DOCKETED	
Docket Number:	22-EVI-06
Project Title:	Vehicle-Grid Integration
TN #:	256589
Document Title:	Network Roaming Workshop - ChargeHub Presentation
Description:	N/A
Filer:	Jeffrey Lu
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/30/2024 8:50:30 AM
Docketed Date:	5/30/2024

CHARGEHUB
PASSPORT HUB

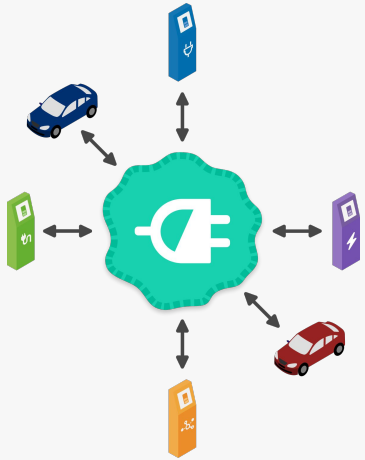
North America's EV Roaming Hub

ABOUT CHARGEHUB

ChargeHub is a software company founded in 2013 with the mission of making EV charging as seamless as fueling a gasoline vehicle.

Passport Hub - North America's EV Roaming Hub

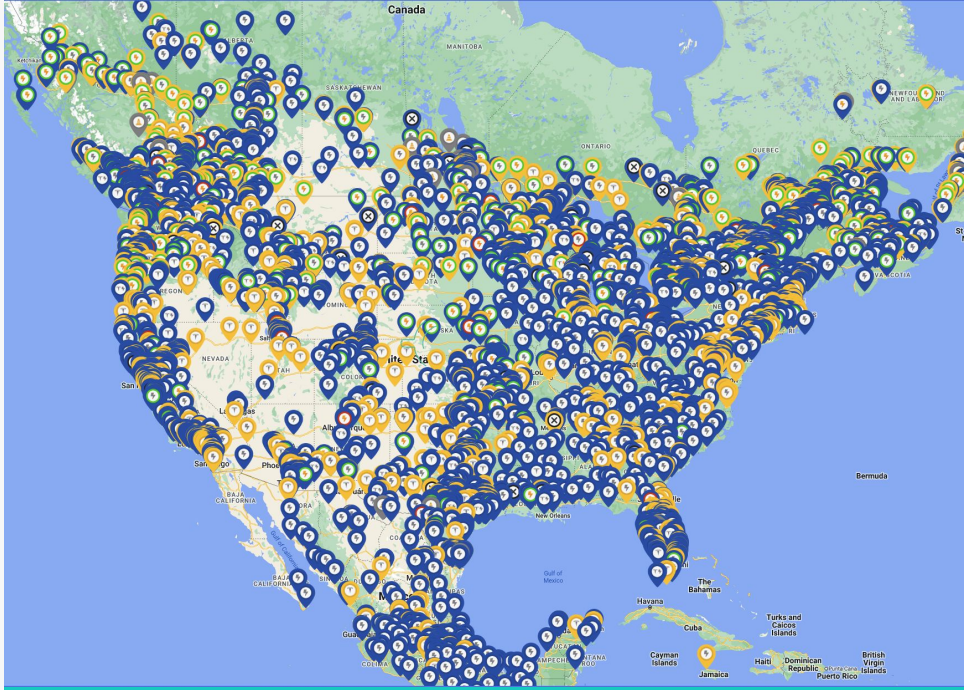
- Goal: Accelerate EV adoption
- How: Streamline, simplify and scale roaming integrations
- +80 CPO <> eMSP roaming connections
- +90,000 charging stations



THE PUBLIC CHARGING INFRASTRUCTURE IS HIGHLY FRAGMENTED AND A CONCERN FOR EV DRIVERS

Public charging experience is a concern for EV drivers

- 36% of EV drivers **lack confidence** in taking road trips in their EV[1]
- 37% of EV drivers are **not aware of any roaming agreements** between network operators[2]
- Only 6% of EV drivers have a **clear understanding** of the scope of roaming agreements



100+
Branded Networks

200,000+
Level 2 & DCFC Charging Stations

Across North America

[1]CAA 2023, https://www.caa.ca/sustainability/electric-vehicles/driver-experience/
[2]Pollution Probe 2022, https://www.pollutionprobe.org/pollution-probe-releases-groundbreaking-report-on-the-consumer-ev-charging-experience-in-canada-publication/

EV ROAMING: A SOLUTION TO A FRAGMENTED ECOSYSTEM

EV Roaming (or eRoaming) powers public charging systems compatibility, enabling drivers to effortlessly connect and charge their vehicles across a diversity of charging networks without the headache of managing multiple subscriptions, apps or cards.

