

Minnesota Electric Vehicle Infrastructure Plan

MnDOT Office of Sustainability & Public Health

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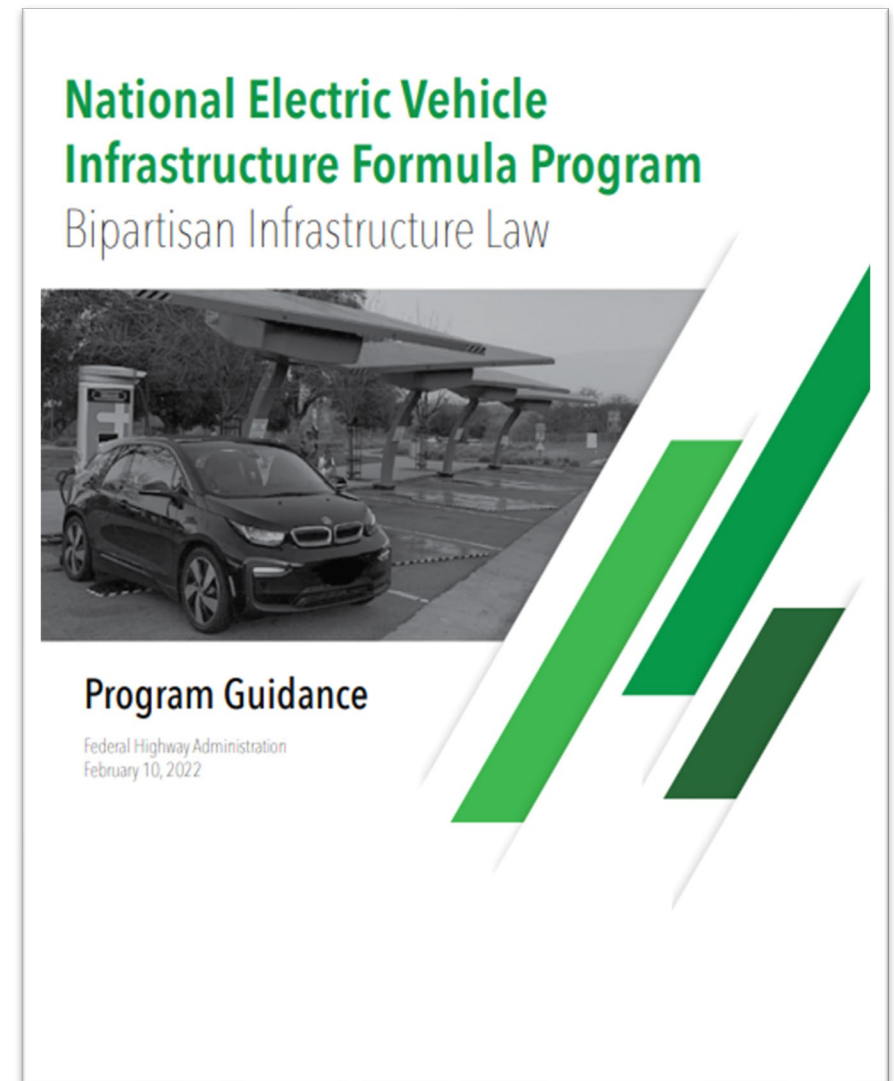


