

# Business Charging Installation Guide





**Welcome** ..... 1

**Introduction** ..... 2

**Charging Overview** ..... 3

- Defining EVSE (Electric Vehicle Supply Equipment) . 3
- Types of Charging Equipment ..... 3
- Connectors and Plugs..... 4
- Recommendations ..... 6
- ‘Smart’ or Basic Charging? ..... 9

**Payment Options** ..... 10

**Monitoring and Reporting** ..... 11

**Considerations** ..... 11

- Location ..... 11
- Convenience ..... 11
- Driver Safety ..... 12
- Mounting Type ..... 12
- Internet Connection ..... 13
- Protecting Chargers ..... 13
- Aesthetics ..... 14
- Signage and Marking ..... 14
- Accessibility ..... 15
- Potential for Growth ..... 15
- Cable Management ..... 15
- Benefits of Offering Charging ..... 16

**Associated Costs** ..... 17

- Equipment ..... 17
- Installation ..... 18
- ..... 18
- Internet Connection ..... 18
- Maintenance ..... 18
- Energy Use ..... 18
- Incentives ..... 19
- EV Rate Program ..... 19
- Illinois EPA Rebate: ..... 19
- 2022 Clean School Bus Rebate..... 19

**Additional Resources** ..... 19

**Checklist** ..... 20

- Goals & Scope..... 20
- Internal Buy-In ..... 20
- Budget and Timeline..... 20
- Incentives..... 20
- Project Design ..... 21

# Welcome

Ameren Illinois is your Electric Vehicle (EV) charging resource. EVs are growing increasingly on the road and in workplace and community parking lots throughout our region. As the demand for charging continues to increase, Ameren Illinois has developed a range of support tools to ensure you are prepared for adding EV charging when your community begins asking to charge their cars at your location.

As part of our commitment to making this transition as easy as possible, we have created this QuickStart Guide to help orient you to charging equipment, installation planning, and capturing the benefits of providing this service to EV drivers.

For more information about vehicles, fleet options, incentives, and additional resources visit [AmerenIllinois.com/EV](https://AmerenIllinois.com/EV).





## Introduction

Millions of EVs are now on the road across the United States and sales of EVs are growing here in Illinois. With more than 40 models available and many more poised for release over the next several years - including fleet, medium, and heavy-duty options - the demand for charging options to power those vehicles will continue to increase. Business owners across our region have the opportunity to take advantage of this transition by installing EV charging infrastructure at their workplace, multi-family dwelling, or other consumer destination locations. Charging availability can help attract and retain top workforce talent, establish your company as a leader in sustainability, and increase customer satisfaction and time spent at your establishment.

This guide will help orient you to different types of charging equipment, identifying good locations for chargers, the benefits of offering charging at your business, and potential installation costs. A project checklist is also included to help you get started.



## Charging Overview

### Defining EVSE (Electric Vehicle Supply Equipment)

Electric Vehicle Supply Equipment (EVSE), colloquially known as “charging stations,” is used to safely supply electricity to an EV from a power source. EVSE communicates with the EV to ensure safety for the user, vehicle, and power grid. EVSE can be installed at residences, workplaces, retail locations, public parking, and fleet facilities. How quickly a battery charges depends on multiple factors including the type of battery, vehicle considerations, and the type of EVSE.

### Types of Charging Equipment

#### Level 1: Easy

Level 1 charging uses a standard 120-V AC plug and typically provides roughly 4-5 miles of range per hour. Most EVs come with a cordset to support Level 1 charging. If desired, a dedicated Level 1 charger can be installed at workplaces or community locations. For at-home charging, access to a standard wall outlet can be adequate, pending review of the underlying electrical system by a qualified electrician.

#### Level 2: Faster

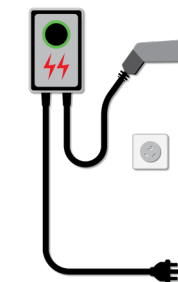
Level 2 charging uses a 240-V or 208-V electrical connection and typically provides about 25 miles of range per hour or a full charge in 4-8 hours. Level 2 EVSE requires a dedicated circuit of 20-80 Amps depending on the specific requirements of the chosen equipment. Locations that aim to provide a faster rate of charge during a smaller window - including workplaces, retail, local public parking, and individual and multi-unit residences - often opt to integrate Level 2 charging. Level 2 chargers use a universal connector (see Connectors and Plugs below). It is recommended that businesses consult with a state certified electrician or contractor and Ameren Illinois at 800.232.2477, M-5 7:00 a.m. - 5:30 p.m. for installation guidance.

