# Power up your federal fleet

Everything you need to know to go electric



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# The time is now to electrify your fleet

How to prepare for federal fleet electrification requirements

# More sustainable federal procurement

In December 2021, President Biden signed Executive Order 14057, "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability."

## **Zero-emissions goals**

Under this order, the federal government must now lead by example to achieve a carbon-free electricity sector by 2035 and net-zero emissions by no later than 2050.

Federal agencies with a fleet of 20 vehicles or more are required to develop a strategy for achieving 100% zero-emissions light-duty vehicle acquisitions by 2027 and 100% zero-emissions vehicles of all types (light-, medium- and heavy-duty) by 2035.

Federal fleet to achieve 100% zeroemissions by 2035



## **EV** infrastructure requirements

The order further stipulates that agencies must implement the electric vehicle (EV) charging infrastructure needed to support their zero-emission fleet. Agency leads must also provide annual progress metrics that map to these and other new sustainability requirements.

Fortunately, networked EV charging solutions allow agencies to track and measure sustainability metrics, making it easier for them to stick to their objectives and fulfill reporting requirements.

## Lower costs. Fewer emissions. Happier drivers.

The good news is that EVs offer lower fuel and maintenance costs, produce fewer emissions and result in higher driver satisfaction. Thanks to recent legislation aimed at providing funding to spur the transition to electric transportation, it's a great time for federal agencies to make the shift without disrupting existing fleet operations.

#### **Cost-effective**

In a comparison of New York City's electric, hybrid and gas-powered fleet vehicles, the Department of Citywide Administrative Services learned that fleet operators experience 25% lower total cost of ownership after converting their vehicles to electric, thanks to greater overall efficiency, more affordable fueling and operating costs, and reduced maintenance.

In fact, according to the Natural Resources
Defense Council, electric motors convert over 85%
of electrical energy into motion compared with
less than 40% for an internal combustion engine
(ICE) vehicle, and according to the Union of

Concerned Scientists, some electric fleet vehicles produce 50% lower emissions than equivalent gaspowered vehicles.

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Some electric fleet vehicles produce 50% lower emissions than equivalent gas-powered vehicles.

- Union of Concerned Scientists, 2020

## **EV** fleet opportunities

The U.S. government operates the largest civilian fleet in the world with more than 656,000 vehicles as reported in the May 2022 Federal Fleet Report.

According to the 2022 BloombergNEF Long-Term EV Outlook report, makers of medium- and heavy-duty trucks are targeting between 35% and 60% of their annual sales to be zero-emissions and primarily all-electric by 2030. BNEF predicts that the share of zero-emissions medium- and heavy-

duty trucks on the road will be 15% by 2030 and 35% by 2040.

This level of growth offers expanded opportunities for federal agencies to convert their fleet for a variety of purposes in a way that does not disrupt existing fleet operations.

## Federal fleet inventory

U.S. Postal Service: over 234,000 vehicles

Other civilian agencies: over 241,000 vehicles

Military: over 181,000 vehicles

## 5 considerations for electrifying a federal fleet

If you're tasked with transitioning your federal fleet to electric, it's important to think strategically about your needs today as well as tomorrow before you start to plug in vehicles.

### 1. Why do you need to electrify?

As a federal agency, your broad reason to electrify your fleet is to achieve 100% zero-emissions by 2035, as per the 2021 executive order. You may also be looking at ways to reduce overall operating costs across your fleet operations. Outlining your specific goals upfront will help frame all aspects of your fleet electrification project.

## 2. How will you achieve your goals?

Identify the specific objectives you'll work toward along your electrification journey. For example, you might start with a pilot program to convert 100 vehicles to electric the first year and then scale incrementally over time to convert the rest of your fleet. Maybe you'll focus on light-duty trucks first or perhaps your fleet of sedans.



## 3. Where will you install EV charging infrastructure?

Depending on your fleet, you may need infrastructure for agency employee charging of passenger vehicles or fleet depot charging for light- and medium-duty vans and trucks, or both. Start by getting an <a href="EV">EV infrastructure site</a> assessment specifically for fleets, and be sure to involve building managers and your local utility right from the start.

