



NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM

2024 Annual Small Business Development Conference
March 18, 2024

Presenters



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EV 101



EV Charging Basics



The difference between AC and DC fast charging



AC charging
AC power is supplied by the charging station to the EV's on-board charger, which converts the power into DC power and charges the battery



DC fast charging
AC power is converted to DC power in the charging station, which then supplies DC power directly to the EV battery.






DC Fast Charger Examples

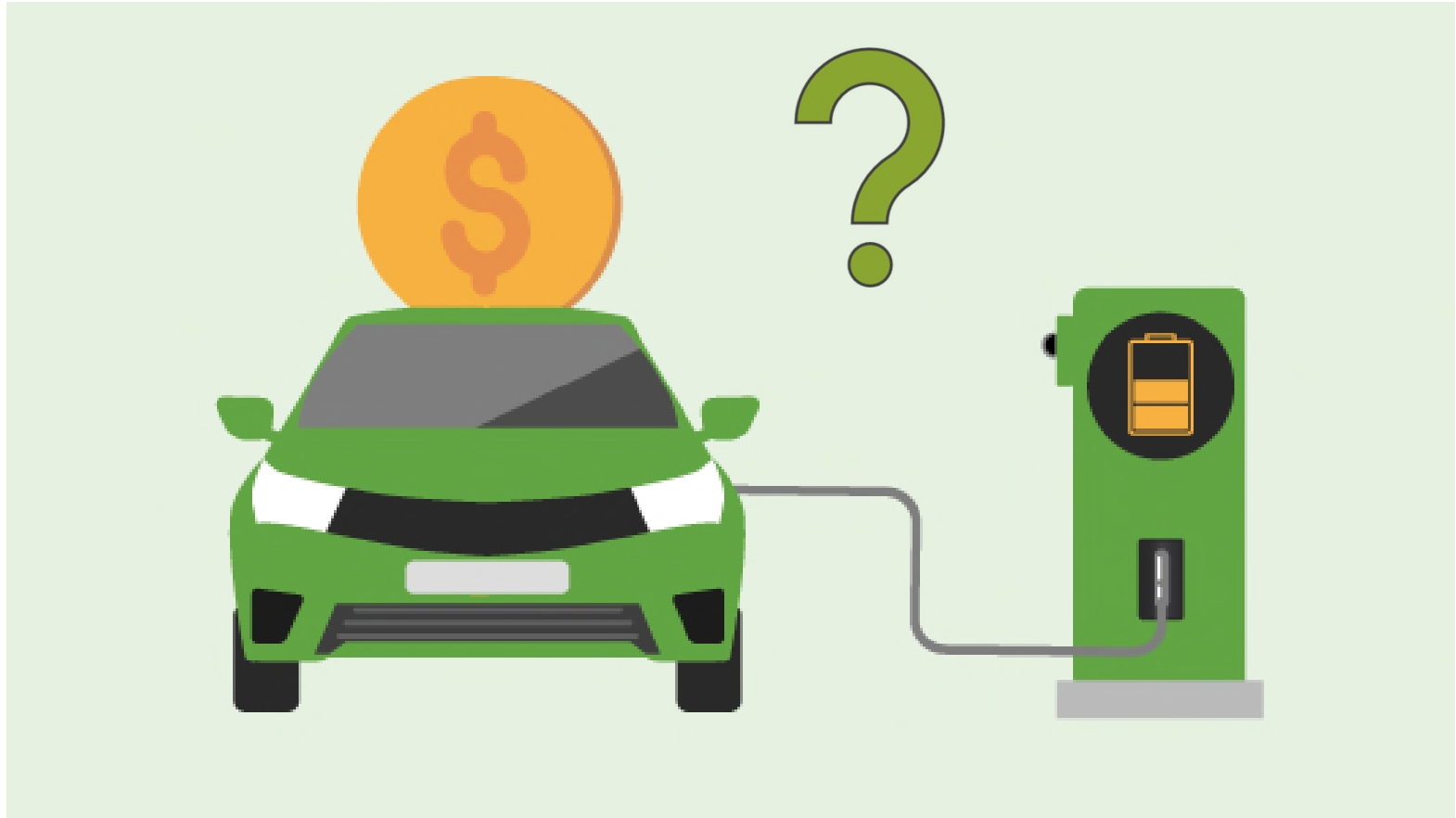


NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI)



EV Connectors

<p>CCSI</p>  <p>SAE CCS1</p>	<p>CHAdeMO</p> 	<p>J3400</p>  <p>in development from NACS</p>
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State of Michigan's EV Programs and Goals





National Electric Vehicle Infrastructure



Charging and Fueling Infrastructure (CFI) Discretionary Grant



EV Charger Reliability and Accessibility Accelerator (CRAA) Program





Charge Up Michigan



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



Lake Michigan Circuit



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



Charging Equipment for Battery-Electric Vehicles & Transit Buses



Technology, Management & Budget



Renewable Energy and Electrification Infrastructure Enhancement and Development Grant



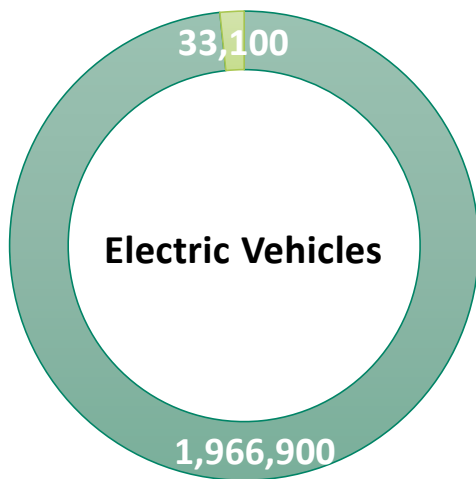
Michigan Public Service Commission



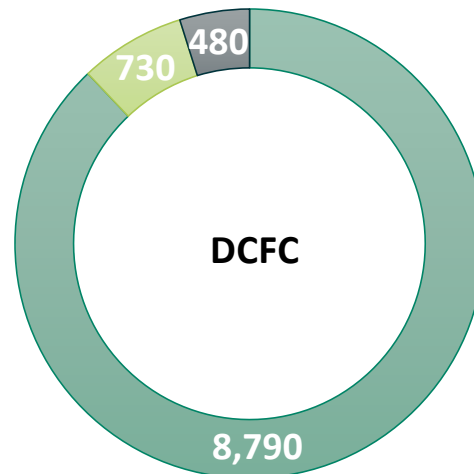
LAURENCE AND THOMAS AUSTIN



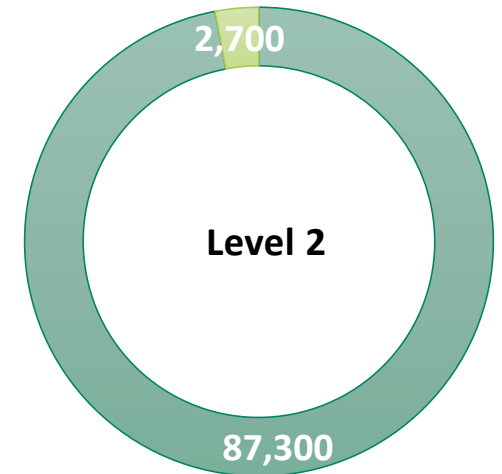
Michigan will need approximately **10,000 DCFC** and **90,000 Level 2** chargers by 2030 to support two million EVs.



