

# 2021 MINNESOTA ELECTRIC VEHICLE ASSESSMENT

## ***APPENDIX G: EQUITY ANALYSIS & RECOMMENDATIONS***

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## Acknowledgments

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Figures and tables included in the *2021 Minnesota Electric Vehicle Assessment* were developed by the Great Plains Institute unless otherwise noted.

## TABLE OF CONTENTS

<b>Appendix G: Equity Analysis &amp; Recommendations .....</b>	<b>4</b>
<b>Introduction .....</b>	<b>4</b>
<b>Definition .....</b>	<b>4</b>
<b>Literature Review.....</b>	<b>5</b>
<b>Interviews .....</b>	<b>5</b>
<b>Equity Questions and Matrix.....</b>	<b>6</b>
Categorization Question .....	6
Open-ended Questions.....	7
<b>Recommendations.....</b>	<b>7</b>
Recommended Equity Strategies .....	7
Advancing Equity in the Strategies.....	8
Equitable Implementation of the Assessment .....	9
<b>Conclusion .....</b>	<b>9</b>
<b>Endnotes.....</b>	<b>10</b>

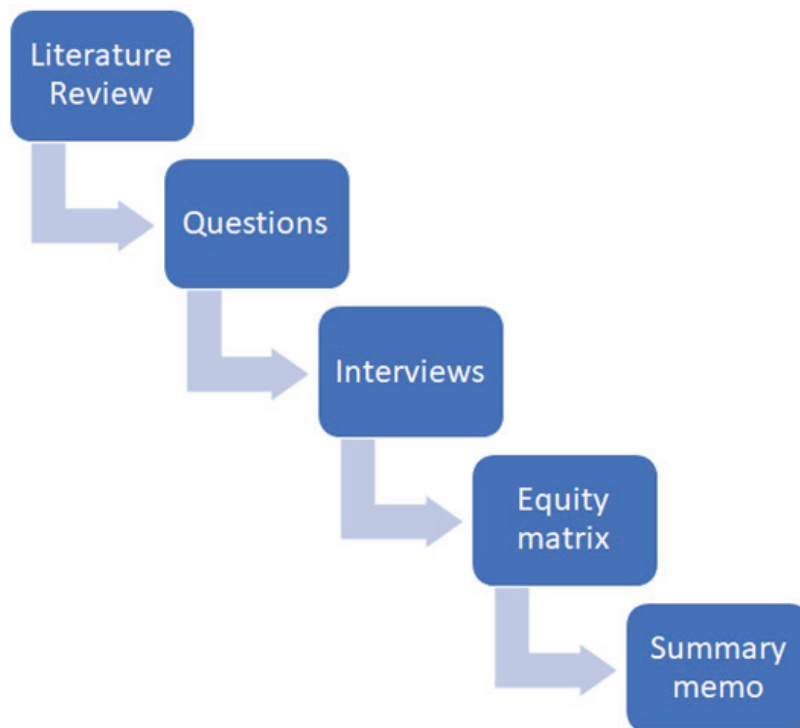
## APPENDIX G: EQUITY ANALYSIS & RECOMMENDATIONS

Prepared by Bellwether Consulting

### Introduction

This document describes the equity analysis that the Bellwether Consulting/Great Plains Institute Team used to develop the 2021 *Minnesota Electric Vehicle Assessment* and the recommendations that emerged from that analysis. As figure G-1 shows, the equity analysis included a literature review, the development of key questions, interviews, an equity matrix, and this summary memo.

**Figure G-1: Equity analysis steps**



### Definition

Throughout the analysis, the team used the definition of equitable transportation from *Advancing Transportation Equity: Research and Practice*, a report published by the University of Minnesota Center for Transportation Studies and sponsored by the Minnesota Department of Transportation:

- “Transportation systems that support multi-modal options that are affordable, sustainable, reliable, efficient, safe, and easy to use;
- Quality transportation services that are accessible to all populations for reaching destinations independently if needed; and
- Transportation decision-making processes that incorporate inclusive public engagement to reduce the longstanding socioeconomic disparities experienced by underserved and underrepresented communities.”<sup>1</sup>

The Minnesota Department of Transportation is working on a revised equity definition that builds off this past work.<sup>2</sup>

People and communities of focus in the analysis included:

- Black, Indigenous, and People of Color (BIPOC)
- Low-to-moderate income (LMI)
- People with disabilities
- Women
- Rural/urban
- Vulnerable health groups – children, seniors, and ill

## Literature Review

The team completed an in-depth literature review to identify key equity questions and strategies in the following areas:

1. EV access, use, and ownership
2. EV charging
3. Benefits & burdens of EVs on the public and non-EV users
4. Leadership and community engagement

Appendix C summarizes the findings.

