

*We, in the public sector,
need to be ready for this
transformational
change - and in
Wisconsin, we will be.*

*- Craig Thompson,
WisDOT Secretary*



Kaleb Vander Wiele – DOT Officer
Transportation Electrification Project Manager
WisDOT Division of Budget and Strategic Initiatives



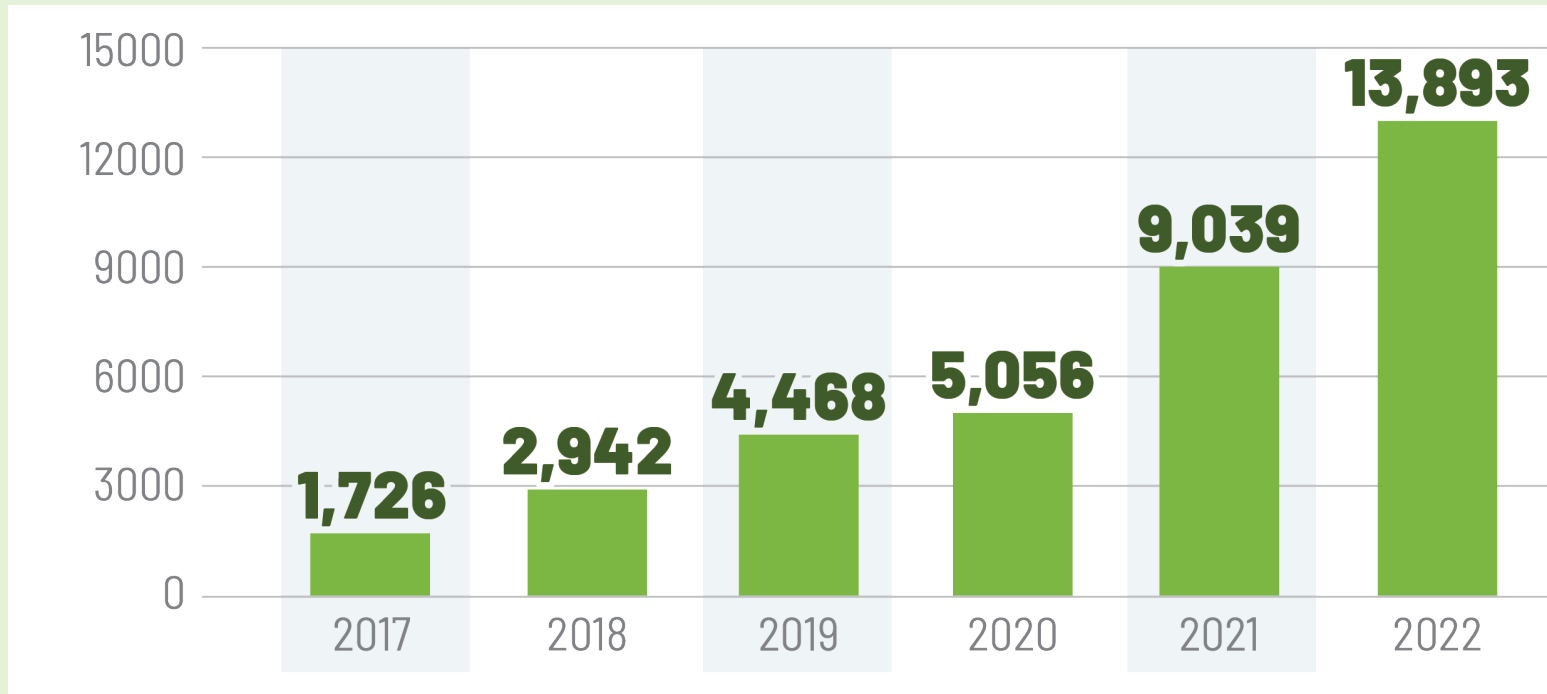
ELECTRIC VEHICLES

EVs registered in Wisconsin

as of December 2022

150+ new EV models are anticipated to hit the market from 2023 to 2028.

Source: www.renewwisconsin.org



WisDOT Division of Motor Vehicles – Report 25, Published on 1/9/23



EARLY WisDOT EV ACTIVITIES

BIPARTISAN INFRASTRUCTURE LAW IMPLEMENTATION

- Winter 2021 WisDOT statutory analysis
 - Review of potential opportunities for EVCS implementation.
 - Review of statutory barriers to EVCS placement within the right-of-way.
- On [October 21, 2021](#), WisDOT and WEDC received a \$1M grant from EDA/ARPA to begin EV infrastructure study.

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- Bipartisan Infrastructure Law signed [November 15, 2021](#).
 - Preliminary NEVI guidance released [February 10, 2022](#).
 - NEVI NPRM released [June 9, 2022](#).
 - NEVI Final rule announced [February 15, 2023](#).



BIPARTISAN INFRASTRUCTURE LAW

EV FUNDING OPPORTUNITIES

\$5 billion

National Electric Vehicle Infrastructure (NEVI) Formula Program

- \$78.65 million to Wisconsin over five years
 - \$11.64 million is Wisconsin's first allocation
 - \$16.75 million is Wisconsin's second allocation
-

\$2.5 billion

EV and other alternative fuel infrastructure discretionary grant funds

- **Corridor Charging Grant Program (\$1.25 billion)**
Strategically deploy publicly accessible EV charging stations and other alternative fuel infrastructure along Alternative Fuel Corridors.
- **Community Charging Grant Program (\$1.25 billion)**
Priority given to projects that expand access to alternative fueling infrastructure within rural areas, low- and moderate-income neighborhoods, and communities with a low ratio of private parking spaces.



