



**Winn-Marion  
Companies**

# **Charging Ahead**

## **The Complete Guide to Funding and Financing Your EV Charging Station**

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An extensive overview of available funding and financing options.



# Introduction

Like many others, you realize that electric vehicle adoption is on the rise. And whether your organization is looking to demonstrate a commitment to the environment or hope to develop an additional revenue stream, you're curious about what it takes to install an EV charging station at your place of business. This eBook will give you an idea of the costs involved, but more importantly, provide an extensive overview of the funding and financing options available.

In this eBook, we'll explore:

## **Costs of Commercial EV Charging Station Installation**

- Factors affecting installation costs
- Infrastructure and labor expenses
- Soft costs and software
- Ongoing operating costs

## **Funding Options for EV Charging Station Installation**

- Federal grants and programs (NEVI, CFI)
- Alternative Fuel Infrastructure Tax Credits
- State and local funding programs (rebates, incentives, and grants)

## **Financing Options for EV Charging Station Installation**

- Financing through equipment suppliers
- Financing through energy companies
- Lease financing
- Power Purchase Agreements

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# The Costs of Commercial EV Charging Stations Installation

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Hardware/Type  
of Charger



Quantity



Infrastructure



Location



Soft Costs



Software



Maintenance



Power  
Management

# EQUIPMENT COSTS

What specific chargers you need is determined by what power level your business requires. The following charts provide a general guideline. Level 1 charging of 1kW or less is not included, as our focus here is on commercial and business solutions.

## AC Level 2

**Ave. Cost:** \$300 - \$1,500

**Power Level:** 3-19 kW

**Charge Time:** 4-20 hours

**Suggested Use:**

- Office, workplace
- Multi family housing
- Hotel and hospitality

## DC

**Ave. Cost:** \$400 - \$6,500

**Power Level:** 20-25 kW

**Charge Time:** 1-4 hours

**Suggested Use:**

- Workplace, multifamily
- Parking structures
- Dealerships

## DC Fast

**Ave. Cost:** \$9,000 - \$26,500

**Power Level:** 50 kW

**Charge Time:** 20-90 hours

**Suggested Use:**

- Retail, grocery, restaurant
- High turnover parking
- Fueling stations

## DC high Power

**Ave. Cost:** \$30,000 - \$80,000

**Power Level:** 150-350 kW

**Charge Time:** 5-30 hours

**Suggested Use:**

- Highway corridor travel
- Metro 'charge and go'
- Large fleet

## INSTALLATION COSTS

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A dedicated infrastructure is required for most commercial EV charging stations to power the equipment. These expenses include a variety of electrical elements and labor. Depending on the number of units and how large the infrastructure is, this cost can range anywhere from \$1,500 - \$40,000.

## SOFT COSTS AND SOFTWARE

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When considering installing EV charging infrastructure for a commercial business, it's important to understand the concept of hard and soft costs. Hard costs refer to the direct expenses related to purchasing and installing the charging equipment. Soft costs include indirect expenses that are not typically associated with the physical construction or installation but are still necessary for a successful project. Balancing these costs is crucial for businesses to make informed decisions about their EV charging investment.