## Interviews

The team conducted interviews with community leaders and subject matter experts throughout the analysis. The primary purpose of the interviews was to inform the equity analysis, and in particular, the equity matrix (described below). The following questions guided the interviews:

1. When considering equity and EVs, what historical context is important to know and share?
2. Who stands to benefit most from the expansion of EVs?
3. Who might be left behind, or not able to participate, in EV expansion? In what way could that play out?
4. Who might face negative effects from EV expansion? In what ways?
5. What strategies have the potential to most effectively advance equity?
6. Which ones might contribute to continued disparities, or even worsen them?
7. What are some potential data analyses that could illuminate equity considerations? What would you like to know?
8. What are some questions that we might want to engage people on?
9. Who should be engaged about EV expansion strategies moving forward?
10. What other considerations are important for expanding EVs in the most equitable way?
11. What other questions do you have for us?

## Equity Questions and Matrix

Using the information gathered in the literature review and interviews, the team created a matrix to evaluate the draft strategies in the *2021 Minnesota Electric Vehicle Assessment*. This section outlines the questions that the team asked of the strategies, which included a categorization question and several open-ended questions.

### CATEGORIZATION QUESTION

The Minnesota Department of Transportation and its partners want the *2021 Minnesota Electric Vehicle Assessment* to make measurable progress toward equity goals. And at this stage in the process – when a draft strategy is a high-level idea expressed in a sentence fragment – it is impossible to predict impact because it depends on how the strategy is implemented.

For example: Who designs and implements the strategy? What language and goals guide it? How is success measured and reported? Few of these questions are answered at this stage, but they have a huge influence on the strategy's results.

What we can evaluate at this point is the intention of the draft strategy. We know that strategies intentionally designed with and for BIPOC, low-income people, people with disabilities, and other underrepresented communities are more likely to benefit them.

Therefore, the guiding question in this categorization system is: *for whom is the strategy designed?* Each draft strategy was placed into one of three categories. This categorization system served as a simple and clear way of grouping and comparing draft strategies.

#### Category 1: Universal Strategies

Strategies in this category are designed to benefit the general public or a broad group within it. As stated, they are not targeted at any specific group.

While these strategies are not necessarily inequitable, on their own, they will not directly lead to more equitable outcomes. Some Category 1 might have indirect and/or longer-term benefits for BIPOC, low-income, and other priority communities, such as improved air quality.

##### Recommendations:

- Since capacity and funding is limited, ensure that these strategies do not dominate the final plan. They should be balanced by Category 2 and 3 strategies.
- Look for opportunities to add an equity focus, pushing them into Category 2.

#### Category 2: Universal Strategies with an Equity Focus

Strategies in this category are designed to benefit the general public, and contain a component that focuses on BIPOC, low-income, or other underrepresented communities.

Compared to Category 1, these strategies are more likely to “move the needle” towards more equitable outcomes.

##### Recommendations:

- Center BIPOC and other underrepresented communities in the development and implementation of the strategies.
- Be aware of the potential for “equity washing.” Sometimes strategies billed as equity initiatives end up more greatly benefiting people outside the target populations, with less positive impact on the intended communities.
- Focus on building relationships with underrepresented community members to inform the strategy and hold the strategy implementers accountable.

### Category 3: Equity Strategies

Strategies in this category are designed to benefit BIPOC, low-income, people with disabilities, and other underrepresented communities.

These strategies have the most potential to improve equitable outcomes.

*Recommendations:*

- Include as many of these as possible in the final assessment.
- Resource these strategies fully; this is not the place to pinch pennies.
- Engage leadership to reinforce their importance and create smooth pathways for their development and implementation.
- Track measures to ensure they're having their intended impact.

### OPEN-ENDED QUESTIONS

To go deeper into the equity analysis of strategies, the team developed the following questions that are applied to the draft strategies:

- What are potential indirect benefits, and to whom?
- What are potential burdens, and for whom? Who might be excluded?
- What are opportunities to increase the impact of this strategy on equity goals, if any?
- What are other equity-related issues for consideration as this strategy is developed and implemented?

## Recommendations

The recommendations that emerged from the equity analysis follow and are organized into three categories: (1) Recommended Equity Strategies, (2) Advancing Equity in the Strategies, and (3) Equitable Implementation of the Plan.

### RECOMMENDED EQUITY STRATEGIES

The following strategies, which were identified through the literature review, interviews, and community engagement, are recommended for inclusion in the final plan. All these strategies fell into Category 3, equity strategies, in the matrix:

- Provide point-of-purchase rebates for low-income earners on used EVs and encourage BIPOC prospective owners to take advantage.
- Create income-based car swap programs like “Cash for Clunkers” to encourage older vehicle owners to upgrade for newer and cleaner vehicles.
- Amend state building code to require that 4% of charging spaces be accessible to drivers of all physical abilities in compliance with the Americans with Disabilities Act. This includes improving path of travel after alterations or additions are made to existing buildings or facilities to add EV chargers. Examples of path of travel improvements include ensuring that charging stations are connected to the building entrance, bathrooms, telephones, and drinking fountains and that those features are upgraded to current accessibility standards.