#### DC Fast Charging: Fastest

A DC Fast Charger (DCFC) can typically add up to 80% of a vehicle’s charging needs in roughly 30 minutes. DCFC systems require a higher power supply than the Level 1 or Level 2 options, typically 480V and 100+ Amps. The charging rate depends on the battery design of the EV and the maximum rate of the charge supported by the DCFC. Today’s EVs can accept fast charging rates ranging from 50kW to 150kW, while some EVs anticipated in the near future will have charging rates above 300kW. Today’s DCFC systems can typically deliver power at a rate between 50kW to 350kW. Before a DCFC charging session begins, the EV and the charger communicate to determine the appropriate charging rate for the EV batteries. DCFC charging uses several types of connectors (described below) that vary depending upon the make and model of the vehicle. Across the country, DCFC infrastructure is being developed along major roadways and other travel corridors to support longer EV trips.



Level 1 example



Level 2 Example



DC Fast Charging Example








### Connectors and Plugs

Any vehicle with a standard SAE J1772 receptacle will be able to use Level 1 and Level 2 charging. All major manufacturers support this standard, and Tesla provides adapters with its vehicles to allow them to access these ports. Manufacturers currently use a range of adapters for fast charging - including CHAdeMO (used by automakers such as Nissan and Mitsubishi), the Combined Charging System (used by most automakers), and Tesla's proprietary connector, making Tesla Superchargers available only to those vehicles. However, Tesla owners have access to accessory adapters and can utilize SAE J1772 and CHAdeMO plugs.



### Summary Table

Level	Voltage	Charge Rate	Connector	Auto Makers
<b>Level 1</b>				
	122-V	~5 miles per hour	 SAE J1772	All
<b>Level 2</b>				
	208-V or 240-V	~up to 25 miles per hour	 SAE J1772	All (Tesla with adapter)
<b>DC Fast Charger</b>				
	480V	~80% in 30 minutes	 CHADEMO	See list of automakers - <a href="https://www.chademo.com/products/products_type/evs">https://www.chademo.com/products/products_type/evs</a>
	480V	~80% in 30 minutes	 CCS (Combined Charging System)	All (Tesla with adapter)
	480V	~80% in 30 minutes	 Tesla	Tesla



## Recommendations

When thinking about what kind of EVSE to install, consider your goals, how your community is most likely to use the charging capacity you aim to provide, and options for providing the greatest benefit to both your intended users and your organization.



### Workplace

Employees view workplace charging as a great benefit that helps spotlight sustainability initiatives and can also help those with limited access to at-home charging be more inclined to drive electric. Workplaces are ideal for a range of EV charging options given the long dwell times. The energy needed for Illinois’s average daily commute of 50 miles can easily be recovered using a Level 1 or Level 2 charger during an average 6-8 hour workday. While the average length of employee commutes and the pace of visitor traffic to particular sites are always items to consider, some items to factor when weighing workplace charging options include:

- Exploring dedicated Level 1 charge options can make for a low-cost installation scenario that can provide 20-30 miles of charge for most vehicles during a typical eight-hour day.
- For smaller campuses that make moving vehicles or charging connectors relatively easy, 32 Amp Level 2 chargers may be shared and allow multiple users in one day. Another consideration is the length of employee commutes.
- For larger campuses with hundreds of employees where moving vehicles is inconvenient and sharing chargers is not as practical, 16 Amp Level 2 chargers can be used to provide an ample 12 miles of range per hour of charge. This may also allow more stations to be installed due to lower power requirements for each charging plug. Some charging stations have the ability to split a single electrical feed into two 16 Amp stations that only requires wiring one circuit to the unit, saving on installation costs and electrical panel requirements.

Additional workplace considerations include fleet vehicles such as security and campus use vehicles. For vehicles with a range of 200 or more miles, an overnight Level 2 charge will ensure vehicles are fully charged at the start of each day.

The potential for visitor use should also be factored when making workplace charging decisions. Will visitors require charging support? How many? How often?

As charging stations are added to any workplace, it will likely spur additional demand for units in the future. Businesses should plan for meeting their charging needs today and anticipate additional steps that might help address later needs at a lower cost now.



Workplace Charging



Multi-Family Dwelling Charging



Public/Around Town Charging



### Multi-Family Dwellings

Multi-family property owners are increasingly choosing to offer EV charging as an amenity to differentiate their property which can attract and retain residents. Adding EV charging to multi-family dwellings like large apartment buildings creates another substantial benefit for the residents of those locations. Dedicated 32 Amp Level 2 charging stations can be a preferred option to accommodate faster charging needs for residents. Installing slower Level 1 charging locations can also help drivers with less daily driving needs that can benefit from a slower rate of charge over a longer period. Additional rates are available to multi-family property owners through the Multifamily EV Rate Program. For more information visit [Ameren.com/illinois/business/electric-vehicles/rate](https://www.ameren.com/illinois/business/electric-vehicles/rate).