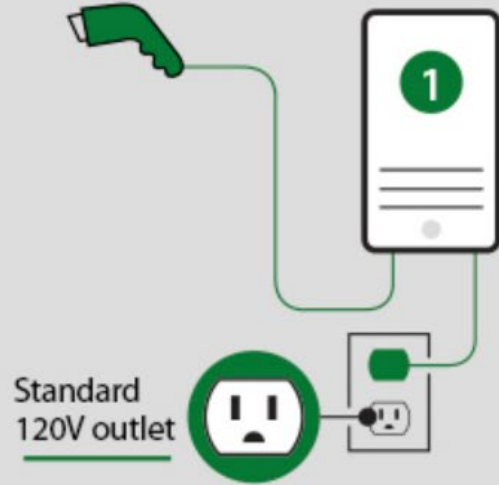
NEVI PROGRAM CRITERIA



- Charging stations installed **every 50 miles** along the State's Alternative Fuel Corridors (AFC) within **1 travel mile** of a **highway intersection or exit**.
- EV charging station locations have a minimum of **four ports** that can charge a minimum of **150kW** simultaneously.
- Need to build out **AFCs** before Wisconsin can allocate discretionary NEVI funding.

Level 1

120V



Standard
120V outlet



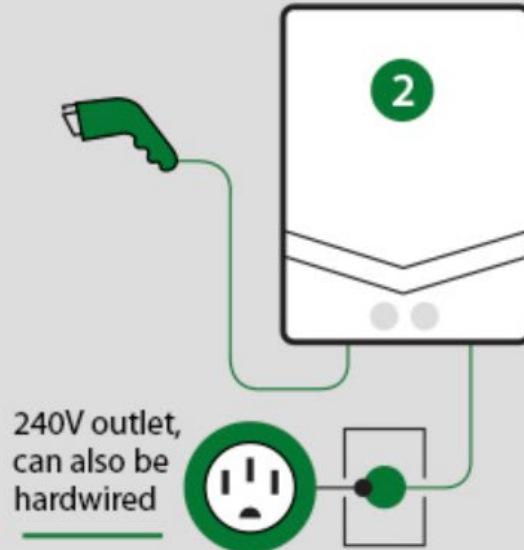
Adds 5 miles
per hour
of charge*



Residential use

Level 2

240V



240V outlet,
can also be
hardwired



Adds 20-60
miles per hour
of charge*



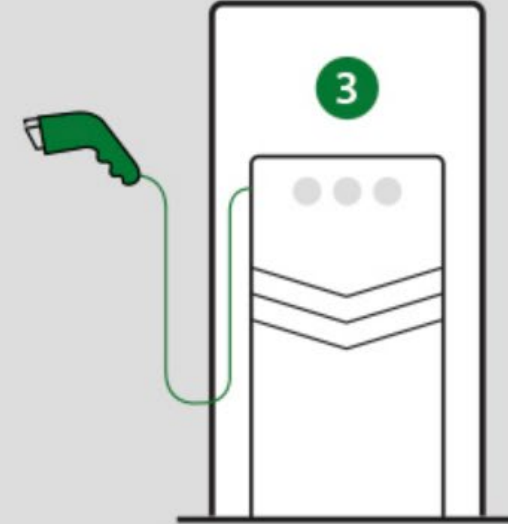
Residential &
commercial
use



Level 3

480V

DC Fast Charger



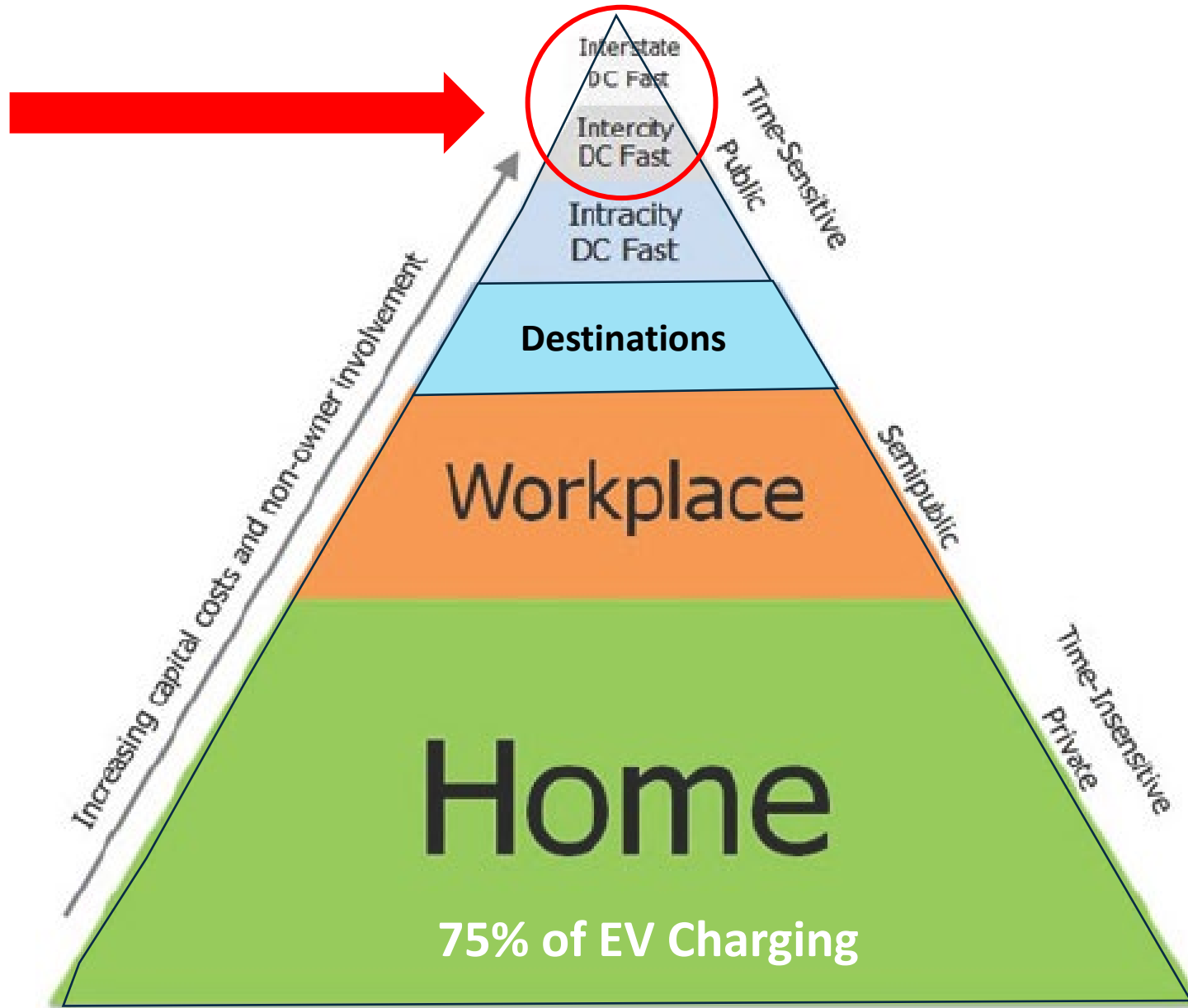
Adds 60-100 miles
per 20 minutes
of charge*



