REQUEST FOR INFORMATION (RFI)

TWIN CITIES EV MOBILITY NETWORK

CITY OF SAINT PAUL, MINNESOTA
15 W KELLOGG BOULEVARD
SAINT PAUL, MINNESOTA 55102

RELEASE DATE: SEPTEMBER 17, 2019
QUESTIONS DUE: 5PM CST, SEPTEMBER 24, 2019
RESPONSE DUE: 2PM CST, OCTOBER 14, 2019

Responses should be submitted by email in one PDF package to:
Samantha Henningson
Climate Advisor, City of Saint Paul
Samantha.henningson@ci.stpaul.mn.us
1 **OVERVIEW**

The City of Saint Paul (the “City”) is seeking partners for the Twin Cities EV Mobility Network, a network of seventy curbside charging hubs (3-4 ports per hub, with up to twenty hubs providing DCFC capabilities as well) placed in the public rights-of-way in Saint Paul and Minneapolis. Each hub will offer public EV charging and feature electric carshare provided by HOURCAR.

The purpose of this Request for Information (RFI) is to solicit submittals from vendors to gather information to help the City determine options for EV charging hardware and software, as well as whether there is interest in the marketplace in owning and/or operating all or part of the network. The City of Saint Paul is issuing this RFI in partnership with the City of Minneapolis and HOURCAR.

1.1 **RFI Schedule**

- **Distribution of RFI:** September 17, 2019
- **Questions from Respondents due:** 5 pm CST, September 24, 2019
- **Answers provided to all Respondents:** September 27, 2019
- **Due Date for Submittals:** 2 pm CST, October 14, 2019
- **Due Date for registering for Saint Paul bids:** 2 pm CST, October 14, 2019
- **Potential Interviews with Respondents:** Week of October 28, 2019

1.2 **Twin Cities EV Mobility Network overview**

Vision: everyone needs to get around. Not everyone can, should, or needs to own a car, and not everyone needs to bring a car into town with them. The Electric Vehicle Mobility Network will give residents, employees, and visitors a convenient, affordable, low-impact choice for getting around.

To its credit, the region has made it possible for people to move around much of its central area by biking, walking, and using transit. On the other hand, the region suffers from the lack of a flexible, one-way carsharing option. The 2017 Shared-Use Mobility Center “**Action Plan for the Twin Cities**”, drawing on interviews with more than 75 regional stakeholders and extensive analysis of regional mobility needs, identifies the absence of one-way carsharing as a major gap in the region’s transportation network.

The lack of widely available car-sharing means all kinds of people need to buy more cars and drive more than they want to, increasing household costs, regional congestion, and pollution, and reducing the attractiveness of the region as a destination for new employers and employees.
More ubiquitous, visible EV charging infrastructure will allow consideration of EV adoption by people who, for any number of reasons, can’t rely solely on transit, carshare, biking and walking. For our substantial renter population who may face difficulty installing chargers in rental properties, EV charging in the right-of-way may also present an opportunity for conversion to EV.

1.3 EVs in Saint Paul and Minneapolis

As of April 2019, there were 10,150 EVs registered statewide. This number is up roughly 6,000 from a year earlier. In 2019, 1,488 of the registered EVs are in Minneapolis, up 460 from a year previous. In Saint Paul, 769 EVs are registered.

The City of Saint Paul’s draft Climate Action and Resilience Plan sets some ambitious goals around reduction of VMT (vehicle miles traveled) and electrification of remaining VMT. Thirty-one percent of Saint Paul’s GHG (greenhouse gas) emissions are from transportation, with 71.5% of those emissions coming from passenger vehicles. People drive about 2 billion miles a year in Saint Paul, or about 5.5 million miles a day. Saint Paul is projected to add an additional 30,000 residents by 2030. If current transportation trends continue, this growth is likely to increase car-usage, congestion, and associated greenhouse gas emissions.

