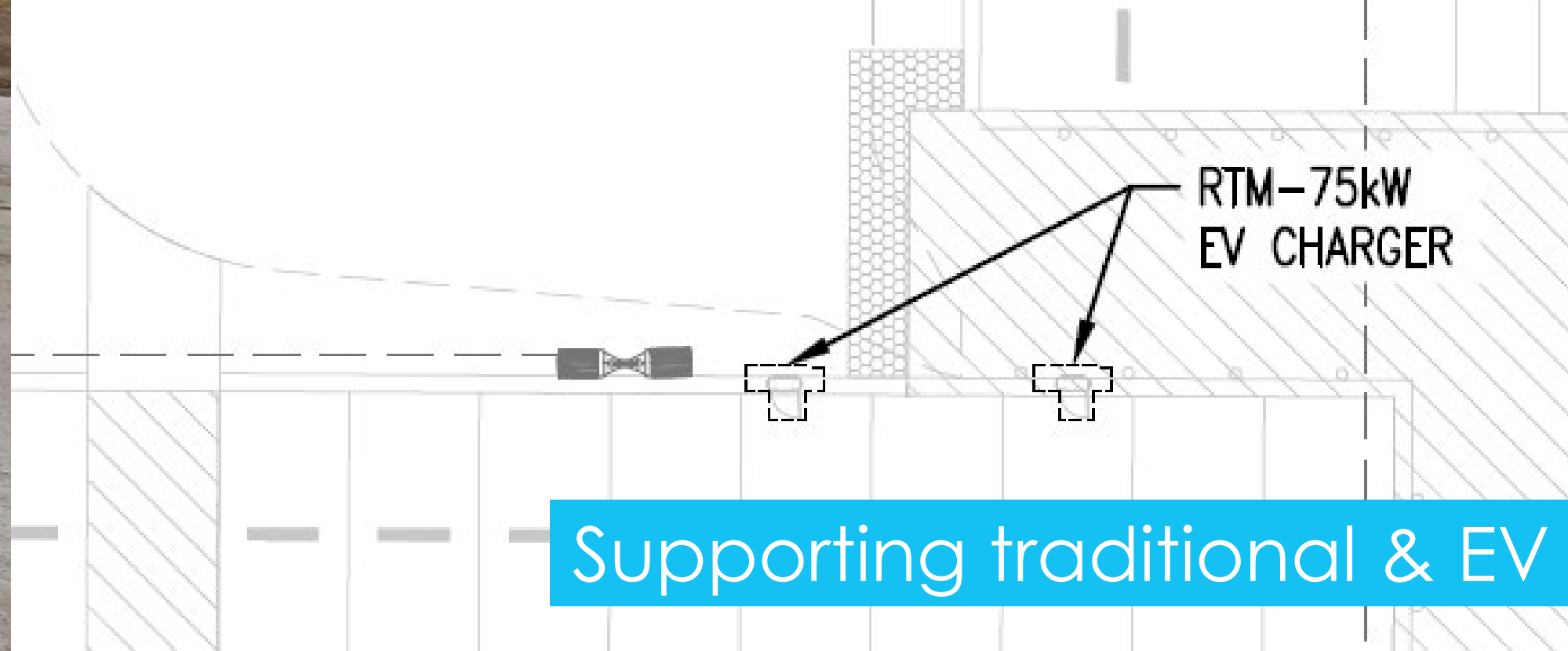
# Gilbarco Veeder-Root | The Global Leader of Fueling Control

## e-Mobility & ICE Fueling



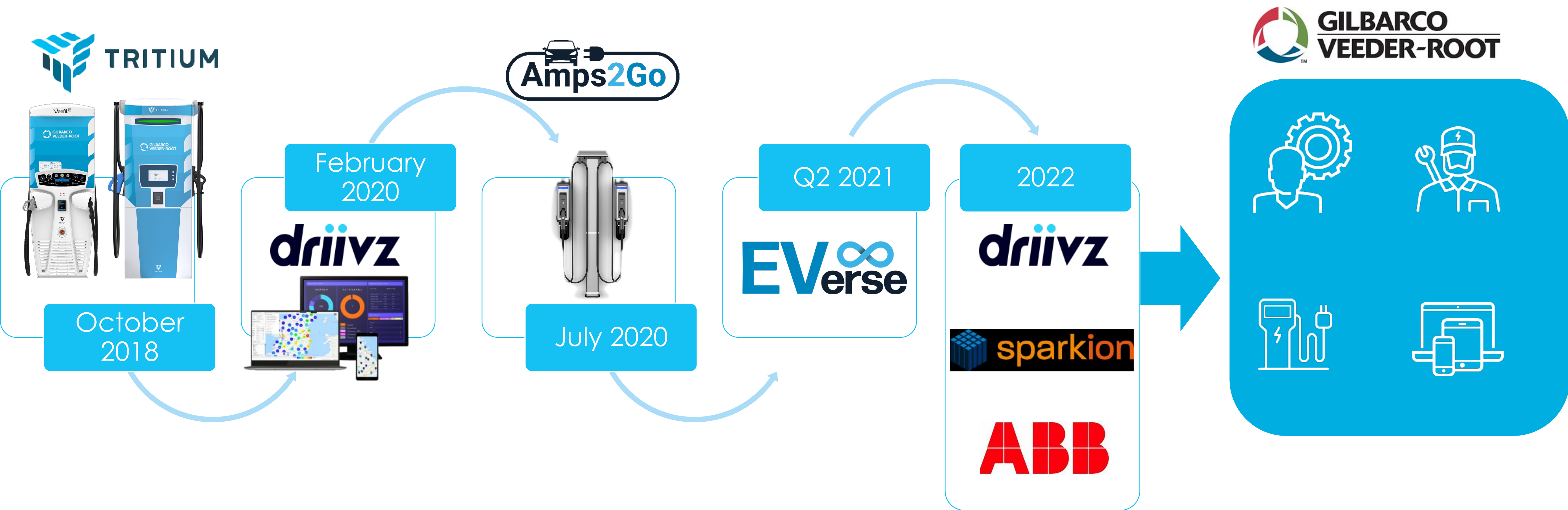
We keep the world moving with the best fueling technology and services