■ Remaining ■ Existing



■ Remaining ■ Existing ■ NEVI

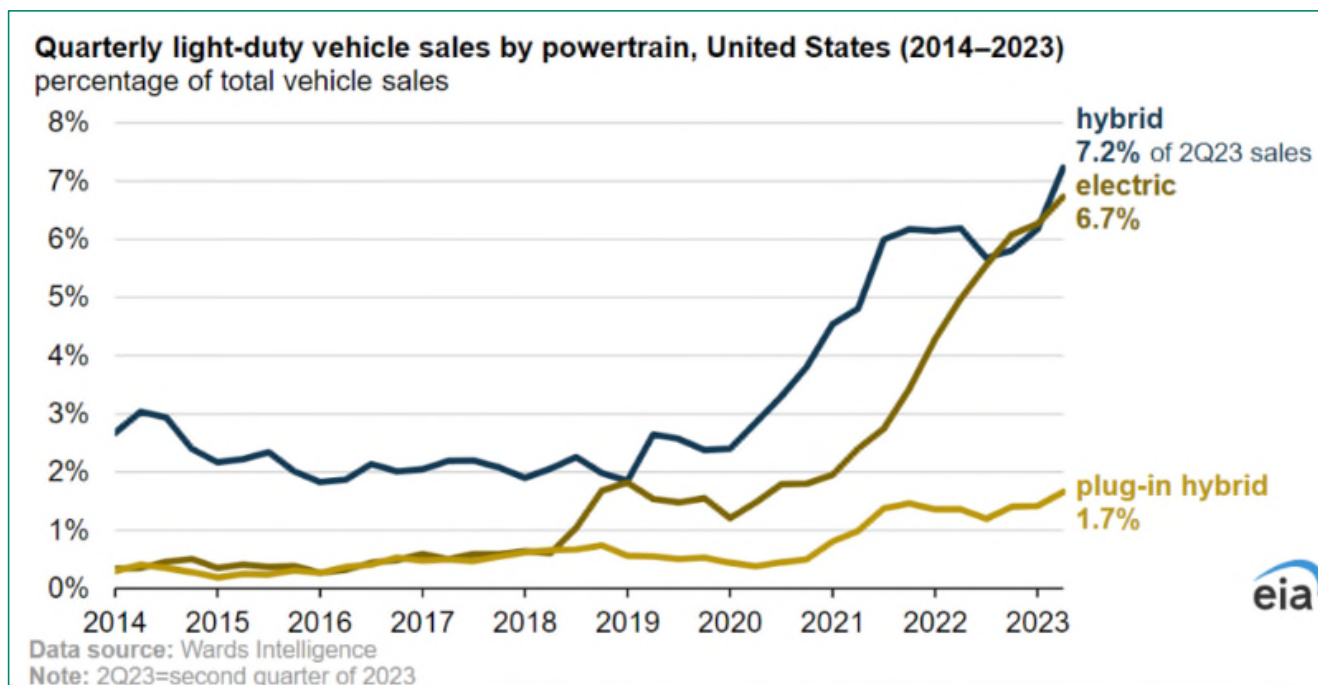


■ Remaining ■ Existing

EV Industry Trends

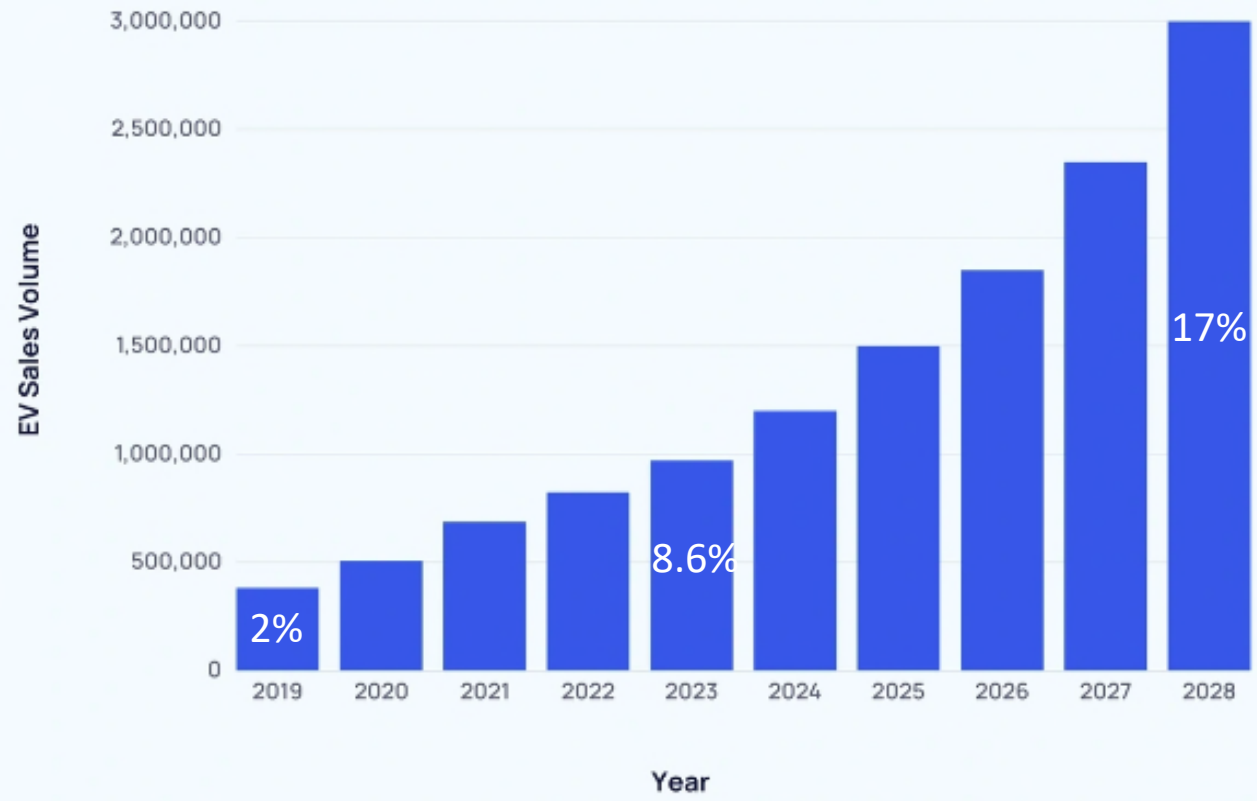


- EVs account for **0.9%** of US market share
 - **2.4M** electric vehicles registered in the U.S. vs **280M** total vehicles
- Over **1.2M** EVs were sold in 2023, growing to nearly **2M** in 2024
- Tesla has a **56.5%** market share for EVs sold in the U.S.



EV Adoption Projections

Electric Vehicle Adoption Forecasts



By 2028, EVs could make up over 17% of all auto sales in the US

EV prices fell 22% in 2023



- EVs account for **0.4%** of the market share in Michigan
 - Top 5 states range from **2% - 3.5%**
- **33,100** EVs registered in Michigan in 2022
 - **8M+** registered vehicles in Michigan

Michigan's rankings:



1st

in EV- and battery-related announced investments since 2018

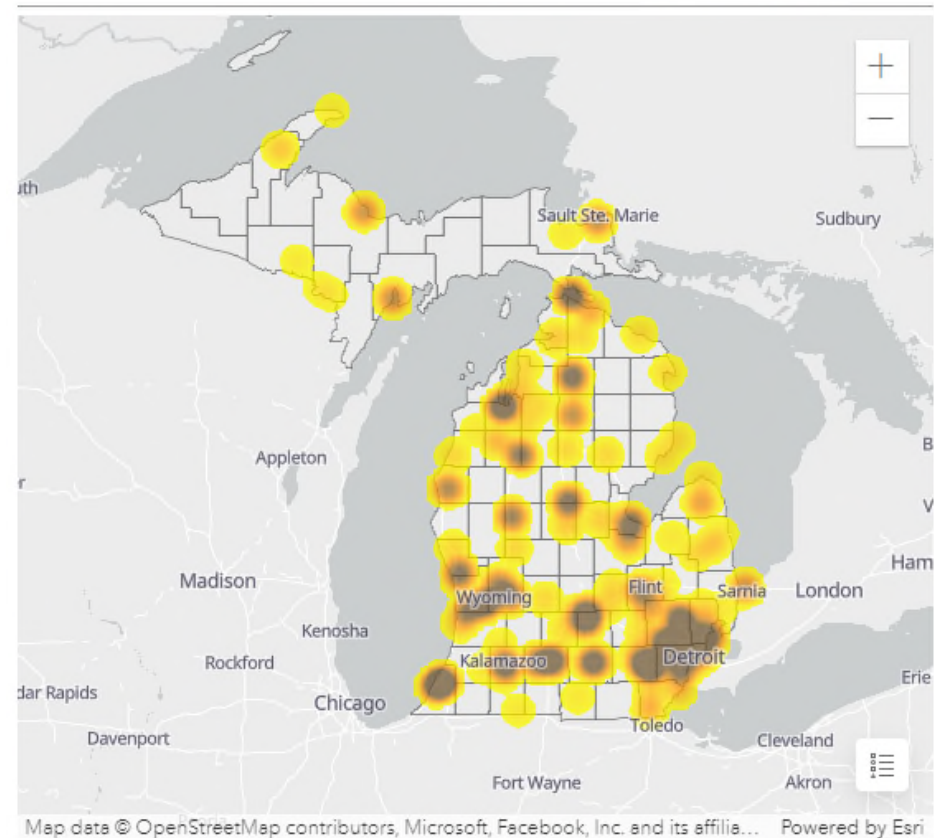


5th

in clean energy jobs

- Michigan ranks **24th** in public EV charging station locations per capita
 - 12.5 charging stations per 100k people
- Michigan's Charging Inventory
 - 730 DCFC ports
 - 2,700 Level 2 ports
 - 1,500 charging locations