NEVI Formula Program Overview



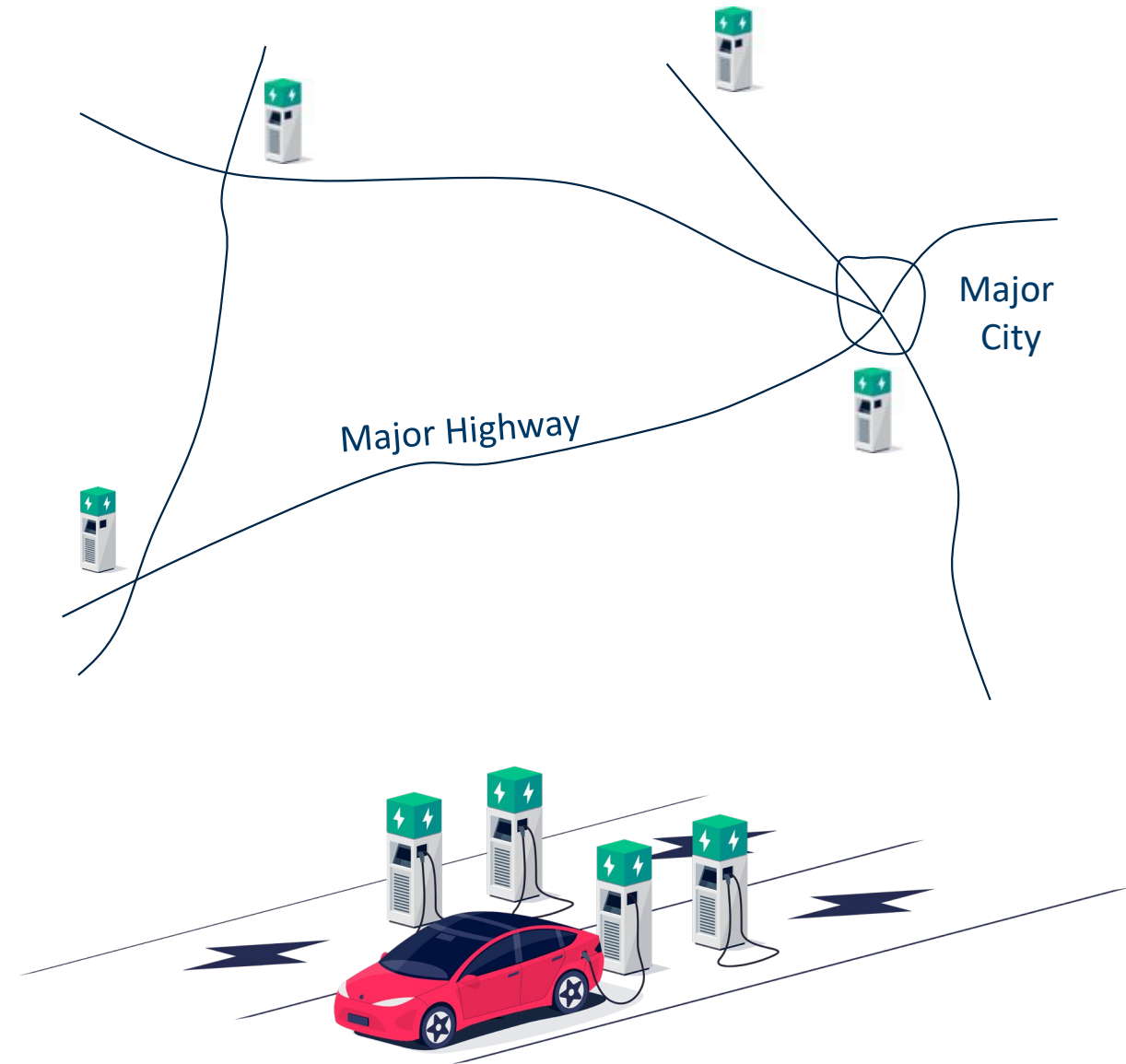
What is NEVI?

- New federal program authorized under the Bipartisan Infrastructure Law
- Provides funds to states to install DC fast chargers along designated corridors
- Federal appropriation for Minnesota is \$68 million for federal FY 22 – 26
- 20% non-federal match and state legislative spending authorization required
- Plan submitted to new Joint Office of Energy and Transportation by **Aug 1** to access formula funds



So how does the NEVI program work?

- Funding must be used to build out Alternative Fuel Corridors (AFCs) first before spent on non-AFC corridors
- Charger requirements for full build out
 - Level 3 DC Fast Charging
 - Located every 50 miles
 - Located <1-mile from AFCs
 - 4 150 kW fast chargers at each site
- MnDOT's first year of funding will focus on the build-out of NEVI compliant chargers along the existing AFCs in Minnesota: I-94 and I-35



Joint Office Plan Requirements

- Introduction
- Description of State Agency Coordination
- Description of Public Engagement
- Plan Vision and Goals
- Description of Contracting Approach
- Existing and Future Conditions Analysis
- EV Charging Infrastructure Deployment Plan (map with approximate locations of planned EV infrastructure)
- Description of Implementation and Program Evaluation Approach
- Civil Rights, Equity, Labor and Workforce, Cybersecurity Considerations
- Requests for Discretionary Exceptions