Saint Paul’s commitment to the Twin Cities EV Mobility Network is based on reducing the need for car ownership via the opportunity for carshare, and encouraging and supporting conversion to EVs for those who will own cars. Goals from the draft Climate Action and Resilience Plan:

<table>
<thead>
<tr>
<th>Increase Electric Vehicle Ownership</th>
<th>EV Targets</th>
<th>2030 Targets</th>
<th>2040 Targets</th>
<th>2050 Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentivize the sales of electric vehicles and expand charging infrastructure so that 40% of vehicles on city streets are electric by 2030.</td>
<td>Number of Level 2 chargers deployed</td>
<td>364 Level 2 Chargers</td>
<td>600 Level 2 Chargers</td>
<td>As needed</td>
</tr>
<tr>
<td>% of on-road vehicles that are EVs</td>
<td>33%</td>
<td>80%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Number of mobility hubs</td>
<td>75</td>
<td>100</td>
<td>300</td>
<td></td>
</tr>
</tbody>
</table>

2 Project Purpose and Description

The Twin City EV Mobility Network will be a one-way car-sharing and EV public charging network in Minneapolis and Saint Paul. The network will cover a 35 square-mile service area with a 0.6-mile infrastructure grid. The goal is that at any point within this walkshed, people will be within ~0.3 miles (~5-minute walk) of a hub with electric vehicles and EV charging. We
envision that many of these hubs will become part of “mobility hubs” so that people charging or driving the electric vehicles can connect with transit, bikeshare, and scooters.

Seventy charging hubs in the public right-of-way will serve as home base for a carshare fleet of 150 battery electric vehicles (BEVs). Each charging hub will have three to four level 2 EVSE ports, two of which will be reserved for carshare BEVs, and two available for use by the public. At up to 20 of the hubs, we are interested in providing DCFC capabilities as well. As noted below, Xcel Energy will be providing the make-ready infrastructure. Ability to support DCFC would be location-by-location.

The EV mobility network is developing a rate structure for both the carshare and the public charging. Goals for this structure will include:

- For the public charging component, integrating if possible, with payment for parking where applicable.
- For the carshare component:
  - The ability to end a carshare trip not at a hub;
  - Incentives to return a carshare vehicle to a charge port when necessary;
  - One or more low-income categories.

If the City considers a model in which a vendor owns and operates the network, the City would need the ability to help determine the charging rate structure. For electricity costs to the charging hubs, including demand charges, potential responders may refer to p.64 (Section No. 5-Sheet No. 52) of this document: [https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Rate%20Cases/Me_Section_5.pdf](https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Rate%20Cases/Me_Section_5.pdf).

The charging hubs will be conveniently accessible, because—whether or not a given charging hub is part of a broader mobility hub that integrates many modes—the service area generally has good infrastructure for walking and biking, and good transit service. The hubs will connect to more than 90% of the region’s transit routes, including all the commuter express routes.

Final hub design and services will depend on a variety of factors, including available funding and available space, and may be informed by what the City learns from RFI responses. The seventy hub locations will be pre-determined by the cities of Saint Paul and Minneapolis, with make-ready construction performed by Xcel Energy.

Below is a conceptual map of the hubs located on a 0.6-mile grid. City staff will do site-specific vetting and community engagement to finalize the hub locations.
3 PROJECT SCOPE/RFI OBJECTIVES

At a minimum, when this project goes into an RFP/procurement phase, vendors would be responsible for the following:

1. Providing level 2 EVSE hardware for up to 280 ports — equipment only, not make-ready — and/or;

2. Providing up to 20 DCFC (50KW or greater) chargers — equipment only, not make-ready — and/or;

3. Providing charging network software, including a payment system;

4. Telecom setup.

Additionally, the City is open to entertaining scenarios from vendors on outside ownership, operation, and/or maintenance of the L2 charging network, the DCFC charging network, or the entire network.
4 Submittal Guidelines and Questions

The City’s purpose in issuing this Request for Information is to gather information that will help the City successfully implement the system outlined above and make progress towards the City’s goals.