# Fleet Markets Served



Supporting traditional & EV deployments

# Gilbarco Veeder-Root e-Mobility Timeline



Gilbarco Veeder-Root is a total e-Mobility solutions provider

FLEXIBLE, SCALABLE TECHNOLOGIES

# Software Solutions

# Why EV charging software?

When it comes to managing a fleet of electric vehicles, what's important?

OCPP EV charging software helps address the following important fleet needs...

1

*Completing the Mission*

Vehicle Readiness

Charger Uptime

Scheduling

Diagnostics

Authentication

NOC Support

2

*Reducing OpEx*

Energy Management

Consumption Reports

LCFS Reporting

3

*Management, Tracking, & Reporting*

Driver Management

Analytics & Reports

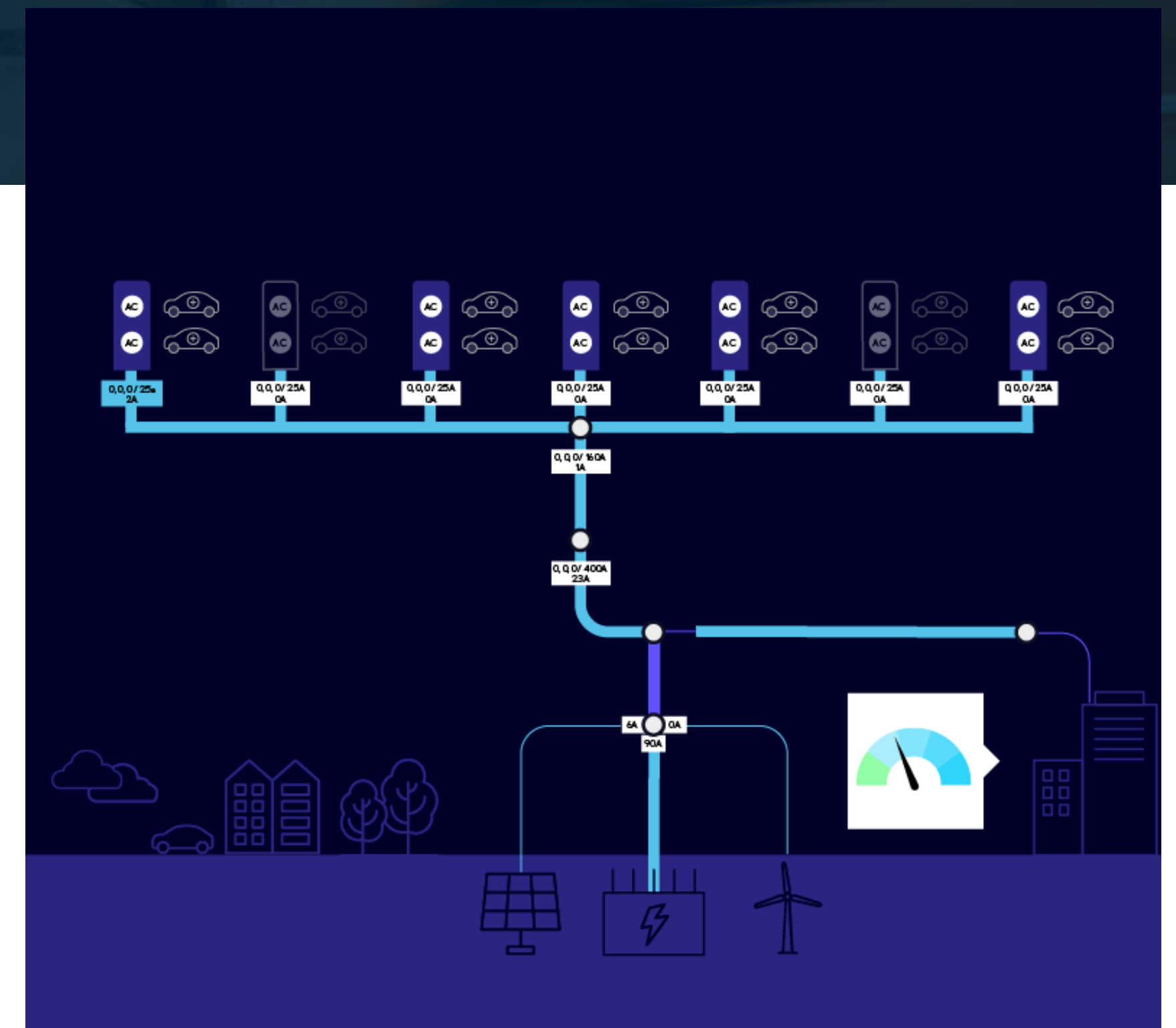


## Optional Energy Management Module

### Energy Management Module

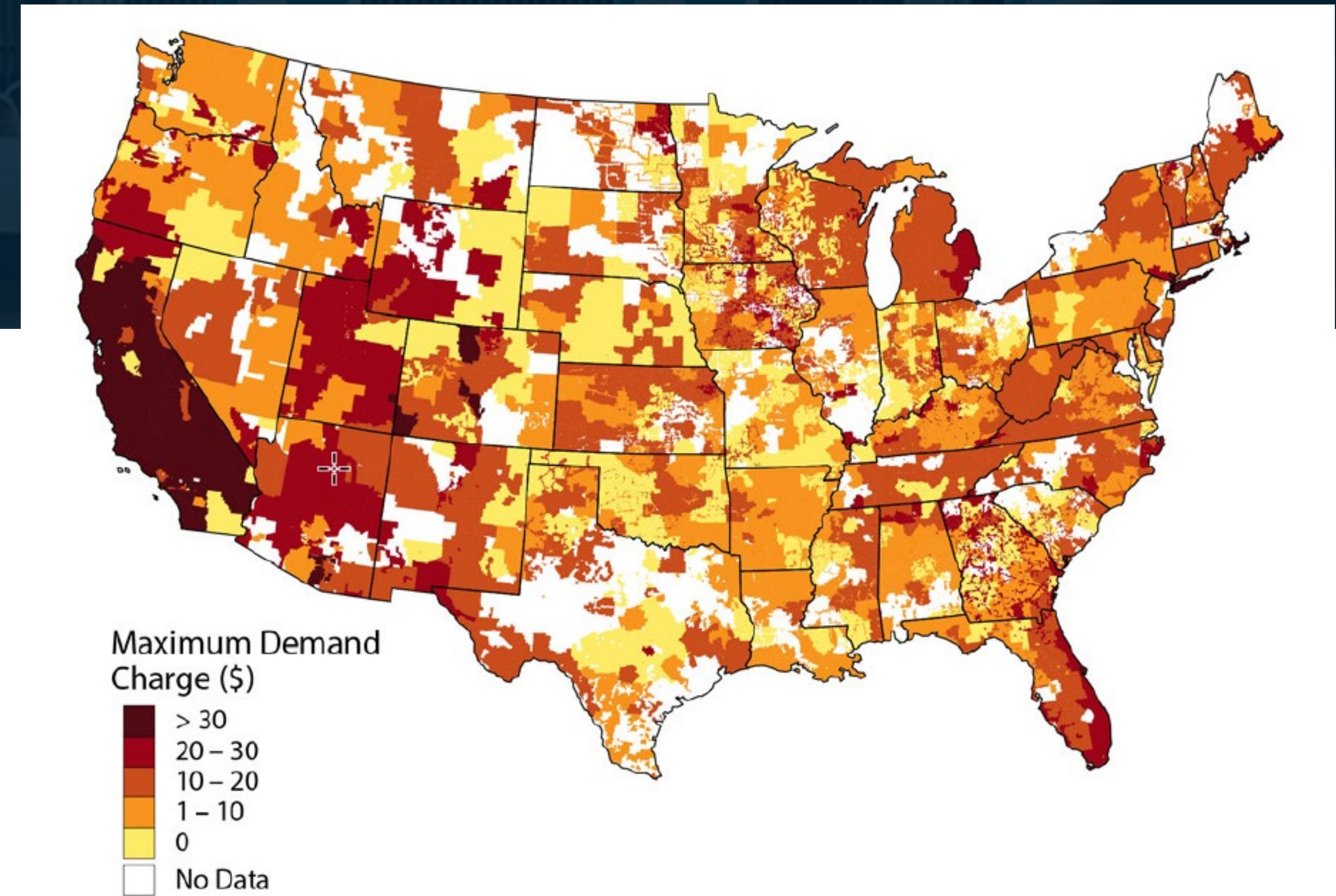
- ✓ Improves fleet charging efficiency and potentially reduces OpEx
- ✓ Monitor, manage, & adjust energy consumption
- ✓ Near real-time load balancing for single chargers, sites with multiple chargers, & sites with locally supplied electricity (renewables, microgrid, etc.)

- ✓ Smart demand response algorithm to lower consumption when grid is congested or prices too high
- ✓ Supports OpenADR demand management
- ✓ 170+ models of chargers from different OEMs supported



## Peak Demand Reduction

- ✓ By basing a portion of a customer's electricity bill on their peak level of demand, the utility distributes more of the costs associated with building and maintaining system capacity to those who contribute most to the need for increased capacity.
- ✓ Demand charges are typically based on the highest average electricity usage occurring within a defined time interval (usually 15 minutes) during a billing period. Unlike electricity consumption charges, which account for the volume (kWh) of electricity consumed throughout a billing period, demand charges track the highest rate (kW) of electricity consumption during the billing period. The greater the need for electricity at any time during the period, the higher the customer's demand.

