

EVSE Offerings and Considerations

EVSE Empowerment Week Plug Into the Future: Energize Your Skills!



U.S. Federal Fleet Electrification Initiative

Advancing EV Market

- Fixing America's Surface Transportation (FAST) Act of 2015
- Executive Order 14037 (50% of auto sales ZEVs by 2030)
- Infrastructure Bill \$7.5B for ZEV Charging across U.S. (NEVI Program)
- Domestic battery and vehicle production and station manufacturing
- Chips & Science Act of 2022

Federal Fleet Efforts

- EO 14057 Federal Fleet Zero-Emission Vehicle Acquisition goals (100% of light-duty vehicle acquisitions by 2027 & 100% of all vehicle acquisitions by 2035) and annual intermediate targets
- Providing acquisition pathways to support electrification
- Making Buildings EV-Ready
- Looking to pilot and build out electric vehicle infrastructure at Federal Facilities
- Expanding public charging opportunities

Types of EV Charging Stations

Level 1 Charging 110V/120V

- Majority use J1772
- 4-6 miles per hour charge time
- 12-16 amps
- \$

Level 2 Charging 208V/240V

- J1772 / Type 2 NACs for Tesla
- **10-20 miles per hour charge time**
- 16-80 amps
- **\$\$**

Level 3 / DC Fast Charging 208V/480V

- Majority use CCS
- 50-90 miles in 30 minutes
- 100 amps or more
- **\$\$\$**

EVSE by Recharging Time

MY2024 Electric Vehicle	KW	All Electric Range/Total Range/Mile	Level 1/120V Recharge Time (hrs) \$ 4-6 miles of range per hour. Charging cord provided. Plug into existing outlet or station	Level 2/240V Recharge Time (hrs) \$\$ 10-20 miles of range per hour.2-10 hours for full charge. Stations can collect data.	DC FAST (50-150 kW) Recharge Time (hrs) \$\$\$ 50-90 miles of range per 30 mins. Full charge in 30 minutes-1 hour.
Nissan Leaf (base)	40 kWh	149	30	7.5	1.8
Chevy Bolt	66 kWh	259	64	9	1.4
Chrysler Pacifica PHEV	16 kWh	32/520	14	2	N/A
F150 Lightning	98 kWh	230-320	72+	10-14	41-122 minutes
Mustang Mach-E	70 kWh	211-300	95+	14	1 hour
Hyundai Kona	49 kWh	258	50+	9.5	1 hour
Ford Escape PHEV	14 kWh	37/530	10	3.5	N/A



EVSE Blanket Purchase Agreements

GSA's EVSE Blanket Purchase Agreement Benefits (gsa.gov/evse)

Benefit of BPAs:

- Streamlined contracting vehicle
- Pre-Competed
- Pricing discounts •
- Technical evaluation of products •
- Includes additional requirements on top of MAS such as IT Security •

Who can access:

- Federal agencies
- Federal agencies' embedded Contractors •
- Contractors with PBS' Governmentwide Design/Build & Construction EVSE IDIQs ullet
- Cities & States for emergency or disaster preparation, public health emergencies, or through • the cooperative purchasing program

EVSE BPA Product Offerings

- Levels 1 & 2 (CLINs 0001-0002)
- Level 3/DC Fast (CLIN 0003)
- Solar & Portable (CLINs 0004-0005)
- Software & Network Plans (CLINs 0007-0008)

Solar Chargers (CLIN 0004 on the BPA)

Benefits:

- Easy install
- Renewable and resilient
- Mobile, carbon free
- Off-grid option

Product Information:

- \$64-72K
- Enel Juice Box or Chargepoint station options
- L1 or L2
- 5.76KW max single port power per plug



Solar Chargers on GSA Advantage

EVSheltron BoostHub

- Installed in 1 day
- Supports up to 3 EV Charge Station spots,
- Level 2 AC with SAE J1772 Plug.
- Any model or style of EV Charger can be provided pre-installed.
- Charge Station upgrade to 25/50KW "Level 3" DC-Fast Charge w/CCS(2) / CHAdeMO plugs.
- Pricing ranges from \$70K \$199K



Mobile Chargers: CLIN 0005

Charging Station Features

- Power required
- Stand-alone charging system
- One or two charging port options
- CCS1 charging handle
- Up to 50 kW output on a single port
- 7" touch screen display
- RFID reader
- Removable wheels for fixed installation • 16.4ft (5m) charging cable
- 16.4ft (5m) power cord



Services: CLIN 0006

Agencies will need to prepare their sites for EVSE. If agencies need to determine their site's electrical capacity, optimal solar station locations, or other services, they can use CLIN 0006 through the BPAs. Per the FAR, Statement of Works are required for all CLIN 006 services.

