STATE OF THE SYSTEM: ELECTRIC VEHICLE INFRASTRUCTURE

Air Quality Advisory Committee Meeting

January 24, 2023

EAST-WEST GATEWAY REGION

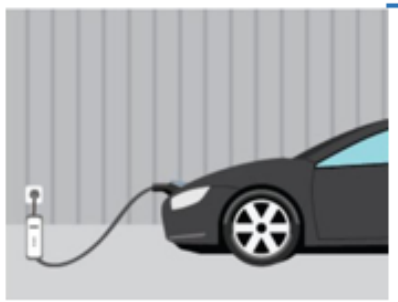
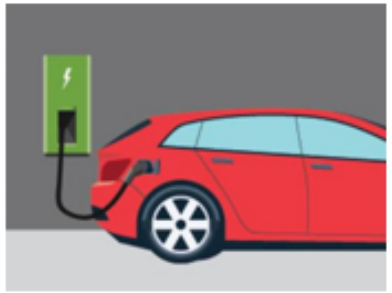
- Approximately 345 public charging stations in the EWG region
- Majority are on the Missouri side
- Each location has one or more types of chargers
- Ten charging networks
  - ChargePoint
  - Tesla Destination
  - Evgo
- Most chargers are not part of a network

CHARGING STATIONS

- Illinois is ranked 11th in the nation with 1,216 station locations
- Missouri is ranked 16th in the nation with 990 station locations

Charger Type	Illinois	Missouri
Level 1	3	0
Level 2	2,229	1,854
DC Fast	707	296
Total Ports	**2,939**	**2,150**

Types of EV Charging

		Range	Application
Level 1		2 to 5 miles of range per hour	• Single Family Homes • Multi-Unit Residential • Condos
Level 2		10 to 30 miles of range per hour	• Single Family Homes • Multi-Unit Residential • Workplace • Fleet • Public
Level 3 **(Direct Current Fast)**		150 to 350+ miles of range per hour	• Fleet • Public • Multi-Unit Residential

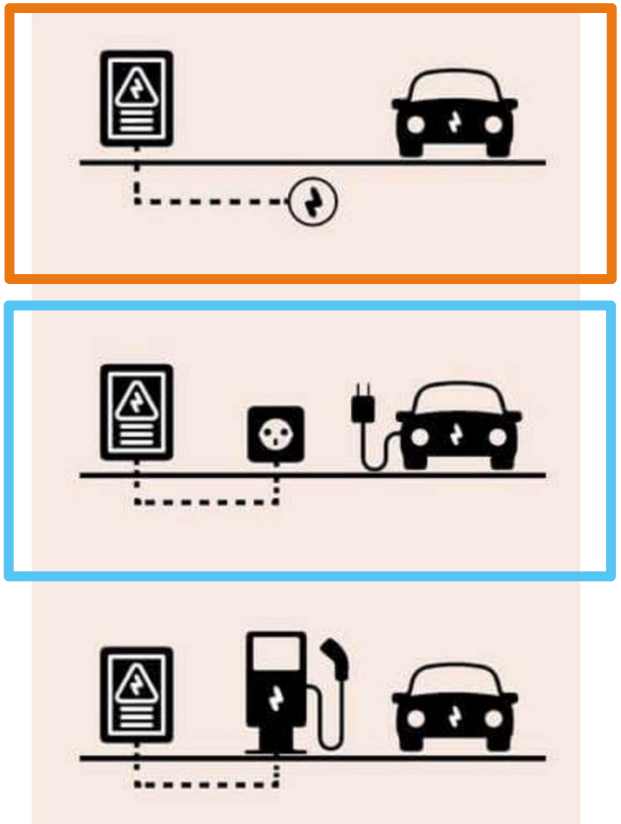
REGISTERED EVS

- Illinois is ranked 9th in the nation with 36,520 registered electric vehicles
- Missouri is ranked 26th in the nation with 10,050 registered electric vehicles
- Registered EVs in the EWG Illinois counties as of January 2023
  - Madison – 729
  - Monroe – 118
  - St. Clair - 732