MI Public DCFC Electric Charging Stations Heatmap



Source: SEMCOG EV Resource Kit and Planning Hub

National Electric Vehicle Infrastructure (NEVI)





Bipartisan Infrastructure Law (BIL) or Infrastructure Investment and Jobs Act (IIJA)



NEVI Formula Program provides funding to states to strategically deploy EV charging infrastructure - \$5 billion



Historic investment in electric vehicle infrastructure to make chargers accessible

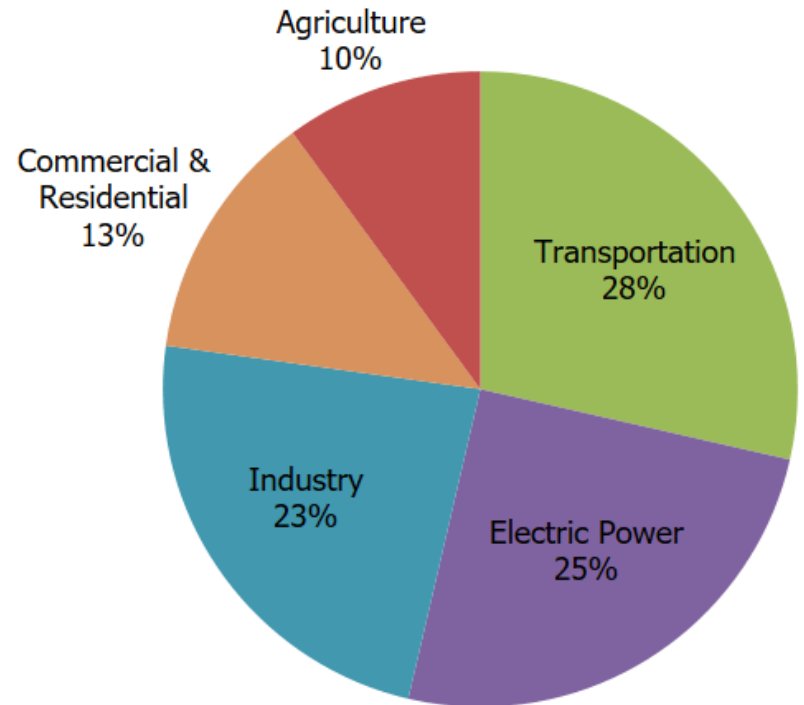


Michigan will receive \$110 million through Fiscal Year 2026
Round 1 funding (FY22-23) is approximately \$40 million

WHY:

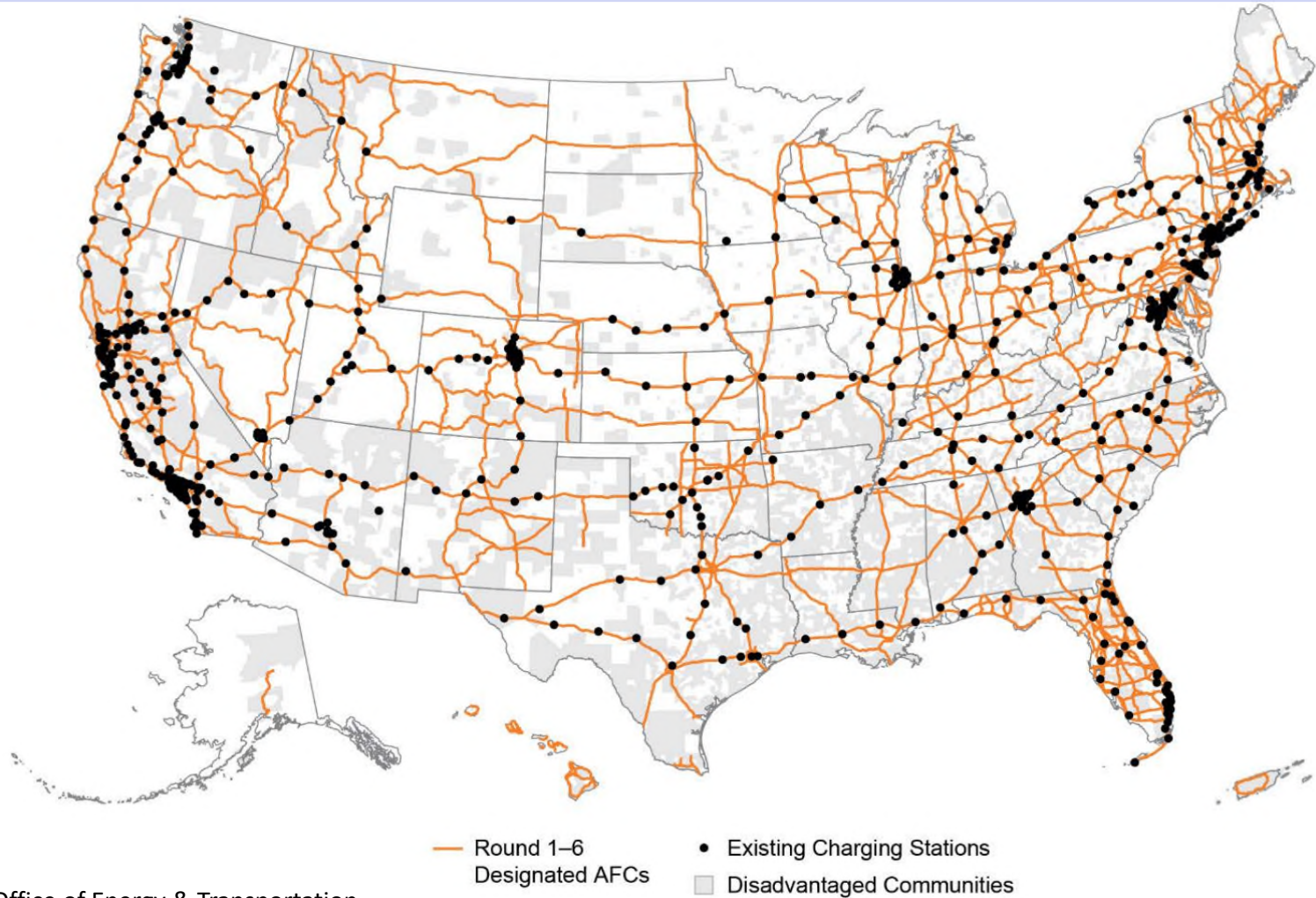
1. Transportation is the largest source of U.S. GHG emissions
2. Reduce range anxiety
3. Low return on investment
4. Increase reliability

Total U.S. Greenhouse Gas Emissions by Economic Sector



Source: Environmental Protection Agency

GOAL: 500k publicly accessible DCFC across the U.S.