Options for offsetting the cost of the energy being provided for charging include implementing a small EV parking fee, instating a usage bill in the monthly rent statement, or installing chargers with credit card processing abilities. Entities can also create charging cards specific for tenants or others with permission to access stations.

### Public Locations



#### Retail

Retail destinations – malls, restaurants, grocery stores, hotels, etc. – can often benefit from providing Level 2 charging options. Visitors can recover 25 miles or more of range while on-site for an hour or longer. Increased stay times among visitors can boost retail revenue and attract new customers.

Given the potential for guests to use charging overnight, hotels can explore a mix of Level 1 and Level 2 options; Level 1 for slower overnight recharges and Level 2 for faster top-offs for customers as they require it.



#### Parking Facilities

Public parking lots and garages often provide an excellent location for EVSE installations. Depending on the rate of traffic and typical dwell times, public parking locations can benefit from a portfolio of Level 1 and Level 2 charging options. Typically, locations with longer average dwell times can explore the viability of adding Level 1 charging options. Locations with shorter dwell times (e.g., 2-3 hour dwell times) are better candidates for Level 2 charging. Even locations that warrant more Level 1 options can be candidates for Level 2 EVSE installations that can support drivers who require a faster recharge.

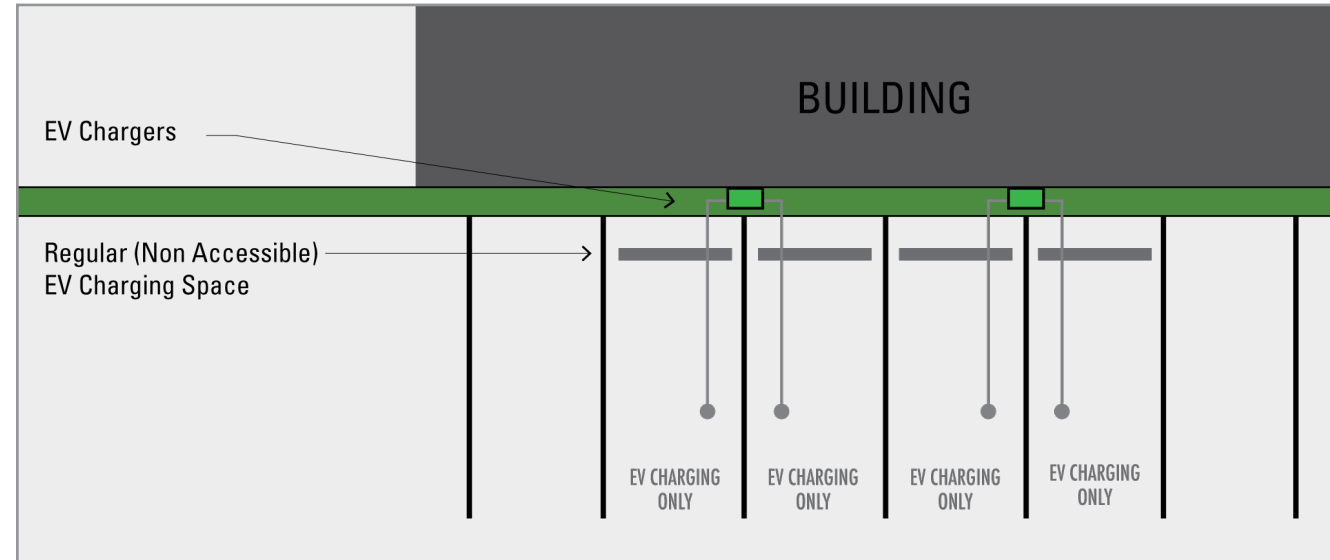
Retail and public locations adjacent to highways or major routes through and between cities can be good candidates for DCFC installations to provide drivers on long-distance trips options for recharging their EVs for 30-60 minutes while taking a break and patronizing at local businesses.

### Summary Table

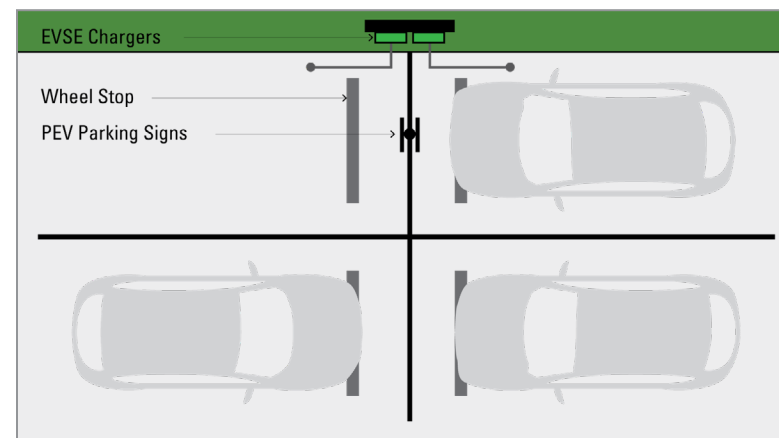
Location	EVSE Recommendation
Workplace	Level 2
Multi-Family Dwelling	Level 2
Public / Around Town	Level 2, DC Fast Charger