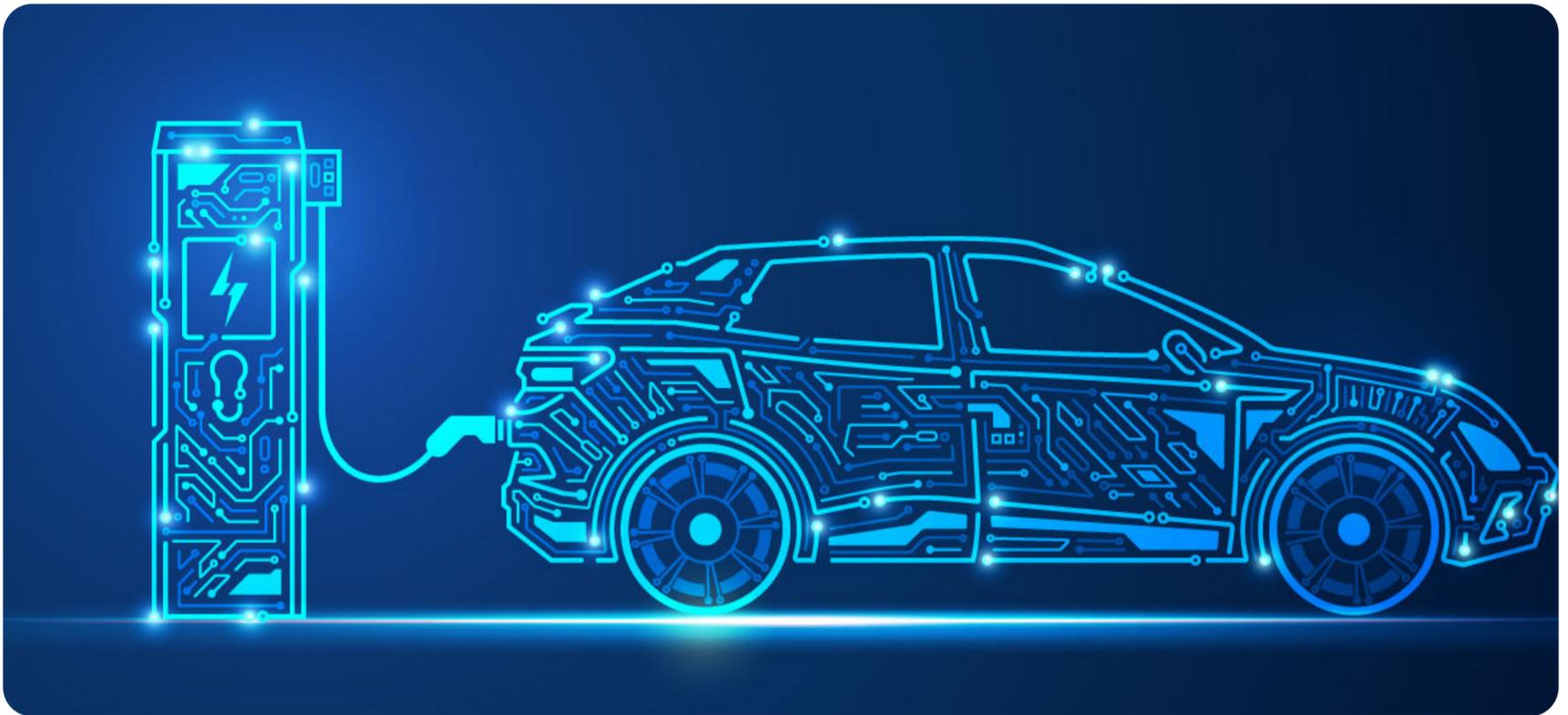
Parking ports, lighting, permits, and other 'soft costs' should be budgeted at about 5% of the overall expense.

Commercial EV charging stations are also mandated by utilities to include network subscriptions and metering system software to provide monitoring, protection, and analytics. This is usually less than \$300/year.

## OPERATING COSTS

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Once installed, there are ongoing expenses to keep in mind, such as electricity, power management, and maintenance. These vary depending on local utility rates, if you choose to include a power management system, usage factors, and so on. According to the US Department of Energy, the average maintenance cost of EV infrastructure is \$400/year per station.



# Funding Options for EV Charging Station Installation

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As electric vehicles become more prevalent, commercial businesses are recognizing the need to provide charging stations as an amenity for their customers. While some may choose to offer free charging, others may see an opportunity to generate revenue.

If you decide to offer EV charging as a paid amenity, you can collect a revenue stream that can help offset the operating costs or even generate profit. According to [Accesswire](#), the electric vehicle charging station market is projected to be worth \$727 billion by 2031.

The profit potential for offering a paid amenity charging service can vary depending on several factors, such as the location and the cost of electricity. Businesses that install charging infrastructure may also increase customer satisfaction and loyalty, and potentially attract more customers.

There are plenty of resources available to help your business mitigate the cost of building EV infrastructure.

**Let's review the possibilities!**

## FEDERAL GRANTS AND PROGRAMS

The federal government has a vested interest in encouraging the mass adoption of electric vehicles, with an ambitious plan to build a national network of charging stations and reduce national greenhouse gas emissions by 50% by 2030. To encourage EV adoption, several federal programs are available to help make building EV infrastructure more affordable.

