



Planning Commission Agenda

Wednesday, July 1, 2026

6:30 PM

City Council Chambers

In accordance with [Minnesota Statutes §13D.02](#) and City policy, Council and Commission members may attend meetings remotely up to three times per calendar year.

(Times listed are approximate – please note that items may be earlier or later than listed on the agenda)

- 1. Call to Order**
- 2. Roll Call**
- 3. Approval of Agenda**
- 4. Public Comment**
- 5. Approval of Meeting Minutes**
 - a. Review of May 6, 2026 Minutes
- 6. Communications and Recognitions**
- 7. Public Hearing**
- 8. Business**
- 9. Commission Direction on Member Initiated Agenda Items**
 - a. Evaluate Roseville's EVCS and EVSE (electric vehicle charging) requirements for new parking areas - Commissioner Cyra
- 10. Adjourn**

REQUEST FOR COMMISSION ACTION

Date: **7/1/2026**

Item No.: **5.a.**

Department Approval

Agenda Section

Approval of Meeting Minutes

Item Description: Review of May 6, 2026 Minutes

Application Information

n/a

Background

n/a

Staff Recommendation

n/a

Requested Planning Commission Action

Review the May 6, 2026 minutes and make a motion to approve subject to requested corrections.

Alternative Actions

Prepared by:

Attachments: 1. May 6, 2026 Minutes



**Planning Commission Regular Meeting
City Council Chambers, 2660 Civic Center Drive
Draft Minutes – Wednesday, May 6, 2026 – 6:30 p.m.**

1. Call to Order

Chair Bjorum called to order the regular meeting of the Planning Commission meeting at approximately 6:30 p.m. and reviewed the role and purpose of the Planning Commission.

2. Roll Call

At the request of Chair Bjorum, City Planner Thomas Paschke called the Roll.

Members Present: Chair Erik Bjorum, Vice-Chair Pamela Aspnes, and Commissioners Steve Cyra, Allison Jensen, Rose Lindsay, Erin Lynch, and Ben Schaefer.

Members Absent: None.

Staff Present: City Planner Thomas Paschke and Community Development Director Janice Gundlach.

3. Approve Agenda

MOTION

Member Lynch moved, seconded by Member Aspnes, to approve the agenda as presented.

Ayes: 7

Nays: 0

Motion carried.

4. Public Comment

None.

5. Review of Minutes

a. April 1, 2026, Planning Commission Regular Meeting

MOTION

Member Aspnes moved, seconded by Member Cyra, to approve the April 1, 2026, meeting minutes.

Ayes: 7

Nays: 0

Motion carried.

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43 **6. Communications and Recognitions:**

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45 **7. Public Hearing**

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47 **8. Business**

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49 **9. Commission Direction on Commission Member-Initiated Agenda Items**

50 **a. Evaluate Roseville's EVCS and EVSE (Electric Vehicle Charging) Requirements**
51 **for New Parking Areas**

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53 Commission Member Cyra stated that he wanted to provide a brief overview of the
54 memorandum he prepared on the city's non-residential parking area electric-vehicle
55 charging requirements. He explained that the discussion centered specifically on whether
56 the current ordinance should be reevaluated. He noted that the Roseville Planning
57 Commission adopted the ordinance, which went into effect in March 2023. Since
58 adoption, the city has received two variance applications that demonstrate the challenges
59 of complying with the requirements in certain situations.

60
61 Member Cyra explained that the ordinance's stated objectives were clear and worthwhile,
62 specifically to facilitate electric vehicle use and expedite the deployment of convenient,
63 cost-effective charging infrastructure. He stated that the issue was not whether those
64 goals were appropriate, but whether the existing ordinance was the best means of
65 achieving them.

66
67 Member Cyra reviewed the current ordinance requirements. He explained that new
68 parking lots with 30 to 49 spaces must provide two Level 2 charging stations, including at
69 least one accessible station. Parking lots with 50 or more spaces must provide Level 2 or
70 greater charging stations equal to 5 percent of parking spaces, with at least one accessible
71 charger. He further explained that all new residential parking areas, as well as all
72 nonresidential parking areas, regardless of size, must have 10 percent of the required
73 parking spaces wired for electric vehicle service equipment infrastructure.

74
75 Member Cyra discussed the two recent variance requests that prompted his concerns. He
76 stated that the first case involved Dick's Sporting Goods, where the ordinance would have
77 required 15 Level 2 chargers and 30 EVSE-ready stalls. He explained that the applicant
78 argued that Level 3 fast charging made more sense for a retail environment with higher
79 customer turnover, and that planning staff supported a variance allowing a total of six
80 chargers, including three Level 2 and three Level 3, along with the required EVSE stalls.
81 He noted that the variance board ultimately approved that request.

82
83 Member Cyra then referenced the Hempel Real Estate case discussed during the prior
84 month's meeting. He explained that the proposed 528-space parking lot would have
85 required 26 charging stations and 53 EVSE stalls under the ordinance. The applicant
86 instead proposed eight Level 2 chargers and 22 EVSE stalls. He noted that the variance
87 request in that case was denied.
88

Member Cyra stated that those cases highlighted potential edge cases where compliance may be difficult for developers. He said it would be beneficial to examine how Roseville's ordinance compares with neighboring municipalities to determine whether the city's requirements are aligned regionally, even if they are not identical. He also suggested reviewing broader market trends related to electric vehicle adoption and charger utilization rates.

Member Cyra stated that the economic impacts on businesses should also be considered. Using the Rosedale variance case as an example, he noted that compliance costs were estimated at more than \$500,000. He also said the city should evaluate long-term maintenance obligations associated with charging infrastructure. He commented that requiring businesses to install chargers effectively places them into a separate business operation involving the management and maintenance of charging equipment.

Member Cyra concluded by stating that he looked forward to hearing additional input from the commission regarding the issue.

Chair Bjorum clarified that, for purposes of the evening's discussion, the matter was open for commission discussion based on the information and memorandum provided by Member Cyra.

Chair Bjorum noted that Member Cyra had also included a draft motion within the meeting materials that, if approved, would direct city staff to review the current electric vehicle charging requirements contained in the zoning code. He asked Community Development Director Gundlach to confirm that understanding and stated that the item was open for discussion and conversation before any potential action by the commission.

Ms. Gundlach explained that the policy governing commissioner-initiated items exists to ensure that staff resources are not expended unless a majority of the Roseville Planning Commission supports pursuing the topic. She stated that Member Cyra had outlined his concerns and requested areas for review. The commission first needed to determine by vote whether a majority wished to take up the issue for further discussion.

Ms. Gundlach explained that if a majority of the commission supported examining the topic, staff could then begin dedicating resources toward researching the issues identified in Member Cyra's materials. She stated that the commission should also provide direction regarding timing, noting that staff likely could not return with information the following month, but potentially by the meeting after that.

Ms. Gundlach explained that the materials prepared by Member Cyra provided a comprehensive starting point for the scope of work and outlined the areas he believed should be examined. She added that if the commission agreed, those materials could serve as the initial framework for staff research, although additional topics or research needs could arise during future discussions.

Ms. Gundlach explained that the city's sustainability specialist would likely handle much of the research, as the subject matter closely aligned with that role. She also noted that

some of the information Member Cyra referenced was unavailable when the ordinance was originally enacted, explaining that many communities still lack electric vehicle charging requirements in their ordinances. She stated that when the ordinance was adopted, staff understood that implementation would involve some trial and error and that future refinements might become necessary over time.

Ms. Gundlach emphasized that ordinances should not be viewed as permanently fixed and instead should be continually evaluated and amended as conditions change. She reiterated that Member Cyra's materials would provide a strong foundation for the discussion if the commission chose to proceed with the review. She concluded by noting that any eventual recommendation developed by the commission would ultimately be forwarded to the Roseville City Council for consideration.

Member Aspnes stated that he had watched the recent Roseville City Council meeting, during which the council convened as the Board of Adjustment and Appeals to consider the applicant's appeal of the denied variance request. She explained that the city council ultimately voted to overturn the variance board's denial and grant the appeal.

Member Aspnes stated that there was significant discussion during the meeting regarding the same electric vehicle charging ordinance issues being raised by Member Cyra. She encouraged members of the Roseville Planning Commission to watch the meeting replay, noting that the discussion occurred early in the agenda. She commented that the city council appeared to expect the planning commission to examine the issue further.

Ms. Gundlach agreed with Member Aspnes' observations. She stated that the city council discussion addressed many of the same topics outlined in Member Cyra's written materials, as well as findings staff had prepared in support of the Hempel variance recommendation. She noted that the discussion covered issues including distinctions among Level 1, Level 2, and Level 3 charging, short-term versus long-term parking considerations, and differences among commercial, private, and publicly accessible charging infrastructure. She stated that many related factors could be explored as part of the commission's review.