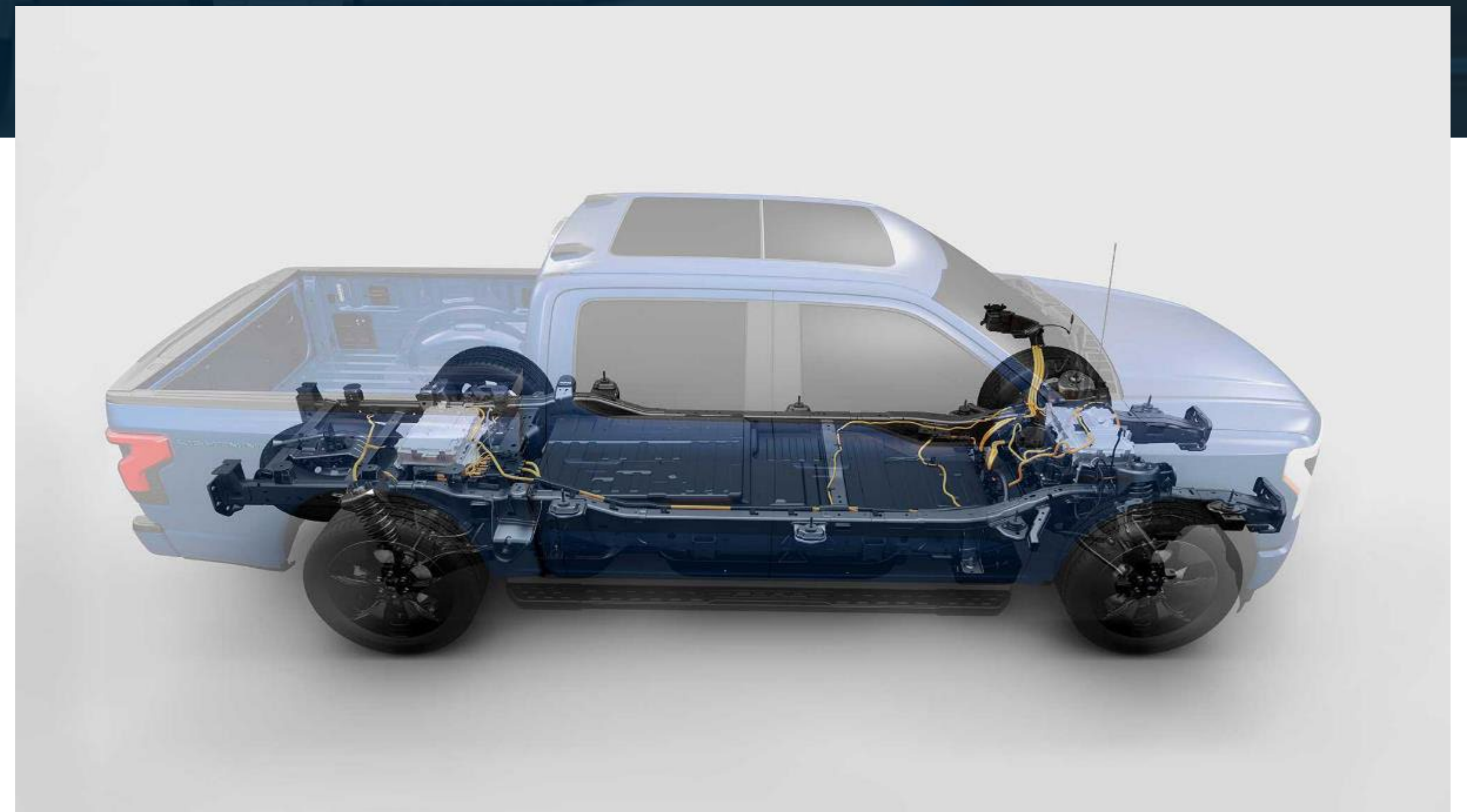


Amps2Go

# Fleet EV Trends

Batteries are getting bigger & onboard chargers are too

Vehicle	Battery Size	Onboard Charger Max
Nissan Leaf (standard)	40kWh	6.6kW
Nissan Leaf (extended range)	62kWh	6.6kW
Ford e-Transit	64kWh	11.3kW
Lordstown Endurance	109kWh	11kW
Fort F150 Lightning (standard)	125kWh	19.2kW
Ford F150 Lightning (extended range)	155kWh	19.2kW





FLEXIBLE, SCALABLE TECHNOLOGIES

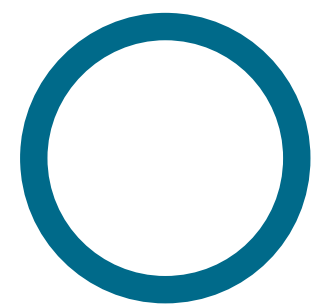
# L2 Charging Solutions

Amps2GO

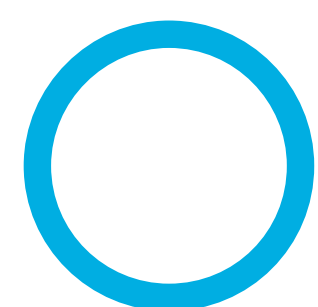
# Public Access

Use case when EV drivers need to charge away from home & are using a charger made publicly available by a site host

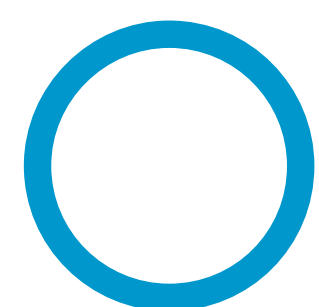
Potential locations  
Customer experience  
Site host's role  
Settlement



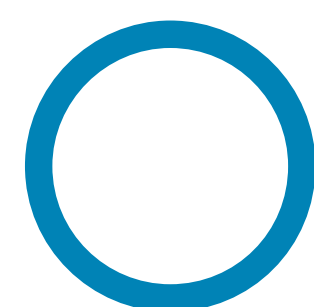
"I need a charge"