Commercial use

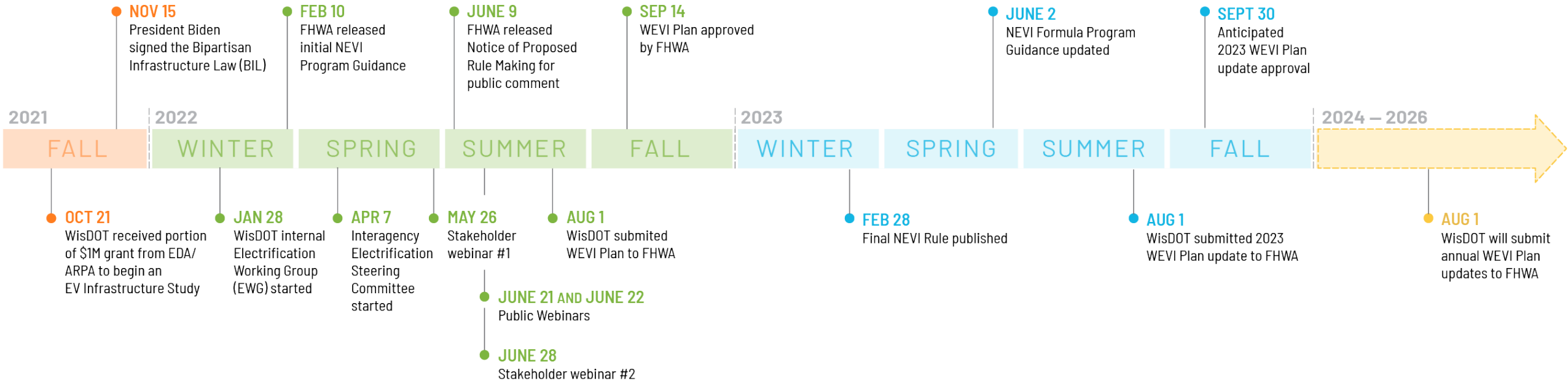
* Estimated. Actual charge times may vary.

NEVI & WIEV



Planning Process

Wisconsin Electric Vehicle (WIEV) Initiative



PLAN OBJECTIVES

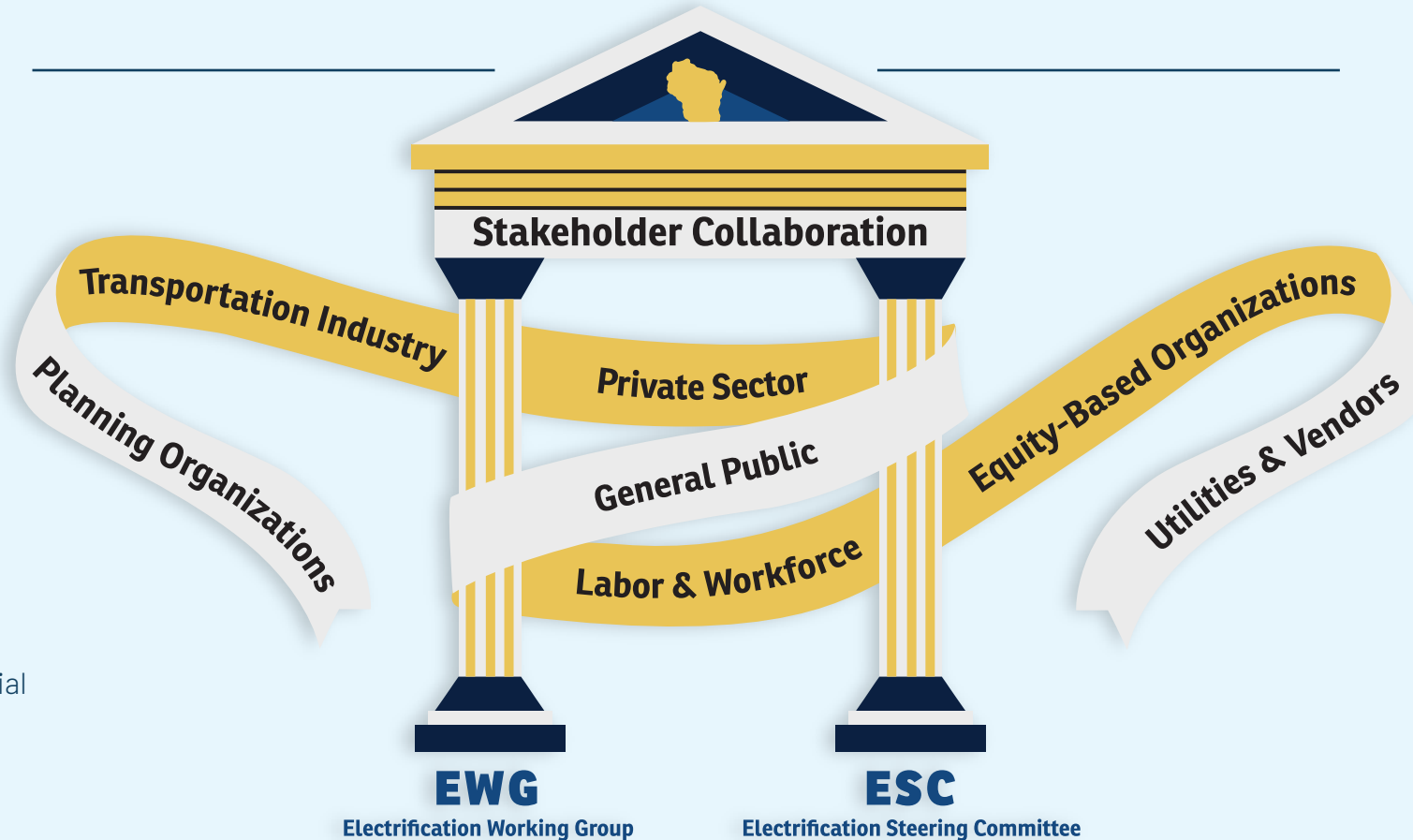
The WEVI Plan, as approved on 9/14/2022
2023 Plan Update submitted on 7/31/2023, approved 9/29/2023