- Establish a marketing campaign (radio, TV, billboards, etc.) directed at consumer segments who have low EV ownership rates (e.g., BIPOC, low-income, and rural communities). Tailor messages based on geography.
- Develop partnerships with racial, gender, and environmental justice community groups by providing grants, technical assistance, or working together on contracts.
- Provide financial incentives to BIPOC and LMI community organizers to promote grassroots movements on acting on climate change including increasing awareness and buying EVs.
- Involve BIPOC and low-income communities during planning stages of EV plans and policies to consider and understand the environmental, economic, and equity impacts on these communities.
- When creating educational materials, ensure that they are accessible & multilingual.
- Encourage landlords and owners of multi-unit dwellings that contain affordable units to participate in utility programs that offer reduced charging rates for charging during off-peak periods when it is beneficial for the electric grid.
- Prioritize equitable access to charging infrastructure. When planning out site locations for state-funded charging infrastructure, set-aside a certain percentage located within or near disadvantaged communities, including rural areas and tribal nations. These charging points should have accessibility and user safety embedded in their design.
- Offer discounts to low-income individuals who use EV car sharing programs.
- Offer higher rebates/ tax credits on purchases of EVs and EVSE to low-income families.
- Provide workforce training funds to employers, nonprofit organizations, trade associations, Joint Apprenticeship Training Committees, and chambers of commerce to create EV-related training opportunities for BIPOC and low-income workers.
- Eliminate human harm in the global EV supply chain by supporting improvements in EV battery chemistry that do not rely on unsafe mining practices.

### ADVANCING EQUITY IN THE STRATEGIES

The equity analysis also illuminated opportunities for the draft strategies to be strengthened from an equity perspective. The following recommendations highlight opportunities for the strategies to support more equitable outcomes:

- Focus electric vehicle access and availability efforts to reach low-income and BIPOC communities in rural areas, where EVs can have the greatest benefit. In denser metro areas, focus on expanding transit (including but not exclusively e-buses), shared mobility, car sharing, and overall land use changes to support healthy and affordable living.
- Ensure that any tax credit programs are refundable so that low-income families can fully benefit. Better than tax credits, use “pre-bates” or point-of-sale rebates.
- Set income limits for programs equitably so that they benefit those who most need them.
- For government fleets and other programs that require significant purchases, seek procurement from BIPOC-owned and inclusive companies.
- Locate charging stations in safe and accessible public locations such as schools, libraries, community colleges, and other facilities that serve low-income and BIPOC communities.



- Focus efforts to locate chargers in multi-unit dwellings on buildings with affordable units.
- In addition to multi-unit affordable housing, look for ways to reach low-income families located in single-family homes, especially in rural areas.
- Work with nonprofit certifiers to ensure equitable and just battery supply chains.

### EQUITABLE IMPLEMENTATION OF THE ASSESSMENT

Many findings from the equity analysis are not strategy-specific; instead, they apply across the entire *2021 Minnesota Electric Vehicle Assessment*. Therefore, our team presents the following recommendations for every strategy in the plan:

- Understand the context for the strategy; research and openly articulate the related historical decisions that have impacted BIPOC and other underrepresented communities.
- Explore the potential for funding set-asides for vulnerable or underrepresented communities in the implementation of the strategy.
- Fund BIPOC-led community organizations to engage their community members in the development and implementation of each strategy.
- Work toward building long-term relationships with community organizations and residents by collaborating on the strategy.
- Find opportunities to connect the strategy to existing programs and priorities that have emerged from community-based organizations, partnerships, or residents.
- Conduct additional engagement and data analysis to understand how to maximize the strategy's impact toward equity goals.
- Build public sector staff capacity, awareness, and accountability systems to achieve more equitable outcomes.
- Set equity goals and measures to track the success of the strategy.
- Establish a communication plan to transparently track and report progress toward equity goals and measures.

### Conclusion

EV policy makers need to purposefully build equity into all stages of transportation electrification. State and local governments should engage diverse stakeholders in inclusive policy design, lower barriers to EV use for underserved communities, address ingrained EV stereotypes, attend to distributional benefits and burdens of EV expansion, and draw equity lessons learned from other EV acceleration efforts. Finally, state agencies need to track and measure EV burdens and benefits by race, income, geography, and gender, sharing those assessments transparently with the public and EV stakeholders. In putting equity at the center of EV acceleration, Minnesota will more readily meet goals for greenhouse gas reduction, reduce existing inequities, and contribute to creating more just and equitable communities.

## ENDNOTES

1 Leoma Van Dort, Andrew Guthrie, Yingling Fan, and Gina Baas, *Advancing Transportation Equity: Research and Practice* (Center for Transportation Studies, University of Minnesota, February 2019), <https://hdl.handle.net/11299/204694>. The researchers developed the definition based on community input.

2 Tim Sexton, email message to Katelyn Bocklund, August 26, 2021.