Minnesota Electric Vehicle Infrastructure Plan



Planning Process

Plan Kick-off:
April 4, 2022

AFC Applications Due:
May 13, 2022

Plan Submitted:
August 1, 2022



**Establish criteria
for MN EV Fast
Charging Network**



**Draft MN EV
Fast Charging
Network**



**Determine AFCs
that will receive
FY2022 investment**



**Prioritize
locations along
AFCs**



**Plan
submittal**

<< Stakeholder engagement throughout process >>

Engagement Overview

Virtual Stakeholder Workshops

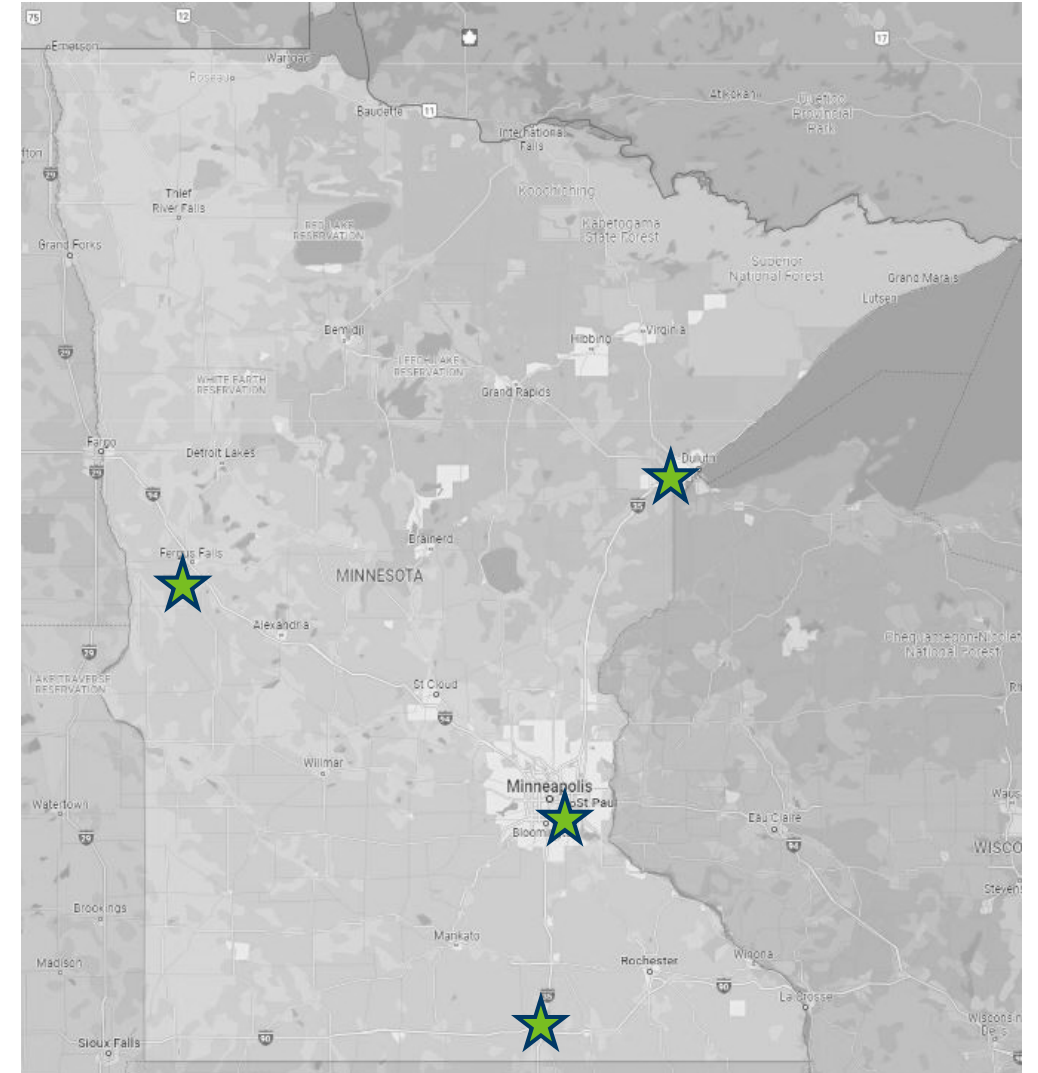
- **Utilities Workshop**, May 23
- **EV Installers Workshop**, May 24
- **Local Government Workshop**, May 26