- Provides for the use of NEVI funds to incentivize private investment in Electric Vehicle Charging Infrastructure.
- Determines potential preferred locations to support charging infrastructure on Wisconsin's Alternative Fuel Corridor system.
- Details WisDOT's stakeholder outreach that provided critical input in plan development.
- Outlines program structure, including a process for competitive grants and contract development to ensure ongoing maintenance and operation of charging stations funded by the program.



STAKEHOLDER COLLABORATION & ENGAGEMENT

- **Planning Organizations:**
Metropolitan Planning Organizations, Regional Planning Commissions
- **Tribal Governments in Wisconsin**
- **Transportation Industry:**
Freight, Logistics, Transportation Agencies
- **Private Sector:** Commercial partners where charging stations will be located



- **General Public**
- **Labor & Workforce:**
Labor and workforce organizations
- **Equity-Based Organizations:**
Outreach to underserved and disadvantaged communities
- **Utilities & Vendors:**
Specialize in technical aspects

KEY ROLES and RESPONSIBILITIES

Federal



- **FHWA:** Determine NEVI policy and state guidance, approve NEVI plans, disseminate funding to states.
- **Joint Office of Energy & Transportation (JOET)** Provides expertise to deploy a network of electric vehicle chargers and zero-emission fueling infrastructure.

State Agencies



- Develop the Wisconsin Electric Vehicle Infrastructure Plan.
- Determine policies, technical specifications, contracting processes, and grant regulations.
- Review private sector site applications and allocate funding.

Private Sector



- Includes: Charging station suppliers, owners, operators, and operations & maintenance companies
- Apply for grants to build and maintain Wisconsin's charging station network

Local, Tribal & Regional Govts



- Coordinate electric vehicle infrastructure activities to develop a robust and equitable charging station network in Wisconsin.