*Access to the most **seamless integration to the public charging infrastructure** is of critical importance to offer an easy charging and payment experience to EV drivers.*

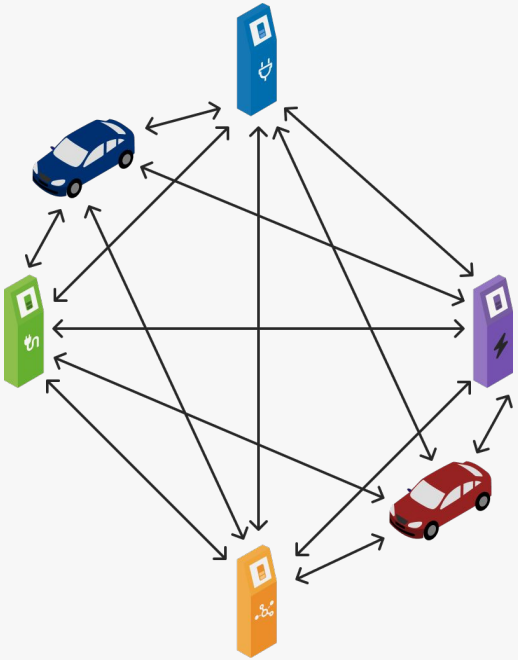
EV Roaming, alongside infrastructure growth and reliability, is needed to accelerate EV adoption.

LIMITATIONS OF PEER-TO-PEER EV ROAMING

Peer-to-peer agreements alone cannot scale at the rate of the industry

1) A simple EV Roaming case

- 4 Networks (CPOs + eMPSs)
  +
- 2 Auto OEMs (eMSPs)
  =
- 14 peer-to-peer connections



AN EV ROAMING INTERCONNECTION NEEDS AT LEAST 4 ESSENTIAL ELEMENTS

Technical Integration

Legal Agreement

Periodic Accounting/Reconciliation

Business Agreement

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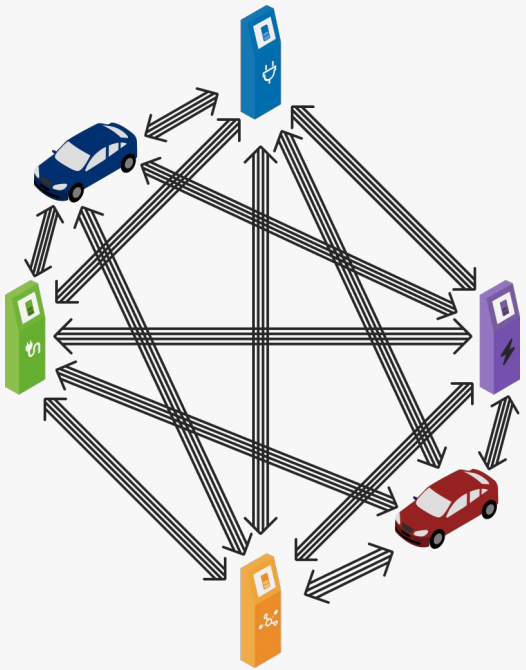

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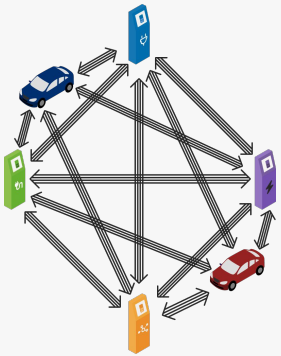

2) At scale North America's ecosystem may have:

+ 100 CPO/CSOs

+ 25 Auto OEMs

+ 1,000 Utilities

+ 10,000 Fleets

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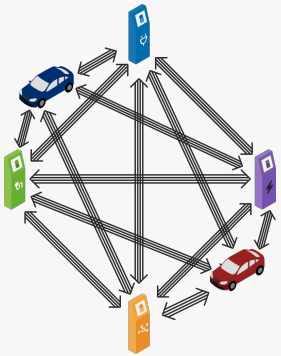

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...EV adoption, we have a **problem!**

EV ROAMING VIA PASSPORT HUB

What if each entity in the ecosystem opted to have a single interconnection to Passport Hub?

