

# Workplace EV Charging: Uses and Applications

## INTRODUCTION

The purpose of this memorandum is to provide various examples of uses and applications of workplace EV charging across the country for businesses of varying sizes, to convey the plausibility of adopting workplace charging in various contexts. Through demonstrating the viability of WPC across various locations and business sizes, businesses may be more convinced of the viability of becoming an EV friendly workplace.

This memorandum is part of a broader initiative, the [EMPOWER Workplace Charging Project](#), which aims to catalyze workplace charging (WPC) adoption across organizations of any size by supporting and recognizing pledged employers and providing a guided path to implementation. Pledges represent a commitment from employers to increase access to EVs for their employees, and include numerous benefits:

- Personalized coaching from a local Clean Cities Coalition to support a workplace's workplace charging program.
- Access to resources to help further a workplace's workplace charging program.
- Access to charger incentive information.
- Recognition regionally and nationally by the EMPOWER project highlighting a workplace's leadership in workplace charging adoption.

## SUMMARY OF FINDINGS

- **Charging Policies:** Very few businesses have formal WPC policy documents. Those that cited having formal policy documents noted that it is not distributed frequently.
- **Payment Methods:** Businesses typically collect payment for WPC usage through the charging manufacturer's operating system/application or through a payroll deduction.
- **Time/Usage Restrictions:** Some businesses defer to restrictions built into the charging manufacturer's operating system/application, while others have no restrictions.
- **Time/Usage Coordination:** Most businesses rely on informal communication methods amongst EV owners at their workplace to coordinate charger usage.
- **EV Ownership Incentives:** Most businesses do not offer any additional EV ownership incentives.
- **Funding Mechanisms:** Some businesses fund WPC programs through grant programs, while others fund the program directly by the company. On rare occasions, a "cost-share" is utilized between the business and charger manufacturer, where a business and the manufacturer will share the cost needed for implementation.

## METHODOLOGY

There were various stages of outreach conducted to ascertain interviews with businesses who have implemented workplace charging, detailed in this section. Due to EV charging still being a somewhat new technology, there are limited options for businesses that have elected to implement this service at their workplaces for employees to use. However, due to the constant evolution of technology, improvements in

reliability, and decreases in price, there are likely to be an increasing number of businesses implementing charging, specifically for employee use.

The following list describes the various stages of outreach conducted:

- Outreach to workplaces engaged to participating in the EMPOWER project and shared by project leadership.
- Outreach to all U.S. Clean Cities Coalition managers.
- Other miscellaneous outreach to businesses to inquire about workplace charging.

## EXAMPLE USES AND APPLICATIONS

The following section contains business profiles and interview findings for businesses that have adopted workplace charging. The businesses interviewed represent various sizes, types, geographies, and stages of WPC implementation.

### Central States Bus Sales, Inc.

**Location:** Lebanon, TN

- Other locations in MO, IL, AR, KY, AL (upcoming)

**Size:** 100+ Employees (across all six states)

**Type:** Privately owned bus dealer for commercial and school transportation needs.

**Charger Details:** Two chargers (DC fast chargers) for the electric buses sold by the company.

- One charger has been installed for roughly one year, the other will be commissioned shortly.

#### Program Details:

- Chargers were not initially installed for employee use.
- They will consider allowing employee use of these chargers if employees express more interest in personal EV ownership.
- If chargers are allowed to be used by employees, there would likely be a fee associated with use.

### EPIC Metals

**Location:** Rankin, PA

**Size:** 120+ Employees

**Type:** Privately owned company manufacturing and selling steel roof and floor deck ceiling systems used in commercial construction.

**Charger Details:** Eleven level 2 charging stations, divided between two locations (a split of four and seven).

- All chargers are [Blink](#) chargers (originally purchased as SemaConnect chargers).
- The first two charging stations were installed in June of 2016, funded directly by the company.

#### Program Details:



- The Blink operating system is utilized to charge employees for use, with payment for charging made directly to Blink and a portion of the fee returned to EPIC metals to assist with covering the cost of electricity.
- Chargers are only available during business hours, as the business site closes.
- There are no time restrictions for use—employees are charged by kWh consumed using Blink’s fee structure, as opposed to being charged a flat rate per hour for occupying the parking spot.
- There is no policy document associated with charging use, rather, information about charger use is spread by word of mouth.
- No coordination is required between employees for use of the charging stations, as the capacity currently outweighs the demand.
- The charging stations were originally installed to facilitate the adoption of plug-in hybrid and electric vehicles by employees for personal use.

### Other Information:

- The company offers an incentive of up to \$3,000 to employees for purchasing plug-in hybrid or electric personal vehicles.
- Future expansion of charging stations will be based on the demand from employees by proxy of purchased plug-in hybrid and electric personal vehicles.
- Blink reports to EPIC metals how many gallons of gasoline were displaced from burning and how many pounds of CO<sub>2</sub> were eliminated due to the company’s charging station use.

## Iowa Economic Development Authority

**Location:** Des Moines, IA



**Size:** ~140 employees within the Iowa Economic Development Authority, but roughly 300 employees in total that utilize the office building (shared with Iowa Finance Authority and Iowa Insurance Division).

**Type:** A public agency for the state of Iowa, with the mission “to strengthen economic and community vitality by building partnerships and leveraging resources to make Iowa the choice for people and business.”

**Charger Details:** One level 2 dual head charging station.

- The charging station is a [ChargePoint](#) charger.
- The charging station was installed in July 2021, funded by a grant.
- The charging station is available for use by staff and guests.