Community Events

- **Minneapolis, Midtown Global Market**, June 1
- **Duluth, Bayfront Park**, June 2
- **Albert Lea, Thursdays on Fountain**, June 9
- **Fergus Falls, Summerfest**, June 11

Additional Engagement

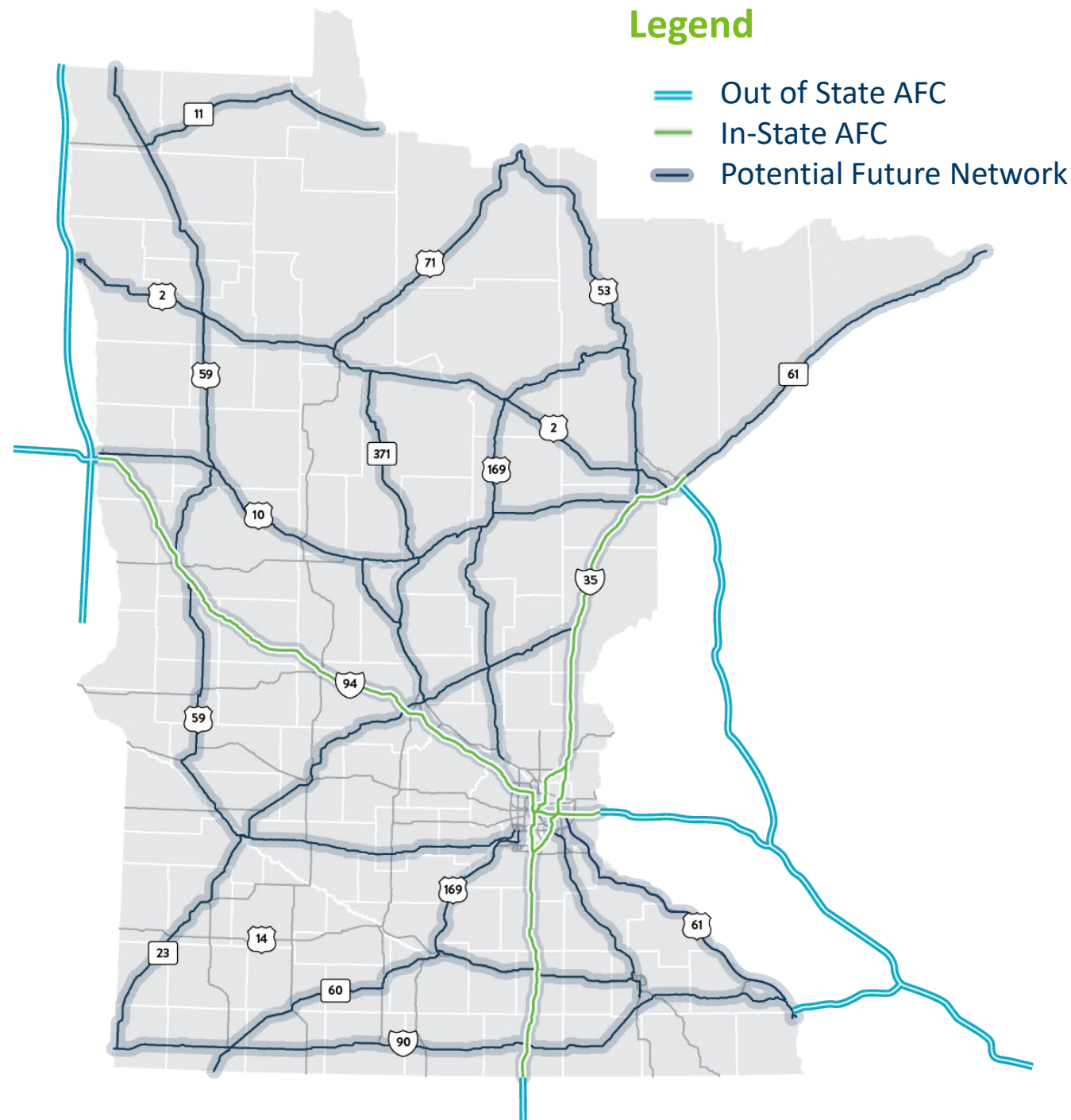
- **EV Subgroup:** Plan steering committee
- **Plan website:** 21,631 views, 5681 survey responses
- **Ad-hoc meetings/presentations:** 60, ~1,600 participants