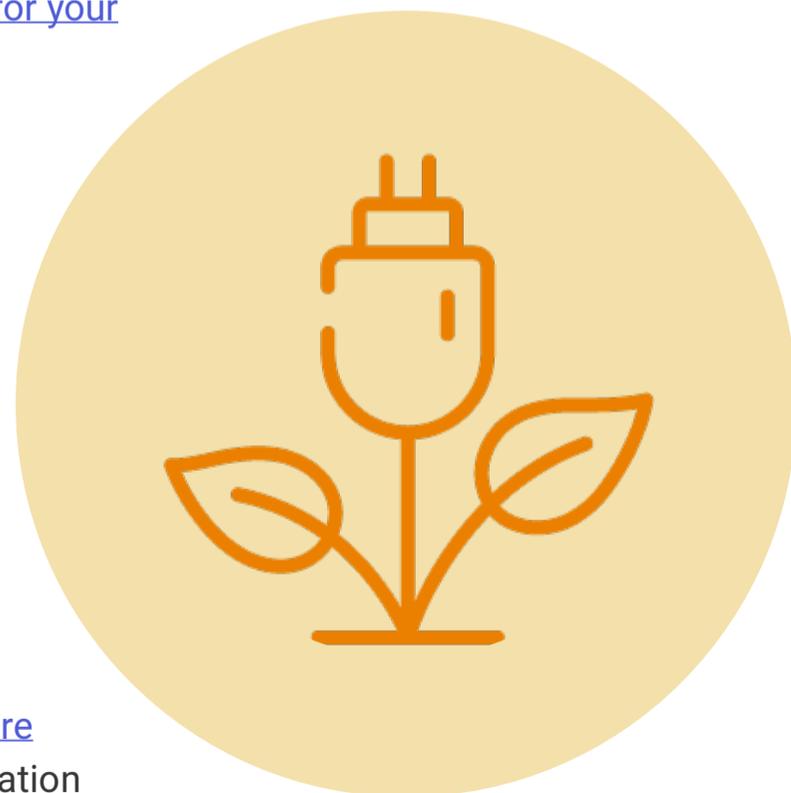
The [National Electric Vehicle Infrastructure Formula Program](#) (aka NEVI) dedicates \$5 billion to fund the development of EV charging infrastructure across 75,000 miles of national highway. To qualify for funding (up to 80% of project costs), your business must meet the following criteria:

- ✔ **Be located within one mile of an established alternative fuel corridor**
- ✔ **Accommodate DC solution power requirements**
- ✔ **Simultaneously charge four vehicles at a minimum of 150kW**
- ✔ **Cover remaining costs**

Each state is allowed to establish its own NEVI requirements in addition to the federal minimum standards. You can [look for your state's standards here](#).

State planners, local governments, and Indian Tribes should consider the Joint Office of Energy and Transportation's [Charging and Fueling Infrastructure \(CFI\) Discretionary Grant Program](#). This grant makes up to \$700 million in funding available, with the purpose of strategically deploying publicly accessible EV charging infrastructure across urban and rural communities. Applications must be submitted electronically by 11:59 pm EST on Tuesday, May 30, 2023\*.

\*Note: This was the deadline at the time of publishing this ebook, please visit [Charging and Fueling Infrastructure \(CFI\) Discretionary Grant Program](#) for up to date information on this grant.



# STATE AND LOCAL EV CHARGING FUNDING PROGRAMS

Depending on your location, state and local governments may also have funding programs to cover the installation or operating costs of EV charging infrastructure.

## State Rebates, Incentives, and Grant Programs Charging Funding Programs

Rebates for EV charging stations refund you part of the cost of the charging station, while tax incentives reduce your tax burden by allowing you to write off some of the installation expenses. Grant programs provide government funds to cover a portion of the costs.

The funding opportunities available on a state level vary. Some examples include:

- ✔ **Tucson Electric Power's Smart EV Charging Program offers up to \$9,000 per port for Level 2 Charging stations and up to \$40,000 per port for DC Fast Chargers to commercial businesses, multi-family complexes, and nonprofit customers that purchase and install EV charging ports at their location.**
- ✔ **The Charge Ahead Colorado program provides financial support to fund 80% of the cost of a charging station. Up to \$9,000 for a Level 2 Dual Port Station and up to \$50,000 for a Level 3 Multiple Connection Standard Station. CAC typically has three application rounds per year: in January, May, and October.**
- ✔ **Austin Energy offers a rebate of up to \$4,000 or 50% of the cost to install approved Level 2 charging stations for businesses and multifamily properties. Austin Energy also offers rebates of up to \$10,000 to those who want to install a DC Fast Charger.**
- ✔ **The Utah Department of Environmental Quality (DEQ) EVSE Incentive Program allows businesses and non-profit organizations to apply for a reimbursement grant of up to 50% of the purchase and installation costs for a pre-approved EVSE project (both Level 2 and DC fast charging EVSE).**

These are only a few of the state-level initiatives across the US designed to help businesses upgrade America's transportation infrastructure. The US Department of Energy provides further information on new and recently updated state laws, incentives, and regulations related to electric vehicles, alternative fuels, and EV infrastructure through its Alternative Fuels Data Center. This resource also provides information about local incentives and laws.