For full interconnection, a charging ecosystem with 100 entities all connected to one another via Passport Hub needs :

- **100 Technical Integrations**
- **100 Business Agreements**
- **100 Legal Agreements**
- **100 Accounting Reconciliation Processes**

To achieve the same result with a peer-to-peer approach an ecosystem with 100 entities needs:

- **5,050 Technical Integrations**
- **5,050 Business Agreements**
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- **5,050 Legal Agreements**
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Connecting to Passport Hub is Simple

1 Baseline Business + Legal Agreement

1 Technical Integration

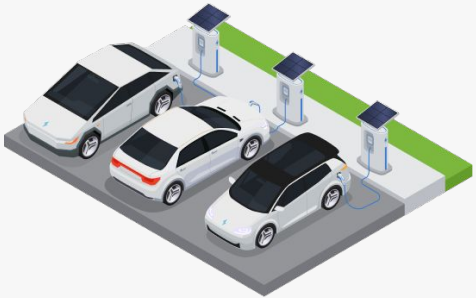
1 Accounting Reconciliation

Covering as many of your roaming interconnections as you want

PASSPORT HUB IS ACCELERATING EV ADOPTION

eMobility Service Providers (eMSP)

- Automakers
- Fleets
- Utilities
- Vertically Integrated CPOs



Fast-track & Scalable EV roaming

More chances EV drivers can find/pay/activate chargers through their account of choice

Simplified Public Charging

Accelerated EV Adoption

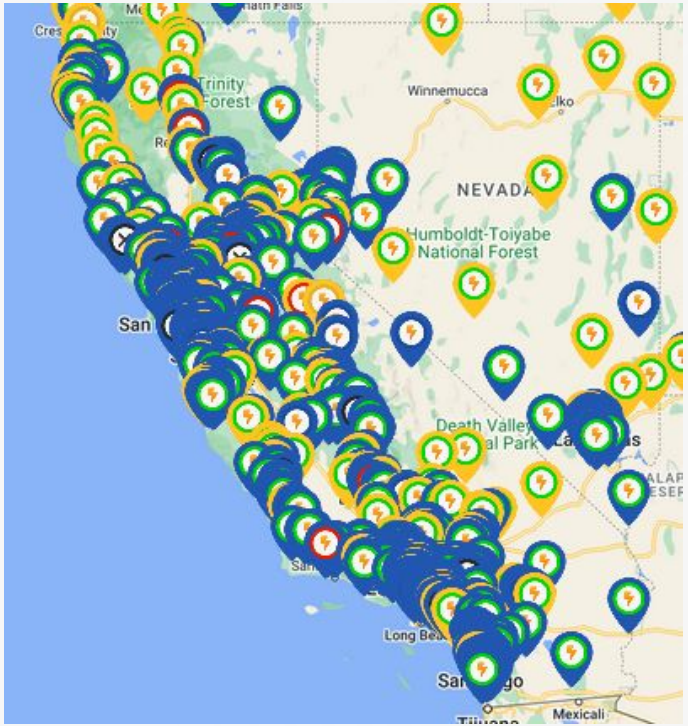
Charge Point Operators (CPO)
Charge Site Operators (CSO)

- Charging Networks
- Retailers/C-Stores/Fuel
- Utilities

CURRENT PASSPORT HUB COVERAGE IN CALIFORNIA

CPO coverage in California

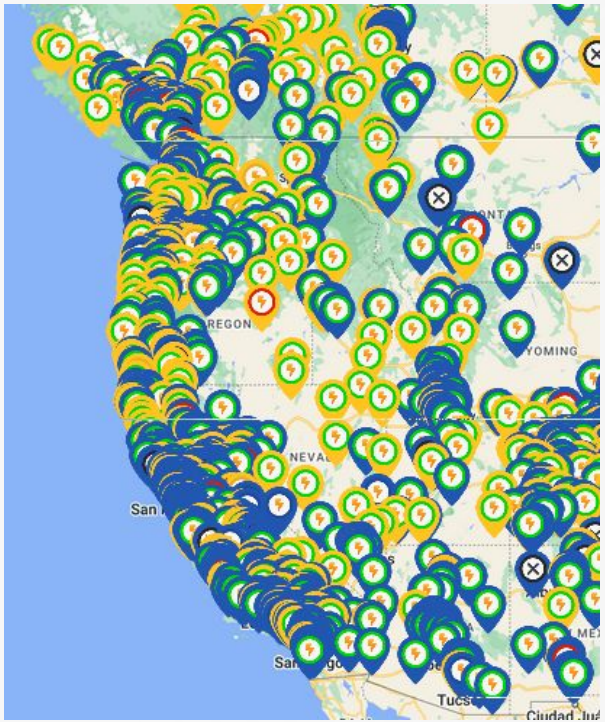
- 22,278 Ports (and growing weekly)



