Regional EV Planning

Transportation Committee

METROPOLITAN COUNCIL

July 27, 2026

Overview

- EV Public Charging Needs Analysis
  (Q2 2025 – Q3 2026)
- EV City Support
  (Q2 2026 – Q3 2028)
- EV Public Engagement
  (Q4 2026 – Q2 2028)
- EV Curbside Charging Implementation Cohort
  (Q3 2027 – Q2 2028)

EV Public Charging Needs Analysis

Project Objective

Planning an EV charging network for the region

- Planning level analysis of the gaps in publicly available EV charging infrastructure
- Identification of what part the public sector might play a role in

Project Results

- **Accommodate & accelerate light duty EV adoption**
- **Inform the award of federal funds via Regional Solicitation**
- **Inform charging infrastructure location needs and CFI fund usage**
- **Provide analysis to cities and other regional entities**

Approach

Focus Areas

Collect Background Information

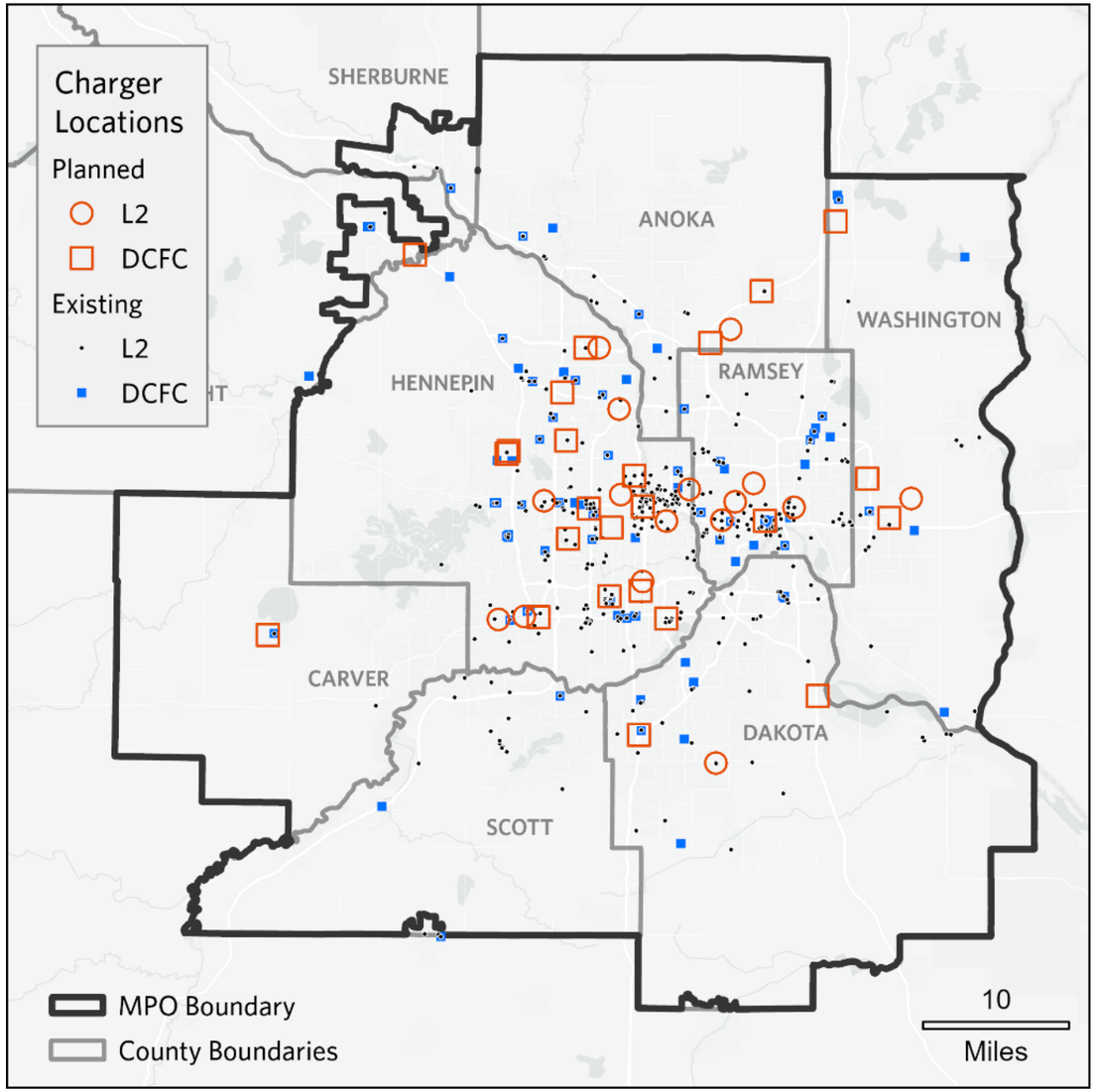
Engage Stakeholders and the Public

Estimate Future Charging Needs & Gaps

Prioritize Locations for Public Investment & Develop Interactive Map

Existing and Planned Charging Stations

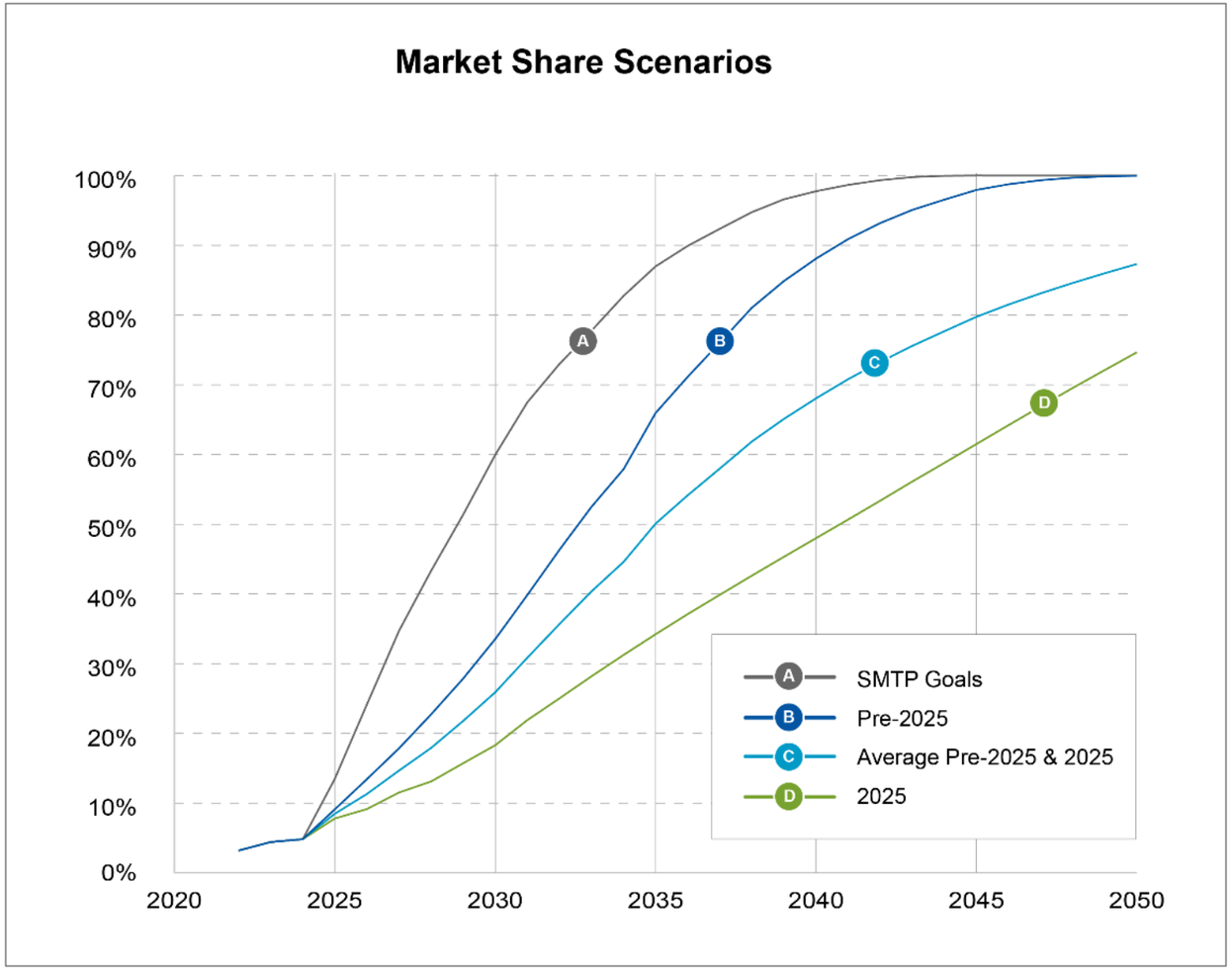
- **Direct Current Fast Charger (DCFC) Stations**
- **Level 2 Charging Stations**