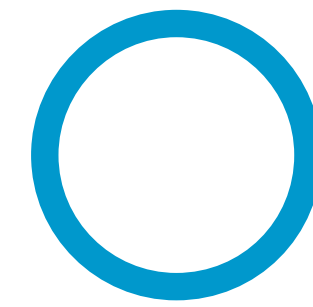
App & locator



Authorization at charger



Charging session



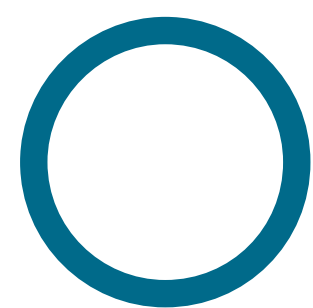
Leave/billing



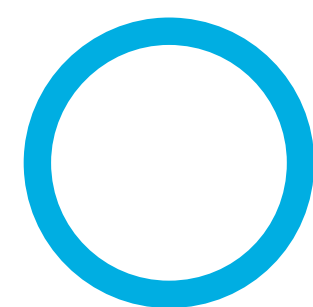
# Amps2GO Workplace Charging

Use case when EV drivers need to charge where they work are using a charger made publicly available by a site host  
-OR-  
Not publicly available, for employees only

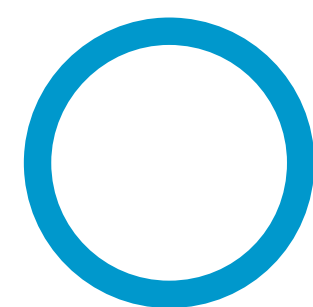
Potential locations  
Customer experience  
Site host's role  
Settlement



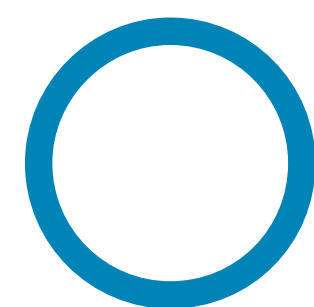
"I need a charge"



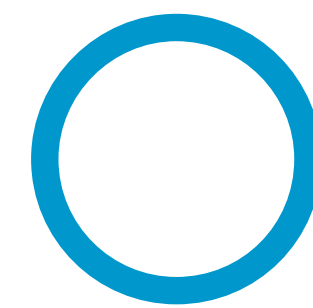
App & locator



Authorization at charger



Charging session



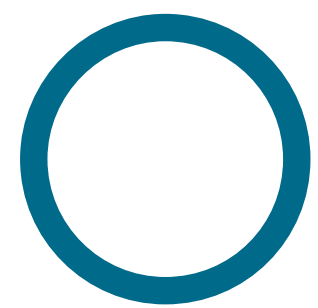
Leave/billing



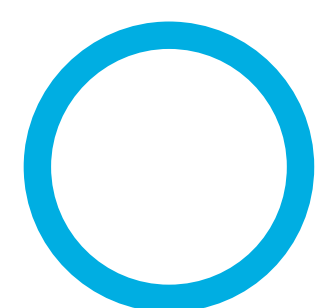
# Amps2GO Fleet Charging

Use case when EV drivers need to charge overnight or for a period of time at a fleet-only facility  
-OR-  
At a publicly available charger without a fee

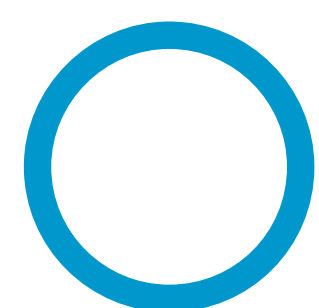
Potential locations  
Driver experience  
Site host's role  
Reporting vs. Settlement



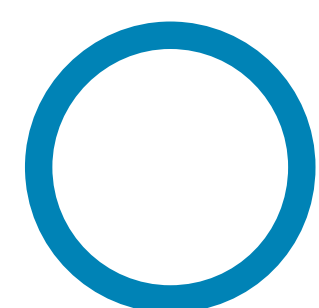
"I need a charge"



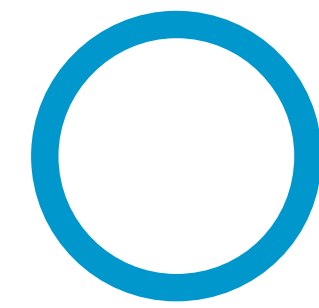
Key card/Fob



Authorization at charger



Charging session



Leave/  
reporting





FLEXIBLE , SCALABLE TECHNOLOGIES

# DC Charging Solutions

FLEXIBLE , SCALABLE TECHNOLOGIES

# DC CHARGING SOLUTIONS

Universal charging | Flexible | Tailor-fit for your needs

## 11-25kW

Low-Cost DC power

Simple to own & operate

## 50 -150kW

Simultaneous charging

Modular from 50-150kW

## 175-350+kW

Ultrafast Charge

# ABB DC Chargers

# Wallbox

Simple to own fleet-focused DCFC

The ABB product line represents high quality & ultimate flexibility

- ✓ DC output power at 22-25kW, 208/240 single  $\Phi$  input or 480V three  $\Phi$  input
- ✓ 1:1 vehicle to charger ratio
- ✓ Low cost unit for DC output
- ✓ Rapid availability to ship
- ✓ Cloud based data access via EVerse



# ABB DC Fast Chargers

## HVC150

Simple to own fleet-focused DCFC

The ABB product line represents high quality & ultimate flexibility

- ✓ DC output power at 150kW
- ✓ Up to three charging posts
- ✓ Sequential charging
- ✓ Rapid availability to ship
- ✓ Cloud based data access via EVerse





# ABB DC Fast Chargers

# Terra 94/124/184

Simple to own fleet-focused DCFC

The ABB product line represents high quality & ultimate flexibility

- ✓ DC output power for commercial vehicles
- ✓ Single/dual port output (all power to a single vehicle or a 50/50 split to two vehicles)
- ✓ Cloud based data access via EVerse