## Local EV Charging Funding

Cities across the United States also have their own incentive and funding programs to help businesses adopt EV infrastructure. For information on specific EV charging laws and incentives in your area, contact your local government.

## PRIVATE FUNDING AND FINANCING OPTIONS

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In addition to federal, state, and local funding options, there are also private sources you can leverage, including:

- ✔ **Commercial loans**
- ✔ **Lease financing**
- ✔ **Power Purchase Agreements (PPAs)**
- ✔ **Energy Service Agreements (ESAs)**
- ✔ **Crowdfunding**



## TRADITIONAL COMMERCIAL BANK

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To finance an EV infrastructure project, you can obtain commercial loans from a bank, credit union, or other financial institution. Like any other traditional loan, these typically have a fixed interest rate and repayment terms over a set period of time.

## LEASE FINANCING

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Another option to mitigate the expense of developing commercial EV infrastructure is lease financing. This allows you to rent EV charging equipment and pay for it over a period of time, similar to leasing a car. This choice can ease the lump-sum high cost by spreading it out with a down payment and monthly payments.

## POWER PURCHASE AGREEMENTS

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Power Purchase Agreements (PPAs) allow businesses to purchase renewable energy directly from a renewable energy provider, typically at a fixed price over a set period of time. By using PPAs, businesses can ensure a stable and predictable energy cost for their EV charging infrastructure, which can help them better manage their finances and plan for the future.

By taking advantage of a Power Purchase Agreement with your local electricity provider, you can lease your EV charging equipment from them and pay for it via a long-term contract. The provider owns and maintains the equipment, while your business shoulders the cost of electricity.

While PPAs can be beneficial, with a low or nonexistent upfront capital cost for energy efficiency projects, they typically disqualify your business from some state or federal subsidies related to your power use or EV infrastructure.

## ENERGY SERVICE AGREEMENTS (ESAS)

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Similar to a PPA, Energy Service Agreements are contracts with an electricity provider that enable you to implement energy efficiency projects without any upfront capital expenditure, making them very attractive to risk-averse businesses.

However, there are notable differences between ESAs and PPAs. An ESA is not a lease but a services agreement similar to a shared savings model. An ESA for EV infrastructure makes your business liable not only for electricity costs but also for energy management, such as demand response and load balancing. The electricity provider owns the equipment and is responsible for the maintenance costs.



## ENERGY-EFFICIENT PROPERTY ASSESSED CLEAN ENERGY (PACE) FINANCING

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The [Property Assessed Clean Energy \(PACE\) Program](#) enables property owners to finance energy efficiency and renewable energy improvements on their private property by repaying the costs over time through a special assessment on their property tax bill. Taking advantage of PACE financing for EV charging infrastructure ties the cost to property, rather than a debt held by the property owner, in order to eliminate upfront costs.

While PACE is a government program and PACE programs are enabled through state legislation and authorized at the local government level, the funds from PACE do not actually come from local or state government finances. Rather, most PACE programs rely on public-private partnerships and source financing from private capital.

Reach out to your local municipality to learn more about EV charging through PACE programs in your area.

## CROWDFUNDING

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Some businesses across the United States have turned to crowdfunding to raise funds that can partially or completely cover the cost of EV charging stations, equipment, and installation. Crowdfunding enables your business to connect to a large audience of potential investors who are interested in supporting sustainable infrastructure projects.