Source: Joint Office of Energy & Transportation

NEVI Challenges

Typical State DOT Project

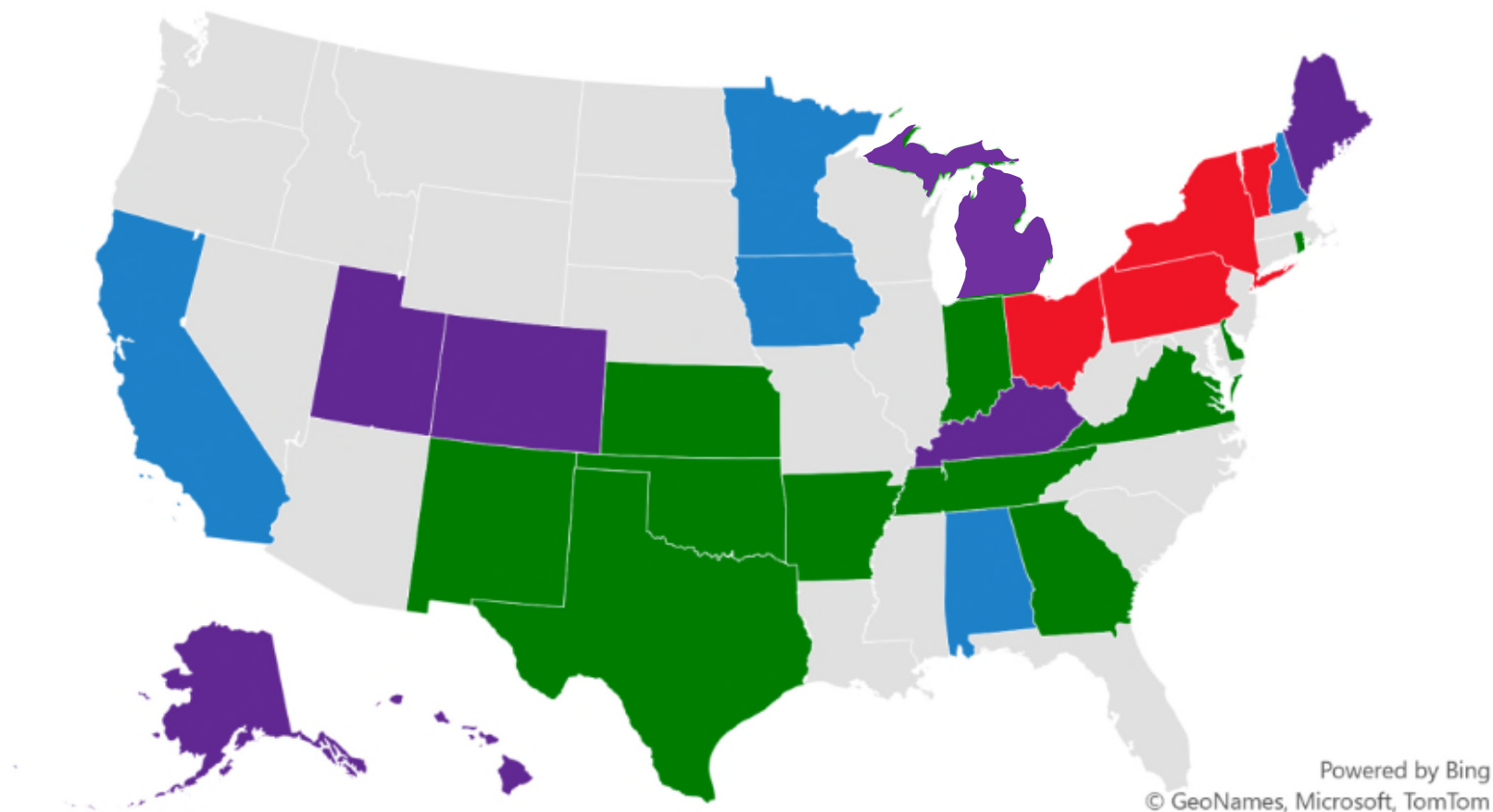
- On DOT Property/Right of Way
- State DOT Owns & Operates
- Non-Revenue Generating
- Project Locations Defined

Overlap

- Competitive Procurement
- Federal Laws
- State Laws
- Transparency & Reporting

Novel to NEVI

- On Private Property
- Private Sector Own & Operate
- Private Sector Revenue
- Project Locations TBD



Powered by Bing
© GeoNames, Microsoft, TomTom

- Soliciting Applications
- Evaluating Applications
- Awards Issued, Construction Initiated
- Awards Issued

Source: Atlas Public Policy



NEVI in Michigan

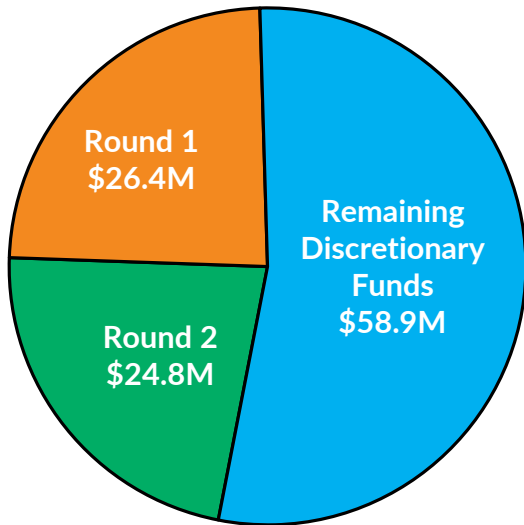


Michigan NEVI Program Funding

FY22	FY23	FY24	FY25	FY26	Total
\$16,290,764	\$23,442,593	\$23,442,756	\$23,442,775	\$23,442,824	\$110,061,712

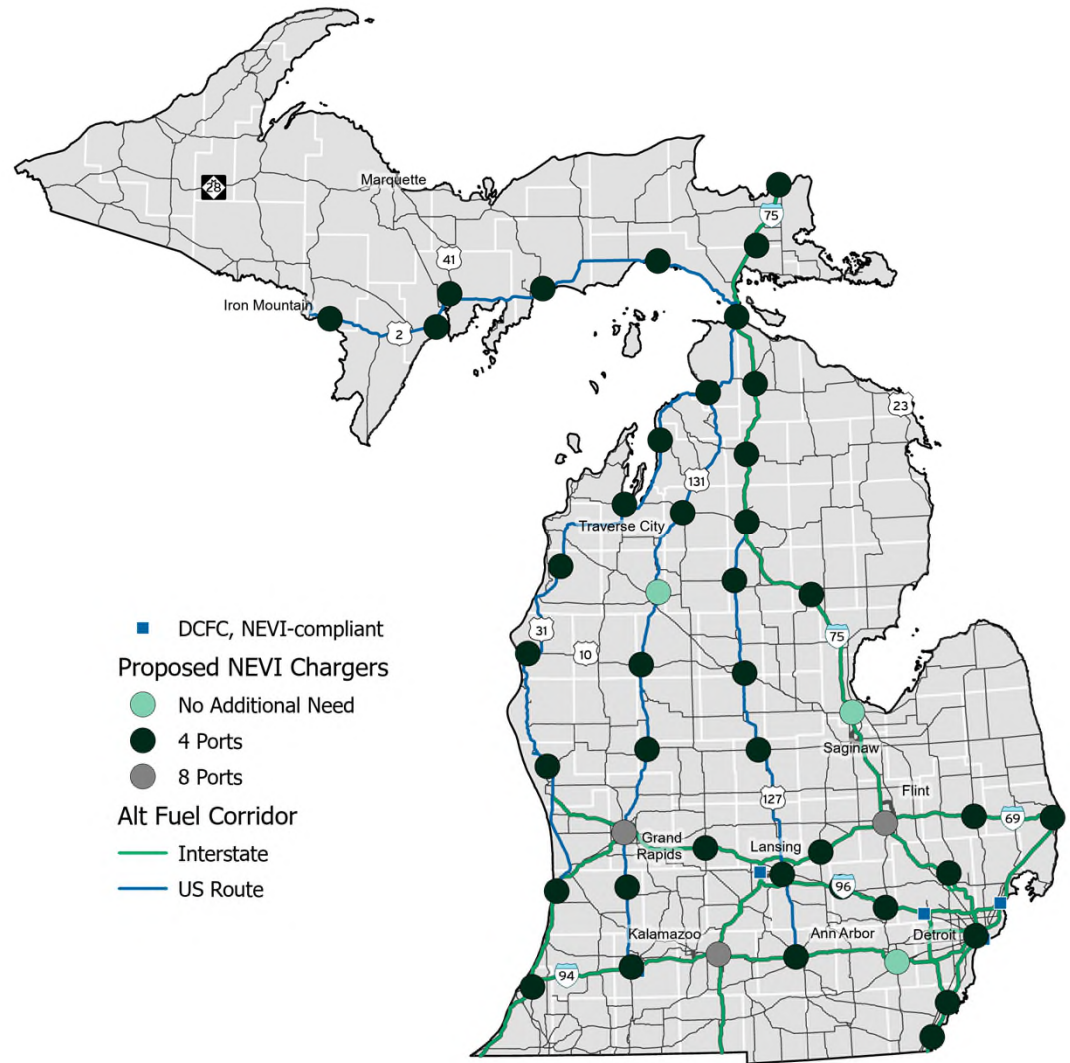
- Dedicated for AFC build out
- Funding Rounds 1 and 2

- Discretionary funds
 - AFCs
 - Other NHS routes
 - Community-based charging
 - Destination chargers
 - Medium/heavy duty charging
 - Emergency routes, emergency charging needs



Michigan's AFC Planning Map

Total Number of Nodes	43
Total Number of Charging Ports	184
<p>Other Considerations:</p> <ul style="list-style-type: none"> • Nodes are placed every ~50 miles along Alternate Fuel Corridors (AFC) • Sites must be located within 1 mile from AFC 	





A minimum of four network-connected direct current (DC) 150 kilowatt (kW) charging ports capable of simultaneously and continuously charging four EVs.