# ABB DC Fast Chargers

# Terra HP 175/350kw

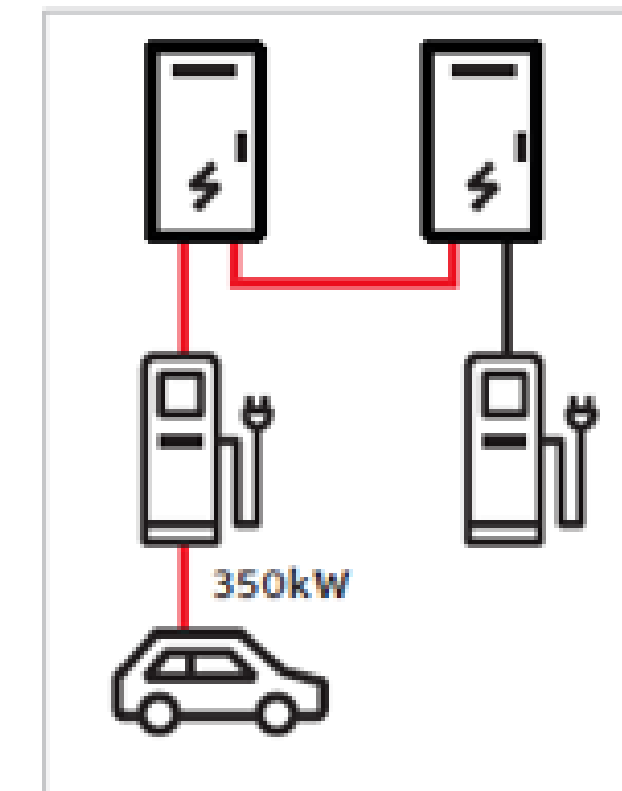
Simple to own DCFC



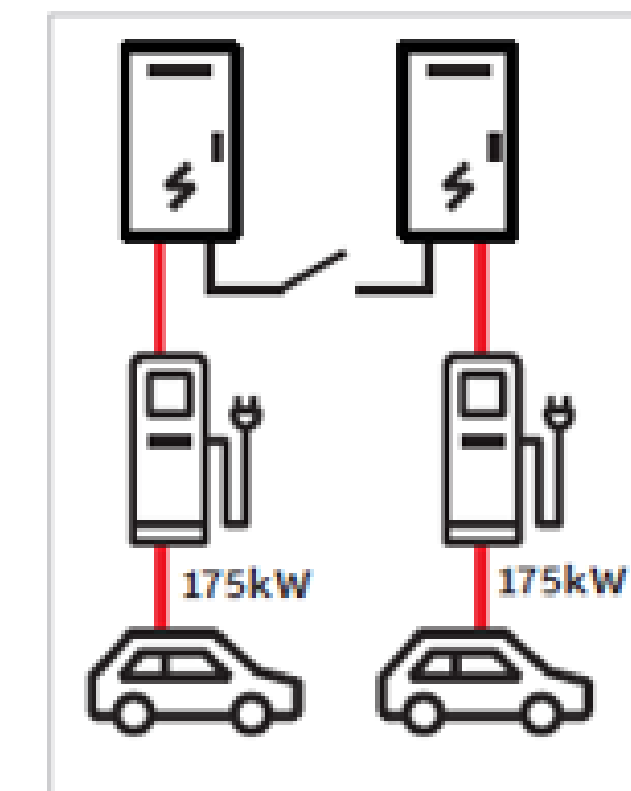
The ABB product line represents high quality & ultimate flexibility

- ✓ DC output power at 175kW or 350kW
- ✓ The Terra HP system can be configured as:
  - 175 kW: one charge post and one cabinet
  - 350 kW: one charge post and two cabinets
  - 175-350 kW: two charge posts and two cabinets

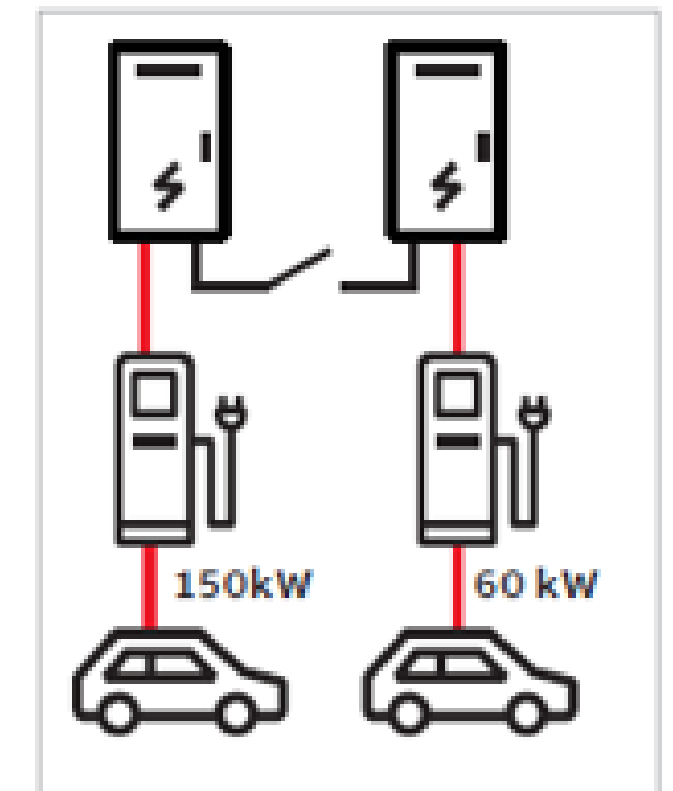
Dynamic DC illustrated



Max charging dedicated to premium EV at up to 350kW on either charge post.