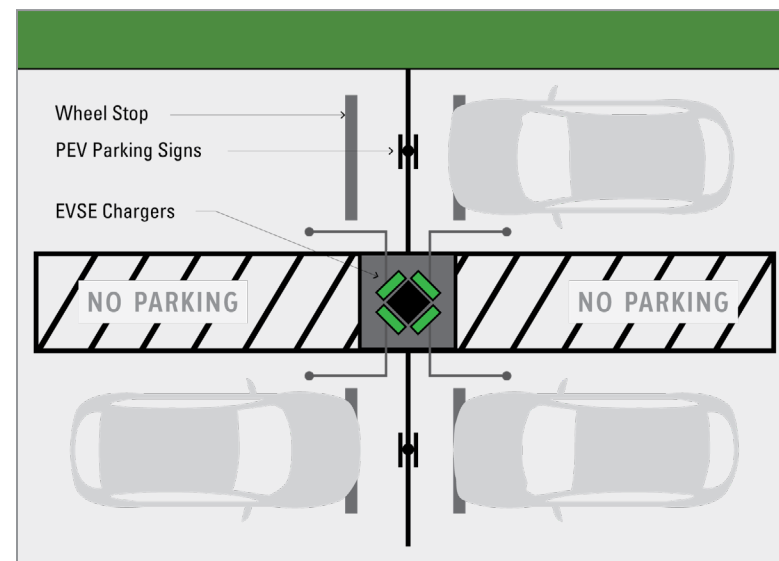
Diagrams of parking configurations with ports/cars.