Find out whether your site has any electrical constraints. Some older buildings may have structural limitations or other obstacles to making electrical upgrades. Consider your daily vehicle flow. Do you need to keep your fleet charged up around the clock? Or will your fleet always be parked overnight?

Electrifying a large fleet may take time. Consider not only what your needs are today, but what you think you'll need in the future as your EV charging program expands. It's much more cost-effective to get adequate infrastructure in place at the beginning than to find out you need to add more down the road.

Think carefully about how to set up charging so that parking can accommodate both EVs and ICE vehicles during your transition.

#### 4. Who will use the chargers?

Knowing your user group and their charging habits will help steer you toward the appropriate EV charging solution.

- + Level 2 AC chargers are great for drivers who park and charge while they're at work or for those who leave their vehicles overnight to charge in a depot.
- + Certain types of fleet vehicles, however, may need to charge up quickly and get back on the road, so a DC fast charging solution will be more efficient.

Think of every use case and consider how long drivers will be parked and what type of vehicle they will be driving.

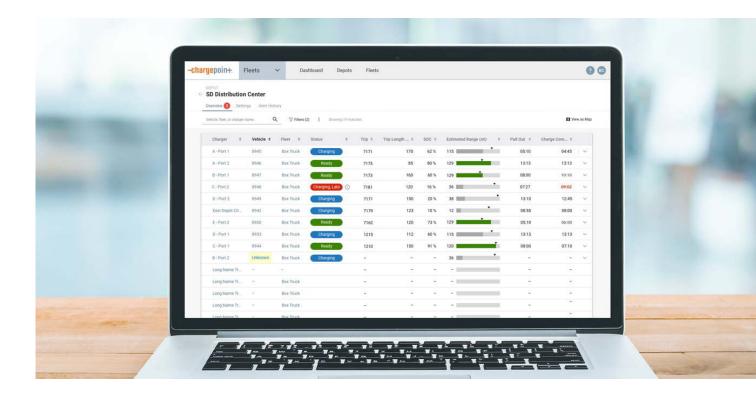
# 5. How will you manage your EV charging program?

Getting your electrical infrastructure and charging hardware in place is only the first step. You'll also need tools to help you manage your EV charging program. Having a solution that can integrate with existing fleet management and telematics systems

is crucial, since your transition to electric is likely to roll out in stages.

Networked charging solutions enable you to control who has access to chargers when and to share power among charging stations to help keep fueling costs down. A flexible, interoperable solution will keep legacy systems running while you make the transition to electric and provide integrated dashboards to track energy usage, GHG emissions and other metrics.

Read on to learn more about how to set up EV charging infrastructure using a blanket purchase agreement (BPA) and discover how ChargePoint and our partners can help.



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# Fast and feasible charging for the federal fleet

Except for the U.S. Postal Service, all federal agencies must acquire their vehicles using the services provided by the U.S. General Services Administration (GSA). The GSA has issued 16 blanket purchase agreements (BPAs) to help simplify the purchasing of EV charging and related services for the federal fleet.

These BPAs enable <u>federal civilian agencies</u> and the military to place orders directly with EV charging providers and move through the procurement process more quickly. This speed will be vital in reaching the administration's 100% zero-emissions fleet goals by 2035.

The federal government has only 1% of the chargers it needs to electrify its federal fleet according to the U.S. Government Accountability Office.

#### **BPA** benefits

GSA BPAs help federal agencies purchase new EVs as well as the infrastructure needed to keep them charged up and running smoothly. BPAs:

- + Aggregate buying power
- + Support a range of charging scenarios and ownership needs
- + Adhere to security and supply chain requirements
- + Include site assessment and planning services
- + Address hardware, software and installation