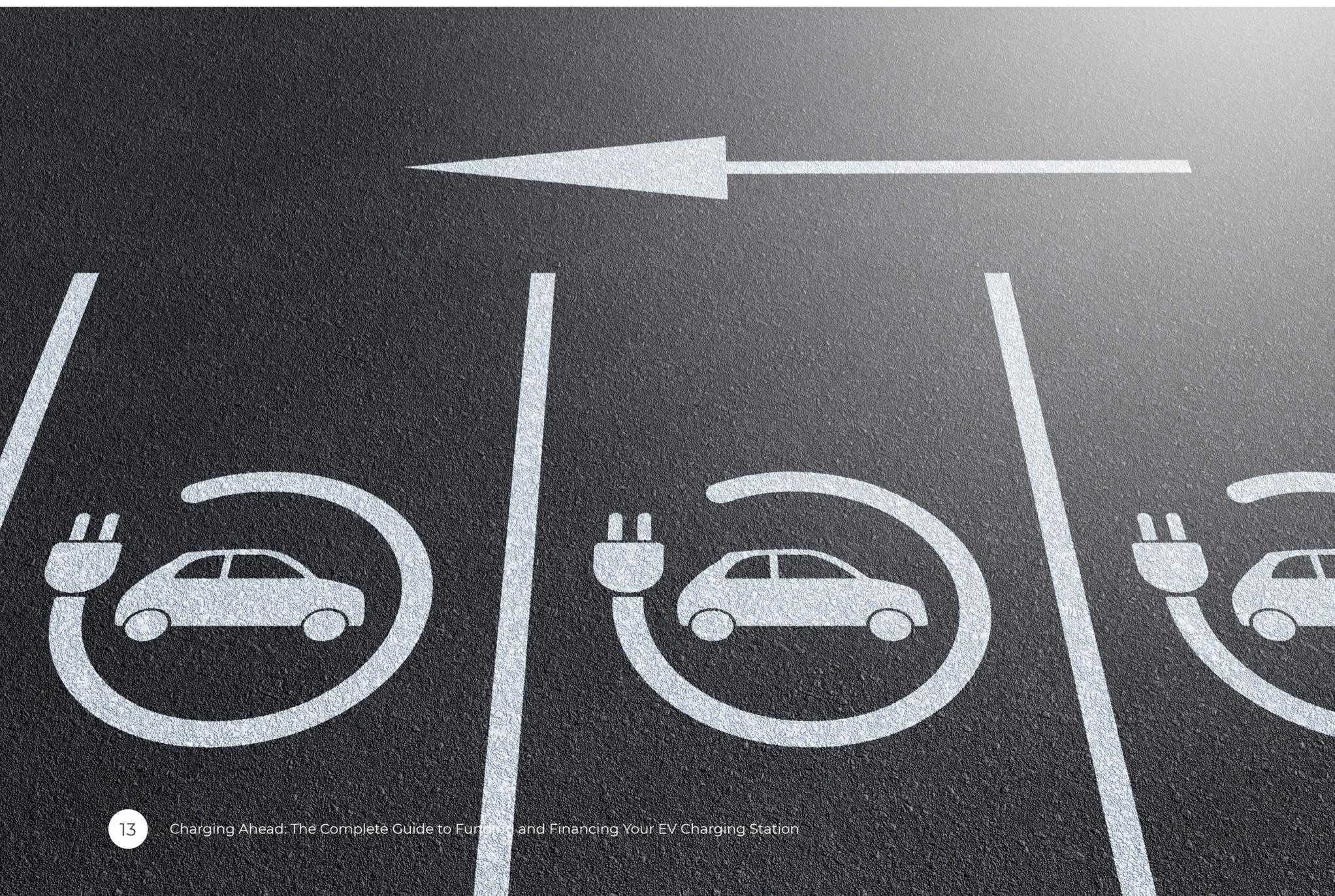


# Getting Started

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Installing EV infrastructure requires great attention and oversight, from planning and permits to electrification and aftercare. Determining what your business needs and how much to invest is only the first in a series of important decisions.

The good news is that you don't have to manage all the moving parts alone. The EV Charging specialists at Winn-Marion can create an all-inclusive solution tailored specifically for your business. This option ensures you have a knowledgeable partner every step of the way – even after the job is complete.



## WHY WINN-MARION?

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Since 1972, Winn-Marion has been dedicated to solving complex automation, control, and electrical challenges. Now we're turning our deep technical expertise to the EV charging industry, offering the same excellence in engineering and innovation to provide best-in-class solutions for businesses looking to play a part in expanding our nation's electric vehicle infrastructure.

As one of the world's largest ABB distributors, Winn-Marion partners with ABB to provide future-proof EV charging. These chargers feature robust connectivity options for remote services and updates. ABB technology maintains the highest standards for safety and reliability and is backed by the most respected technical and service engineers in the EV industry. A world leader in EV charging solutions, ABB has sold more than 680,000 electric vehicle chargers across more than 85 markets—more than 30,000 DC fast chargers and 650,000 AC chargers.

ABB has over 130 years of experience providing electrification solutions and was the first to roll out nationwide DC charging networks in 2012. DC fast chargers are ideal for workplaces, commercial and hospitality centers and public parking areas.



# Ready to get the ball rolling and become part of the largest network of EV charging stations in North America?

Reach out to our experts today. We'll schedule an EV audit and show you what the perfect EV charging solution for your business looks like.

**Contact Us**

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**Get Started With an EV Audit**