Charging stations available for use by the public 24 hours a day, seven days a week, and on a year-round basis.



Charging stations with basic user amenities on-site or nearby (*preferred*).



Regular and comprehensive collection, sharing, and reporting of EV charging infrastructure data.



Annual average EV charging station uptime of 97% or higher.



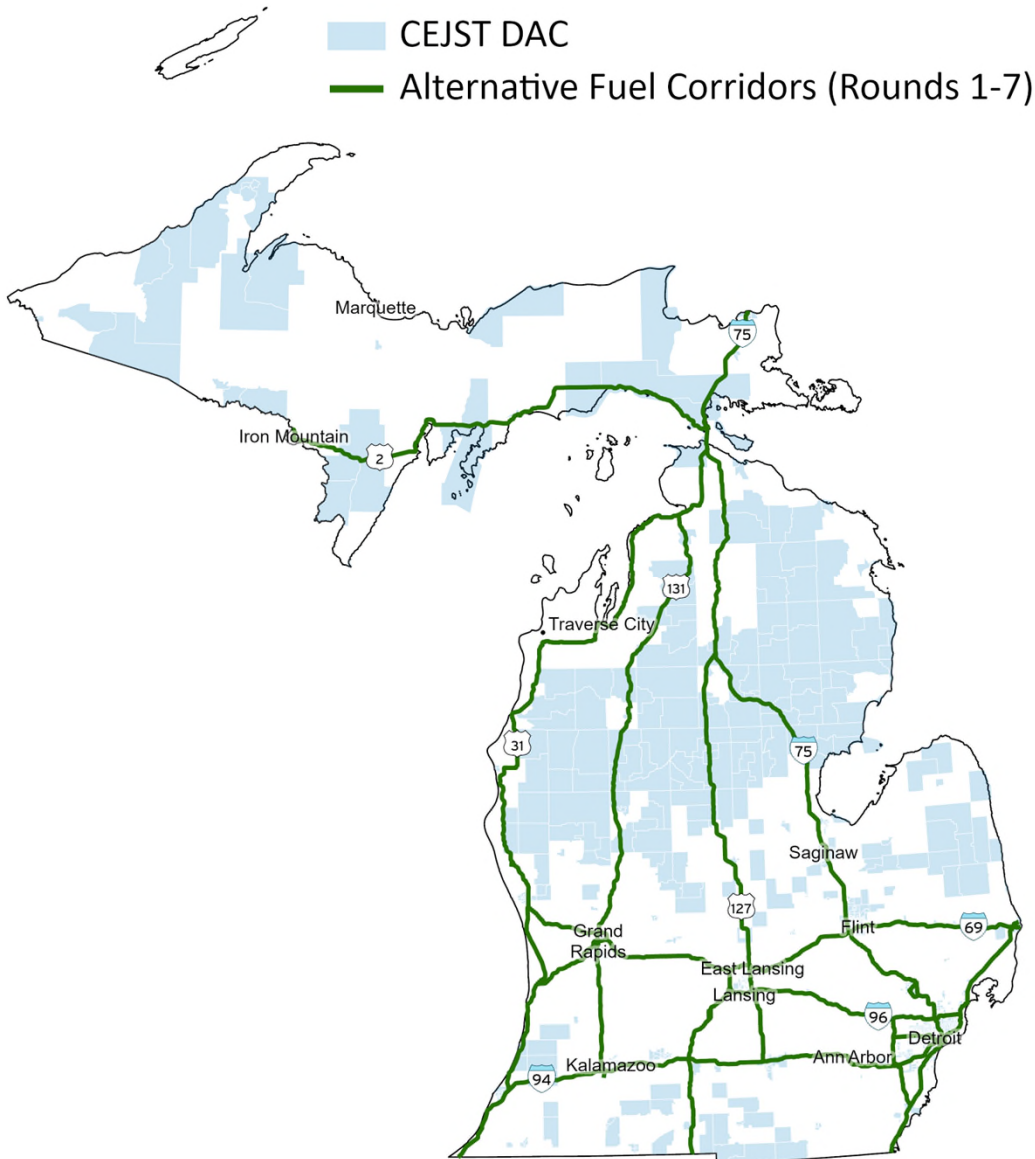
The chargers must be operated and maintained (per the uptime requirements) for a 5-year period after commissioning.



Project Companies selected to install and operate chargers must fund 20% of the total eligible costs.

NEVI Equity Approach: Michigan

- NEVI is a Justice40 program
 - 40% of program benefits must go to disadvantaged communities
 - No Federal DBE requirement for NEVI but DBE/SBE participation is a goal for MDOT
- AFCs
 - 637 miles through DACs (30%)
 - 11 miles through tribal lands
- Outreach focus:
 - Understanding local needs and priorities
 - Engaging a diverse spectrum of stakeholders



How to Get Involved



FHWA NEVI grant:

- Formula grant program to state DOTs
- DBE/SBEs should apply to state RFPs or partner with firms applying
- State DOTs are currently releasing their RFPs
- NEVI was not designated as a DBE program by Congress
- Minority-Owned Business Outreach and Partnerships for EV Infrastructure Webinar (*available online*)

FHWA CFI grant:

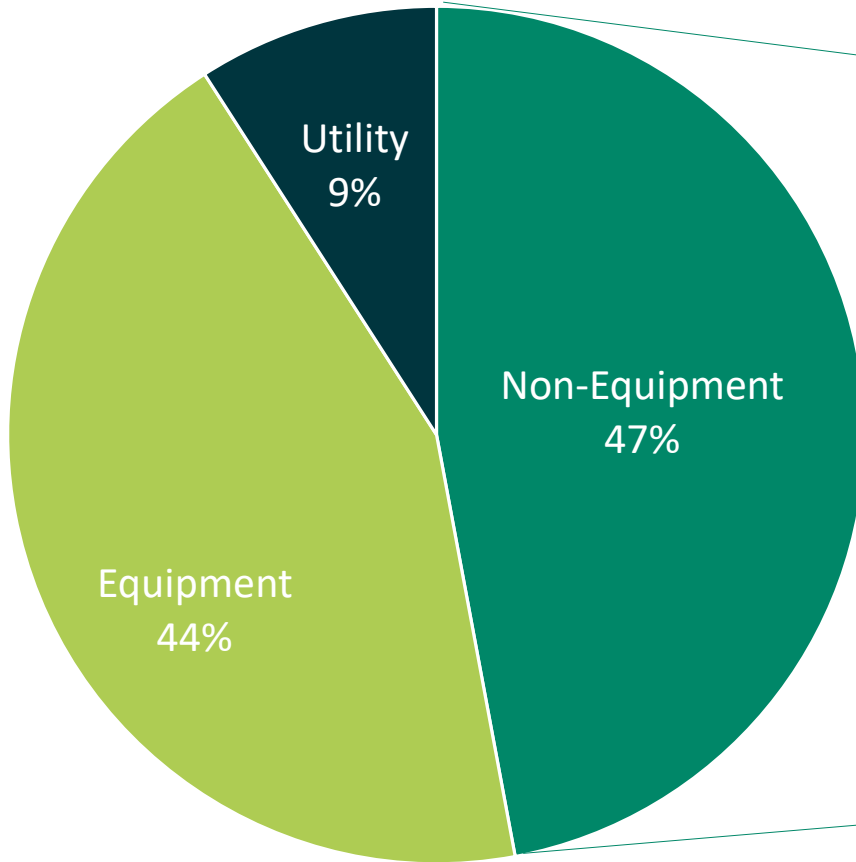
- Competitive grant program; NOFO anticipated Summer 2024
- Criteria #4 “promote local inclusive economic development and entrepreneurship such as the utilization of Disadvantaged Business Enterprises, Minority-owned Businesses, Women-owned Businesses, or 8(a) firms”