Please respond to all of the questions that are applicable to your company’s products and/or services. Respondents may also address any other aspect of the City’s plans as outlined above. The City welcomes observations relevant to the goals given above, which are not otherwise addressed in the comments below.

Submittals will not be evaluated. This RFI is for informational purposes only and is not a solicitation that will result in a contract. If the City chooses to do so later, it may issue a separate solicitation for the project services.

All submittals must be emailed as one PDF package. Responses to questions should not exceed 20 pages. Any materials in excess of 20 pp (such as product illustrations) must be included in the same PDF.

Email to the City’s Climate Advisor and EV Mobility Network Project Manager, Samantha Henningson, at Samantha.henningson@ci.stpaul.mn.us no later than 2:00pm CST on Tuesday, October 14, 2019. Also, by this deadline, you need to register for Saint Paul’s bid portal system; instructions for registering are at the end of the RFI.

Please direct all questions regarding this RFI to Samantha Henningson at the email address above by 5pm CST, September 24. Answers to all questions will be disseminated to all responders via email on September 27.

To qualify for any subsequent solicitation opportunity, respondents must be:

- In compliance with all applicable federal and state regulations.
- Able to provide an ADA compliant product.

Please number answers with the numbers used here.

4.1 General questions

- Company name
- Address
- Best contact (Name, email, phone number)
- Where are your operations based?
- Number of employees
- Why the vendor is interested in this project
4.2 Partnership arrangements and opportunities

4.2.1 Do you install your own hardware or outsource to a third party?

4.2.2 The cities currently assume they will own and operate the level 2 EVSE network, but are there reasons to consider alternative/leased arrangements?

4.2.3 Fast charging:

- The City does not yet have budget arranged for the DCFC hardware of up to 20 chargers across the two cities. Is there a vendor interested in owning and operating the DCFC network specifically? Our partnership with Xcel energy provides a large portion of the cost of the DCFC network by providing the make-ready construction up to the stub.

- How would you approach the development and phasing of fast charging in our cities? Note that the State of Minnesota has been funding the construction of DCFC on interstate corridors to and from the Minneapolis and Saint Paul, but to date not in either city.

4.2.4 In the case of an outside ownership/operation model, please describe:

- Your service model/s and submit a sample agreement that includes term of contract, ownership structure, easements, facility access, payments, and liability. Include other partnership organizations, if any, that would serve as site host or support.

- Scenarios for sharing costs and revenues.

- Your approach for working with us to determine pricing in a way that considers our needs
  - for the carshare component of our program to subsidize low-income users,
  - to recoup parking charges in locations where there’s a charge for parking.

- Any anticipated revenues besides charging fees.

- Your fees for charging, whether you charge based on time or energy usage, and how charges vary by level of charger.

- If membership is necessary, how can non-members use the charging station?

- What data from the charging network will you collect?
- Of this data, is there any information you cannot share with the City due to your privacy policy?

- Please provide a copy of your privacy policy and/or other relevant policies regarding data collection and sharing.

- How your company has typically dealt with responsibility for snow removal at the chargers in a curbside setting?

4.2.5 What level of utilization is the minimum required to cover operating costs?

4.2.6 If you are a hardware company, is there a software company you would partner with to deliver on this project (and vice versa)?

We are open to “a la carte” system delivery and are interested in reasoning for why “a la carte” or “turnkey” is best for Saint Paul and Minneapolis.

4.2.7 What local experience/workforce connections do you have?

4.3 Hardware & Software

The City is working to determine specifications for required hardware and software. What should be considered regarding the following questions? (Answer only questions pertinent to your product if you provide one or the other.)

4.3.1 Pros and cons of single- versus dual-port chargers in a curbside, parallel parking setting?

4.3.2 Thoughts on cord length and cord management systems in a scenario with single- versus dual-port chargers in a curbside, parallel parking setting?

4.3.3 With your product/s in a curbside setting, would user interaction with the charger payment platform occur from the sidewalk or from the street (side)?