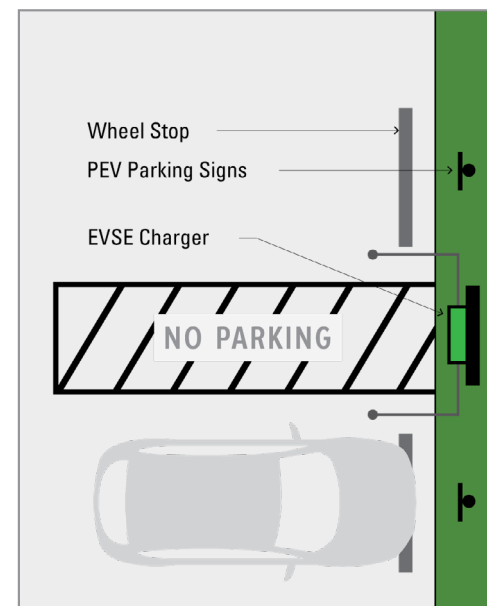
Example Wall-Mounted EVSE Configuration



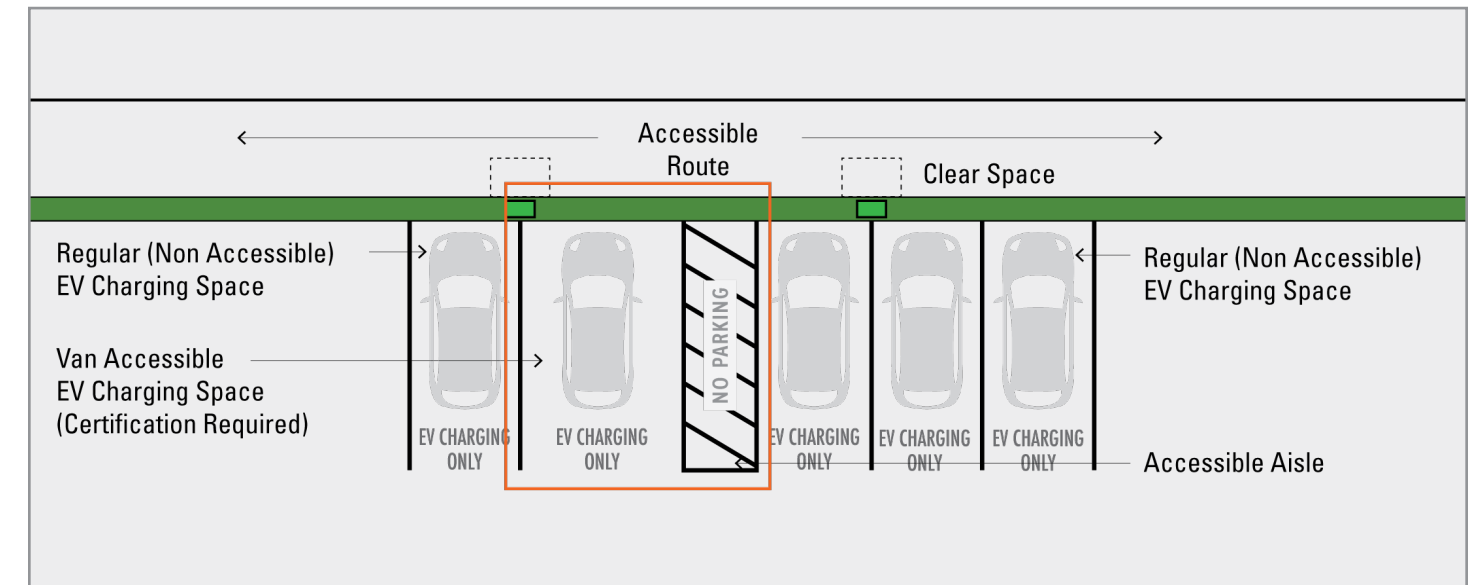
Example Dual Unit EVSE Configuration



Example Multi-port EVSE Configuration



Example Single Unit Dual Port EVSE Configuration



Example Wall-Mounted EVSE Configuration

'Smart' or Basic Charging?

Determining whether a smart or basic EVSE will best fit your needs is a key step in the charging station installation process. While the initial cost can be higher than using a basic system, smart charging provides many benefits. For some organizations choosing to utilize a smart charging system will make the most sense, especially when managing a fleet of all-electric vehicles

Smart systems actively control the charging stations, collect charging information yields insights on utilization, and charge fees. The information collected can include time and electricity use for the unit overall or a single charging session, peak usage, and the ability to modulate electricity provided to the unit during peak times while tracking individual users. Smart systems connect to Wi-Fi or other information technology platforms like LTE wireless to share information – thus a “smart” network.

Alternatively, basic chargers do not allow for user payments, the capture and report of usage information, nor provide control over the output of the unit beyond turning it on and off. Basic charging is the simpler and less expensive of the two options, though it does offer the same overall charging capacity.

If your entity has not yet determined whether to use networked equipment, consider choosing equipment with the Open Charge Port Protocol which will allow the station to be more easily and cost-effectively upgraded if needed/desired.



## Payment Options

While offering access to free charging may be beneficial in particular settings, it is not practical in all instances. Most operators of public-facing DC fast chargers offer them as a paid service. Smart systems enable the operator to collect fees via the network - several payment models are available including providing a monthly subscription service or structuring payment by individual user charge. Per use payment structures offer flexibility to accommodate peak rates, total usage rates, and more. Depending on the network provider, payment structures may be customized. In addition to various payment structures, there are several ways to collect payment from users. Some models feature credit card readers for payment, others use smartphone enabled apps or RFID cards to enable the charging station. There are various costs associated with offering these options which will be discussed later in this guide.



### EXAMPLE:

A retail center may choose to offer the first hour of charging free to customers. Every hour thereafter will be charged by kWh.

## Monitoring and Reporting

Smart charging stations optimize charging infrastructure by allowing operators to manage electricity use. Smart chargers can also generate reports to help site hosts better understand demand which in turn can help them plan for future capacity, avoid peak demand charges that can cause higher electric bills, and design policies to better balance station usage. The ability to monitor and in turn regulate the system is a top consideration when determining which type of EVSE to install. Many businesses may find this data useful in determining how long people are using the chargers and can also help determine if there are certain times/days which are prime use hours. This can also be helpful when planning future expansion with more EVSE.

## Considerations

There are many important considerations to take into account when determining if an EVSE installation is right for your organization and then, if so, how to plan for the project.

### Location

When evaluating available parking, the ideal location to install EV charging is near existing electrical infrastructure to reduce installation costs. The farther away chargers are installed from this infrastructure the more complicated the installation process and, ultimately, the higher the costs. During initial construction is an ideal time to run conduit under parking areas to remote spaces to enable future EVSE installs. When installing conduit it is recommended to plan for additional spaces to be electrified in the future as many more EVs are expected on the roads in the years to come.

### Convenience

Keep in mind that you'll want to locate the chargers in a convenient location with easy access to walkways and buildings if possible. Many operators choose to locate EV charging in optimal parking locations to raise awareness and encourage the use of the chargers. If the chargers are difficult to access or burden the driver unnecessarily, they may choose not to charge. Locating chargers near prime parking locations can also help to encourage people to drive EVs. Another consideration includes the length of cables for the charging connector. Different EVs locate their charge ports in different locations (e.g., front vs. back, or which side of the vehicle) so longer cables are recommended to not require vehicles to park in only one certain direction. Longer cables also allow EVs in two different parking rows to share the charger, when appropriate, to allow more access to the same station.