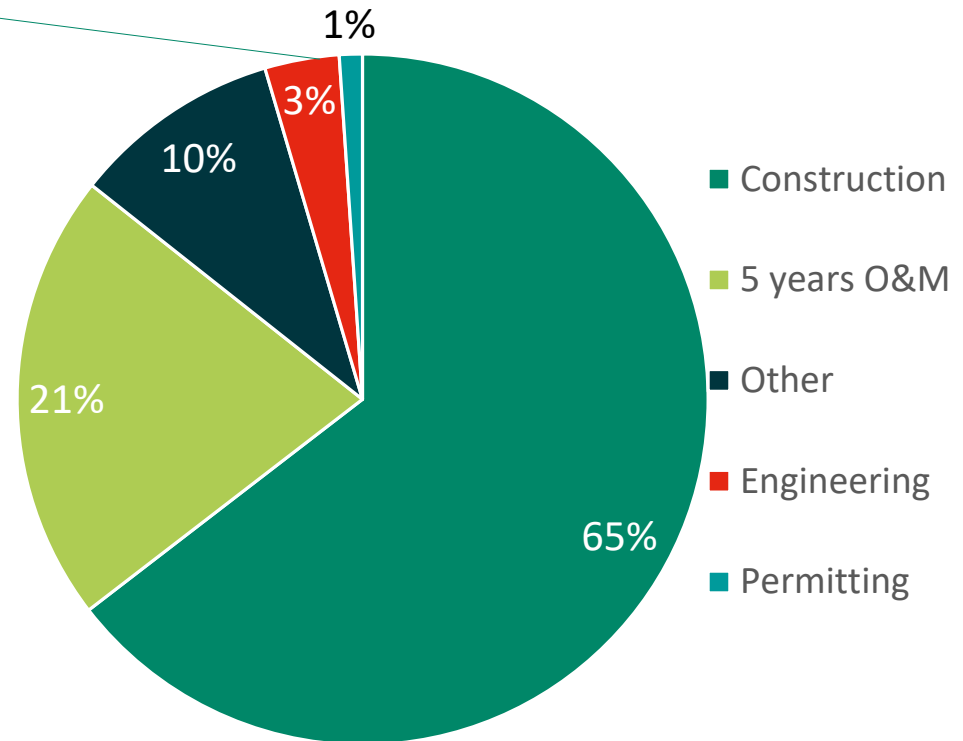
Teaming Partners	Purpose/Considerations
Site Host	<ul style="list-style-type: none"> • Property owner/operator • E.g., gas station, hotel, grocery, big box retail
Electric Distribution Utility	<ul style="list-style-type: none"> • Provide electrical service to the site
Site Design	<ul style="list-style-type: none"> • Design, survey, geotech, environmental compliance
Contractor	<ul style="list-style-type: none"> • Installation of EVSE • Must be EVITP certified
Electric Vehicle Supply Equipment (EVSE)	<ul style="list-style-type: none"> • Provide necessary equipment • Site design
Charging Network	<ul style="list-style-type: none"> • Online connection, payment, real-time status • Data collection and reporting
Operations & Maintenance	<ul style="list-style-type: none"> • Equipment and site maintenance and repair • Cleaning and landscaping • Equipment monitoring • Security • Snow removal

Typical NEVI Site Costs = ~\$950,000

Typical NEVI Site



Non-Equipment Breakdown



- Construction
- 5 years O&M
- Other
- Engineering
- Permitting

NEVI requires all electricians installing, operating, or maintaining EV supply equipment have a certification from the Electric Vehicle Infrastructure Training Program (EVITP) or similar program.



Non-profit organization that trains electricians in the EV infrastructure

Training includes site assessment, load calculations, National Electric Code, jobsite safety, personal protection equipment, and other installation and maintenance best practices.

EVITP online class is 20 hours and costs \$275



Established by LEO to attract and train the workforce, especially historically underserved populations, to support the electrification of vehicles in Michigan

Electric Vehicle Infrastructure Project Partners Directory

[Home](#) > [About Us](#) > [Divisions and Offices](#) > [Materials Management](#) > [Energy](#) > [Transportation](#) > [EV Infrastructure Directory](#)

The Electric Vehicle (EV) Infrastructure Project Partners Directory is a list of organizations with stated services and needs that interested parties can utilize to make partner connections for electric vehicle charging station projects. Fill out the EV Infrastructure Project Partners Form to get added to the directory.

[EV Infrastructure Project Partners Form](#)

Click the green plus next to the organization name to display all columns.

Key for search terms:

- **Charger Hardware Vendor:** Provides charger equipment
- **Charger Software Vendor:** Provides charger software for online connection, payment, and data collection
- **Consultant:** Outsourced experts that provide advice on site design, engineering services, or other areas of interest
- **Contractor:** Coordinates with all project partners to provide turn-key services
- **Electrician:** Installs the chargers
- **Operation & Maintenance Provider:** Provides services for operation and maintenance of hardware and software
- **Owner:** Invests in the chargers and reaps the benefits and responsibilities of the chargers, but may or may not be the site host
- **Site Host:** Owner of the property that house the chargers
- **Utility:** Provides power to the chargers


Organization Services

vs

Organization Needs



- Charger Hardware Vendor
- Charger Software Vendor
- Consultant
- Contractor
- Electrician
- Operation & Maintenance Provider
- Owner
- Site Host
- Utility
- None
- Other (please specify)

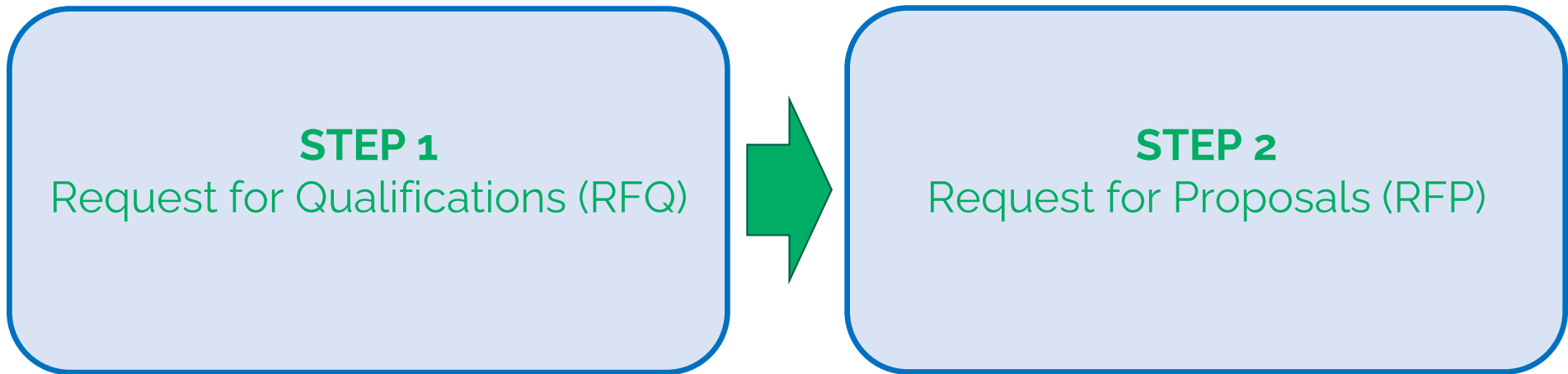
 Blink Charging	407 Lincoln Road, Suite 704, Miami Beach, FL 33139	Kristin Brady	KBrady@BlinkCharging.com
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Organization Services Charger Software Vendor; Operation & Maintenance Provider; Owner

Organization Needs Contractor; Electrician; Operation & Maintenance Provider; Site Host; Utility

Round 1 DBOM

Michigan NEVI Design Build Operate Maintain (DBOM) Round 1 Procurement



STEP 1 – Request for Qualifications (RFQ)

Design Build Operate Maintain Team Members



Site Host



Electric Vehicle Supply Equipment



Charging Network Provider



Electrical Distribution Utility



Site Designer



Installer/ Electrical Contractor



Operations and Maintenance Provider

STEP 2 – Request for Proposals (RFP)

RFP Evaluation Criteria :



Site Location



Design Concept



Management Approach / Understanding of Service



Project Cost



Technical Considerations



Ability to Meet NEVI Final Rule

Power Connection

Utility Engagement

Eligible Costs

MICHIGAN

8 
INVESTOR
OWNED

(Regulated by MPSC)

40 MUNICIPAL

9 RURAL
CO-OPS



ROUND 1 SCORING		Points
①	Project Readiness	Pass/Fail
	NEVI Requirements	
	Complete Proposal	
②	Project Approach	15
	Design & Construction	
	Operations & Maintenance	
	Site Location and Attributes	50
	Site & Charger Location	
③	Site Amenities	
	Other Site Attributes	
	Equity	10
	Environmental Justice	
	Cost	25
	Total	100

STEP 1

Request for Qualifications (RFQ)

- Received 135 statement of qualifications (SOQ)
- Prequalified (shortlisted) 44 Project Companies