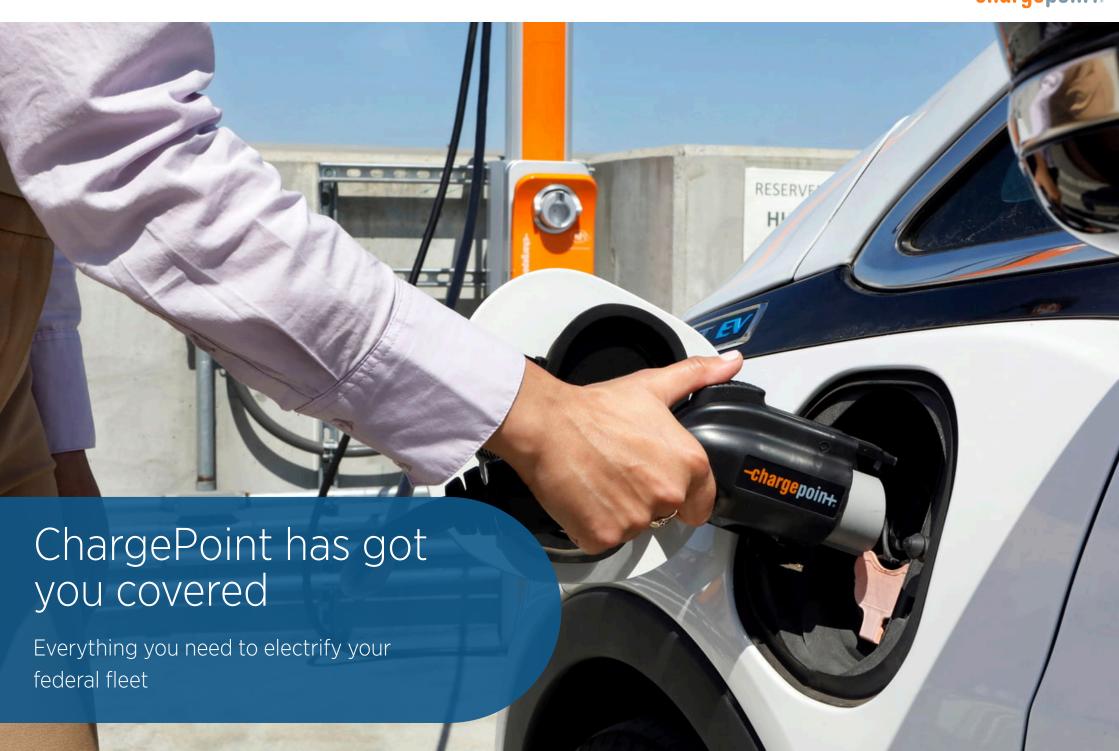
The BPA process enables your agency to connect with partners who understand all of these requirements and can help you plan and carry out your charging implementation.

#### Only the best for BPAs

The BPA process ensures that agencies are working with reputable, knowledgable EV charging providers. All contractors are vetted to

offer the best value products and services. Orders are issued using full and open competition and hold significant advantages over the acquisition of commercial items.





# Networked charging streamlines fleet management

With over 3,000 charging ports at over 100 federal agencies, including subagencies and components of cabinet-level agencies, ChargePoint offers a long-trusted federal EV charging experience. We're the only network with an integrated portfolio of hardware, cloud services and support delivering the smoothest possible experience for federal fleets.

Facing the momentous challenge of climate change is not something that any business or federal agency can do alone. ChargePoint brings years of experience in planning and implementing EV infrastructure, providing you peace of mind when embarking on an electrification project.

ChargePoint solutions support both governmentowned vehicles (GOVs) and personally-owned vehicles (POVs) as required in the FAST Act. Federal agencies can elect to purchase Level 2 AC or DC fast chargers under our partner BPAs.

Our networked charging solutions give you the visibility, accuracy and control you need to tailor an EV charging program to meet your needs today, with the ability to scale as your fleet continues to evolve.



#### Manage energy usage

Easily monitor your fleet's energy usage in real time, set a power ceiling to avoid expensive utility demand charges and even install additional charging spots beyond your organization's rated electrical capacity. Use power-sharing software to dynamically share electricity between stations to charge more vehicles with less energy, keep operating costs down and avoid infrastructure upgrades as your needs change.