4.3.4 How is payment pricing displayed/shared with the consumer? (E.g., in-app, on display screen, etc.)

4.3.5 Does your product have the option to display multiple language options?

4.3.6 Do you have a product with capacity to mount on a streetlight? Pros and cons of this approach?

4.3.7 Does your product have built-in lighting for better visibility?
4.3.8  How has your hardware stood up to winter weather and vandalism where it’s been deployed elsewhere?

4.3.9  What measures do you take and/or recommend to deter vandalism of the hardware?

4.3.10 Within a future contract, would there be capacity to mix and match curbside hardware units based on individual hub location (i.e. different unit for placement adjacent to a historic building)?

4.3.11 Do you offer charging units that can be wall-mounted?

4.3.12 Do any charging units have capacity built in for phone charging?

4.3.13 Do any charging units have ability to scale to other vehicles, such as adding a bike or scooter charging dock?

4.3.14 Is there any opportunity to provide public WiFi via your product?

4.3.15 If you offer DCFC hardware, does the setup require a utility cabinet in addition to the charger itself? If so, at what levels of fast-charging is the cabinet required? What are the dimensions of the cabinet?

4.3.16 Are there reasons to consider kiosks as part of our hub design, in addition to chargers?

We assume kiosks would add to space constraints in the right-of-way, and increase upfront and maintenance costs, but perhaps there are other mitigating factors to consider.

4.3.17 Does your product have the capacity to integrate with the cities’ paid parking stations/kiosks?

4.3.18 Curbside EVSE will need to be ADA compliant. Describe your experience or approach to ensuring compliance.

4.3.19 Does your product meet ISO 15118, or will it by next year?

4.3.20 What are your policies related to customer/use data, specifically the following:

- What 3rd party data sharing agreements do you have in place? List entity and purpose of data sharing agreement.
• What is your records retention policy? Include the specific data that is retained and for how long.

• What usage data are you able to provide? Is there ability to develop a dashboard for city staff to use in analysis?

4.3.21 What kinds of smart technology would you be able to provide? For example:

• API integration and ability to pull use data from software

• Ability to reserve chargers in advance using API calls

• Ability to tell whether the charger is occupied using API calls

• Ability to provide real-time alerts via text messaging, email, and/or in-app notifications to the user and/or station owner when the vehicle has finished charging.

• Accepting diverse payment methods, including:
  
  o Payment by phone (24/7 customer service)
  
  o Ability to integrate with cities’ fleet operations’ current system of using HID fobs for fuel usage
  
  o RFID cards or similar for carsharing fleet, billed to a single account

• Programmable software to support different access privileges at different times of day

• Ability to charge for “overstays” to keep spaces turning over

• Ability to add an operations and maintenance surcharge on top of payment for electricity

• Different billing rates to different classes of customers (i.e., carshare versus public charging; add parking fee onto charging fee in certain locations; equity memberships and/or locations)

• Provide electronic transaction receipts to customer and to contract administrator

• Respond to demand signaling from utilities or city, that may either throttle down or delay charging of vehicles

• Allow consumer to remotely start and/or stop charging session
4.3.22 Describe your product/s’ useful life, and how determined.

4.3.23 Are your products subject to Buy America requirements, and if so, are they compliant?

4.4 Interoperability

4.4.1 Describe your approach to and rationale for interoperability with other networks. Which networks do you have roaming agreements with? Which payment types do you support?

4.4.2 Describe your approach to and rationale for station-to-network interoperability. Are you OCPP compliant? If not, why not? What are tradeoffs of OCPP compliance?

4.4.3 Can another software vendor operate on your charging unit?

4.4.4 Describe your physical charging system interface as well as your approach to/rationale for interoperability with a variety of vehicles.

4.4.5 Describe your approach and rationale for ensuring vehicle to grid interoperability. Ability to work with utility rates as well as signals

4.4.6 What are data costs associated with OCPP, for Level 2 and DCFC?

4.4.7 The City of Saint Paul currently owns and operates a system of ChargePoint EVSE, which are nearing the end of their useful lives. (All but two are off-street. Both because the new network will be primarily on-street, and given budget constraints, we do not currently plan to replace them as part of this project.) When the City replaces them, we expect them to join the network described here. Please describe your approach to such legacy systems.