EV Fast Charging Network Vision

Includes all potential corridors for investment with the \$68 million of NEVI funds (FY 2022-2026)

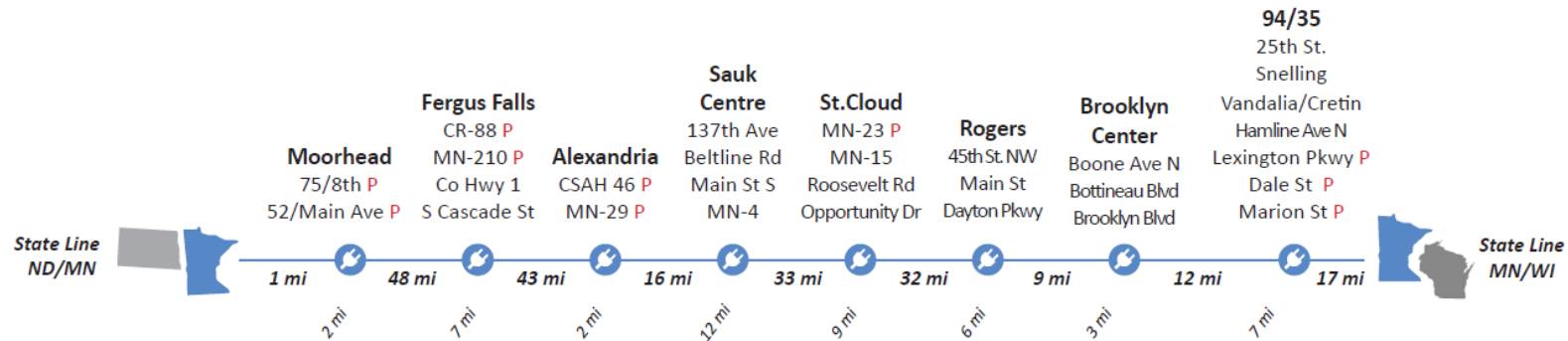
- Promotes coverage across the state
- Prioritizes roadways that serve long distance travel
- Creates a network that connects to other networks
- Recognizes both rural and urban communities
- Serves current and future EV drivers



Goals

MINNESOTA EV INFRASTRUCTURE GOALS		2022-2045 SMTP OBJECTIVES*	ACCELERATING EV ADOPTION STRATEGIES*
Goal 1: Support Minnesota's greenhouse gas (GHG) emission reduction goals and minimize transportation's impact on human and environmental health		O4, O6	S4
Goal 2: Facilitate regional and statewide travel while setting the standard for EV infrastructure in the Midwest		O1, O5	S2, S3
Goal 3: Distribute 40 percent of NEVI Formula Program benefits towards disadvantaged communities in Minnesota		O3, O5, O6	S2
Goal 4: Advance EV adoption		O3	S2
FIVE YEAR TARGETS			
Five Year Target 1: Full build-out of all two-digit interstates to full NEVI-compliance by the end of the program			
Five Year Target 2: Build-out of the EV Fast Charging Network (to potentially secondary standards) by the end of the program			

P – 600kW load verified
available per utility input



Equity Considerations

- **Identification and outreach to disadvantaged communities**
 - Used the Electric Vehicle Charging Justice40 Map tool to analyze the existing and planned future EV network in Minnesota and incorporated the location of these communities as key criteria for the selection of corridors and the priority scoring of interchanges along these corridors
 - Included disadvantaged community members in outreach and engagement
- **Quantifying and measuring benefits to disadvantaged communities**
 - Plan implementation will include additional site-level engagement with disadvantaged communities and efforts to encourage workforce participation from disadvantaged communities
 - Program evaluation metrics include:
 - Percentage of NEVI-funded charging stations in U.S. DOT-designated DACs using the
 - Workforce participation from underserved, disadvantaged, and tribal communities
 - **Others - TBD**