### Program Details:

- The ChargePoint operating system is utilized to charge employees for use, charged by the sum of the cost of electricity and the EV excise tax for the state of Iowa (11 cents/kWh total).
- There are no time restrictions for use if the vehicle is actively receiving a charge.
- If the vehicle sits in the designated parking space for longer than four hours, the cost raises to \$5/hour.
- There is a policy document related to workplace charging for employees, though it is not regularly distributed.

- The charging station is utilized consistently, so there is an open line of communication between EV drivers at the agency to coordinate scheduling, if necessary.

### Other Information:

- There are current plans for future expansion of charging stations (ten additional dual head charging stations of the same make and model for consistency) in the next five years or so, as part of a larger energy efficiency initiative in the agency that was spearheaded by a voluntary employee group (“Green team”).
- The presence of the charging station has seemingly motivated employees to purchase more personal EVs.
- Feedback from employees, board members, and guests has been positive.
- Usage is much higher in the winter and summer, due to EV battery ranges being lower in the extremely cold or hot temperatures.

## Jon Henry General Store

**Location:** New Market, VA



**Size:** Seven Employees

**Type:** A privately owned general store with a storefront, wholesale sales and delivery, and lodging.

**Charger Details:** Three level 2 dual head charging stations (six ports in total)

- All charging stations are [Blink](#) chargers.
- The charging stations were installed roughly one year ago, funded by a VDOE grant administered through [Virginia Clean Cities](#).
- The charging stations are available for use by staff, patrons, guests, and the public.

### Program Details:

- The company has a cost-share with Blink on the chargers, which was offered as an option on the grant they were awarded to purchase the chargers.
- There is a fee associated with charging at the stations, set by Blink, which is sufficient to cover electricity costs and receive a small amount of profit.
- Employees are offered a charging rate discount if they choose to use the chargers.
- There are no occupancy or time restrictions associated with the chargers (for instance, lodging guests may use them overnight).

### Other Information:

- The grant was pursued and charging stations installed out of personal interest from the company's owner, who wanted to adopt innovative technology but found chargers to be quite expensive.
- The company is in the process of purchasing an EV fleet vehicle to be used for wholesale delivery.
- In the future, the company would like to install fast chargers with universal plugs, where possible.
- Presently, the chargers are more highly utilized by customers on the weekends, as opposed to employee use throughout the week.

## Oregon Department of Transportation (ODOT)

**Location:** Headquartered in Salem, OR, with various locations across the state.



**Size:** 4,500+ Employees

**Type:** A public agency for the state of Oregon, responsible for systems of transportation in the state.

**Charger Details:** Thirty-five level 2 chargers, spread across 12 ODOT locations.

- Chargers are owned and operated by [Blink](#) (originally installed as SemaConnect chargers).
- The highest quantity of chargers at one ODOT location is 13 chargers at the Salem, OR headquarters.
- Chargers have been incrementally installed over time, starting with eight chargers installed in 2010 that were funded by Electrify America.

### Program Details:

- Chargers are available for employee use and ODOT fleet EVs (11 fleet EVs in total).
- Cost for use is currently based on vehicle charger size—a flat fee is withheld from an employee's paycheck which equates to \$10 or \$20 for small or large batteries, respectively.
- Currently employees must use the Blink app to unlock charging, while the ODOT fleet vehicles use a proprietary RFID card rather than the app.
- There is no means of reserving the charging stations, rather, employees have established informal email groups to coordinate ad hoc charging times.

### Other Information:

- It is anticipated that the quantity of chargers will be significantly scaled up soon, due to an Oregon mandate to adopt EVs for light duty fleet vehicles by 2025.
- Employees have expressed an interest in changing the fee structure to be a cost per kWh rather than a flat fee per paycheck.
- In the future, ODOT will consider establishing more specific guidelines for charger use for state fleet vehicles versus personal employee vehicles as the quantity of EVs in the state fleet will dramatically increase.
- In Oregon, ODOT is incentivized to report to the State about kWh usage according to the DEQ Clean Fuels program—credits are then received according to kWh usage, which may be sold to other businesses who are required to offset their use of fossil fuels.

## Riner Rentals

**Location:** Harrisonburg, VA



**Size:** 11 Employees

**Type:** A privately owned property rental and management company for students and families.

**Charger Details:** Four single-head level 2 chargers

- Chargers were installed in February 2024.
- The office space at which the chargers are located is rented, but approval was given by the property owner for use.

## Program Details:

- Five employees use take-home company fleet vehicles (four of which are EVs and one of which is a hybrid), which are the only vehicles utilizing the chargers.
- There is no fee associated with use of the chargers, due to use being limited to fleet vehicles.

## Other Information:

- The potential for expansion in the future depends heavily on the number of employees at the company—more employees would require more fleet vehicles but would not merit the installation of additional chargers.
- Employees were apprehensive about the conversion to EVs at first, but the company owner (an EV owner) has already realized some of the benefits through personal ownership.

## Shaver Transportation Company

**Location:** Portland, OR

**Size:** ~145 Employees



**Type:** A privately owned regional tug and barge company focused on ship assist, bulk commodity transportation, harbor/marine services, and emergency response and rescue.

**Charger Details:** Two level 2 chargers

- Chargers have been available for approximately two years.
- The office space that the chargers are located is owned by the company but was originally constructed by the City of Portland, including the installation of the chargers.

## Program Details:

- Chargers do not have a fee associated with use, nor are there any time restrictions.
- There is no policy document related to workplace charging, rather, information about utilizing the chargers is communicated more informally.

## Other Information:

- The goal of employing workplace EV charging was to reduce impacts on the environment.
- The company has received positive feedback from employees about the chargers, so there are no plans to make any changes currently.