Forecast Future EV Demand

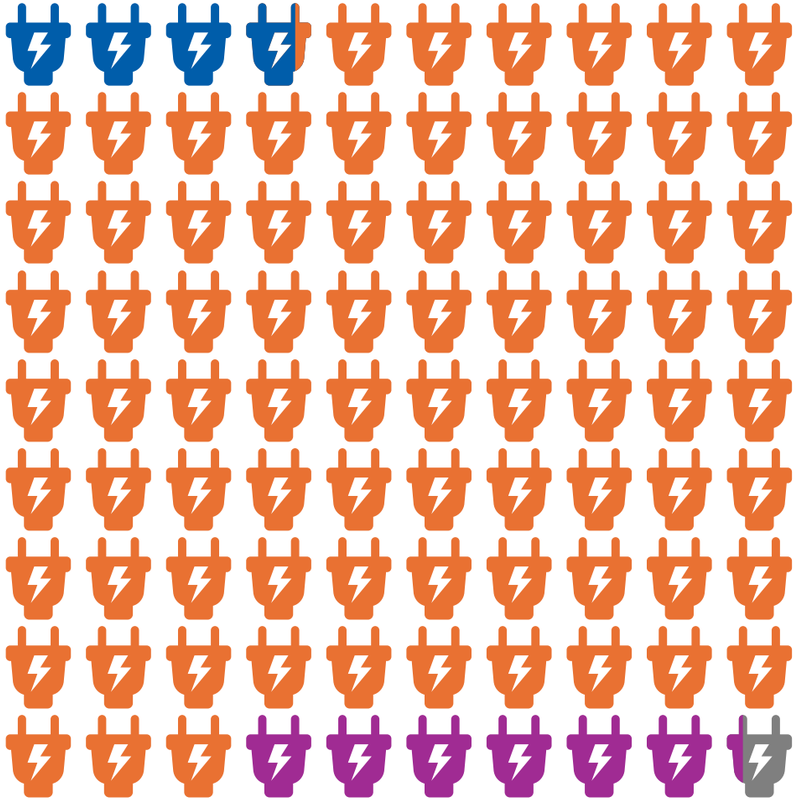
- Using **historic vehicle registration data + national EV market share trends**, developed **four scenarios** to project estimate of light-duty electric vehicles on the road in 2025

- **Average of Pre-2025/2025** chosen as forecasting input
  - **~In 2040, about 30%** of light-duty vehicles on the road estimated to be battery electric
  - **~1,222,600 EVs**



Estimate Charging Needs

Total Ports Needed by 2040 (EVI Pro-Lite)