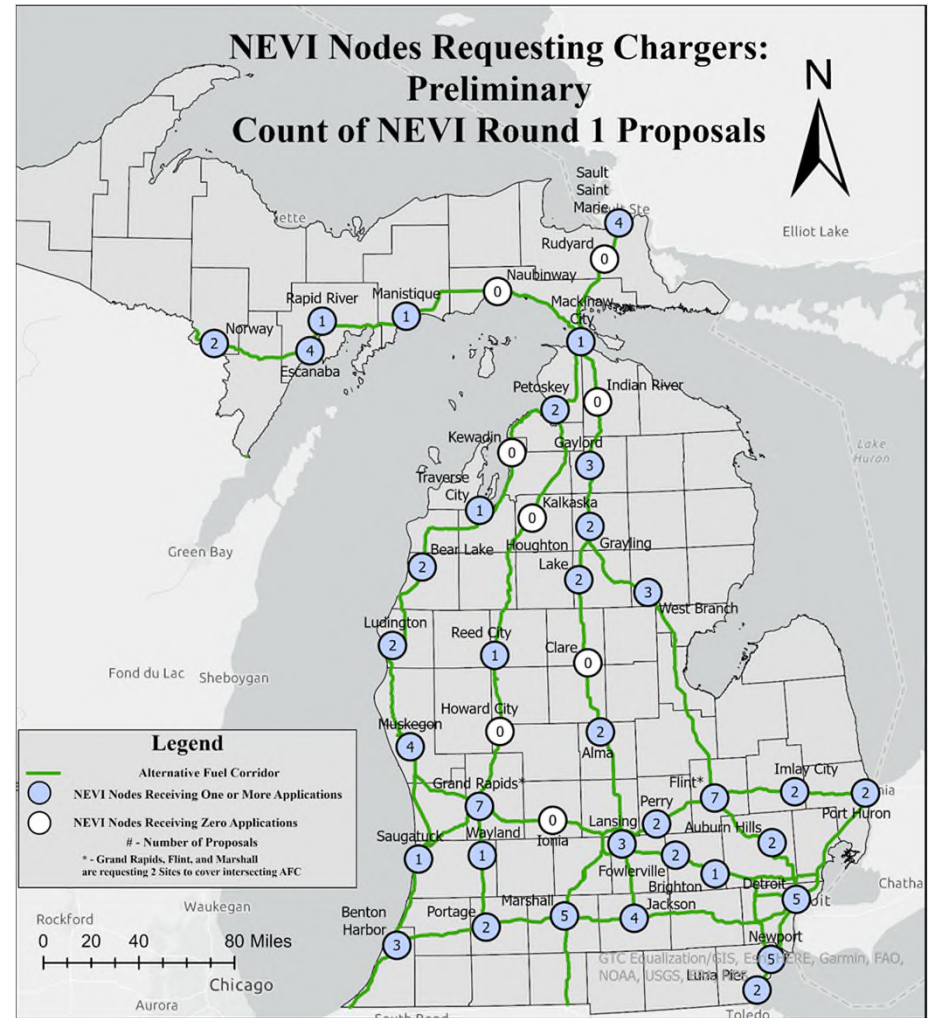


STEP 2

Request for Proposals (RFP)

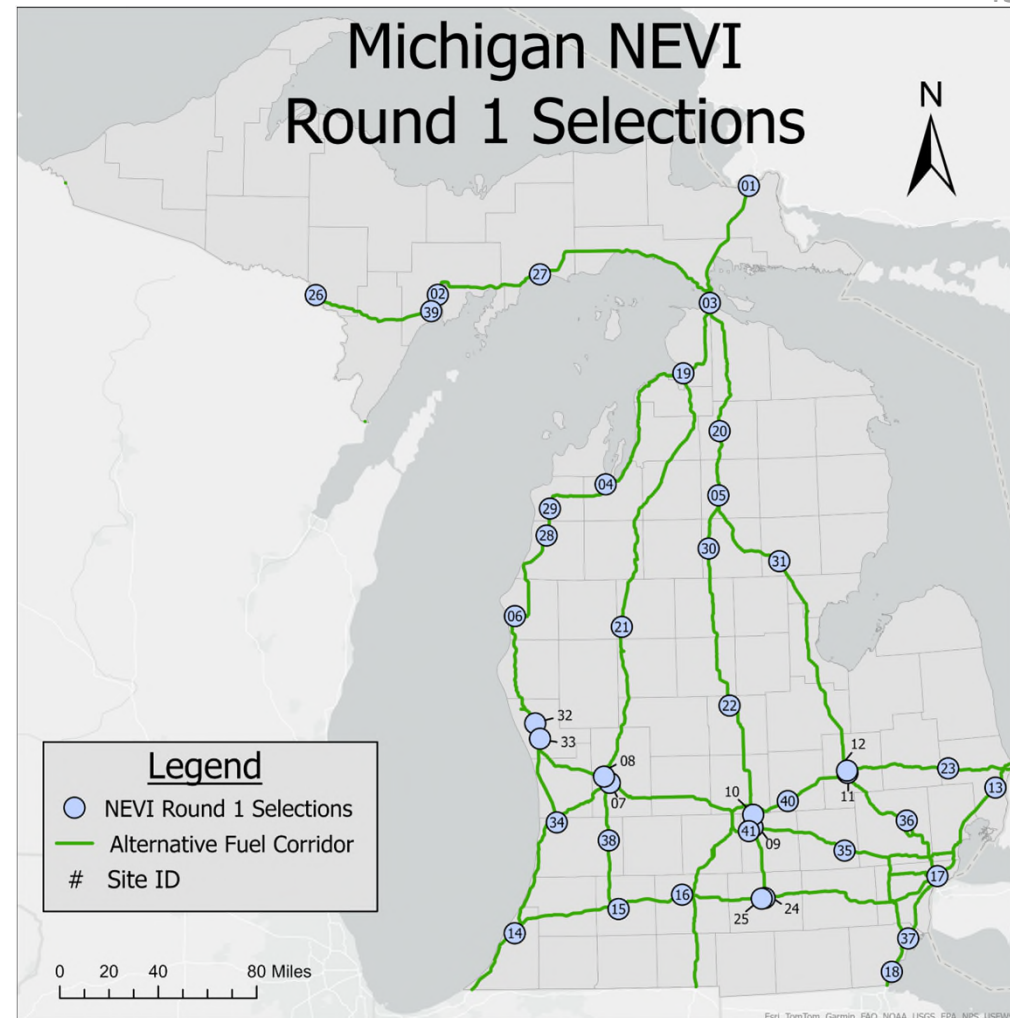
- Received 93 proposals
- 418 proposed ports, \$149k per port
- Average proposal \$674,000
- Min - \$206,000
- Max - \$2,624,000
- Typical land uses: gas station, shopping center, big box retail, grocery, restaurants