Located under **CLIN 0006** on the BPA, services offered include:

- Site assessment
- Validation
- Permitting
- Basic installation
- Utility coordination
- Wiring
- and more

Power Management: CLINs 0007

EVSE power management products optimize the distribution of electrical power among multiple electric vehicle chargers, ensuring efficient, safe, and cost-effective charging.

CLIN 0007 Offerings:

- Power Management Kits
- Site Controllers
- Annual licenses for AI Charging Management Systems



Network Solutions: CLIN 0008

Enhanced Visibility

- Driver details
- Power use
- Energy costs
- Station status
- Management of stations

Control Features

- Set pricing and access policies
- Adjust policies according to driver, session duration, energy fees, and time of day
- Manage and redistribute load

FedRAMP-authorized solutions available on the EVSE BPA:

- Chargie- Software Walkthrough
- ChargePoint- Software Walkthrough
- *Atom Power is FedRAMP authorized but only available through GSA's Multiple Award Schedule

FedRAMP Estimated Authorization Timeline (Based on Firm Submitted Timelines & Subject to Change)

3 FedRAMP Authorizations

- **Atom Power**
 - 03/28/2024 Ο
- **ChargePoint**
 - 01/23/2024 Ο
- **Chargie**
 - 01/23/2024 Ο

5 Solutions In-Process Early Q1 FY25

- BP Pulse*^
- Blink[^]

Late Q1 FY25

- Loop *^(moderate)
- EVGateway*
- Siemens DepotFinity*^
- All solution providers submitted by GSA CISO to FedRAMP for In-Process designation

Warranty Plans: CLIN 0009

With new technology such as EVSE, it is important for GSA to ensure that customers feel comfortable and secure with their new equipment, with the opportunities to upgrade with the emerging technology.

Offerings include:

- Parts-only warranties
- Parts & labor warranties
- Annual device cleaning and vandalism warranty
- Onsite repair and replacement
- Usually 1-5 year coverage for warranties
- Guaranteed uptime
- No stress, hassle free charging!

Charging as a Service (CaaS): Offered through CLINS 0002 & 0003

CaaS is a subscription based contract. An agency will pay a predetermined cost, and the vendor will maintain the charging station(s) for a predetermined time.

Who is involved?

- \rightarrow Agency = Host of the station
 - Decides who to offer the charging stations to (employees, the public, ect.)
- → Vendor = Owner/Operator
 - Takes care of the logistical side of things, such as installation, maintenance, and further support.

Removes the burden of ownership and maintenance from the charging host by providing services such as:

- Site assessment/installation
- Management software
- 24/7 driver support
- Professional field maintenance

CaaS Continued

District Fleet / EV Connect CaaS

- Offering \bullet
 - Level 2 chargers
 - Options include wall mounts, pedestal mounts, and single/double ports
- 60 month (5yr) contracts (paid monthly) \bullet
- Install included \bullet
- Is not FedRAMP authorized \bullet

Carahsoft / ChargePoint

- Offerings lacksquare
 - 42 Level 2 options & 4 DC Fast options
 - Options include wall mounts, pedestal mounts, and single/double ports —
- **Level 2:** 1yr/3yr/5yr plans •
- **DC fast:** 3yr/5yr plans lacksquare
- Install NOT included \bullet
- **FedRAMP** authorized

Charging Made Easy: One Streamlined GSA Solution

Charging Station BPAs

- Hardware offerings for Level 1, 2 & DC Fast
- Ancillary product services
- Federal IT security compliance
- Product onboarding & offboarding
- Small Business preferences

Installation & Infrastructure IDIQs

- Feasibility studies & site assessments
- Construction and design/build
- **EVSE Installation**
- Electrical infrastructure upgrades
- Site work
- Testing, commissioning & utility coordination
- Small Business set-aside

FAR 51 Deviation allows IDIQ contractors to buy from BPAs

Overview of the EVSE D/B Construction IDIQ Contracts

Governmentwide EVSE D/B IDIQ Contracts

Total small business set-aside

•All EVSE IDIQ contracts are small businesses, many of which represent additional socioeconomic categories

Four geographic zones

Covers any Federal agency location

Including GSA controlled space and non-GSA controlled space

\$500M total ceiling per geographic zone

•Across all IDIQ contracts within each geographic zone

1 year base w/ four 1 year option periods

• Currently in Option Year 1

EVSE Ordering Paths

How to Use the BPA

Visit gsa.gov/EVSE

- Self-Service! Work directly with the vendor
- For a full list of available products, vendor information, and ordering guide go to gsa.gov/EVSE.