Chair Bjorum provided additional context based on his prior experience serving on the Roseville Planning Commission during the earlier variance discussion involving Dick's Sporting Goods at Rosedale Center. He explained that the ownership group at Rosedale had not fully understood the city's electric vehicle charging requirements when the parking lot project was completed, and had already constructed the parking lot before realizing the ordinance applied to the project. As a result, he said the applicant was required to return to the city to seek relief through the variance process.

Chair Bjorum stated that part of the reason the variance was viewed favorably was that the applicant agreed to install Level 3 charging stations, which he described as a more expensive, faster-charging option. Drawing on his professional experience as an architect, he explained that commercial properties such as Rosedale often have opportunities to partner with charging providers to generate revenue for property owners. He noted that

the Rosedale ownership group had not effectively pursued those opportunities and had generally failed to follow the ordinance requirements initially.

Chair Bjorum commented that the costs associated with the Rosedale project were not unreasonable, given what he regularly encounters in his professional work, and stated that the project costs would not have been alarming from his perspective. He contrasted that situation with the Hempel variance case, which he acknowledged involved substantially higher impacts given the nature of that business. He stated that he believed the variance process was appropriately used in that case.

Chair Bjorum stated that he was not opposed to the commission reviewing the ordinance if members wished to do so. Still, he wanted to provide additional context regarding how the requirements compare with industry practices. He explained that from a residential and multifamily development standpoint, the city's ordinance requirements are not out of line with current standards. He noted that many affordable housing projects financed through Minnesota Housing programs are subject to even stricter electrification requirements than those currently imposed by the city. He stated that some developments now require electrifying entire parking garages and installing multiple Level 2 charging stations, while bypassing Level 1 charging entirely.

Chair Bjorum concluded by suggesting that, if the commission proceeds to review the ordinance, the discussion should focus primarily on commercial applications rather than residential requirements, stating that he did not believe the residential portion of the ordinance required reconsideration.

Member Cyra agreed with Chair Bjorum's comments regarding the residential requirements. He stated that he had no concerns about the residential portion of the electric vehicle charging ordinance and believed the review should focus solely on the nonresidential requirements.

Member Campbell Jensen stated that, coming into the discussion without the previously provided historical context, her initial reaction was that the commission had now encountered two examples suggesting that the current ordinance requirements may not be appropriately calibrated for certain projects. Referring to the Hempel case, she stated that she was struck by the scale of the requirement, noting that the ordinance would have required approximately 75 parking spaces associated with electric-vehicle charging infrastructure. In contrast, the applicant initially proposed only a minimal number of charging spaces before later offering 8 charging stations.

Member Campbell Jensen stated that the significant gap between the ordinance requirements and the applicant's proposal suggested that either the ordinance or the applicant's expectations were misaligned. She added that the additional example involving Dick's Sporting Goods at Rosedale Center further reinforced her concerns.

Member Campbell Jensen emphasized her support for electric vehicles and efforts to encourage broader adoption. However, she stated that she was uncertain whether the current mandate structure was the appropriate mechanism for achieving those goals. She

indicated that she would support further discussion and review of the ordinance, particularly regarding commercial applications.

Member Lindsay stated that she was approaching the discussion with a fresh perspective, noting that it was only her second meeting as a member of the Roseville Planning Commission. She thanked Member Cyra for bringing the issue to the floor for discussion. She stated that she was proud that Roseville had been among the first cities to adopt this type of electric-vehicle charging ordinance.

Member Lindsay commented that when ordinances are newly implemented, it is appropriate to revisit them after practical experience and variance requests reveal how the regulations function in real-world situations. She agreed that there must be a balance between the city's environmental objectives and its economic development goals, while ensuring that the ordinance supports both priorities effectively.

Member Lindsay stated that she supported further review of the ordinance. She also expressed appreciation that Member Cyra's written materials identified potential alternative approaches and opportunities for continued expansion of electric vehicle infrastructure within Roseville properties, even if modifications to the ordinance were eventually considered. She thanked Member Cyra again for raising the topic for discussion by the commission.

Member Schaefer asked about the history of electric vehicle charging infrastructure on city-owned and municipal properties and whether the topic had previously been discussed or explored by the city.

Ms. Gundlach responded that the city has examined the installation of charging infrastructure on municipal properties. She explained that the city has considered adding chargers at park locations. Still, based on experiences in other communities, some are concerned that park charging stations might not see significant use. She noted, however, that the city is actively looking at installing chargers at facilities such as Roseville City Hall.

Ms. Gundlach stated that cost considerations also influence installation decisions. She noted that within the Community Development Department, two of the department's four vehicles are fully electric and are currently charged on site at City Hall. She stated that the city remains committed to expanding electric vehicle charging infrastructure on municipal property when feasible and in alignment with the city council's broader sustainability goals.

Ms. Gundlach added that municipal charging infrastructure does not necessarily need to be addressed separately in the ordinance, as the city can implement those improvements directly on its own properties as opportunities arise.

Chair Bjorum stated that, based on the discussion and comments provided by commission members, there appeared to be general interest in continuing the discussion regarding the electric vehicle charging ordinance. He stated that he would entertain a motion to move

the commissioner-initiated item forward for further review by the Roseville Planning Commission.

Chair Bjorum directed his comments to Member Cyra and referenced the draft motion included within his meeting materials. He stated that if Member Cyra wished to make the motion based on the language he had prepared, he could do so, although another commission member could also make the motion if desired.

Member Cyra stated that the language contained within his draft motion generally reflected the direction he wished to propose. He suggested that holding approximately two meetings before the item returns to the Roseville Planning Commission would likely give staff sufficient time to gather information and feedback.

Member Cyra explained that he would like city staff to provide additional information regarding the implementation of the current ordinance, including feedback and concerns received from developers. He also requested information comparing Roseville's electric vehicle charging requirements with those of neighboring municipalities.

MOTION

Member Cyra, seconded by Member Aspnes, to continue the Planning Commission's discussion regarding potential amendments to Roseville's electric vehicle charging requirements for new parking areas and to direct Planning Development staff to report back within two months regarding implementation of the current code, concerns raised by developers, and comparison between Roseville's requirements and those of neighboring communities.

Chair Bjorum asked if the motion required a time frame.

Ms. Gundlach noted that the commissioner-initiated item policy requires the Roseville Planning Commission to provide staff with a general timeline for returning with information. She stated that the July Planning Commission meeting appeared to be a reasonable timeframe for staff to prepare background information and research responsive to Member Cyra's request.

Ms. Gundlach explained that staff intended to gather information regarding regional comparisons with neighboring cities, developer feedback, and implementation experiences related to the current ordinance. She added that staff might also be able to address additional topics identified within Member Cyra's memorandum.

Ms. Gundlach stated that staff would provide as much information as possible by the July meeting to support a meaningful discussion by the commission. She also emphasized that there was no deadline for the commission to reach final decisions on potential ordinance amendments, and that the July discussion would serve as a starting point for continued evaluation.

Ayes: 7

Nays: 0

323 **Motion carried.**

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325 **10. Adjourn**

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327 **MOTION**

328 **Member Schaefer, seconded by Member Cyra, to adjourn the meeting at 7:02**
329 **p.m.**

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331 **Ayes: 7**

332 **Nays: 0**

333 **Motion carried.**

REQUEST FOR COMMISSION ACTION

Date: **7/1/2026**

Item No.: **9.a.**

Department Approval

Agenda Section

Janice Gundlach

Commission Direction on Member
Initiated Agenda Items

Item Description: Evaluate Roseville's EVCS and EVSE (electric vehicle charging) requirements for new parking areas - Commissioner Cyra

Application Information

This is a city-initiated request.

Background

The City of Roseville adopted an EVSE charging requirement ordinance on March 20th, 2023 as part of the phase 2 zoning code update. This project was aided by consulting services with HKGi.

Since adoption, two developments have been subject to the requirements, and both developers sought and received variances to reduce the number of chargers required.

Commissioner Cyra brought this item forward for discussion during the May 6, 2026 Planning Commission meeting, with a majority of commissioners voting to evaluate the ordinance to determine if changes were necessary. Staff has conducted initial research on other regional EVSE ordinances to help aid commissioners in determining whether Roseville should consider changes to the existing ordinance, including adding amended requirements for commercial developments that do not cater to the general public (private commercial, or employment-driven developments).

As a reminder, Roseville's existing ordinance requires EV chargers to be installed for any new parking lot, or parking lot expansions of 25% or more, with 30 or more spaces. It was modeled after the City of St. Louis Park's and City of Minneapolis' ordinances.