Utilities



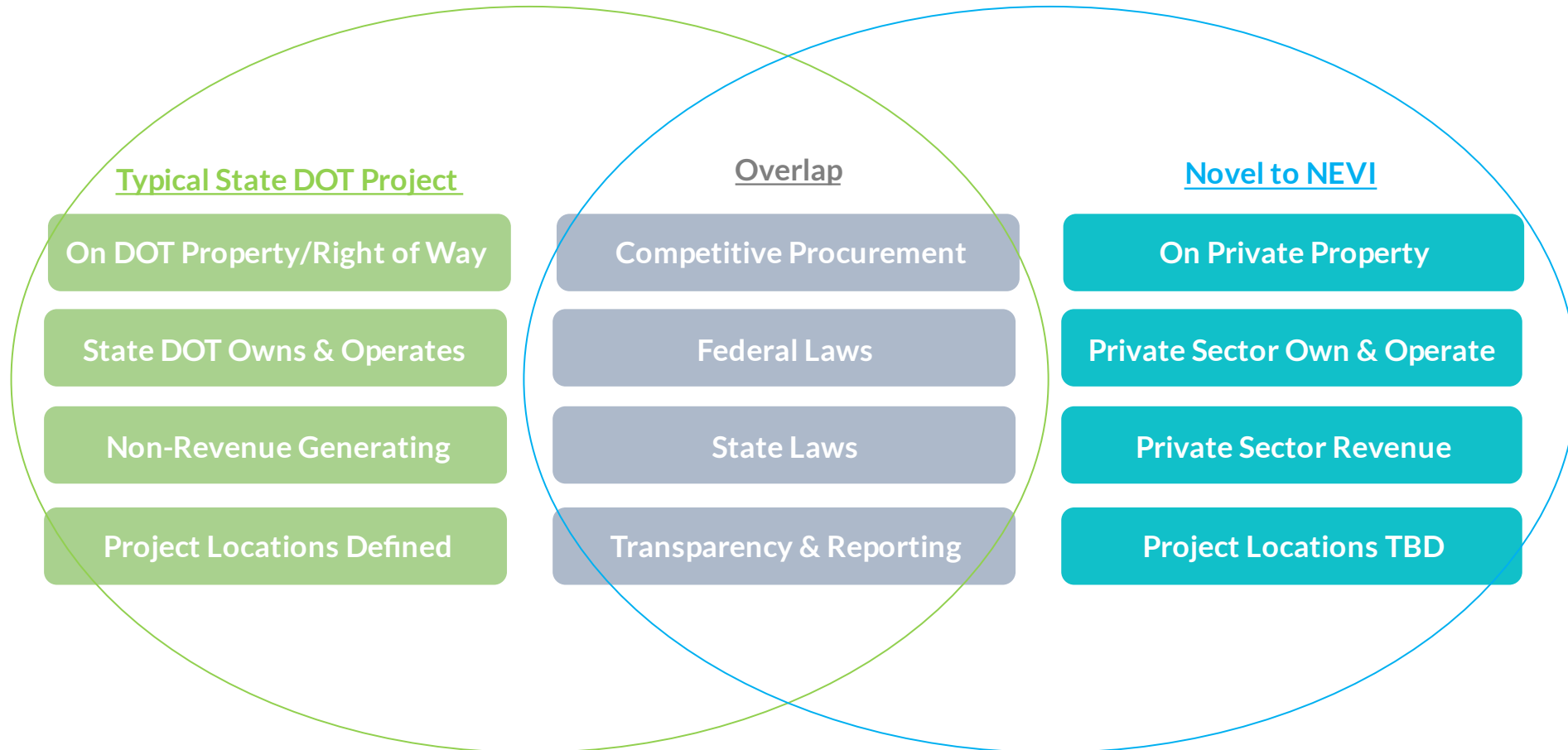
- Supply electric power
- Work with sites to design and build connections
- Potential EV charging station and infrastructure owners/operators

How WEVI Works

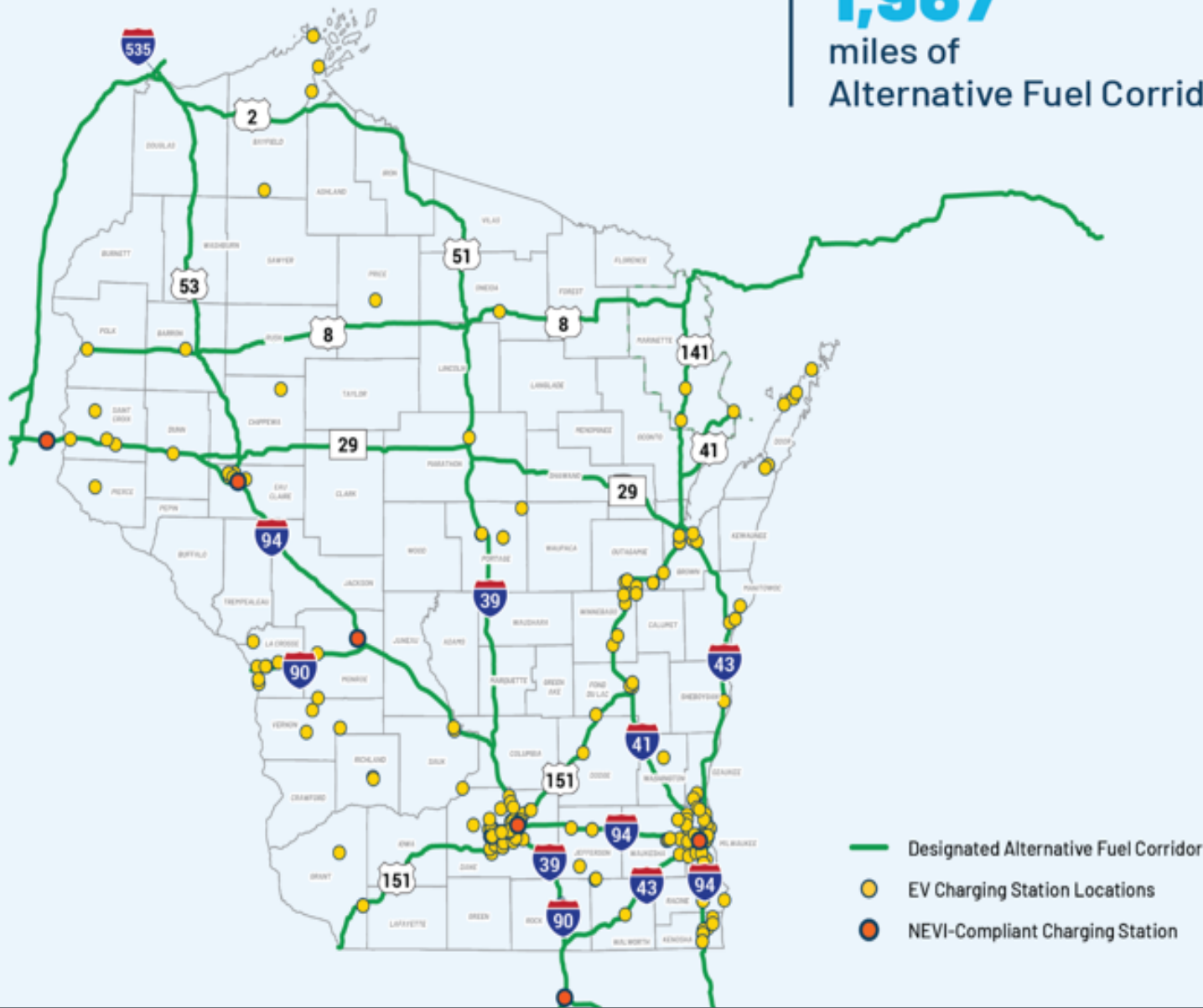
- WisDOT does not intend to own or operate charging stations.
- Charging stations funded by WEVI will primarily be hosted by private businesses.
- Final NEVI rules dictate installation, maintenance, and operation requirements.
- Site location is a critical component of eligibility.