CURRENT PASSPORT HUB COVERAGE ON THE WEST COAST

CPO coverage on the West Coast

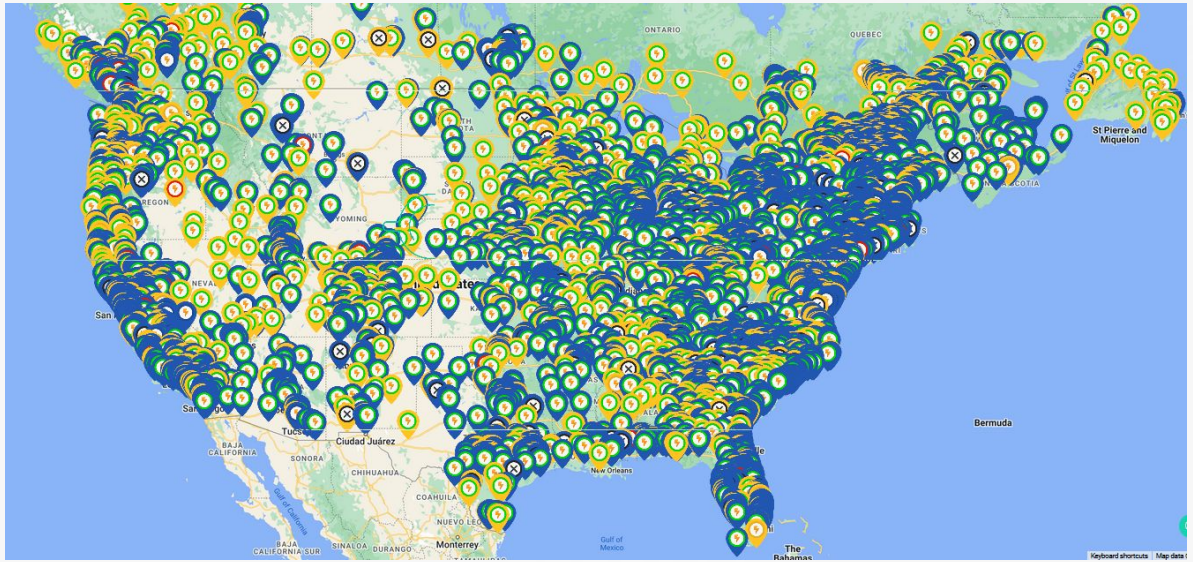
- 34,048 Ports (and growing weekly)



CURRENT PASSPORT HUB COVERAGE IN THE U.S. AND CANADA

CPO coverage U.S. + Canada

- 90,778 Ports (and growing weekly)



SOME PASSPORT HUB PUBLICLY ANNOUNCED eMSPs

Examples of Passport Hub partners in fleets and payment systems

- **Holman**: largest fleet management company in North America integrated to Passport Hub
- **VinFast**: Auto-OEM integrated to Passport Hub
- **Comdata (Corpay/Fleetcor)**: large payment solution for fleets integrating to Passport Hub
- **Parkopedia**: parking + in-car payment solution for auto-OEMs integrating to Passport Hub

In case you are interested, we also provide other industry solutions

ChargeHub eMobility Service Provider (eMSP) - free

Powerful eMSP solution enabling drivers to find any public charging station in the U.S. and Canada, offer live status of stations and payment with a single account

EV Driver Engagement - free

Engage with EV drivers who charge at your stations and improve customer satisfaction

EV Charging Solution Portal - free

Offer your clients exclusive branded public charging credits and the best-selling chargers

ChargeHub Premium EV Charging Location Data (POI Data)

The most complete and up to date EV charging location data for the U.S. and Canada

GET IN TOUCH TODAY

solutions.chargehub.com

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