Shared power delivery for premium EV utilization at up to 175 kW to each vehicle.



Shared delivery tailored to varied EV model demands.

# DC Fast Chargers

# RTM75

Modular Scalable Charging

The RTM75\* is a game changer for DCFC

- ✓ Liquid cooling
- ✓ Pay as you Grow
- ✓ Simultaneous Charging
- ✓ Configurable Power Electronics Modules
- ✓ Increased reliability & low maintenance
- ✓ Up to 920V output
- ✓ IP65 rating
- ✓ CHAdeMO and CCS connectors
- ✓ Custom branding
- ✓ Cloud based data access via Veefil Pulse



## DC Fast Chargers

## PKM 150

Modular Scalable Charging

The PKM150 is a game changer for DCFC

- ✓ Liquid cooling
- ✓ Pay as you Grow
- ✓ Simultaneous Charging
- ✓ Configurable Power Electronics Modules
- ✓ Increased reliability & low maintenance
- ✓ Up to 920V output
- ✓ IP65 rating
- ✓ CHAdeMO and CCS connectors
- ✓ Custom branding
- ✓ Cloud based data access



# Fleet Markets Served

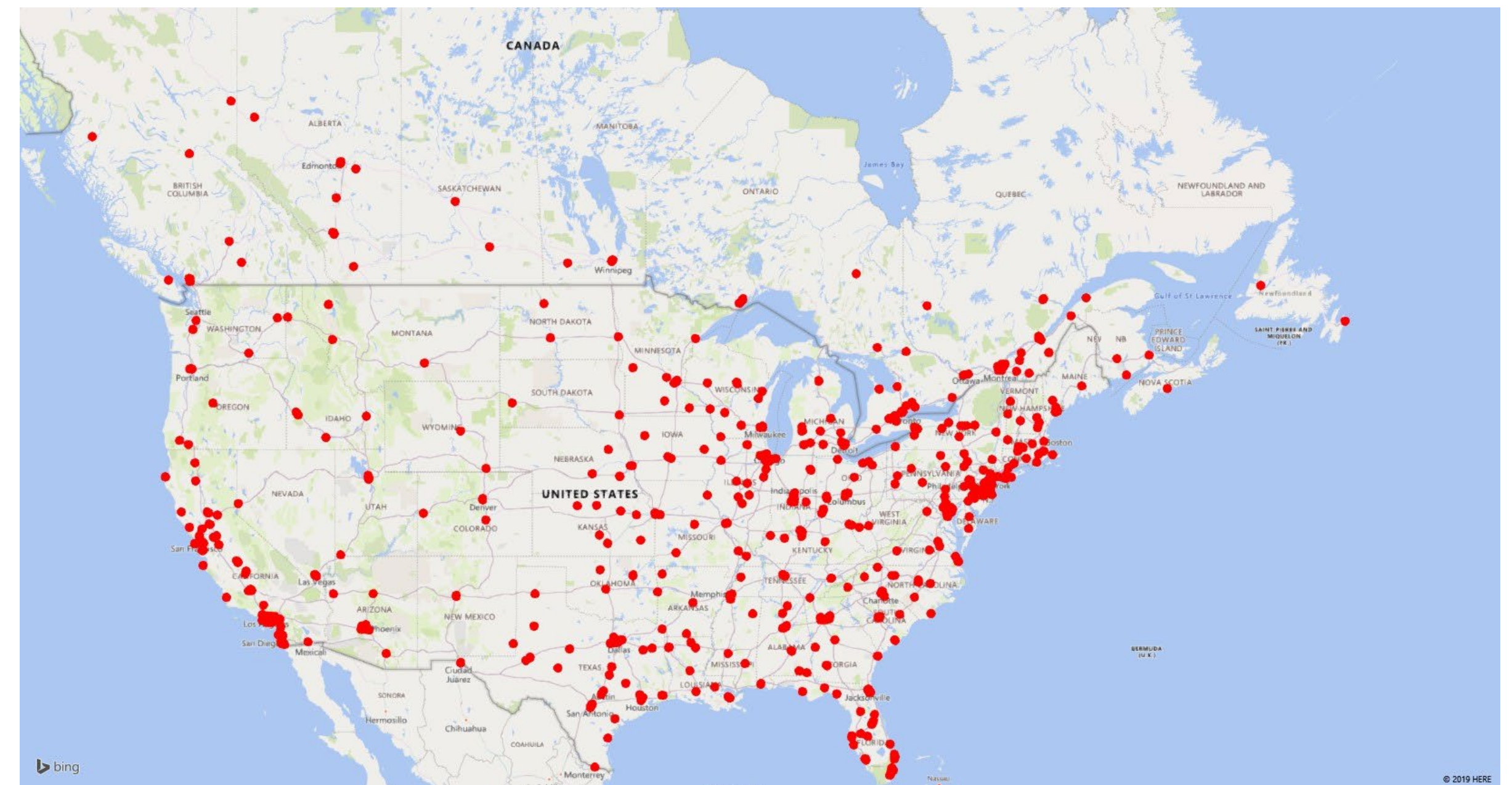


Gilbarco e-Mobility DCFC units for fleetdeployments

# Service Providers & Technicians

Gilbarco Veeder-Root's industry leading service and support team

- 600+ Gilbarco Service Contractors in North America
- Certified Technician Base
  - 2375+ Certified Techs



# Site assessment & Installation

Gilbarco Veeder-Root's industry leading service and support team

- In-person site walk performed by authorized ASC to determine best location for siting charging to meet operational needs & reduce cost.
- Project Management process includes elements of permitting, site design, and coordination with local utilities for infrastructure upgrades (if needed).
- Construction scope covers an agreed upon schedule to meet customer needs.