### Driver Safety

Employee, tenant, and customer safety should be a top priority when designing your installation. Areas selected for charging infrastructure should be well lit to allow drivers to easily read all signs and instructions. Most charging stations are fully outdoor rated and safe to be used outside in the elements however it is recommended to verify this for your selected model. If a lot of chargers will be located along the same parking row it may be good to use cable management to keep cables up off the ground and help to mitigate any tripping hazards. Cable management will be covered below.

### Mounting Type

Different configurations are available for mounting chargers, depending on your needs and available space. Wall mounts and pedestals are common options to consider when trying to choose the right equipment for your available space. In parking lots, typically pedestal mount chargers are used and for parking garages, wall mount chargers help to simplify installation. There are several other mounting styles as shown below:



Example Pedestal



Example Wall Mount

### Internet Connection

Check the chosen chargers to see if they need Ethernet, Wi-Fi, or LTE wireless access to handle certain functions, including basic operation, usage data, or collecting payments. Keep this in mind as the installation process moves forward. Many chargers are capable of several connection types to make this process simpler for the user. Verify that the location chosen has the appropriate communications signal access, as appropriate, as some parking areas may be too distant from Wi-Fi to connect to the chargers.

### Protecting Chargers

Curbs, wheel stops, bollards, and other mounting methods can be used to protect the charging equipment from potential collisions with cars.



Example Wheel Stop



Example Bollards

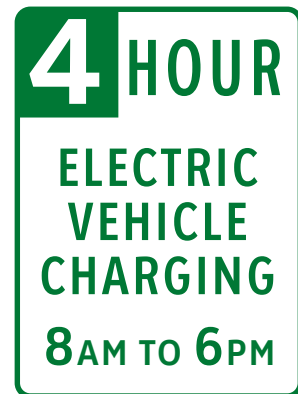


### Aesthetics

If the aesthetics of the charging infrastructure is important, consider how it fits into the existing landscape. Screens or walls can be used to keep the chargers from public view. Additionally, if desired, many chargers can be branded using company logos or other graphics to customize aesthetics.

### Signage and Marking

Call attention to all charging stations with visible signs over the parking areas. Standard “EV Charging Only” signs are available through most signage companies that offer common road and parking signs. Also, consider adding clear markings on the ground to indicate the area is reserved for charging. It is recommended to paint the entire parking space if possible a bright green to highlight the spaces are reserved for EV charging. Wayfinding signs to help guide drivers to charging can also be helpful if that is an option within your facility.



Example Signage



Example Markings

### Accessibility

Considerations include the height of the curb, connectors, or providing accessible charging spaces. For these types of spaces wheel stops and curbs are not recommended so that users can easily access the charger from all sides. Bollards can be used to protect the charger from vehicles when they are parking.

### Potential for Growth

When planning the installation location, consider how needs might increase as electric vehicles become more popular. A key question to consider is if you will want to add more charging capacity in the future. Planning for increased need from the start will help to save costs on design and construction for the longer term for items such as running conduit or adding electrical capacity for future EVSE installs.

### Cable Management

Charging equipment comes with cords and keeping them organized and neat is important for the safety of the users and overall maintenance of the equipment and surrounding landscape. Many charging cords are loose, requiring the user to wrap the cord around a holder after each use. While this is simple and low cost, it can result in cables being left on the ground and subject them to unnecessary wear and cause an obstacle for landscape care. Planning for cable management is an important step when choosing the correct EVSE.

Many charging stations are designed with cable management functions to ensure that cables are properly put away after each use as well as kept up off the ground during use. Options include pole or wall-mounted cable management reels as well as overhead cord management built into the charger.

























Example Cable Management



### Benefits of Offering Charging

Installing EV charging stations can provide an important benefit to your customers, employees, and community while helping establish your leadership in sustainability and innovation. Fleet operators can save on the total cost of vehicle ownership through fuel and maintenance savings while reducing emissions. Workplaces and businesses can provide vehicle charging options to employees and/or customers as an incentive while enhancing employee and customer recruitment and retention efforts, among other benefits.

	 Workplace	 Fleet	 Multi-Family Dwelling	 Public Locations
Attract and retain top talent				
Attract new and repeat customers				
Create an advantage over your competitors				
Increase employee satisfaction and productivity				
Increase customer satisfaction and shopping dwell time				
Potentially add a new revenue stream				
Potentially increase rent and occupancy rate				
Potentially Increase Property Value				

### Associated Costs

When considering an EV charging installation, there are a few cost areas to take into consideration. Equipment, installation, network, maintenance, and energy use are all costs to factor into the overall budget.