4.5 Service

4.5.1 What is your standard warranty? Will you consider other warranty provisions?

4.5.2 What O&M plans are available and what options do they include? How do you price?

4.5.3 What is your response time to inspect hardware issues?

4.5.4 What hardware would be available locally?

4.5.5 What is time to replace hardware not immediately available?
4.5.6 What software uptime is expected? What software uptime is guaranteed?

4.5.7 What has been your software uptime for the past three years?

4.5.8 Do you provide snow removal?

4.5.9 What is your average PlugShare PlugScore? What are you doing to improve that rating?

4.6 Pricing/budget

4.6.1 For software providers, how is the cost of software determined up front – based on size of network, level of service? How is the ongoing cost determined?

4.6.2 Provide recent examples of general costs for similar work done in other jurisdictions, particularly with curbside scenarios.

4.6.3 For hardware providers, what is the incremental cost of installation versus just providing the hardware?

4.6.4 Average annual maintenance cost for hardware

4.6.5 Other annual fees required for operation (e.g. subscription fee)

4.6.6 Provide a list of commonly replaced hardware parts and their respective costs, versus the cost of replacing the entire unit.

4.7 Relevant Experience

4.7.1 Examples of similar work (including photos, diagrams, cost estimates)

4.7.2 References from customers and cities

8. Public Information

Data submitted by a business to the City in response to an RFI is private or nonpublic until the submittals are opened. Once submittals are opened, the name of the responder is read and becomes public. After the City has received the submittals, all remaining data submitted by all responders are public with the exception of trade secret data as defined and classified in Minn. Stat.§ 13.37. A statement by a responder that submitted data are copyrighted or otherwise protected does not prevent public access to the data contained in the response. Submittals in response to an RFI become the property of the City and will not be returned.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Click the following link: https://stpaul-lm01.cloud.infor.com/lmcsf/SupplyManagementSupplier/land/99-2?csk.SupplierGroup=COSP.

Click on the Register As A Supplier link.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Terms and conditions associated with use of the portal and standard purchase order terms and conditions are shown. In order to move forward with registration – read and accept the terms and conditions by checking the box and clicking on Continue.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Fill in all fields which have an asterisk * next to them. When all fields have been filled in click on Continue.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Fill in all fields which have an asterisk * next to them. If the business address is the same as the remit to address please check the box. When all fields have been filled, click on Next.
HOW TO REGISTER ON THE SUPPLIER PORTAL

If you are a certified small, minority or woman owned business, (call 651-266-8900 for more information) please add that designation to your registration. Click on the **Create** button.
HOW TO REGISTER ON THE SUPPLIER PORTAL

When you are done click **Next**.
If the diversity codes do not apply to your business, do not select anything and click **Next**.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Answer all questions and then click **Next**.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Click the Select Commodity Codes button. The Commodity Codes you choose will determine which solicitations you are automatically notified of when they are posted.
HOW TO REGISTER ON THE SUPPLIER PORTAL
You may type a keyword into the search box and then click search. Check the box for each commodity code you wish to add to your profile and then Attach to Contact.
HOW TO REGISTER ON THE SUPPLIER PORTAL

The information is added to your registration, click **Next**.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Select a proxy only if you want other people in your company to receive notifications too.
Click on the Create button and fill in the person’s information. When you are finished click Save.
If you do not want to add an addition person to receive notifications, click Next.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Click save and then Next.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Your registration is now complete and you can respond to Solicitations.
If you would like to add a person to the registration who will be able to respond to solicitations, click My Account and then click Create Contact.
HOW TO REGISTER ON THE SUPPLIER PORTAL

Fill in the required fields and click Next.
Attach commodity codes to the contact. These can be the same that you attached to your profile or they can be different.
Click Next.
Congratulations! You have now added another contact under your Company’s profile.