The State of Minnesota passed a new commercial building code in the 2023 state legislative session. A Technical Advisory Group submitted recommended code changes to add language specifying definitions and requirements for Electric Vehicle Charging. This new submission distinguishes required numbers of EV parking spaces based on the total number of spaces in the facility, and determines requirements for EVSE-Installed spaces, EV-Ready spaces, and EV-capable spaces for parking facilities. (Attachment 2). The proposed changes do not recommend different requirements for residential or commercial developments.

No other cities with EV charging ordinances were found to make accommodations or specific requirements for private commercial developments. Only Minneapolis and St. Louis Park include specific requirements for EV charging within their city code, and staff from those cities plan to align with the state's requirements when they go into effect.

MN Department of Transportation released an Electric Vehicle Infrastructure Needs Assessment in 2025 (executive summary provided as Attachment 3), which reviews EV usage trends throughout the state and projects future needs to support EV adoption statewide. The report does provide technical guidelines for different types of charging stations (long-distance, destination, amenity), but does not specifically recommend numbers of charging stations per location.

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Staff will provide a presentation (Attachment 1) at the meeting that discusses overall EV use in Roseville, background information, and a summary of the research conducted thus far.

Staff Recommendation

Review the information and provide direction to staff.

Requested Planning Commission Action

Review the information and provide direction to staff.

Alternative Actions

n/a

Prepared by: Noelle Bakken, Sustainability Specialist

- Attachments:**
- 1. Presentation Slides
 - 2. MN Dept. of Labor & Industry TAG Memo
 - 3. Minnesota Electric Vehicle Infrastructure Needs Assessment-Executive Summary

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Roseville Electric Vehicle Charging Ordinance Discussion

Planning Commission

1 July, 2026

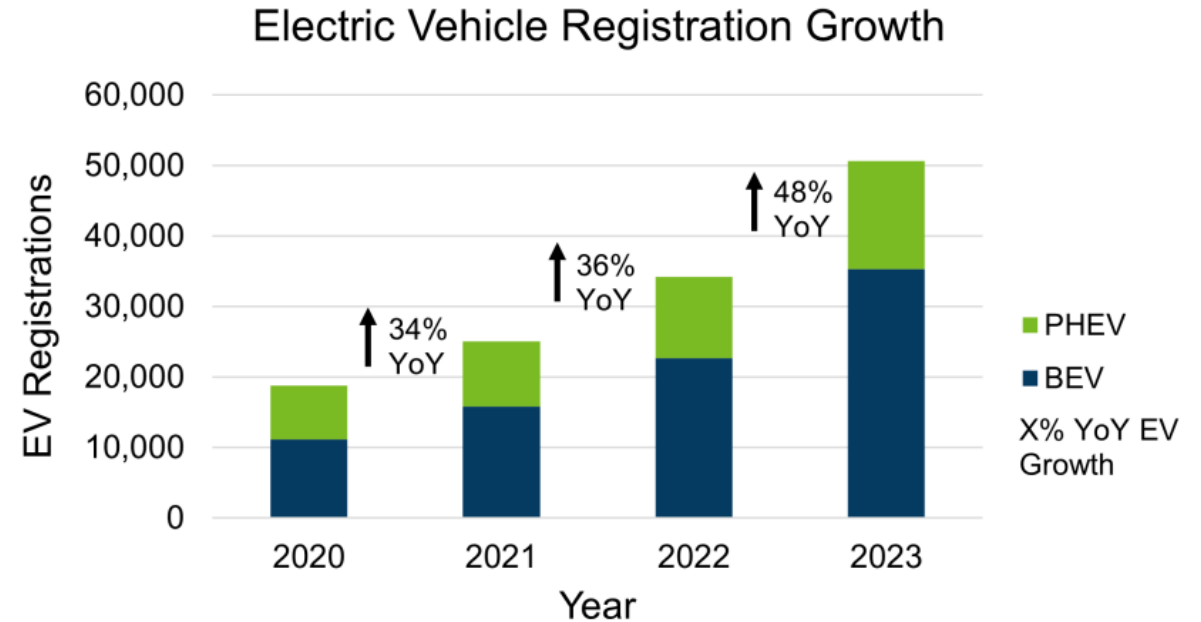


Minnesota and Roseville EV Landscape

ROSEVILLE (as of 2025):

721 registered EVs (+22% from 2024)
45 public EV charging ports

Figure 2: Electric Vehicles in Minnesota (Year-end Data), Atlas Public Policy, December 2020-2023



Minnesota Electric Vehicles registered:

2024: 67,905 (+33%)

2025: 82,062 (+21% - loss of incentives in September)

Drafting the Original Ordinance

Worked with HKGi on zoning code updates

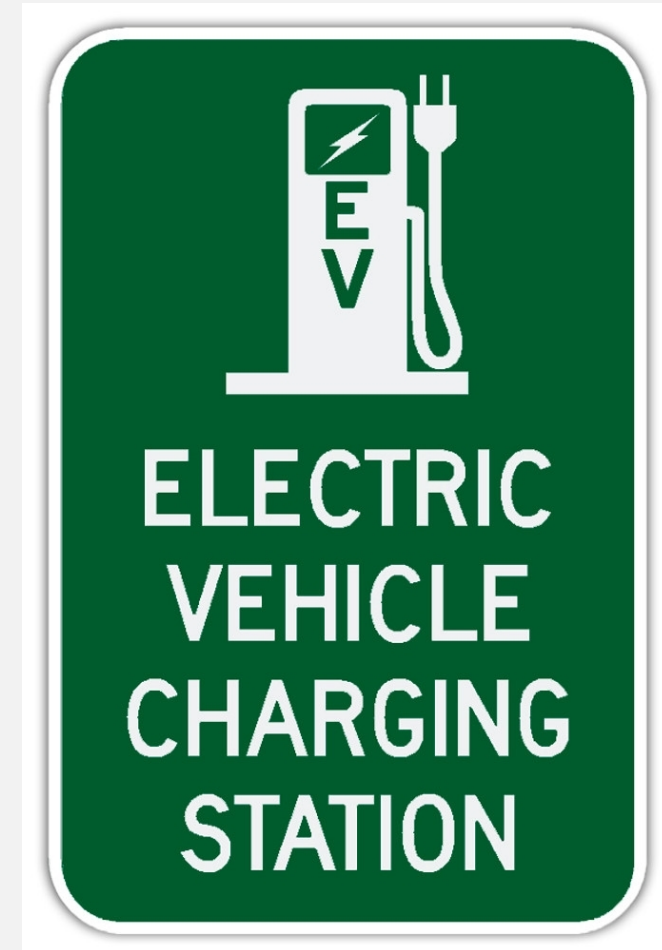
- Phase 1: updates required to comply with the 2040 comprehensive plan
- Phase 2: items the Planning Commission and City Council felt would advance comprehensive plan goals

Incorporating EV standards

- Council and Planning Commission felt that including EV charging requirements would advance our comp plan's sustainability goals

Sample Ordinances

- We reviewed other cities' EVSE ordinances and ultimately modeled ours after [St. Louis Park's ordinance](#)
- We utilized the [EV Ordinance Summary](#) from the Great Plains Institute for guidance and other cities' ordinance language



Current Electric Vehicle Charging Station Requirements

Table 1019-2: Minimum Number of Required Electric Vehicle Charging Stations (EVCS)

Number of spaces	EVCS by required parking spaces and charging levels (Level 1, Level 2, DC) for new parking areas	EVCS by required parking spaces and charging levels (Level 1, Level 2, DC) for expansion or improvement of existing parking areas
29 or fewer	Optional	Optional
30- 49	Multiple-family residential (5 or more units): 5% of required parking spaces, of which at least one shall be accessible, as Level 1 or greater Non-residential land uses Two parking spaces, of which at least one shall be accessible, as Level 2 or greater	For parking areas that are expanded or improved (per Section 1019.03) by more than 25%, EVCS shall be provided at the minimum quantities required for new parking areas, prorated to the number of parking spaces in the area of expansion or improvement.
50+	Multiple-family residential (5 or more units): 10% of required parking spaces, of which at least one shall be accessible, as Level 1 or greater - One guest parking space as Level 2 or greater Non-residential land uses 5% of required parking spaces, of which at least one shall be accessible, as Level 2 or greater	For parking areas that are expanded or improved (per Section 1019.03) by more than 25%, EVCS shall be provided at the minimum quantities required for new parking areas, prorated to the number of parking spaces in the area of expansion or improvement.