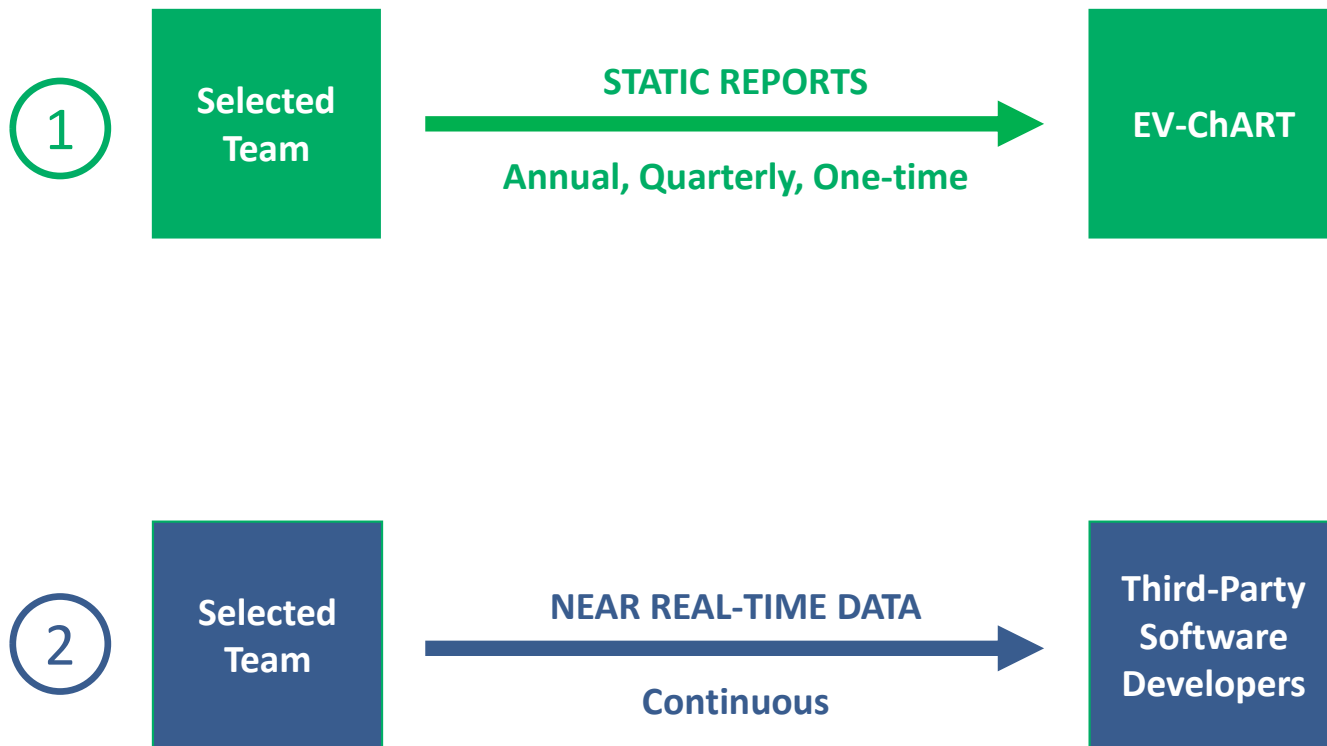
- 22 Proposers
- 8 Nodes did not receive a proposal
- 8 Nodes received 1 proposal
- 27 Nodes received 2+ proposals



Round 1 Selections

- 41 Sites Selected
- \$22,903,000 awarded
- \$3,500,000 utility costs
- 15 different Project Companies
- \$554,534 - Average selected proposal



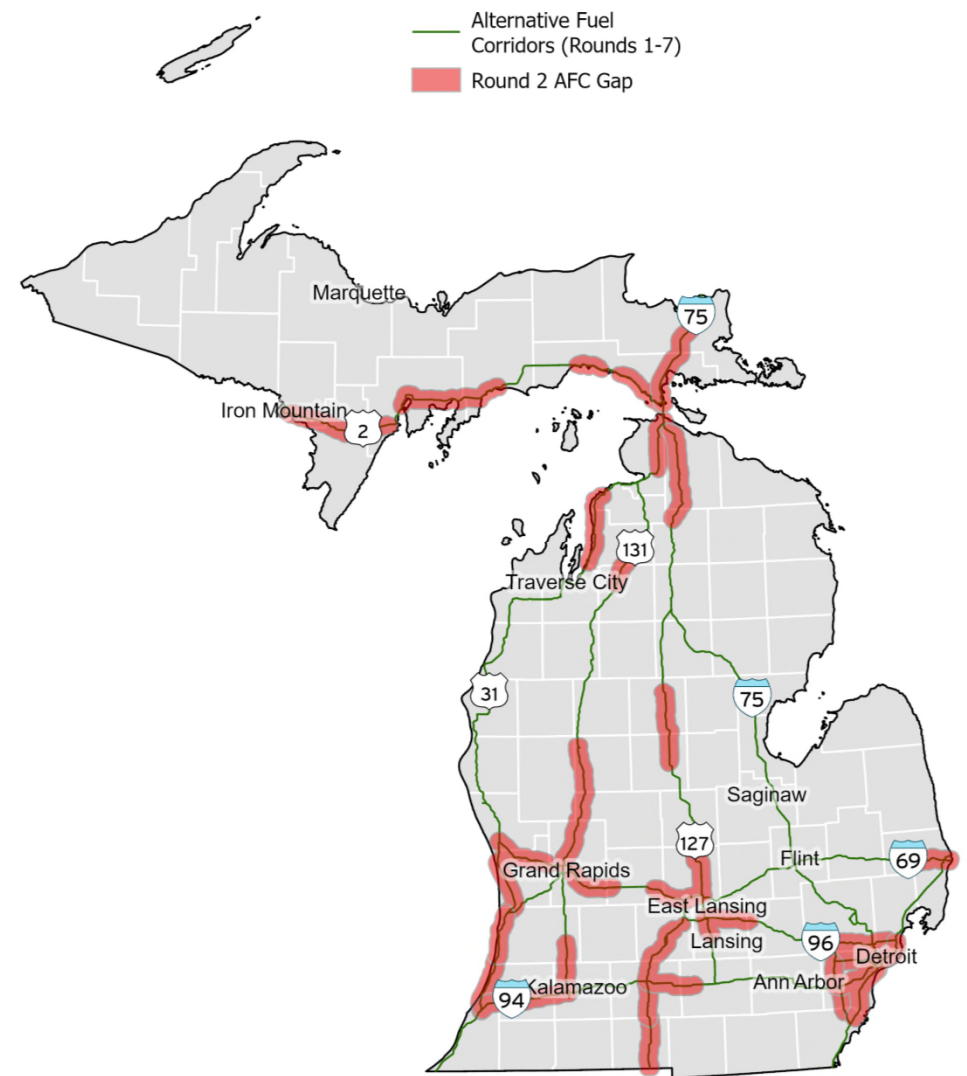


What's Next?

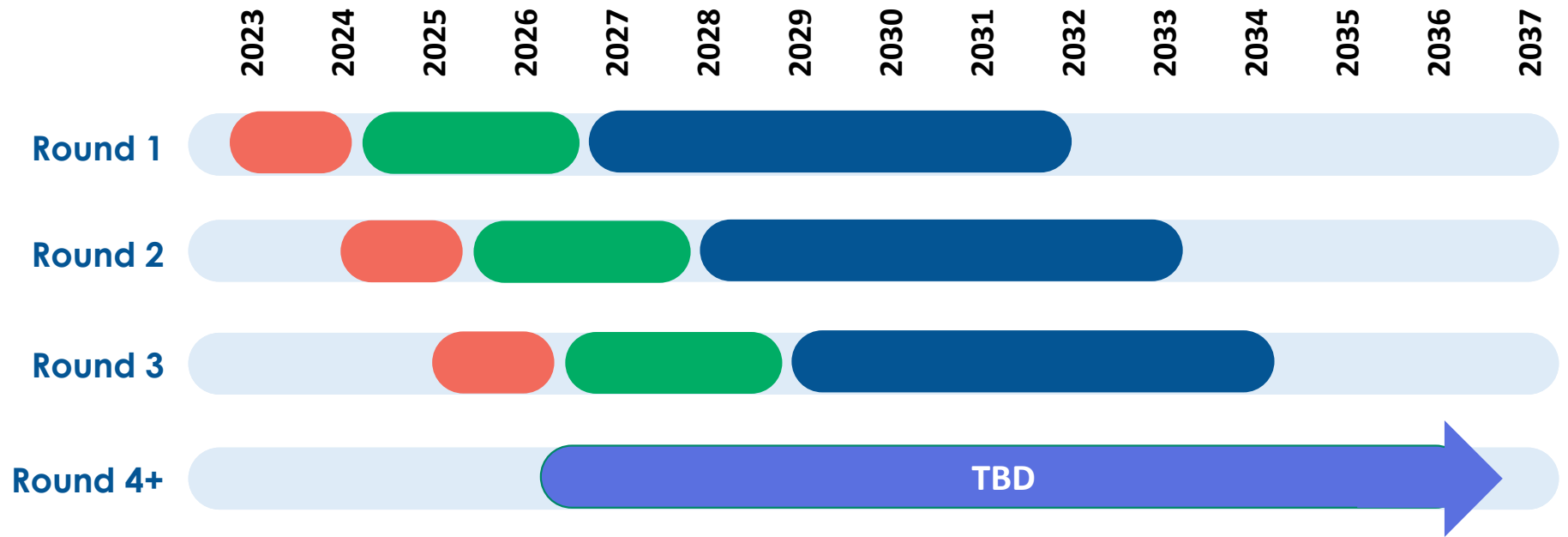


Round 2

- Fill AFC gaps
- 35 locations
- RFP anticipated in 2024



NEVI Program Schedule



Legend

- Procurement
- Design/Construction
- Operations/Maintenance

Steve Minton

- MDOT Innovative Contracting PM
- Email: mintons@michigan.gov

Jeff Feeney

- HNTB PM
- Email: jefeeney@hntb.com



Questions?