#### Equipment

The first consideration is the charging equipment itself - the cost of EVSE varies by brand, the number of charging port connectors, networking capabilities, and more. When selecting the right equipment for your application, consider the features you most need that also fit your budget. For example, many higher-end units feature data collection and require networking which will also add to overall cost considerations. Other questions to consider include:

- Do you need theft deterrent features?
- How many charging port connectors do you need?
- Do you wish to collect data?
- Would you like the ability to remotely manage the units?
- Is cable management preferred at your location?

Level 1 Equipment	Level 2 Equipment	DC Fast Charging Equipment
\$300 (wall mounted) – \$1,500 (pedestal unit)	\$400 (non-networked) – \$7,200 (smart)	\$10,000 – \$40,000+

For more detailed EVSE pricing information, please contact a local contractor or electrician.





## Installation

Installation costs can vary widely depending on multiple factors including existing electrical infrastructure, any upgrades that might be required, local fees and permits, and more. A few ways to reduce installation costs include choosing an installation location with existing electrical access, pairing the project with other needed construction, or installing multiple units. Locating new charging installations as close to existing electrical service as possible, when practical, will help to keep conduit and cable runs shorter. Also, selecting the proper mounting type of EVSE can help reduce costs. For example, consider a wall mount unit in a parking garage or mounted to the side of a building near parking so that concrete work is not required when installing the units. If pedestal mount chargers are preferred, however, perhaps pair installation with routine parking lot resurfacing so that boring or trenching costs can be minimized. A certified electric vehicle charging installer is required to complete an installation project. Refer to Illinois Administrative Code [\[83 Ill. Adm. Code 468\]](#).



### Installation Cost Considerations (sample)

- Concrete Work
- Electric Panel Work/Requirements
- Trenching
- Boring
- Running Conduit/Expanding Service Reach
- Permitting

## Internet Connection

If you have chosen networked or “smart” chargers, establishing a network connection may be an additional cost consideration. Beyond the network connection cost, depending on the vendor, there may also be an additional subscription charge for data collection and transmission. If you choose to collect payment at the chargers, there may also be fees associated with the transaction service. Make sure to check with the supplier of the equipment to see what fees are required to operate the units when selecting a smart charger.

## Maintenance

The type of warranty included with the charger varies by manufacturer and can range from fixed-term to renewable. Basic Level 1 and 2 chargers typically require little to no maintenance. Adding units with additional features may increase maintenance costs, however, systems are frequently modular in design to allow parts to be easily interchanged.

DC fast chargers require more regular maintenance as they have the most complex systems, integrated cooling systems, filters, and other components. Of course, chargers with more features will likely require relatively higher maintenance support. EVSE manufacturers offer a variety of warranties; some offer extended options and onsite maintenance for an additional cost. Cord and plug damage are the most likely maintenance items for EVSE and are often outside of standard warranty coverage.

## Energy Use

Customers today have more energy supply options than ever — choices that could reduce their energy supply costs. Options for Ameren Illinois electric customers include a third-party supplier, government aggregation, and hourly pricing basic generation service (default option). No matter the choice, you can count on us to deliver the safe, reliable energy you need. Ameren Illinois offers a better rate to charge when demand for electricity is lowest with our EV Rate. For example, charging during the Preferred Charging Period (PCP) from 11 P.M. until 7 A.M. will reduce the cost of electricity depending on the type of utility rate. The needs of each location will differ based on expected utilization. To learn more about the EV Rate Program and rate options please visit [Ameren.com/illinois/business/electric-vehicles/rate](https://www.ameren.com/illinois/business/electric-vehicles/rate).





## Incentives

Cost-saving incentives are available to entities willing to make charging infrastructure available at their locations. Additional incentives are available to business who convert their fleets to electric. Incentive offerings do change regularly, please visit [Ameren.com/illinois/business/electric-vehicles/incentives](https://www.ameren.com/illinois/business/electric-vehicles/incentives) for incentive updates and details. It is recommended that you seek pre-approval before beginning any installation activities.

### Federal

Businesses who purchase and install qualifying charging infrastructure before December 31, 2022 are eligible to receive a tax credit of 30% of the cost up to \$30,000 under the Alternative Fuel Infrastructure Tax Credit.

The credit is available on both the cost of the equipment and the installation costs, though, does not include permitting and inspection fees.

Beginning in 2023, up to \$100,000 can be reimbursed for projects set on locations that meet the census tract set forth by Congress. Eligible projects will also meet apprenticeship and prevailing wage requirements. More information can be found on the Department of Energy website.

### NEVI (National Electric Vehicle Infrastructure) Plan

As the state of Illinois rolls out it's NEVI plan, more funding may become available for charging projects.

### EV Rate Program

Ameren Illinois is offering incentives for businesses seeking to install EV charging stations at workplaces, multi-family dwellings, and publicly accessible locations. This program is open to Ameren Illinois business customers.