Parking Requirements

Optional for lots with 29 or fewer spaces

More spaces required in residential uses (5-10% based on lot size) than in non-residential uses

Required when parking areas are expanded or improved by more than 25%

Charger types

Level 2 charger (or higher) required in non-residential uses

Level 1 charger (or higher) is acceptable for residential parking spaces

Exceptions/Reductions

When cost of meeting the EV charging requirements exceeds 5% of the total project cost

- Can request a reduction of requirements, determined by Community Development Department

Chargers are allowed in all land uses

Chargers in residential uses designated private restricted use only

MN State Building Code Update

Table 406.2.7.4

EVSE-Installed, EV-Ready and EV-Capable Space Requirements

Total Number of Parking Spaces (including charging spaces)	EVSE-Installed	EV-Ready	EV-Capable
5-25	0	0	2 ^a
26-50	2	<u>1</u>	<u>6</u>
51-75	3	2	11
76-100	4	3	15
101-150	6	5	23
151-200	8	6	30
201-300	12	9	45
301-400	15	11	62
401-500	20	15	75
501+	20 + 2% of the total number of spaces above 500	15 + 1.5% of the total number of spaces above 500	75 + 7% of the total number of spaces above 500

2704.1.1 EV-Capable Spaces. Each EV-Capable Space used to meet the requirements of Section 406.2.7.4 shall comply with the following:

1. A raceway or cable assembly shall be installed between a junction box or outlet located within 3 feet (914mm) of the EV-Capable Space and electrical distribution equipment where the route of the raceway or cable assembly is located underground, or within a wall assembly or ceiling assembly.
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with Section 2704.4
3. The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated space for an overcurrent protection device and electrical capacity to supply a calculated load in accordance with Section 2704.4.
4. The junction box or outlet and the electrical distribution equipment directory shall be marked "For electric vehicle supply equipment (EVSE)."

2704.1.2 EV-Ready Spaces. Each branch circuit, or other means permitted by the Minnesota Electrical Code, serving EV-Ready Spaces used to meet the requirements of Section 406.2.7.4 shall comply with the following:

1. Terminate at an outlet or junction box located within 3 feet (914 mm) of each EV-Ready Space it serves.
2. Have a minimum system and circuit capacity in accordance with 2704.4.
3. The electrical distribution equipment directory shall designate the branch circuit as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure shall be marked "For electric vehicle supply equipment (EVSE)."

MN State Building Code Update and Roseville Compared

Number of spaces	MN STATE BUILDING CODE			Roseville - required for 30 or more spaces	
	EVSE Installed	EV Ready	EV Capable	Residential (5% <30 spaces, 10% >30 spaces)	Commercial (5%)
5-25	0	0	2	Optional	Optional
26-50	2	1	6	2-3	2
51-75	3	2	11	5-7	2-4
76-100	4	3	15	7-10	3-5
101-150	6	5	23	10-15	5-7
151-200	8	6	30	15-20	7-10
201-300	12	9	45	20-30	10-15
301-400	15	11	62	30-40	15-20
401-500	20	15	75	40-50	20-25
501+	20 + 2% of the total number of spaces above 500	15 + 1.5% of the total number of spaces above 500	75 + 7% of the total number of spaces above 500	50+	25+

Private Commercial - Requirement Reduction

	MN STATE BUILDING CODE			Roseville - required for 30 or more spaces		
Number of spaces	EVSE Installed	EV Ready	EV Capable	Residential (5% <30 spaces, 10% >30 spaces)	Commercial (5%)	Private Commercial (3%)
5-25	0	0	2	Optional	Optional	Optional
26-50	2	1	6	2-3	2	1-2
51-75	3	2	11	5-7	2-4	1-2
76-100	4	3	15	7-10	3-5	2-3
101-150	6	5	23	10-15	5-7	3-5
151-200	8	6	30	15-20	7-10	5-6
201-300	12	9	45	20-30	10-15	6-9
301-400	15	11	62	30-40	15-20	9-12
401-500	20	15	75	40-50	20-25	12-15
501+	20 + 2% of the total number of spaces above 500	15 + 1.5% of the total number of spaces above 500	75 + 7% of the total number of spaces above 500	50+	25+	15+

Comparison to other cities

	MN STATE BUILDING CODE			Roseville - required for 30 or more spaces			Minneapolis - required for 10 or more spaces		Edina - Sustainable Building Policy		St. Louis Park - required for 15 or more spaces	
Number of spaces	EVSE Installed	EV Ready	EV Capable	Residential (5% <30 spaces, 10%)	Commercial (5%)	Private Commercial (3%)	EVSE Installed (5%)	EV Ready (10%)	EVSE Installed (5%)	EV Ready (10%)	Residential - 10%	Commercial (5%)
5-25	0	0	2	Optional	Optional	Optional	5%	10%	5%	10%	10%	2
26-50	2	1	6	2-3	2	1-2	2	2-3	2	2-3	2-3	2
51-75	3	2	11	5-7	2-4	1-2	2-4	5-7	2-4	5-7	5-7	2-4
76-100	4	3	15	7-10	3-5	2-3	3-5	7-10	3-5	7-10	7-10	3-5
101-150	6	5	23	10-15	5-7	3-5	5-7	10-15	5-7	10-15	10-15	5-7
151-200	8	6	30	15-20	7-10	5-6	7-10	15-20	7-10	15-20	15-20	7-10
201-300	12	9	45	20-30	10-15	6-9	10-15	20-30	10-15	20-30	20-30	10-15
301-400	15	11	62	30-40	15-20	9-12	15-20	30-40	15-20	30-40	30-40	15-20
401-500	20	15	75	40-50	20-25	12-15	20-25	40-50	20-25	40-50	40-50	20-25
501+	20 + 2% of the total number of spaces above 500	15 + 1.5% of the total number of spaces above 500	75 + 7% of the total number of spaces above 500	50+	25+	15+	25+	50+	25+	50+		

Summary

Compared to other requirements

- Roseville currently has the highest threshold of parking spaces where the ordinance is triggered
- No other cities include a separate provision for private commercial development
- Roseville's ordinance will need to be revised or rescinded when the state building code revision goes into effect

Roseville Climate Equity Action Plan Data and Goals

- 47.8% of emissions come from transportation in Roseville
- Plan goals:
 - Reduce transportation Greenhouse Gas emissions by 57% by 2036
 - Increase registered electric vehicles from 1.6% to 15% citywide

Potential Next Steps

- Advise staff if additional information and/or research is needed.
- Advise staff to draft an ordinance amendment reducing the requirements for private commercial uses from 5% to 3%.
- Advise staff whether additional amendments should be considered based on the upcoming state building code, OR to wait until the new code is enacted and opt to revise or repeal the ordinance at that time.



Q

&

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Questions?



CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Date: 5/30/2024

Email address: greg.metz@state.mn.us

Model Code: IBC 2018

Telephone number: 651-284-5884

Code or Rule Section:

Firm/Association affiliation, if any: DLI/CCLD

IBC 406.2.7 Electric Vehicle Charging & IBC 2704

Code or rule section to be changed: MR 1305

General Information

Yes No

- | | | |
|--|-------------------------------------|-------------------------------------|
| A. Is the proposed change unique to the State of Minnesota? | ☒ | ☐ |
| B. Is the proposed change required due to climatic conditions of Minnesota? | ☐ | ☒ |
| C. Will the proposed change encourage more uniform enforcement? | ☒ | ☐ |
| D. Will the proposed change remedy a problem? | ☒ | ☐ |
| E. Does the proposal delete a current Minnesota Rule, chapter amendment? | ☐ | ☒ |
| F. Would this proposed change be appropriate through the ICC code development process? | ☐ | ☒ |

Proposed Language

1. The proposed code change is meant to:

☒ change language contained the model code book? If so, list section(s).
MBC 406.2.7 Electric Vehicle Charging.

☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

☐ delete language contained in the model code book? If so, list section(s).

☐ delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

☒ add new language that is not found in the model code book or in Minnesota Rule.

MBC 202 Definitions

MBC 2704 Electric Vehicle Charging

2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.

No

3. Provide *specific* language you would like to see changed. Indicate proposed new words with underlining and ~~strikeout~~ words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

202 Definitions Add the following:

DIRECT CURRENT FAST CHARGING (DCFC) ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE): “Direct current fast charging (DCFC) electric vehicle supply equipment (EVSE)” means equipment capable of fast charging on a 100 amp or higher 480V AC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

ELECTRIC VEHICLE (EV): A passenger motor vehicle for on-road use that is powered by an electric motor drawing current from a building electrical service, EVSE, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. EV includes battery electric vehicles and plug-in hybrid electric vehicles but does not include electric bicycles.