NEVI Novel Challenges



1,967
miles of
Alternative Fuel Corridors



WISCONSIN'S EXISTING EV INFRASTRUCTURE

393 Total publicly available
charging station locations

210
Charging station
locations within one
mile of AFC exit or
intersection

4
NEVI-compliant
charging station
locations

85 Tesla-only charging station locations

Source: <https://afdc.energy.gov/stations/states>, Accessed on July 13, 2023

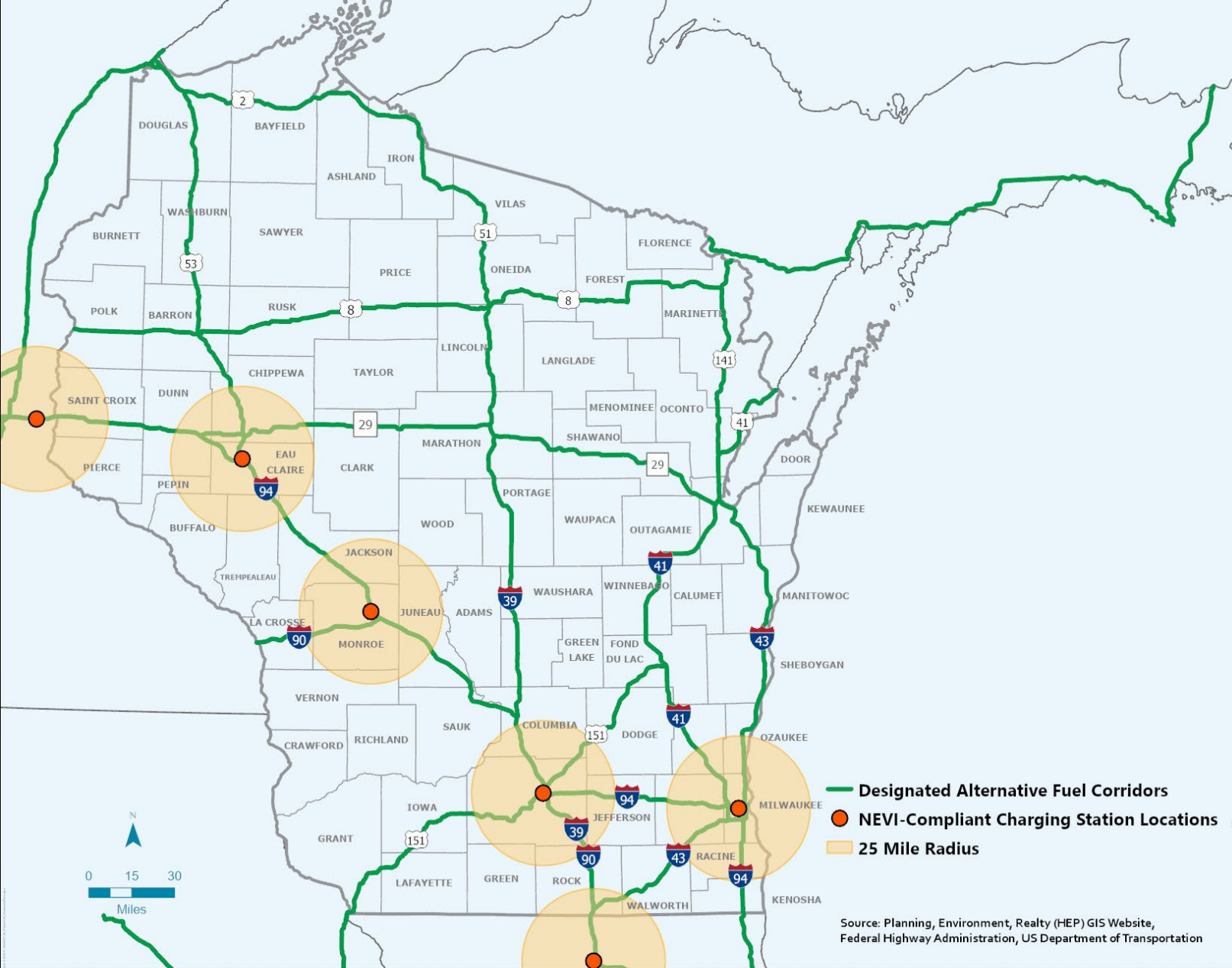


Identify NEVI-compliant EVSE on Interstates and AFCs

Identify existing NEVI-compliant charging sites.

- Ensures WisDOT can use funding to maximize coverage of Wisconsin.
- Minimizes risk of causing lower utilization at existing compliant stations in near-term.

Create a 25-mile driving distance buffer around NEVI-compliant sites.





Role of Utilities in EV Charging Deployments

Electricity is considered an alternative fuel under the Energy Policy Act of 1992.

Utilities have a strong interest in EV charging deployments.