#### **Control station features**

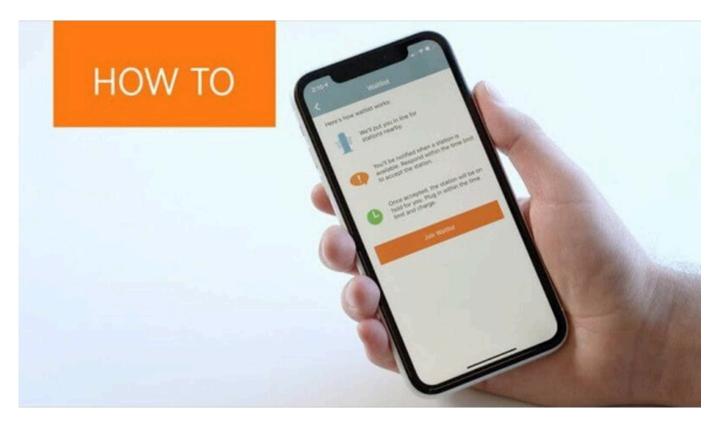
Cloud-based software allows you to implement new features using over-the-air (OTA) updates, limit access to federal employees only, and shut down your stations for safety and security purposes when your site is closed. Track vehicle charging and pay for electricity if the vehicles need to charge at other stations, with WEX integration for easy payment.

## As of August 2023...

- + There are more than 240,000 active charging ports on the ChargePoint network in North America and Europe.
- Drivers can access over 500,000 additional ports through roaming agreements.

### Make charging easy for drivers

The ChargePoint app makes it easy for drivers to find available charging spots in the depot or while on the road. The Waitlist feature allows them to get in line for a charger and receive a notification when it's available. Expert support is available specifically for drivers 24/7, freeing up your time to take care of other tasks. The app also provides helpful navigation and a Tap to Charge feature for contactless charging.



Learn how to use ChargePoint Waitlist.

## Run detailed reports and analytics

Automated reports on energy use, costs and emissions avoided can help you meet regulation requirements and analyze your overall charging program. You will be able to track how stations are being used and know when it is time to add capacity.

# Your fleet. Our e-mobility platform.

One of the first EV charging software platforms to achieve FedRAMP authorization for our suite of cloud software products, we're listed on the <u>FedRAMP</u> Marketplace.

**Fleet assessment.** A good partner does more than get you started. Your path to long-term EV success depends on getting it right the first time. We work with you to examine your fleet's operational footprint and strategize every step of your electric charging solution.

Design and build. Work with us to design an EV charging implementation that best fits your site, vehicle flow and utility needs. ChargePoint certified partners are specifically trained to implement EV charging solutions that can scale to meet the needs of an evolving federal fleet. We'll manage everything from permitting and construction to installation and configuration.

**Incentives and grants.** We've got your back when it comes to finding the best way to pay for your new charging infrastructure. We'll provide a complete estimate upfront along with expert



guidance on available grants and rebates, including federal, state and local incentives; utility programs; and tax credits to help you modernize your fleet as cost-effectively as possible.

Integrated software. Our state-of-the-art software enables you to monitor vehicles, optimize charging and manage fleet operations, all from one simple dashboard. ChargePoint solutions integrate seamlessly with your existing fleet management and telematics systems.

**Charging stations.** We guide you toward the fast, efficient charging hardware that best fits your fleet's needs. Once you get moving, we have your back with charging station monitoring, maintenance and life cycle support.

**Subscription services.** ChargePoint as a Service makes it easy to add EV charging, with pricing models designed to meet your needs. Get stations, cloud-based software, site activation, and ongoing proactive monitoring and support in one bundle. Best of all, you'll save time and money with low overhead and predictable operational expenses.

# ChargePoint ticks every box in the federal security checklist

#### At the station

- + Secure RFID (NEMA UR), NFC (Apple Pay, Google Pay)
- + Encryption in memory, in storage and in transit
- + No payment information stored on the station
- + Manufacturer's digital security certificates to prevent insecure devices from impersonating a charging station
- + Third-party tear-down vulnerability assessment

#### Station to cloud

- + Private IP network not Internet accessible
- + End-to-end encryption from station to cloud
- + Does not rely on local or third-party IT systems for connectivity

### Mobile app

- + Secure software development (SANS, OWASP)
- + Two-factor authentication on account creation
- + Does not store payment information on the device