ELECTRIC VEHICLE (EV) CAPABLE SPACE: “Electric Vehicle (EV) capable space” means a designated automobile parking space for which there is sufficient electrical capacity available and installed on premises to supply EVSE that provides at a minimum Level 2 charging. An EV-Capable space has electrical infrastructure, including but not limited to portions of raceways, cables, and conduits, and panelboard or other electrical distribution space necessary for the future installation of a Level 2 electric vehicle charging station.

ELECTRIC VEHICLE (EV) CHARGING STATION. “Electric vehicle (EV) charging station” means a designated automobile parking space that has a dedicated connection for charging an electric vehicle using Electric Vehicle Supply Equipment (EVSE).

ELECTRIC VEHICLE (EV) READY SPACE: “Electric Vehicle (EV) ready space” means a designated automobile parking space that has sufficient electrical capacity installed in the space by means of a branch circuit or other means permitted by the Minnesota Electrical Code and capable of supporting the installation of an electric vehicle charging station providing at a minimum Level 2 charging.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE): Electrical circuitry and equipment dedicated to EV charging including conductors, connectors, attachment accoutrements, personnel protection, power outlets, apparatus and equipment installed for connecting an electric vehicle to premise wiring for the purposes of charging, power export, or bidirectional current flow.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) INSTALLED SPACE: “Electric vehicle supply equipment (EVSE) installed space” means a parking space provided with EVSE equipment that at a minimum provides Level 2 charging. For purposes of this chapter “EVSE-installed space” has the same meaning as “electric vehicle charging station.”

LEVEL 2 CHARGING EQUIPMENT. “Level 2 charging equipment” means EVSE charging equipment supplied by not less than 30 amps at 208/240 volts single-phase.

PARKING FACILITIES. “Parking facilities” means parking lots, garages, ramps, or decks within or adjacent to buildings that are used for parking passenger motor vehicles.

PASSENGER MOTOR VEHICLE. “Passenger motor vehicle” means any motor vehicle that is not a commercial motor vehicle.

406.2.7 Electric vehicle charging stations and systems. Electric vehicle charging facilities shall be installed in accordance with this section.

406.2.7.1 Scoping. In each location where parking facilities are provided, the number of parking spaces equipped as EVSE-Installed Space, EV-Ready Space, and EV-Capable Space shall be provided in accordance with this section. Where more than one parking facility is

provided on a site, EVSE-Installed, EV-Ready, and EV-Capable spaces shall be calculated using the aggregate number of parking stalls provided. Fractions shall be rounded up to the next higher whole number. EVSE-Installed, EV-Ready, and EV-Capable Spaces are permitted to be allocated across the gross parking area provided the allocation complies with the accessibility requirements of section 406.2.7.5.

Exception: Exclusively residential structures with four or fewer dwelling units shall only be required to provide a conduit from the electrical panel to one parking space.

406.2.7.2 Installed Spaces Exceeding Minimums. EVSE-Installed Spaces that exceed the minimum number of required EVSE-Installed Spaces may be used to satisfy requirements of EV-Ready and EV-Capable Spaces. Installed EV-Capable Spaces that exceed the minimum number of required EV-Capable Spaces may be used to satisfy requirements of EV-Ready Spaces.

406.2.7.3 Identification. EVSE-Installed Spaces shall be identified by permanent signage reading “Electric Vehicle Charging.” A permanent and visible label shall be posted in a conspicuous place at the service panel to identify each panel space reserved for future EVSE as required for EV-Capable and EV-Ready Spaces. Raceway termination points for EV-Capable and EV-Ready Spaces shall be labeled as reserved for EVSE Equipment.

406.2.7.4 Number of Dedicated Parking Spaces. EVSE-Installed Spaces, EV-Ready Spaces and EV-Capable Spaces shall be provided in quantities in accordance with Table 406.2.7.4. Where the calculation of percent served results in a fractional parking space, it shall round up to the next whole number.

Exception: Where EVSE-Installed, EV-Ready, and EV-Capable spaces are provided in accordance with section 2704.2.

Table 406.2.7.4 EVSE-Installed, EV-Ready and EV-Capable Space Requirements			
Total Number of Parking Spaces (including charging spaces)	EVSE-Installed	EV-Ready	EV-Capable
5-25	0	0	2 ^a
26-50	2	<u>1</u>	<u>6</u>
51-75	3	2	11
76-100	4	3	15
101-150	6	5	23
151-200	8	6	30
201-300	12	9	45
301-400	15	11	62
401-500	20	15	75
501+	20 + 2% of the total number of spaces above 500	15 + 1.5% of the total number of spaces above 500	75 + 7% of the total number of spaces above 500

- a. A minimum of one EV-Capable Space shall comply with the accessibility requirements of sections 406.2.7.5 and is permitted to be adjacent to an accessible parking space.

406.2.7.4.1 EV-Capable Spaces. Each EV-Capable Space used to meet the requirements of Section 406.2.7.4 shall comply with Section 2704.1.1.

406.2.7.4.2 EV-Ready Spaces. Each branch circuit, or other means permitted by the Minnesota Electrical Code, serving EV-Ready Spaces used to meet the requirements of Section 406.2.7.4 shall comply with Section 2704.1.2.

406.2.7.4.3 EVSE-Installed Spaces. An installed EVSE with multiple charging plug connections is permitted to serve the same number of EVSE-Installed spaces as charging plug connections. Each EVSE installed to meet the requirements of Section 406.2.7.4, serving either a single EVSE-Installed Space or multiple EVSE-Installed Spaces, shall comply with section 2704.1.3.

406.2.7.5 Accessibility. Where parking is provided, accessible EVSE-Installed Spaces and accessible EV-Capable Spaces shall be provided in compliance with the Minnesota Accessibility Code Scoping Section 1107 and Technical Section A117.1 502.11.

ADD:

2704 Electric vehicle charging stations and systems.

2704.1 General. Where provided, electric vehicle charging systems shall be installed in accordance with NFPA 70. Electric vehicle charging system equipment shall be *listed* and *labeled* in accordance with UL 2202. Electric vehicle supply equipment shall be *listed* and *labeled* in accordance with UL 2594. Installations shall be in accordance with this section.

2704.1.1 EV-Capable Spaces. Each EV-Capable Space used to meet the requirements of Section 406.2.7.4 shall comply with the following:

1. A raceway or cable assembly shall be installed between a junction box or outlet located within 3 feet (914mm) of the EV-Capable Space and electrical distribution equipment where the route of the raceway or cable assembly is located underground, or within a wall assembly or ceiling assembly.
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with Section 2704.4
3. The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated space for an overcurrent protection device and electrical capacity to supply a calculated load in accordance with Section 2704.4.
4. The junction box or outlet and the electrical distribution equipment directory shall be marked "For electric vehicle supply equipment (EVSE)."

2704.1.2 EV-Ready Spaces. Each branch circuit, or other means permitted by the Minnesota Electrical Code, serving EV-Ready Spaces used to meet the requirements of Section 406.2.7.4 shall comply with the following:

1. Terminate at an outlet or junction box located within 3 feet (914 mm) of each EV-Ready Space it serves.
2. Have a minimum system and circuit capacity in accordance with 2704.4.
3. The electrical distribution equipment directory shall designate the branch circuit as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure shall be marked "For electric vehicle supply equipment (EVSE)."

2704.1.3 EVSE-Installed Spaces. An installed EVSE with multiple charging plug connections is permitted to serve the same number of EVSE-Installed spaces as charging plug connections. Each EVSE

installed to meet the requirements of Section 406.2.7.4, serving either a single EVSE-Installed Space or multiple EVSE-Installed Spaces, shall comply with the following:

1. Have minimum system and circuit capacity in accordance with Section 2704.4.
2. Have a nameplate rating not less than 7.2 kVA.
3. Be located within 3 feet (914 mm) of each EVSE-Installed Space it serves.
4. Be installed in accordance with the equipment manufacturers recommended instructions.

2704.2 Alternative Compliance Power Allocation Method. The alternative power allocation method shall be permitted as an alternative to the requirements of section 2704.1. The total power in kVA shall be determined based on the number of parking spaces in accordance with Table 2704.2. EV charging provided using the alternative power allocation method shall include the following:

1. Any kVA combination of EV-Capable Spaces, EV-Ready Spaces, Level 2 charging equipment, or Direct Current Fast Charging (DCFC) equipment;
2. The total kVA utilized for EVSE-Installed Level 2 or DCFC spaces shall meet or exceed the minimum required by Table 2704.2; and
3. At least one space but not fewer than 25 percent of the total available parking spaces shall be provided with Level 2 charging.