# Purchasing Cooperatives

Gilbarco e-Mobility products on contract

- Cooperative purchasing contracts with the National Cooperative Purchasing Alliance (NCPA) & BuyBoard
- **Free** for non-profit organizations to use
- Negotiated pricing
- No RFP required

<http://ncpa.us/Vendors/Gilbarco>

[https://app.buyboard.com/Reports/CurrentVendors\\_TX.pdf](https://app.buyboard.com/Reports/CurrentVendors_TX.pdf)

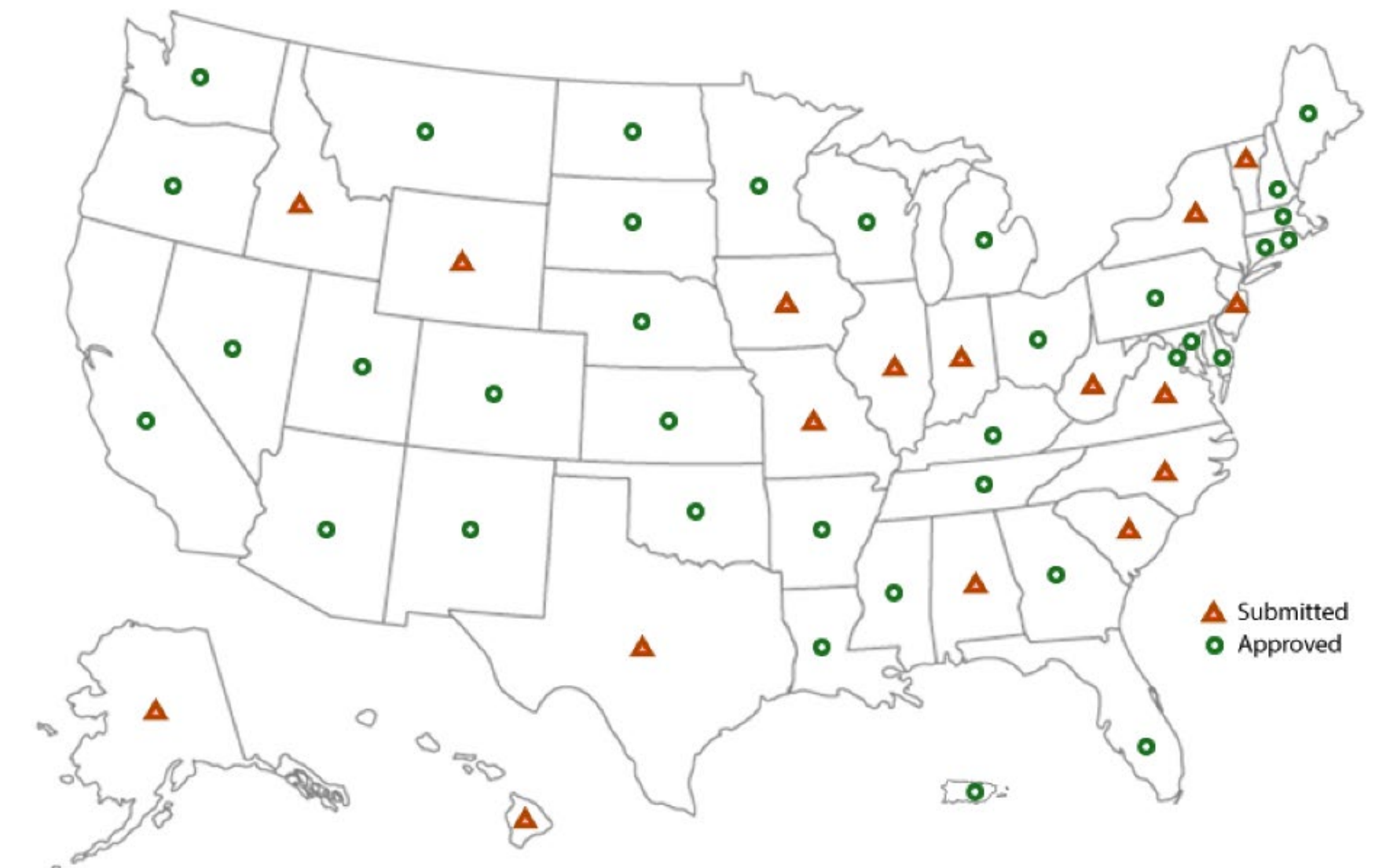




# National Electric Vehicle Infrastructure Plan (NEVI)

- \$7.5 billion in dedicated funding to help make EV chargers accessible to all Americans for local to long-distance trips.
  - NEVI (\$5 billion): 2022 through 2026
- State plans were submitted and approved in 2022
- EVSE installed every **50 miles** along the State's portions of the Interstate Highway System within **1 travel mile of the Interstate**.
- Minimum station power capability at or above **600kW** and supports at least **150kW per port** simultaneously across **four ports** for charging.
- The Federal cost-share for NEVI Formula Program projects is **80 percent**. Private and State funds can be used to provide the remaining cost-share.

	BIPARTISAN INFRASTRUCTURE LAW (BIL)				
Fiscal Year	2022	2023	2024	2025	2026
Avance Appropriation (General Fund)	\$1.000 B	\$1.000 B	\$1.000 B	\$1.000 B	\$1.000 B



States with a green dot have approved EVSE plans and will receive NEVI funding.



CONFIDENTIAL

# Thank you

Fueling the future, today.