- Supporting grid infrastructure and resilience
- EV rate planning and pricing structures
- Varying utility ownership models

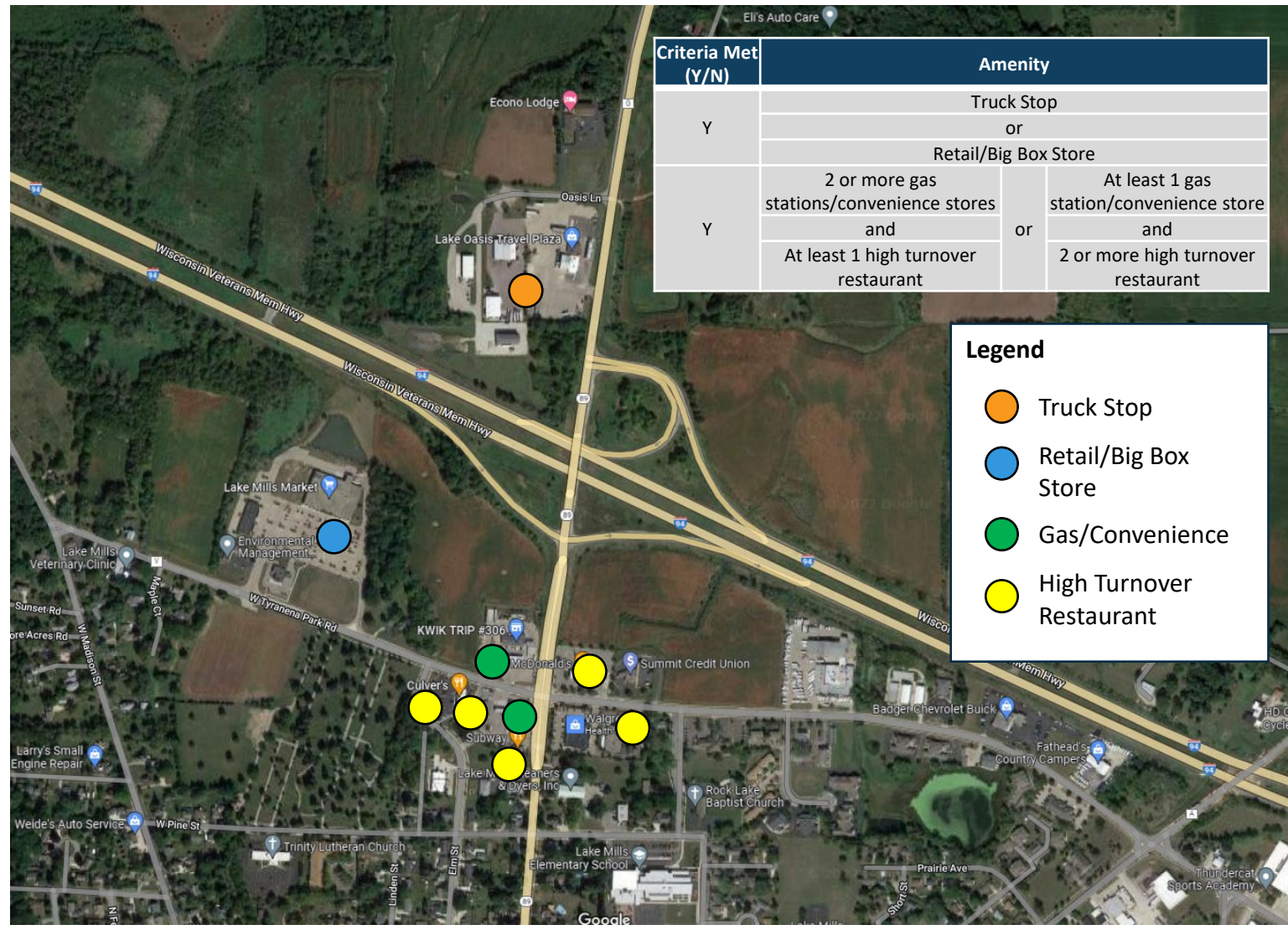
Utilities can offer incentives or unique ownership models for charging equipment and installation.



Higher priority exit example

WisDOT's plan and future grant program will seek to prioritize locations with:

- Multiple prospective site hosts
- Multiple destination amenities
 - » Gas Stations
 - » Truck Stops
 - » Restaurants
 - » Retail
- Available Utility Power Capacity
- Site Readiness
- Accessibility
- Etc.



Low priority exit example

WisDOT will not eliminate or define lower-prioritized exits as ineligible for NEVI Funds.

Priority/scoring will come into play in cases where both low and high priority exits apply for NEVI funded projects.

In these cases, WisDOT will have objective scoring criteria to award sites based on the level of amenities and readiness.