Table 2704.2 Alternative Compliance Power Allocation		
Total number of parking spaces	Total Minimum kVA required in any combination of EVSE-Installed Level 2^a, or DCFC, EV-Ready, or EV-Capable at 7.2 kVA	Minimum required kVA for EVSE-Installed Level 2 or DCFC Spaces^b
5-25	14.4	0
26-50	93.6	23.4
51-75	115.2	28.8
76-100	158.4	39.6
101-150	244.8	61.2
151-200	316.8	79.2
201-300	475.2	118.8
301-400	633.6	158.4
401-500	792	198
501+	10.5% of the total number of spaces above 500 x 7.2 + 792	2% of the total number of spaces above 500 x 7.2 + 198

a. Level 2 EVSE has minimum nameplate rating of 7.2 kVA.

2704.3 Electric power supply. The building electrical service shall supply electricity to EV-Capable, EV-Ready, and EVSE-Installed Spaces located in parking ramps, parking garages, or other parking facility constructed in accordance with Minnesota Rules, chapter 1305. The electricity is permitted to be supplied from a source other than the building electrical service for EV-Capable, EV-Ready, and EVSE-Installed Spaces located in parking lots.

2704.4 System and circuit capacity. The system and circuit capacity shall comply with this section.

2704.4.1 Circuits for electric vehicle charging. The service panel shall provide sufficient capacity and space to accommodate the circuit and over-current protective device for each EVSE-Installed, EV-Ready and EV-Capable Space. Circuits for EVSE-Installed, EV-Ready and EV-Capable Spaces shall have no other outlets. Termination points for EV-Ready and EV-Capable Spaces shall be located where proposed future equipment for such purposes is intended to be installed.

2704.4.2 System Capacity. The electrical distribution equipment supplying the branch circuits serving each EV-Capable Space, EV-Ready Space, and EVSE-Installed Space shall have a calculated load of 7.2 kVA or the nameplate rating of the equipment whichever is larger, for each EV-Capable Space, EV-Ready Space, and EVSE-Installed Space.

2704.4.3 Circuit Capacity. The branch circuit serving each EV-Capable Space, EV-Ready Space, and EVSE-Installed Space shall have a rated capacity not less than 30 amperes at 208/240-volt capacity or the nameplate rating of the equipment, whichever is larger.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
Yes, changes current Minnesota Rule 1305, Section 408.9.

Need and Reason

1. Why is the proposed code change needed?
There is a legislative mandate to include electric vehicle charging requirements for parking associated with buildings.
2. Why is the proposed code change a reasonable solution?
The proposed makes provisions for installed EV charging ability for anticipated need within the next three years, ready capacity which only requires the final equipment installation to meet anticipated demand in 2030 and electrical capacity to meet projected demand in 2035.
3. What other considerations should the TAG consider?
There has already been a TAG convened to craft this specific proposed language. The change is moving it into the building code rather than incorporating it into the energy code. It is more appropriate that scoping comes from the building code because the focus is not building energy conservation.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
Proposed changes will increase construction costs.
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
The added scope increasing construction costs uses the most conservative projections for electric vehicle utilization over the next ten years.
3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
4. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city? A small business is any business that has

less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

No. Other than positional verification, the verification of electrical provisions will be done exclusively by state employees.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
Architects, Engineers, Construction Contractors, Building Officials and Inspectors, Electrical inspectors, building owners and building tenants.
2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?
None
3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
No
4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

The proposed change is the lowest impact option with the potential to produce desired results.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?
None.
6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
DLI violation of state statute for not incorporating electric vehicle charging requirements into the state building code.
7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.
No
8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

***Note: Incomplete forms may be returned to the submitter with instruction to complete the form. Only completed forms can considered by the TAG.

1 EXECUTIVE SUMMARY

The Minnesota Department of Transportation (MnDOT) initiated the Minnesota Electric Vehicle Infrastructure Needs Assessment (EVINA) to guide comprehensive electric vehicle (EV) charging efforts across the state. EV adoption plays an important role in making progress toward statewide greenhouse gas emissions reduction targets and building a statewide EV charging network. EVINA calculated projected statewide charging needs based on an expected increase in EV adoption and the need to add a variety of charging stations (e.g., DC fast charging [DCFC], Level 2).

1.1 EV ADOPTION AND CHARGING NEEDS FORECAST

An analysis of 2024 EV sales and registrations, as well as future projected sales, revealed Minnesota can expect 717,000 registered EVs on the road by 2030, assuming 60% of all new vehicle sales are EVs. To accommodate this number, Minnesota would need:

- 40,000 Level 2 shared private ports (e.g., at multi-family and workplace; charging powered with alternative current [AC] electricity takes 4 to 10 hours to recharge from 20% to 80% battery)
- 48,000 public Level 2 ports (e.g., at retail, libraries, community centers and other recreation areas) (e.g., charging stations powered with alternative current [AC] electricity; charging takes 4 to 10 hours from 20-80% battery)
- 4,000 public DCFC ports (e.g., at retail and fueling stations, charging powered with direct current [DC]; takes 20 minutes to 1 hour to recharge from 20% to 80% battery)

In this scenario, EVs represent roughly 10% of all vehicle registrations by 2030. This is notably lower than the state performance target of 20% of vehicles on the road to be EVs by 2030. However, the EVINA adoption forecast did not consider potential policy changes (e.g., a Clean Transportation Standard) that could accelerate EV adoption in the state.

1.2 EV CHARGING STATION GUIDELINES

To guide development of future charging stations, EV Charging Stations Guidelines were created for EVINA for three charging station types: Long-Distance Hubs, Destination Charging Hubs and Amenity Charging Hubs. The EV Charging Station Guidelines will support consistent service expectations and provide guidance on:

- Appropriate locations and land use types
- Power level per station type
- Number of charging ports per station type
- Amenities and services per station type

Using the anticipated number of charging stations needed by 2030 and the EV Charging Station Guidelines, a comprehensive analysis was completed to assess statewide infrastructure needs for both long-distance and community charging.



1.3 LONG-DISTANCE INFRASTRUCTURE NEEDS

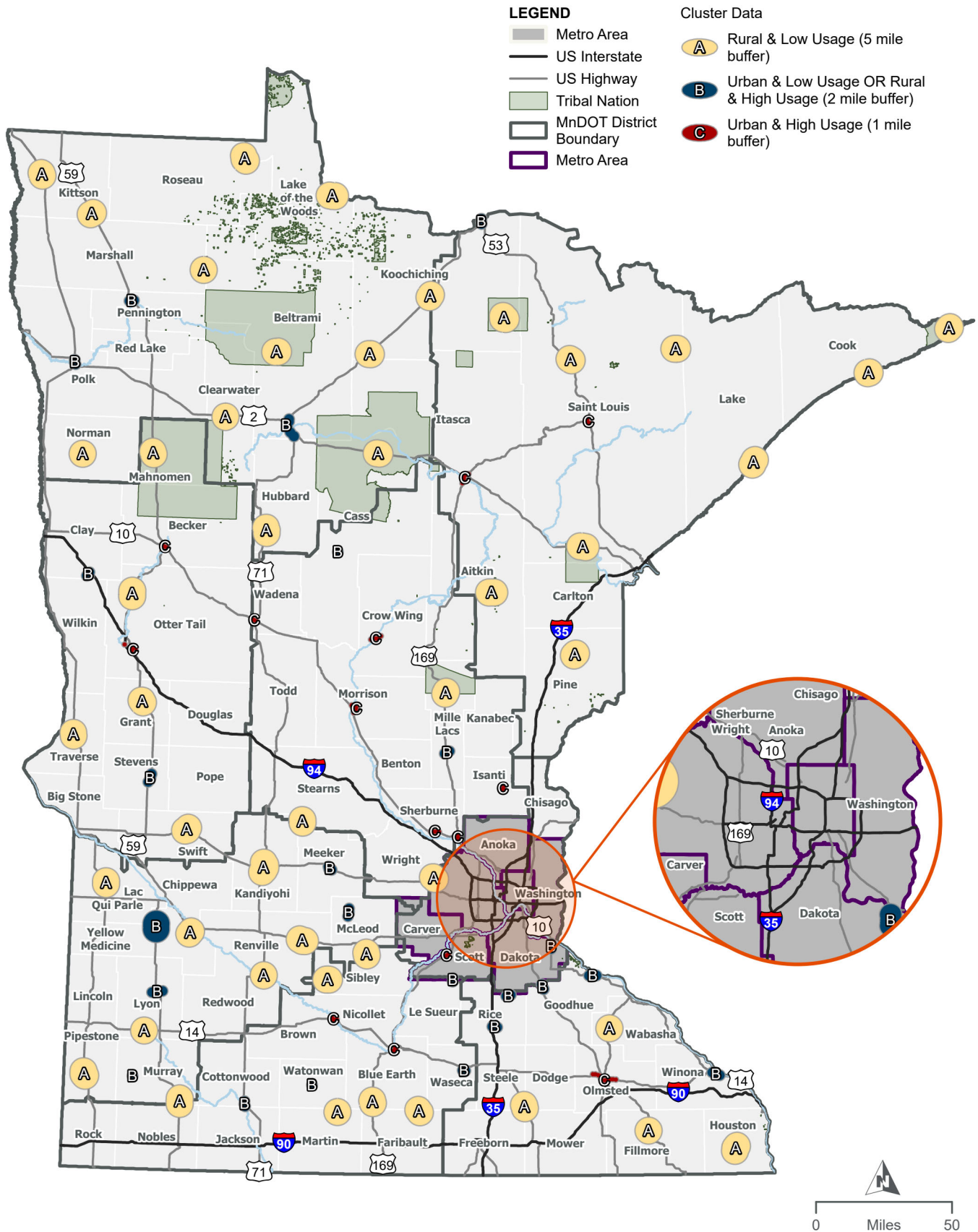
To evaluate the need for long-distance charging, existing charging stations across the state were reviewed and supported the development of the coverage map, shown in **ES Figure 1**. It highlights all areas of Minnesota where EV charging is needed to complete the long-distance charging network according to EV Charging Station Guidelines. Locations along Minnesota interstates and principal arterials identified for long-distance charging stations are referred to as “clusters” in the analysis.