= 1,000 ports

Level 1: 3,810 ports

Level 2: 80,002 ports

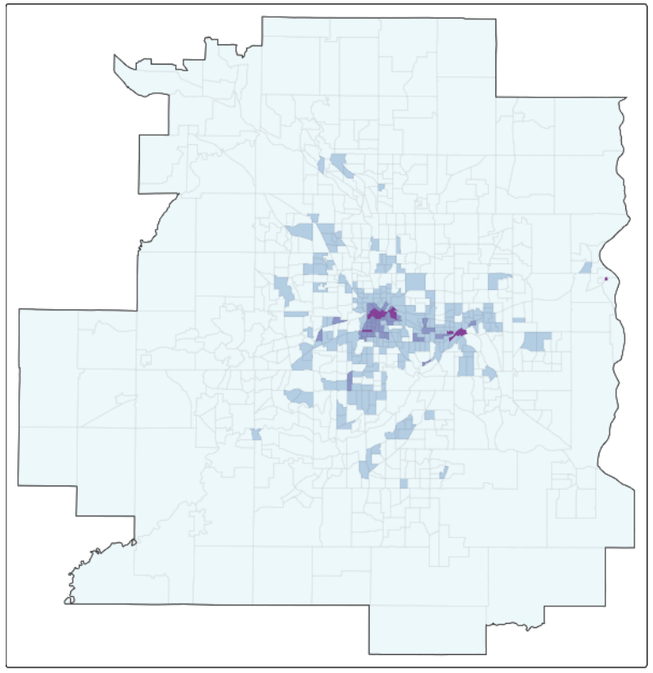
Level 3 (DCFC): 6,236 ports

Existing Ports Account for about ~2% of Total Demand by 2040

Match Charging to Land Use, Dwell Time and Future Demand

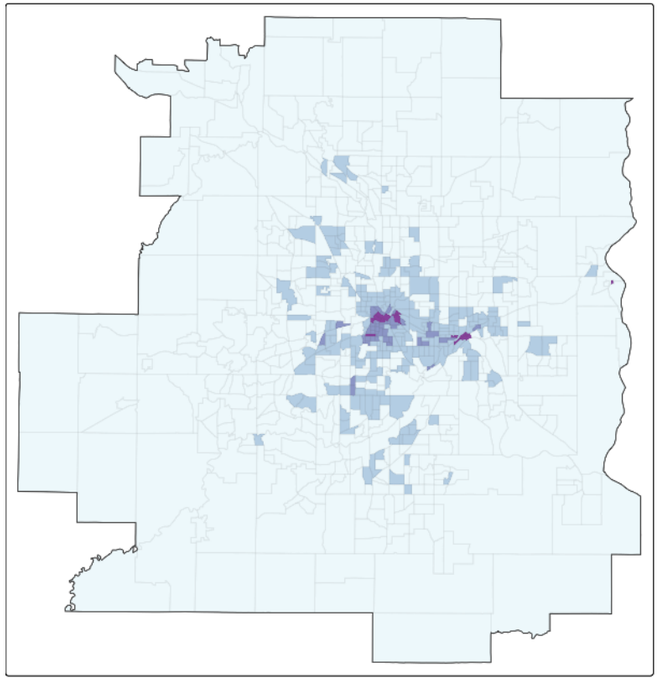
1. **Develop demand weights** by census tract based on dwell analysis and land use suitability
2. **Disaggregate regional totals** (from EVI Pro-Lite analysis) to census tracts, proportional to the demand weights
3. **Subtract existing ports** from each census tract to determine the net charging needs for each tract

Level 1



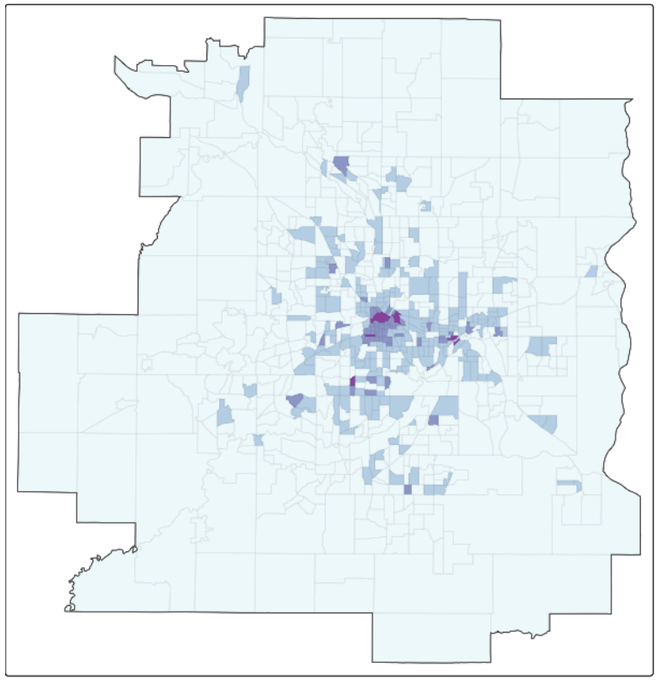
Total: 3,810 ports

Level 2



Total: 78,601 ports

DCFC (All)



Total: 5,668 ports

Stakeholder Engagement Approach

Approach & Activities

Centered perspectives of people most likely to rely on public charging. Focused on engaging two primary audiences:

- Community groups, organizations, and leaders who work closely with residents and could provide insight into equity considerations and charging access barriers.
- Community members who are less likely to have access to at-home charging, such as renters, residents of multifamily housing, and people living in older homes (pre-1925 homes without garages), as well as existing EV users who rely on public charging.