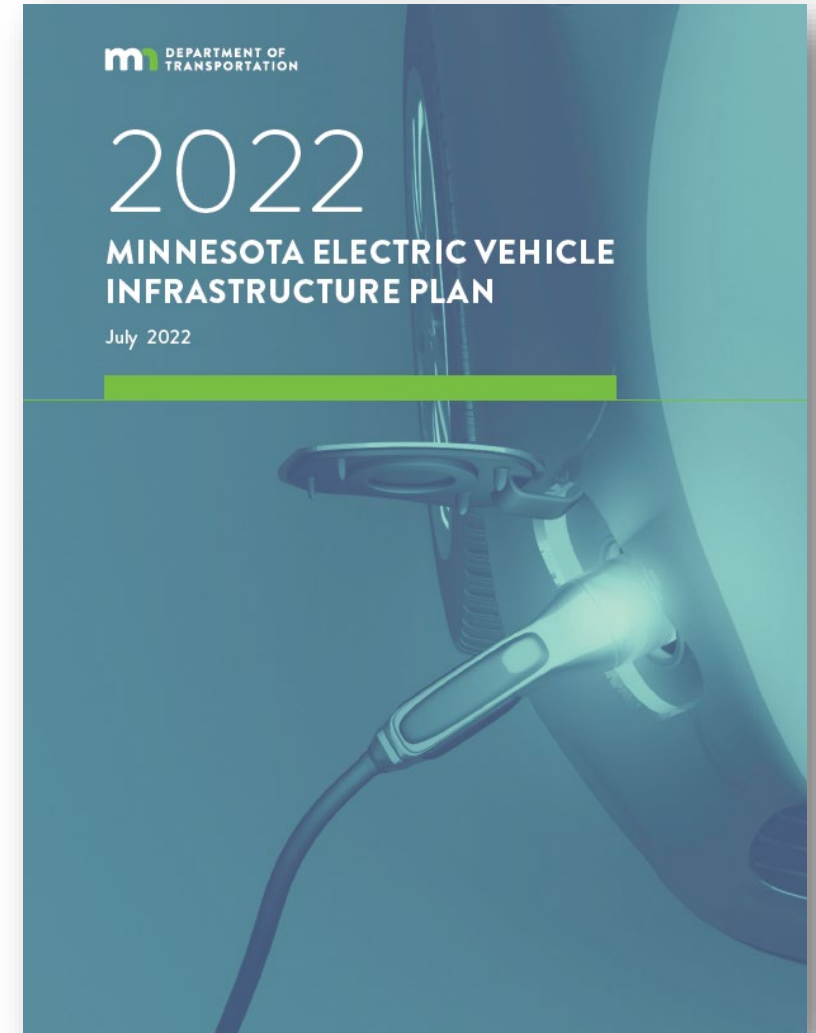
Cost Estimate

- Charger costs assume a full NEVI-compliant build-out of (4) 150kW chargers
- A range of costs have been identified
 - Setting (urban and un-developed rural will cost the most, developed but expandable the least)
 - Range from \$1,200/kW - \$2,000/kW
- The assumed planning-level cost per station is \$900,000 (\$1,500/kW)
 - I-94 (8 stations) = \$7.2M
 - I-35 (8 stations) = \$7.2M
 - Initial Build Out: \$14.4M (Slightly more than Year 1 + Match)



Plan Submittal and Next Steps

- September 30, 2022: MnDOT will receive approval from FHWA assuming plan is compliant
- Fall 2022: MnDOT will host stakeholder workshop to gather feedback site planning - tentatively scheduled **Oct 13**
- 2023
 - Site refinement/pre-construction planning
 - Competitive Site Selection Process
 - Review roads for potential nomination as AFCs
 - Annual updates to plan
 - Community engagement regarding benefits



<https://talk.dot.state.mn.us/ev-infrastructure-plan>

Questions?