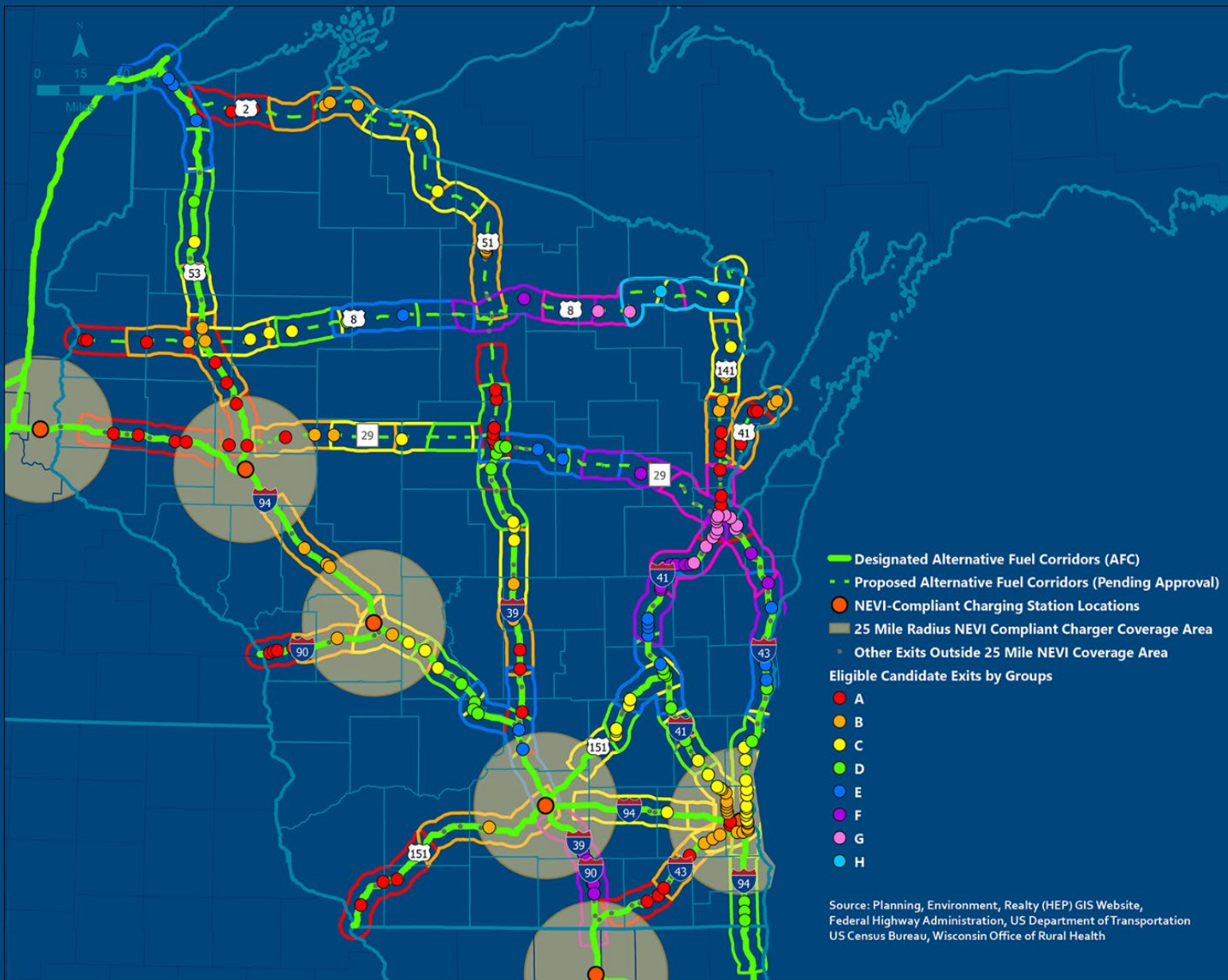
Identify “Approximate Locations” of NEVI-compliant EVSE on Interstates and AFCs

5 200 viable exits identified as potential charging sites

- Based on available amenities AND
- Likelihood of 3-Phase commercial utility power based on types and numbers of commercial businesses.
- *Wisconsin is continuing utility coordination on power availability.*

There are 61 groups of exits.

- 6**
- This ensures that regardless of which exit in a group is chosen, a NEVI-compliant EV charging station will provide for the 50-mile gap coverage.
 - *Explained in detail in Ch. 4 Deployment, WEVI Plan*



National Electric Vehicle Infrastructure Standards and Requirements

- Rule applies to NEVI Program as well as “any publicly accessible EV charging infrastructure project funded with Federal funds that is treated as a project on a Federal-aid highway.”
 - *This final rule establishes minimum standards and requirements specific to the use of NEVI Formula Program funds, funds made available under Title 23, U.S.C. for projects for the construction of publicly accessible EV chargers, and any EV charging infrastructure project funded with Federal funds that is treated as a project on a Federal-aid highway. p17*
- **Clarified EVSE Requirements for AFCs vs Non-AFCs:**
 - All stations along AFCs must have at least four (4) network connected DCFC charging ports capable of charging 4 EVs simultaneously
 - All non-AFC locations can be all DCFC, all LII or combo
- **Different EVSE availability requirements for AFCs vs Non-AFCs**
 - AFC EVSE must be available 24/7/365
 - Non-AFC EVSE have to be available only within “operating hours” of site host



National Electric Vehicle Infrastructure Standards and Requirements

- **Communication of Price:**

- The NEVI final rule requires display and base price on \$/kWh but added 1-year from final rule deadline.
 - NEVI regulations require that charging stations funded under the program sell electricity by kilowatt hour.
 - This requirement ensures that charging station customers know and receive what they are paying for.
 - This is as opposed to less accurate methods, such as basing the price on how much time is spent at the charger.

Build America, Buy America (BABA)



- Buy America Requirements for Electric Vehicle Charging Stations was released in the Federal Register on **2/20/2023**:
 - Phase 1: Waiver on BABA requirements until **6/30/24** (formerly **1/1/2024**).
 - EVSE manufactured before **6/30/24** does not need to meet BABA (aside from steel/iron in the housing components) so long as it is installed before **10/1/24**.
 - Housing components made with 51%+ steel and iron must be made entirely in US.
 - Phase 2: Beginning **7/1/24** (formerly **1/1/24**) 55% of the charging station must be made in America (defined as 55% of cost of all components).

Next Steps - 2023

Current WisDOT Activities

- Program and policy development supported by the final NEVI program rules and requirements. **Complete!**
- Finalize mapping and potential preferred locations. **Complete!**
- Preparation for year two WEVI plan submittal. **Complete!**
- Ongoing stakeholder outreach that provided critical input in plan development. **Ongoing!**
- Program launch. **Pending!**



Preparation for Applicants

Electrification How to Get Started:

- Reading the NEVI Program requirements contained in the [Final Rulemaking](#)
- Reviewing the US Department of Energy Guidance on [EVSE Station Development](#)
- Coordinating with your electric utility provider
- Coordinating with your preferred electric vehicle supply equipment (EVSE) vendor(s)



Questions?

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