Activities

- 13 one-on-one interviews
- Online open house and survey (262 participants)
- Presentations to 3 neighborhood organizations and residents' groups (23 participants)

Led by Bellwether Consulting

Stakeholder Engagement Findings

- Strong support for prioritizing future public chargers for residents without access to home charging.
- Everyday and long-dwell time destinations are the most preferred charging locations because they allow people to integrate charging into their daily schedules
- Charger reliability, safety, and maintenance are as important as charger location.
- Public charging is essential, not supplemental, for many EV users and future users.
- Affordability and price transparency are barriers to EV adoption.
- Public charging investments should align with transportation and community goals.

Prioritization Approach: Combining the Measures

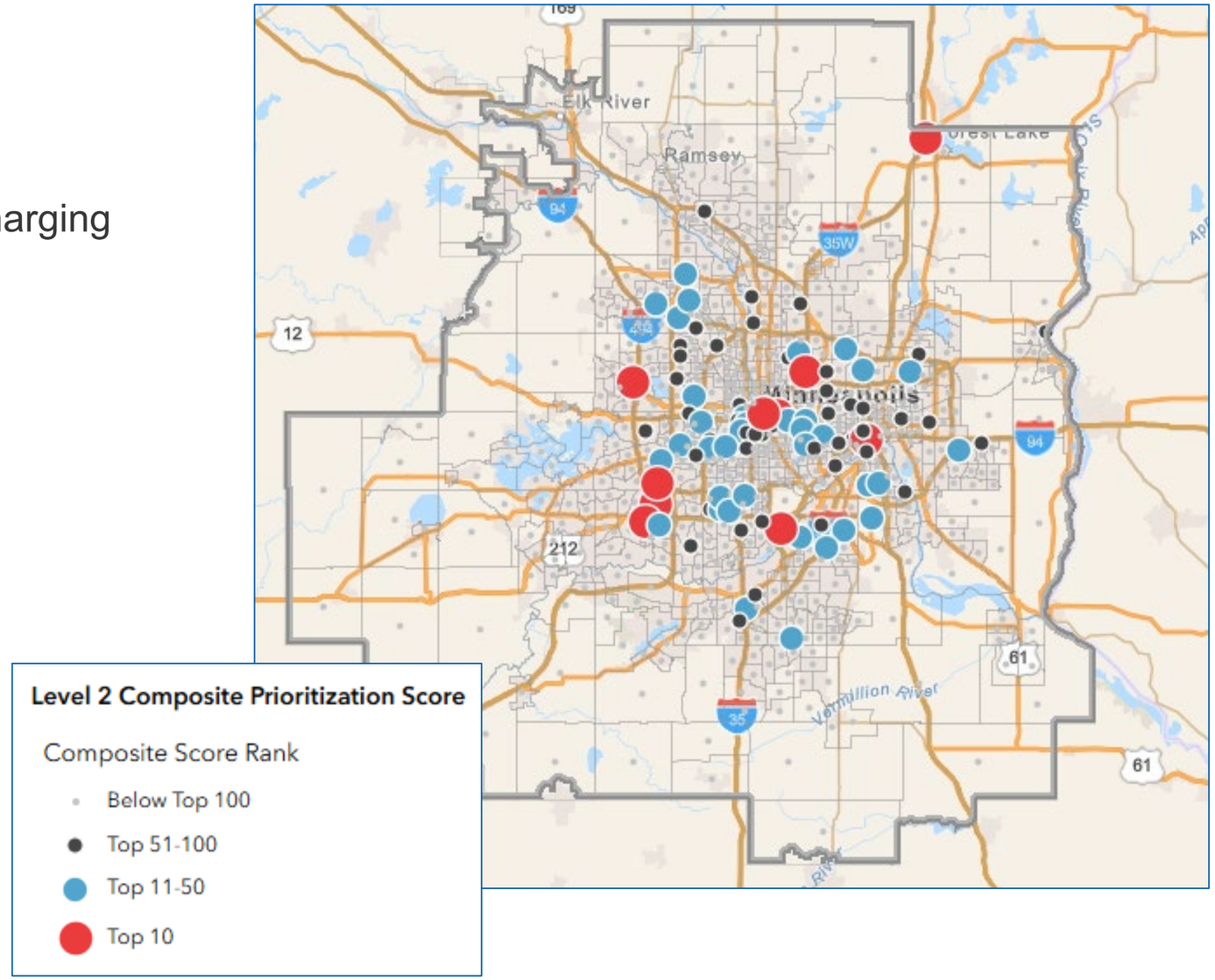
Translating Goals & Priorities into Measures