#### Mobile to cloud

+ End-to-end encryption

#### Within the cloud

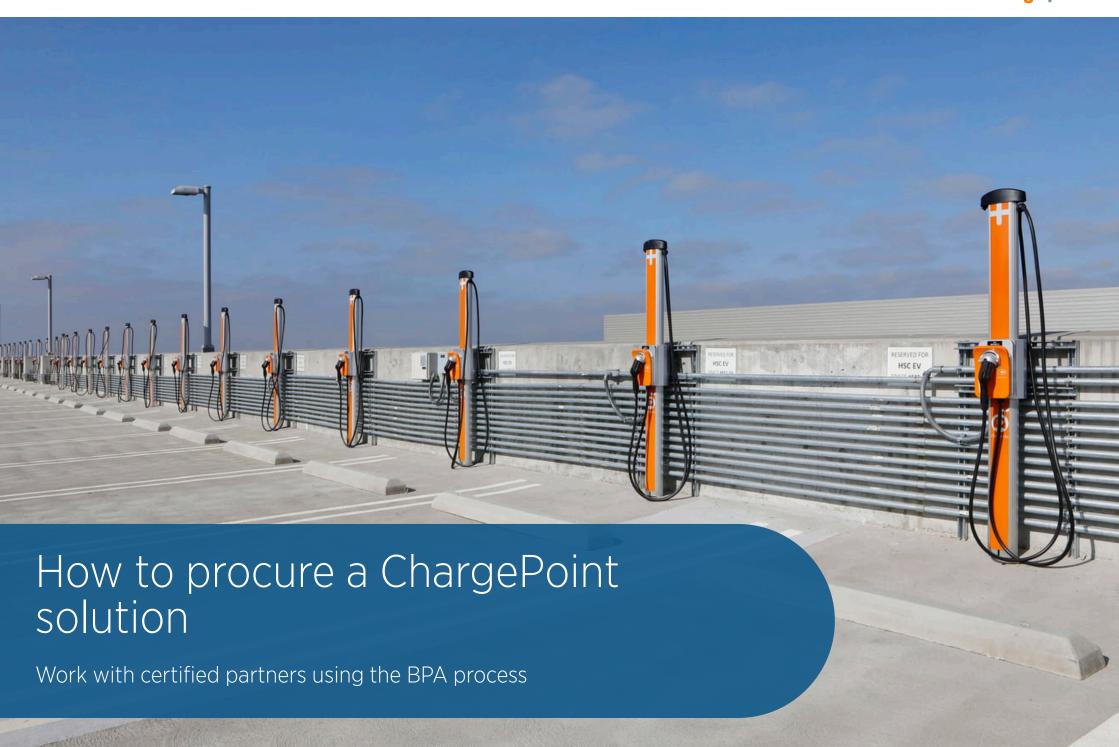
- + Secure hosting environment FIPS, PCI, ISO, FedRAMP (via AWS)
- + Encryption in transit and at rest
- + Does not store payment information in the cloud: uses tokenization

## System and organizational certification and controls

- + PCI compliance
- + SOC 2 compliance
- + Data privacy regulatory compliance (GDPR, CCPA)
- + Third parties subject to same level of security controls
- + ISO 27001
- + FedRAMP

# Federal agencies that have chosen ChargePoint

- + General Services Administration
- + Department of Homeland Security
- + NASA
- + Department of Navy
- + Department of Army
- + Federal Bureau of Investigation
- + Veterans Affairs



# More BPAs than any other EV charging supplier

The GSA's BPAs represent an important step in the process of electrifying the federal fleet, and we're proud to be included in four of them alongside our trusted partners. We are committed to working with multiple stakeholders to make an electric future happen for the benefit of everyone.

Within the GSA procurement system, simply select one of the following ChargePoint-certified partners to get started on your electrification journey:

#### **Apollo Sunguard**

Service-Disabled Veteran-Owned Small Business GSA #GS-30F-0029Y BPA #47QMCA22A0003

Contacts:

Shelbie Wright EV Charging Stations Lead 941-925-3000 ext. 102 swright@apollosunguard.com

#### **Carahsoft Technologies**

GSA contract #47QSWA18D008F BPA #47QMCA22A0005

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#### **Verdek LLC**

Small Business GSA contract #GS-07F-172BA BPA #47QMCA22A000Y

Contact:

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All of the listed providers offer ChargePoint software, hardware and services, as well as options for selecting a ChargePoint as a Service subscription or purchasing your EV charging solution as a capital expense. Each of these contractors has partnerships with a network of national and regional electricians and EV infrastructure installers.

We're proud to come together with leading businesses of all sizes to bring the cost savings, emissions reductions and superior driving experience of EVs to our federal fleet.