As the next step in the analysis, two scenarios were identified as priorities to consider in EVINA. In these two priority scenarios, End Range Anxiety and Accelerate Adoption, the areas of greatest need according to individual scenario objectives were identified. End Range Anxiety prioritizes rural locations where existing infrastructure is lacking. Accelerate Adoption prioritizes locations with high volumes of long-distance trips.

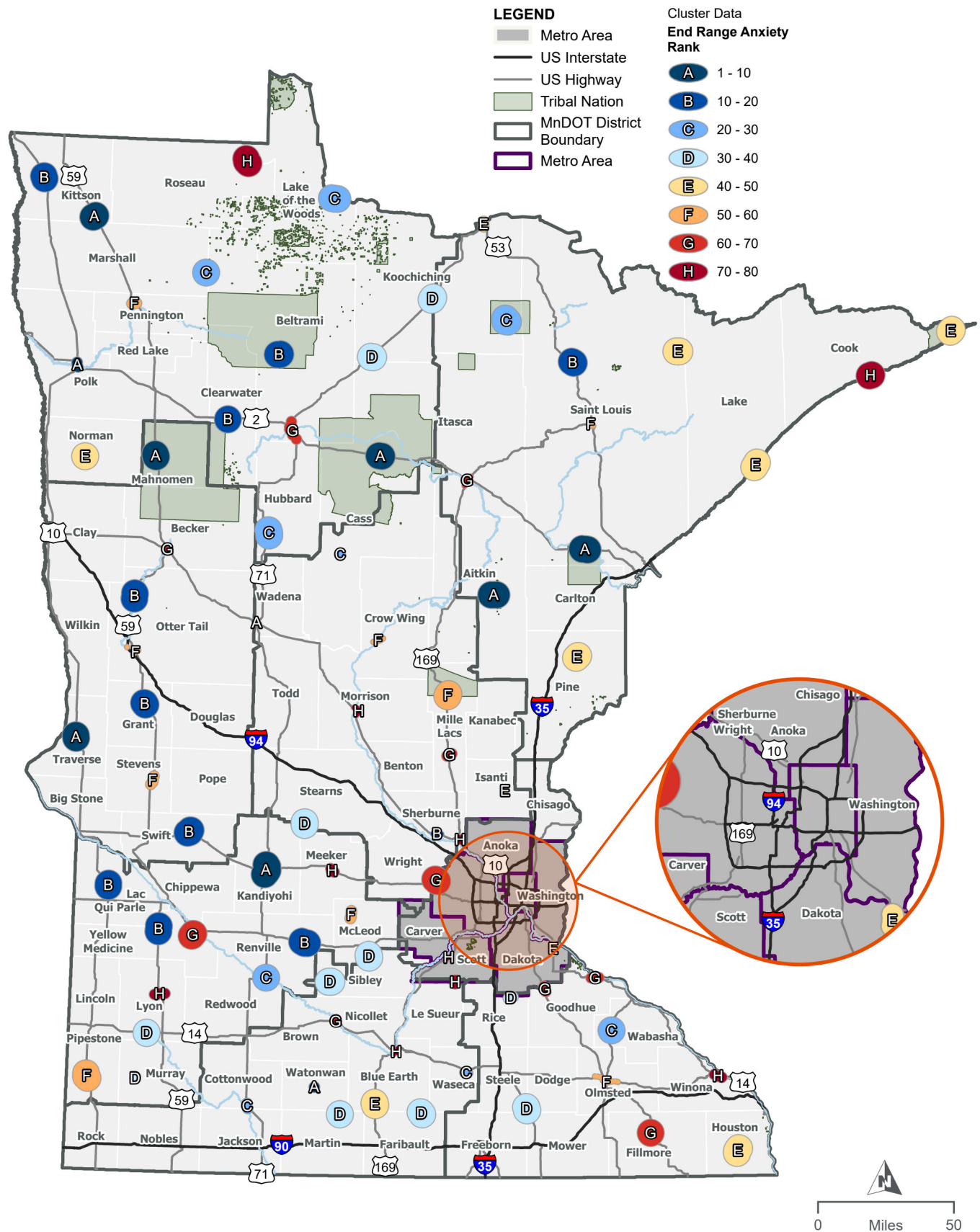
Under the End Range Anxiety scenario, corridors US-2, US-59 and US-71 were revealed as the highest priority corridors. These three corridors had the greatest number of top-ranking clusters. As shown in **ES Figure 2**, clusters located in northern and western Minnesota typically ranked highest in this scenario with low numbers (1, 2, 3) representing a higher rank.

Under the Accelerate Adoption scenario, corridors US-10, US-71, US-169 and US-210 were revealed as the highest priority corridors. These four corridors had the greatest number of top-ranking clusters as shown in **ES Figure 3** with low numbers representing a higher rank.

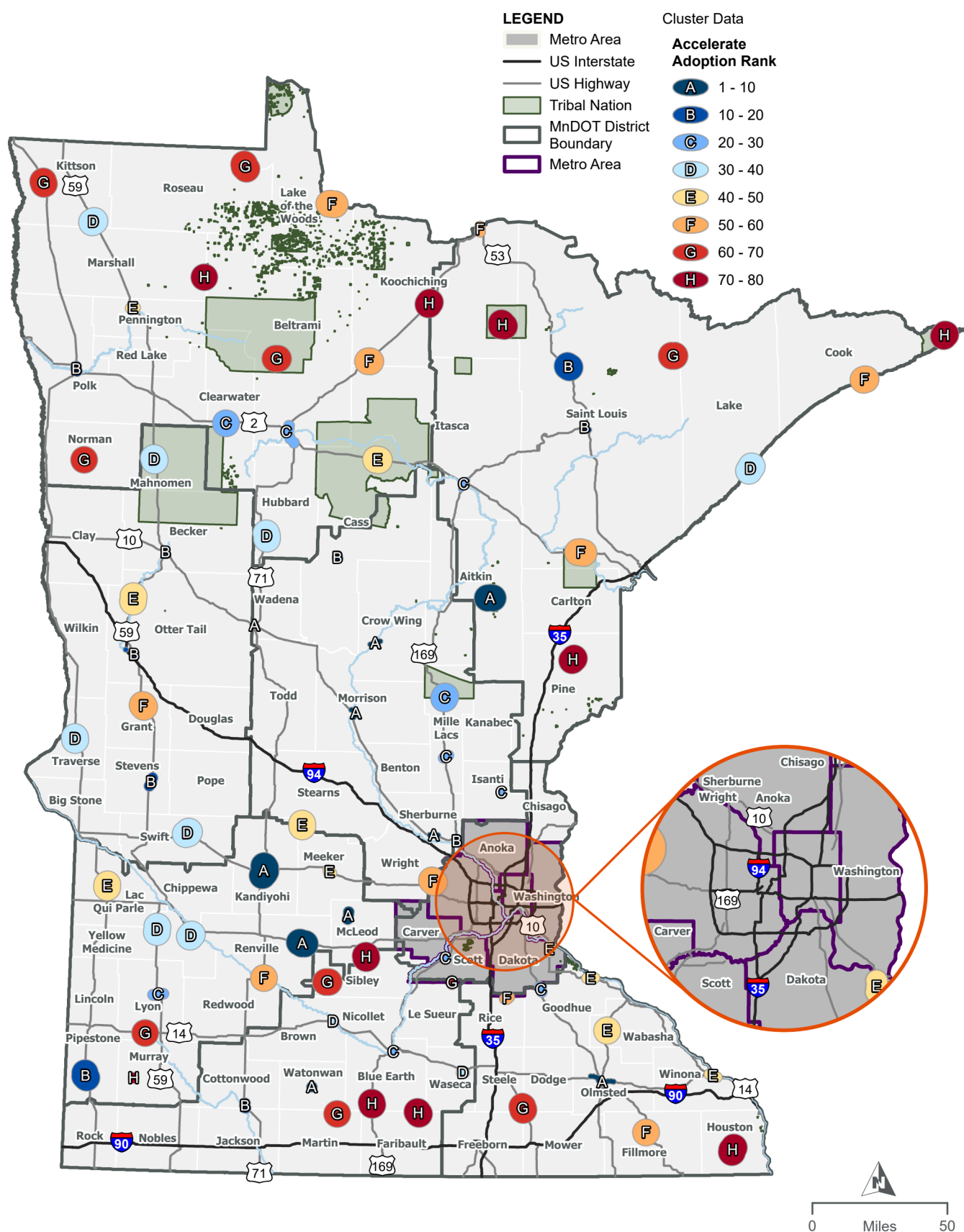
ES Figure 1: Long-Distance Charging Base Coverage Needs