TPP Goal	Charging Network Priority	Measure	L2 Weight	DCFC Weight
Addressing Climate Change	Site chargers at high traffic locations	**Future Public Charging Needs:** Estimated number of charging ports needed to support forecasted publicly accessible EV charging in 2040 by census tract	15%	25%
Equitable & Inclusive	Prioritize charging for residents without access to home charging	**Multi-family Housing Trips:** Estimated number of trips associated with multi-family housing trips aggregated at the census tract level.	45%	40%
		Low-Income Trips: Estimated number of trips taken by residents with household income <$75K aggregated at the census tract level.	15%	10%
Healthy & Safe	Support air quality improvements	**Traffic-Specific Air Pollutants:** Concentration of traffic-specific air pollutants in census tract	15%	15%
	Consider geographic balance	**Rural Trips:** Estimated number of trips to destinations in census tracts in Rural Town Centers	10%	10%

Prioritization Results L2

Level 2 Charging

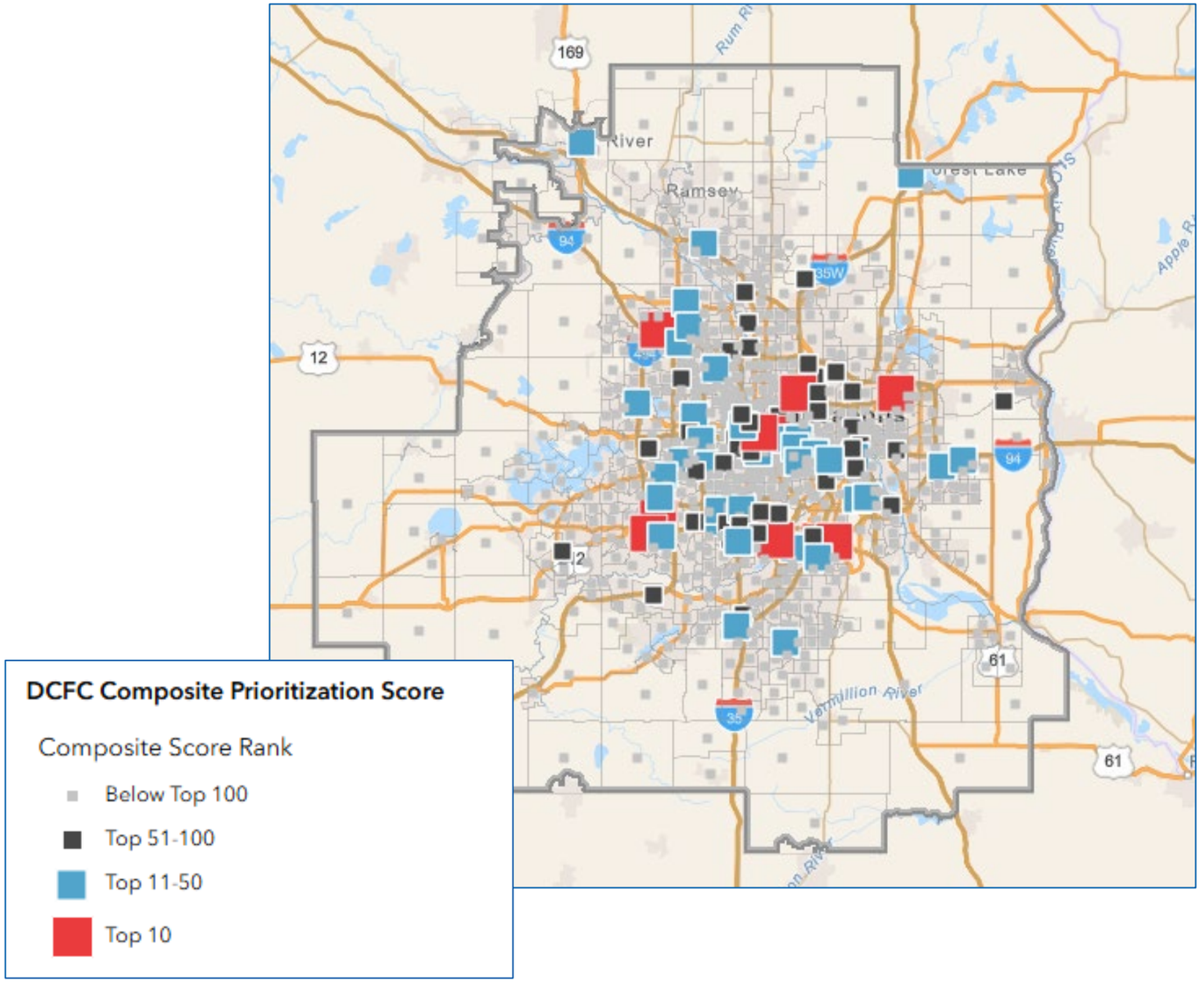
- Top 100 census tracts for Level 2 charging
- Composite score of all measures