DEFINITIONS

- **Electric Vehicle Ready** – Parking spaces that have electrical panel capacity, a conduit, and full circuit that allow for the future installation of a charging station

- **Electric Vehicle Supply Equipment (EVSE) Ready** – A parking space that has a conduit that ends in a 240 volt outlet that is ready for a level 2 charger



LEGISLATION

- City of St. Louis
  - Executive Order #68 signed in 2021 – Priority Procurement of Clean Municipal Vehicles
  - Effective in 2022, 5% of parking spaces must be electric vehicle ready (EVR) in lots with 50 or more spaces
- St. Louis County
  - In Nov. 2022 the county pledged to convert 27% of its light-duty fleet to EVs by 2027
  - Effective in 2022, 10% of parking spaces be EVR and 2% be EV supply equipment ready (EVSE) at major renovation sights and new construction projects

AMERICAN BATTERY MATERIALS INITIATIVE

- Signed by President Biden in 2022
- Part of the Bipartisan Infrastructure Law
- Israeli-based company Israel Chemicals Ltd. was awarded $197 million to construct a battery plant in the Carondelet Neighborhood in the City of St. Louis
- This plant is expected to be the first large-scale manufacturing site for lithium iron phosphate in the United States
- Operational by 2024 with full production by 2025

ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM

- Created in 2011 by EV industry stakeholders, electrical industry, and the Electrical Connection
  - Electrical Connection - partnership between the International Brotherhood of Electrical Workers Local 1 in St. Louis and the National Electrical Contractors Association
- Goal – to establish a reliable national standard for EV infrastructure installation
- A curriculum was developed to train workers all over the country
- 20 hour training course for licensed electricians to become certified

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE PROGRAM (NEVI)

- The NEVI Program is a part of the Bipartisan Infrastructure Law
- Provides funding to states to deploy EV charging infrastructure along public roads to establish an interconnected network across the country
- The program has $5 billion to award
- Missouri was awarded $98.9 million, Illinois was awarded $148.6 million
- Money will be spent over five years from FY 2022 – FY 2026

FY 2022-2026 NEVI Funding for Illinois and Missouri

State	Actual FY 2022	Est. FY 2023	Est. FY 2024	Est. FY 2025	Est. FY 2026	Total
IL	$21,998,178	$31,655,626	$31,655,845	$31,655,872	$31,655,938	$148,621,459
MO	$14,647,722	$21,078,237	$21,078,383	$21,078,400	$21,078,444	$98,961,186

FINANCIAL ASSISTANCE

- Illinois Environmental Protection Agency
  - Rebates to residents for the purchase or lease of a new or pre-owned EV
    - $4,000 between July 1, 2022 and June 30, 2026
    - $2,000 between July 1, 2026 and June 30, 2027
    - $1,500 beginning July 1, 2028
  - $1,500 rebate for purchase of a new electric motorcycle after July 1, 2022
  - Rebates to public and private entities for the installation and maintenance of Level 2 and DC fast charging stations.
    - Covers up to 80% of the eligible project costs
  - Additional rebates available for EV charging stations installed in underserved and environmental justice communities
  - https://www2.illinois.gov/epa/topics/ceja/Pages/Electric-Vehicle-Rebates.aspx

FINANCIAL ASSISTANCE CONT.

- Missouri Department of Natural Resources
  - Grant funded by the Volkswagen Environmental Mitigation Trust
    - Available to offset the cost of buying and installing publicly available EV charging stations
    - Covers up to 80% of the purchase, installation, and maintenance of Level 2 fast charging stations
  - https://dnr.mo.gov/air/what-were-doing/volkswagen-trust-funds/electric-vehicle-charging

QUESTIONS?

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