- Multifamily Facilities, Education, and Transit Facilities
  - DS-2 and DS-3/DS-4
- Corridor Charging Facilities & Non-Corridor Charging Facility Facilities
  - DS-3/DS-4

For more information visit [Ameren.com/illinois/business/electric-vehicles/rate](https://www.ameren.com/illinois/business/electric-vehicles/rate).

### Illinois EPA Rebate:

Beginning July 1, 2022, the Illinois Environmental Protection Agency will offer rebates for Level 2 or Level 3 charging stations that may fund up to 80% of the installation cost to install a charging station. Rebates for residents purchasing a new or used all-electric vehicle from an Illinois licensed dealer will also be offered. Refer to the [Illinois EPA website](https://www.epa.gov/illinois) for more information.

### 2022 Clean School Bus Rebate

The EPA's new Clean School Bus Program will provide five billion dollars over the next five years to replace existing school buses with clean and zero-emission models. Find out more about this program

on the [EPA Clean School Bus website](https://www.epa.gov/clean-school-bus).



## Additional Resources

1. [Electric Vehicle Charging for Multi-Unit Dwellings](#)
2. [Alternative Fuels Data Center Workplace Charging](#)
3. [Lynda.com Case Study](#)





# Checklist

## Goals & Scope

- Identifying clear goals that will help define a project scope is the most important step in the process. Clear goals and a well-defined scope will simplify decision-making as you perform subsequent steps, including research into equipment options, investigating your facility's unique attributes, speaking with EVSE experts, and finding an experienced contractor. Please reach out to our Ameren Illinois EV experts or visit [Ameren.com/Illinois/EV](https://www.ameren.com/Illinois/EV) to help select the right EVSE for your project needs.

## Internal Buy-In

- To ensure the success of the charging installation, it's important to identify a project champion who can lead the way and help the team advance the project through each step. A few options include facilities personnel, a sustainability representative, or an EV driver/sustainability enthusiast. The project champion(s) should have adequate time to dedicate to the design, planning, and facilitation of the installation.

## Budget and Timeline

- After identifying goals and scope and establishing the project champion(s), defining the budget and timeline for your installation project is an important step that includes examining the associated costs, conducting research, and obtaining quotes. A detailed project plan including a projected timeline is necessary to ensure success for larger installations. Refer to the [Illinois Commerce Commission website](https://www.illinoiscommerce.com) for a list of certified contractors who can support this effort to ensure the overall project is successful. Having concise benchmarks in order to achieve goals is a smart way to help ensure the success of the project.

## Incentives

- Determining the incentives available to you will help stretch your budget and fulfill or expand the scope. Applying for EV incentives, grants, and rebates early will help keep the installation timeline on track. Visit [Ameren.com/Illinois/business/electric-vehicles/incentives](https://www.ameren.com/Illinois/business/electric-vehicles/incentives) for details about the incentives currently available.

## Project Design

- Power Assessment**  
Installations are most cost-effective when placed near an existing power source. A power assessment can help identify the most advantageous locations for the installation. Conducting an audit of your site's energy usage and available power sources early on in the process will ensure only viable locations are considered and help identify the type of equipment best suited to your location.
- Location**  
This step requires an assessment of available space, power sources, safety, and much more. Throughout the process, it will be important to consult with facilities managers, security, and other individuals with a vested interest.
- Equipment**  
At this step, you will determine the type of equipment to be installed. This includes:
  - Smart or Basic Charging? You likely need smart charging equipment if:
    - You want users to pay a fee through the station;*
    - You want to get data on how the chargers are being used; and*
    - You want to control charging to avoid utility peak demand charges.*
  - Single or dual connector?
  - Cable management?
  - Manual or mechanical assist?
- Permitting**  
Most installations require permits for various aspects of the installation project. Start this process by conducting research and contacting your local permitting office or inquire with your chosen electrical contractor or service provider.
- EV Charging Policy**  
Organizations offering workplace charging can benefit from setting clear guidelines regarding usage and sharing to help ensure a safe and successful charging experience for all. To develop a charging policy, consider engaging the intended users through a survey in an effort to fully understand their charging needs. When the time comes to develop a policy, [an example of a workplace charging policy \(PDF\)](#) by the U.S. Department of Energy can help you get started.
- Promotion**  
Once you have installed your charging stations, engage with targeted users on how they can take advantage of this benefit. Promoting your charging infrastructure will help make the intended user aware of the offering and provide an opportunity to highlight your company's efforts. Promotional opportunities include a ribbon-cutting/unveiling ceremony, hosting an EV test drive event, educational sessions, and registering on publicly available charging station apps. In addition, internal company communications such as intranet, company mailing, or virtual signs are a great way to promote the amenity of charging stations to employees.



