

Equity Analysis Summary Memo

Metropolitan Council Electric Vehicle Study

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Introduction

This document describes the equity analysis undertaken for the Metropolitan Council as part of the 2021 Electric Vehicle Study. This analysis was completed by Bellwether Consulting in partnership with the Great Plains Institute.

It is essential to study equity and electric vehicles (EVs) because many people in our communities face historical and structural barriers to living healthy and thriving lives, and transportation plays a role in those barriers. For example, Black, Indigenous, and People of Color (BIPOC) Minnesotans are disproportionately impacted by vehicle emissions and poor air quality. They also disproportionately face affordability challenges related to housing and transportation.

Electric vehicles can have a positive impact on both inequities—air quality and affordability. But to date, EVs have been out of reach for most people. Research shows that EV users tend to be white, middle- and-upper income, urban, and male.ⁱThe vehicles remain unaffordable to many, and the charging infrastructure is not yet robust enough to support EV owners who rent or live in multi-family buildings.

Considering this context, this equity analysis asked, “how can EVs contribute to more equitable communities?” As Figure 1 shows, the analysis followed a three-step process: (1) an in-depth literature review, (2) interviews with individuals and organizations in the region, and (3) this summary memo.



Defining Equity

We use the [Thrive MSP 2040](#) description of transportation equity as the foundation of this analysis:

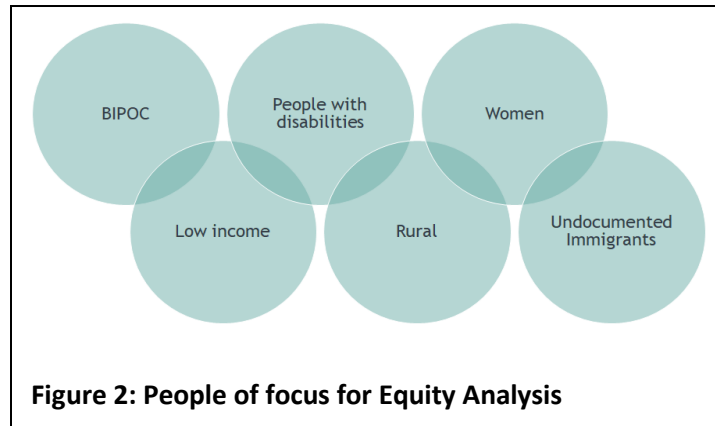
“Equity connects all residents to opportunity and creates viable housing, transportation, and recreation options for people of all races, ethnicities, incomes, and abilities so that all communities share the opportunities and challenges of growth and change. For our region to reach its full economic potential, all of our residents must be able to access opportunity. Our region is stronger when all people live in communities that provide them access to opportunities for success, prosperity, and quality of life.”

Promoting equity means:

- *Using our influence and investments to build a more equitable region.*
- *Creating real choices in where we live, how we travel, and where we recreate for all residents, across race, ethnicity, economic means, and ability.*
- *Investing in a mix of housing affordability along the region’s transit corridors.*
- *Engaging a full cross-section of the community in decision-making.”*

For this analysis, we apply this description to explore opportunities to improve equity in the context of EVs and transportation electrification (TE). Low-income households, BIPOC communities, undocumented immigrants, rural communities, and women are central demographic categories in our equity review.

We also explore EVs and equity regarding ability status, impact on industries and workforces, children, the elderly, and other vulnerable health groups.



We focus particularly on EV strategies that seek to do at least one of the following:

- **Meaningfully engage underserved communities** in the process of EV expansion and TE.
- **Recognize TE as critical in advancing equity** more broadly.
- **Promote equitable access** to the individual and public benefits associated with EVs.
- **Minimize and mitigate any possible burdens** associated with EV expansion.

Literature Review

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

1. Planning and Research for EVs and Equity
2. Equity in EV Charging
3. Benefits & Burdens of EVs on the Public and Non-EV users
4. Equity in EV Access, Use, and Ownership
5. Leadership and Community Engagement in EVs and Equity

The attached EV and Equity literature review summarizes the findings.

Interviews

Next, the team conducted interviews with individuals in the region to better contextualize and apply the findings of the literature review. We conducted interviews with over a dozen people who could provide insight into one or more of the areas explored in the literature review. Figure 3 shows how the interviewees' areas of expertise aligned with the five areas of the analysis.



Recommendations

The findings the literature review and interviews are synthesized below in a set of recommendations that the Metropolitan Council can use to advance equity in TE and in the region more generally.

Planning and Research for EVs and Equity

- Connect EV and equity considerations within the regional planning and comprehensive planning processes. For example, require EV analysis and data in the transportation chapter of comprehensive plans.
- Collect and share data on EV access and use by race, income, gender, age, disability status, and geography.
- Set equity goals and monitor outcomes of EV programs.
- Convene local government partners to identify and collaborate on EV and equity opportunities.
- Convene agencies who allocate low-income tax credits and coordinate a common standard for rewarding EV-readiness in projects.
- Create an agreed-upon metric for car sharing and greenhouse gas (GHG) reduction in the Regional Solicitation.
- Create more support for EV-related projects through the Regional Solicitation.

Equity in EV Charging

- Support strategic EV charging deployment in low-to-moderate income, rural, and BIPOC communities and workplaces.
- Support EV charging in multi-unit dwellings through grants, ordinances, and other programs.
- Promote ability accessible EV charging station design.
- Promote personal safety-informed EV charging design.
- Provide grants to cities to administer for businesses or residents to install EV chargers, with a focus on underserved census tracts.

- Be intentional and engage communities prior to installing public EV chargers in low-income neighborhoods, remaining cognizant of potential harmful ramifications.

Benefits & Burdens of EVs on the Public and Non-EV users

- Support targeted workforce development for people to build careers in TE.
- Support rural and BIPOC businesses with EV charging infrastructure development.
- Implement best safety practices for vision-impaired pedestrians.

Equity in EV Access, Use, and Ownership

- Partner with HourCar and others to expand EV car sharing.
- Conduct a study to determine how to incorporate EVs in Metro Mobility's fleet, including the barriers, costs, and vehicle options.
- Explore targeted programs to electrify public fleets and deploy charging infrastructure.
- Work with local governments to share information on pool EV procurement.
- Promote cohort and workforce EV rideshares.

Leadership and Community Engagement in EVs and Equity

- Engage and fund racial and environmental justice community groups to understand needs and challenges and design programs accordingly.
- Ensure diverse partnership and representation when doing outreach.
- Use accessible, culturally relevant, and multilingual outreach materials.
- Work with affordable housing providers and other organizations to educate people about the benefits and opportunities of EVs.
- Work with community leaders to demonstrate new EV models and EV car sharing opportunities.

Implementation

The results of this analysis, and the forthcoming strategies in the overall study, are high level. Much of how the strategies benefit or burden BIPOC and low-income communities will depend on how they are implemented. The following best practices relate to the equitable implementation of the strategies:

- 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 towards equity goals and measures.

Conclusion

The Metropolitan Council and its partners need to purposefully build equity into all stages of TE. To do this, they 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, the Council and its partners 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, the Metropolitan Council's region will more readily meet goals for GHG reduction, reduce existing inequities, and contribute to creating more just and equitable communities.

¹ Farkas, Shin and Nickkar (2018) Environmental Attributes of Electric Vehicle Ownership and Commuting Behavior in Maryland: Public Policy and Equity Considerations. Morgan State University: www.morgan.edu

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