Prioritization Results DCFC

DC Fast Charging

- Top 100 census tracts for DCFC
- Composite score of all measures



EV City Support

Goals for the EV City Support project

Overall project goals

- Filter and organize information that local governments need to accelerate electrification
- Provide information and resources to local governments in a manner that is most useful to them
- Support local governments to take practical and actionable steps toward EV adoption and charging infrastructure deployment

Implementation goals

- Develop a Technical Assistance Plan (TAP)
- Deliver the TAP to townships, cities, counties, and Tribal nations, as interested
- Creation of resources for participants and local governments
- Receive feedback and guidance from Project Management Team and from Met Council's Transportation Committee, TAB and its subcommittees

Technical Assistance Plan overview

Goal

- Support local governments to take practical local actions to support EV infrastructure deployment and electric transportation adoption

Ideal audience

- Cities are the focus
- Townships, counties, and Tribal nations are welcome as well

Format

- Two cohort cycles, each lasting ~10 months
- The working title “EV Communities Support” will be used to do outreach and recruit participants

Technical assistance formats

Cohort calls

- Monthly cohort calls
- Informational session on chosen topic
- Discussion, report outs, and Q&A
- Assignments for next steps

1:1 Direct Assistance

- Meeting with GPI staff at beginning, middle, and end of cohort
- Opportunity to schedule time with GPI staff when needed

Workshops

- Two hands-on workshops
- One in-person and one virtual
- Topics TBD based on feedback from PMT and participants

Future Work

EV Public Engagement

- Individuals play a central role in transportation electrification
- Newer and still developing technology
- Provide information for decision making:
  - Variety of vehicles
  - Charging options
  - Grants & rebates
  - Private and public benefits
  - Things to watch out for
  - Ride-n-drives, tabling, webinars, etc.
- Budgeted to start in 2026

Curbside Charging Implementation Cohort

- Approach
  - Bring together an interested cohort of local governments
  - Summarize best practices and potential partners
  - Gather broader and street specific data
  - Propose site specific possible approaches
- Why this approach?
  - Important to serve people without access to home charging
  - Includes people who live in multifamily housing and those with low incomes
  - Often neighborhoods that rely on on-street parking
  - Curbside charging can also serve older commercial streets in urban and suburban areas, and rural centers
  - Many of our partners are road authorities
  - New and changing technologies and business models
- In draft budget to begin in 2027

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