ES Figure 2: End Range Anxiety Long-Distance Charging Prioritization



ES Figure 3: Accelerate Adoption Long-Distance Charging Prioritization



1.4 COMMUNITY CHARGING INFRASTRUCTURE NEEDS

Community charging needs for Minnesota's metropolitan and micropolitan statistical areas (as defined by the US Census Bureau) were projected using EVI-Pro Lite. EVI-Pro Lite uses the projected number of EVs in an area and historical trends in EV charging patterns to calculate how many charging ports will be needed across four categories: single-family, shared private, public Level 2 charging and public DC fast charging.

ES Table 1 details the projected community charging need for Minnesota's metropolitan statistical areas (areas with at least one urban area of 50,000 or more inhabitants), while ES Table 2 details the projected community charging need for Minnesota's micropolitan statistical areas (areas with at least one urban area of at least 10,000 but less than 50,000 population). The highest number of ports will be needed in the Minneapolis-St. Paul-Bloomington metro area, followed by Duluth, Fargo (North Dakota) and Rochester. Most of Minnesota's micropolitan statistical areas require less than 5,000 ports, with the exception of Brainerd and Faribault-Northfield.

ES Table 1: Metropolitan Area Community Charging Port Need

METRO AREA	SINGLE FAMILY	SHARED PRIVATE	PUBLIC L2	PUBLIC DCFC	ALL PORTS
Duluth	23,895	1,958	2,484	189	28,526
Fargo-Moorhead (ND-MN)	23,921	627	914	71	25,533
Grand Forks - East Grand Forks (ND-MN)	7,713	577	785	57	9,132
La Crosse-Onalaska	10,557	634	801	67	12,059
Mankato	7,354	574	744	67	8,739
Minneapolis-St. Paul-Bloomington	264,312	27,283	30,667	1,950	324,212
Rochester	18,050	1,424	1,840	151	21,465
St. Cloud	15,803	1,245	1,651	132	18,831

ES Table 2: Micropolitan Area Community Charging Port Need

MICRO AREA	SINGLE FAMILY	SHARED PRIVATE	PUBLIC L2	PUBLIC DCFC	ALL PORTS
Albert Lea	1,796	148	197	21	2,162
Alexandria	2,618	215	300	32	3,165
Austin	2,378	197	266	30	2,871
Bemidji	2,904	198	296	32	3,430
Brainerd	6,632	509	691	69	7,901
Fairmont	1,009	80	115	18	1,222
Faribault-Northfield	5,067	399	530	56	6,052
Fergus Falls	4,109	273	386	36	4,804
Grand Rapids	2,932	259	334	39	3,564
Hutchinson	2,155	161	220	25	2,561
Marshall	1,304	108	149	24	1,585
New Ulm	1,617	120	160	17	1,914
Owatonna	2,577	212	292	32	3,113



MICRO AREA	SINGLE FAMILY	SHARED PRIVATE	PUBLIC L2	PUBLIC DCFC	ALL PORTS
Red Wing	3,790	299	396	39	4,524
Wahpeton, ND-MN	353	22	34	4	412
Willmar	2,887	235	326	34	3,482
Winona	4,137	327	432	45	4,941
Worthington	955	76	108	17	1,156

1.5 PUBLIC ENGAGEMENT

Throughout the project, MnDOT engaged stakeholders to solicit feedback on diverse project components of EVINA, guided by a Partner and Public Engagement Plan. Engagement opportunities included:

- Monthly meetings with the MnDOT Project Management Team
- Two rounds of focus groups
 - Round 1 - to solicit feedback on the Vision Statement and draft EV Charging Guidelines from state agencies, utilities and Tribal Nations
 - Round 2 - to solicit feedback on the revised EV Charging Guidelines and siting prioritization approach from state agencies, utilities, EVSE vendors and Tribal Nations
- A community survey requesting input on benefits and barriers to driving an EV (June 4 - Aug. 16, 2024)
- Community engagement to solicit feedback on the proposed priority locations for DCFC and Level 2 stations from Minnesota residents
- An interview with HOURCAR, a non-profit carshare organization, to gain insight into the impact of EV infrastructure in their operations
- Online information and community input forum in February 2025 to solicit feedback on the proposed priority locations for DCFC and Level 2 stations from Minnesota residents

Engagement also included outreach with Community-Based Organizations (CBOs). The organizations that partnered with MnDOT to reach out to their communities included:

- Native Sun Community Power Development is a Native-led nonprofit dedicated to advancing energy efficiency, renewable energy and an equitable energy transition
- African Immigrants Community Services (AICS) is a nonprofit organization in Minneapolis that serves refugees and immigrants from the East African community
- Communities Organizing Latine Power and Action (COPAL) is a member-based organization established in 2018 to improve the quality of life of Latine families

Through their agreement with MnDOT, these organizations were able to develop specific outreach plans and feedback opportunities to engage community members in comfortable, familiar ways. The goal of this engagement was to gather input on EV charging infrastructure needs throughout Minnesota and perceived EV benefits and barriers from community members.



1.6 IMPLEMENTATION RECOMMENDATIONS

Multiple partners need to coordinate to achieve full build-out of the statewide charging network by 2030. These partners are expected to include MnDOT, state agencies, utilities, Tribal Nations, metropolitan planning organizations (MPOs), regional development organizations (RDOs), local municipalities (e.g., cities, counties) and private partners.

In addition to the infrastructure recommendations, there are complementary policy, program, collaboration and outreach recommendations identified to advance both EV infrastructure development and EV adoption in Minnesota.

POLICY/PROGRAMS

- Offer rebates on EV and charger purchases
- Create income-based car swap programs to take back older vehicles
- Identify non-federal funding sources for EV charging
- Provide additional grant funding for EV carsharing, especially in low-income neighborhoods
- Implement a Clean Transportation Standard

COLLABORATION

- Offer advisory support to key partners
- Expand coordination with utilities to inform long-term planning
- Develop partnerships with trade schools and colleges to develop a clean transportation workforce
- Coordinate with neighboring states to promote a convenient and user-friendly charging experience between states
- Establish interagency working group to advance collaboration between state agencies

OUTREACH

- Provide educational resources to city planning staff, planning commissions and city councils on zoning and building code updates to support EVs
- Develop marketing campaign to improve consumer understanding of EVs
- Involve Black, Indigenous, and People of Color (BIPOC) and low-income communities in EV plans and policies



1.7 EVINA STRUCTURE

EVINA chapters contain the following information, with additional detail provided in referenced appendices:

- **Chapter 1 Introduction:** Highlights the vision that guided development of the assessment process and recommendations, explains the different facets of EV charging needed to create a comprehensive network.
- **Chapter 2 Existing Conditions:** Key highlights from the existing conditions that set the framework for the assessment.
- **Chapter 3 EV Charging Station Guidelines:** Explains what should be considered when planning for and designing a charging station and the relationship of three types of charging stations to different corridors.
- **Chapter 4 Charging Network:** Outlines two primary types of charging needs to support EV adoption. Two subsections provide long-distance and community charging needs in Minnesota.
- **Chapter 5 Engagement and Feedback:** Key highlights from the stakeholder and public engagement process.
- **Chapter 6 Recommendations:** Infrastructure and non-infrastructure recommendations developed as an outcome of this Assessment.