

# Station Construction Considerations

*EV Advisory Commission Meeting (July 21, 2025)*

With the identification of charging site locations now underway, the EV Advisory Commission can turn its attention to other issues associated with station construction.

As part of the construction phase we will select the hardware for each station and we will contract for station construction and maintenance. Dane County will need to meet a variety of federal guidelines relative to these activities but there are considerations we want to discuss relative to both station hardware and construction/maintenance.

## Station Hardware and Software

The biggest question around station hardware and software will be whether we should select one vendor to provide the charging infrastructure for all the stations or if we should use multiple vendors. Our design consultants have identified pros and cons of both approaches, as summarized in the two tables below. We would appreciate hearing EV Advisory Commission members thoughts and ideas on this question.

### Advantages and Disadvantages of the Single Vendor Approach

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• <b>Simplified Deployment</b><ul style="list-style-type: none"><li>o Easier to manage one contract/one set of specifications</li><li>o Potential for streamlined permitting or utility coordination if multiple sites have same utility</li></ul></li><li>• <b>Consistent User Experience</b><ul style="list-style-type: none"><li>o Uniform interfaces, payment systems, and signage</li><li>o May simplify education regarding how to use chargers</li></ul></li><li>• <b>Centralized Maintenance and Support</b><ul style="list-style-type: none"><li>o One point of contact for troubleshooting, warranties, software issues, etc.</li><li>o Potential of better service level agreements, trainings, and long-term support due to scale of partnership</li></ul></li><li>• <b>Data Integration</b><ul style="list-style-type: none"><li>o Easier aggregation of usage, energy, and emissions data (if desired) if in a single platform</li><li>o Supports centralized reporting</li></ul></li><li>• <b>Potential for Volume Discounts</b><ul style="list-style-type: none"><li>o Economies of scale may enable better pricing and/or service terms</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Vendor Lock-In</b><ul style="list-style-type: none"><li>o Risk of relying on one provider for upgrades and service</li><li>o Limits flexibility if vendor fails to deliver or if vendor's company fails</li></ul></li><li>• <b>Reduced Competition</b><ul style="list-style-type: none"><li>o May result in less innovation or higher long-term costs</li><li>o Limits ability to test different solutions in real-world conditions</li></ul></li><li>• <b>Limited Customization</b><ul style="list-style-type: none"><li>o Limits flexibility for solutions that meets the needs of rural, multi-family, and other underserved communities</li></ul></li></ul>

## ***Advantages and Disadvantages of the Multiple Vendor Approach***

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• <b>Potential for Reduced Risk</b><ul style="list-style-type: none"><li>○ Diversifies dependency—if one vendor underperforms or fails, other options may be available</li><li>○ May encourages vendors to stay competitive on service and innovation</li></ul></li><li>• <b>Pilot Testing &amp; Flexibility</b><ul style="list-style-type: none"><li>○ Could allow for evaluation of different models, features, or user interfaces to determine which solutions perform best under local conditions</li></ul></li><li>• <b>Customization by Site</b><ul style="list-style-type: none"><li>○ Different types of chargers or user needs could justify different vendors (e.g., faster charging in some rural areas)</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Complexity</b><ul style="list-style-type: none"><li>○ Requires managing multiple contracts, software platforms, and support processes</li><li>○ Training staff or educating the public may be more complicated</li><li>○ Custom integration and project management could increase initial program deployment costs</li></ul></li><li>• <b>Data Fragmentation</b><ul style="list-style-type: none"><li>○ Aggregating performance data across platforms may be challenging, potentially increasing complexity of reporting to funding agencies or evaluating program performance</li></ul></li><li>• <b>Inconsistent User Experience</b><ul style="list-style-type: none"><li>○ Lack of consistency if hardware, software, apps etc. vary across sites; could frustrate users</li></ul></li></ul>

### **Construction/Maintenance**

Relative to the construction and maintenance of the stations the big item for discussion has to do with workforce development. The construction will be required to meet prevailing wage and apprenticeship requirements but, beyond that, there might be opportunities for us to leverage these projects as a way to expand local access to certain careers and/or job training. This is the time for us to start those discussions too, especially if we need to build partnerships to realize a vision around workforce development opportunities.

One specific idea that's been raised relates to ongoing station maintenance. We expect to have a contract with the station vendors that will cover some aspects of maintenance but we might want to also consider a contract with a local firm to provide on-site maintenance as required. That contract could include some sort of workforce development component. Again, we welcome thoughts and ideas on this topic.