Agency Contracting Officer (CO) Determines Acquisition Threshold

- Orders < \$10K: can be placed directly with any BPA Holder that can meet the need.
- Orders > \$10K and < \$250K: must provide each BPA holder a fair opportunity.
- Orders > \$250K: send Request For Quote (RFQ) to all BPA Holders that offer needed product/service. SOWs are required for services (CLIN 006).

Exceptions: Orders above \$10K can be placed directly if determined and documented that only 1 BPA holder can meet need.

Agency Contracting Officer (CO) Determines Acquisition Threshold

• In accordance with FAR 8.405(C) requirements. All order and delivery arrangements are made by the agency.

Ordering Paths for EVSE D/B & **Construction IDIQ contracts**

Ordering Path 1 ;Full Service - GSA CONTROLLED SPACE AND NON-GSA CONTROLLED SPACE

- PBS provides full acquisition and project management support to award, administer and close out the task order and manage the task order project.
- This ordering path uses PBS' standard Reimbursable Work Authorization (RWA) process.

For more information about RWAs, please visit <u>Reimbursable Services (RS) Program</u>

Ordering Path 2: Self Service- NON-GSA CONTROLLED SPACE

- Ordering agency awards the task order
- Ordering agency provides full acquisition and project management support to award, administer, and close out the task order and manage the task order project
- Ordering agency OCOs must have a Delegation of Procurement Authority (DPA) to place task orders under the EVSE D/B IDIQ contract
- Ordering agencies must provide a service charge RWA per DPA

For project support or questions, please contact <u>pbs-evse-olutions@gsa.gov</u>.

Delegation of Procurement Authority

In GSA CONTROLLED SPACE

• GSA PBS Contracting Officers May Place task orders

GSA NON-CONTROLLED SPACE

GSA PBS Contracting Officers and Other Federal Contracting Officers with a 0 **DPA** may place task orders

DPA BENEFITS

- Once granted a DPA, OCOs may issue one or more task orders in any zone Ο
- Contract access fee is paid once for the life of the DPA 0
- DPAs are valid for life of the IDIQs \bigcirc

Receive a DPA in 3 Easy Steps

- Ordering agency contacts <u>pbs-ev-idig@gsa.gov</u> to request procedures for 0 providing a Reimbursable Work Authorization (RWA) in eRETA for \$1,625 per DPA.
- DPA requestor reviews the Ordering Guide and any supplemental training 0 materials located *here*.
- DPA requestor completes the DPA Request Form located *here*. Ο
- Visit our site to learn more about DPAs and these IDIQ contracts. Ο



Levels of Assistance

Self Service

- Non-GSA controlled space
- Purchase from GSA's EVSE BPAs
- Agency handles contracting for stations, construction/installation of station (s)

GSA Buys Stations Only

- Non-GSA controlled space
- Agency provides requirements
- GSA purchases stations on behalf of agency for a fee
- Customer agency handles contracting for construction/installation

Design-Build Contracts Access Only

- Non-GSA controlled space
- Customer agency CO awards task order (for a fee)
- Can have PBS contractors buy stations or buy stations themselves
- **GSA Awards Task Order & Manages Project**
- **GSA controlled space**, agency **must** come to GSA for full service (RWA fee structure)
- Non-GSA controlled space, customer agency may utilize GSA to provide full service (RW-A fee structure) Charging as a Service
- Vendor on GSA's EVSE BPA does station buy, install etc. and "leases" station(s)
- Agency pays a monthly fee for fixed and variable costs & management (could include install, doesn't have to)

Electric Vehicle Supply Equipment (EVSE) in PBS Owned Space

Policies/Guidance

- P100 recently updated
 - Level 2 charging station
 - Network capable 0
 - o 2:1 ratio
 - At Least 1 ABAAS parking space 0
 - Includes FLS requirements 0
- Fire and Life Safety (FLS)
 - Location preference: 1) Surface Lot 2) Roof Level of structure 3) All other 0 areas within parking structure
 - Surface lots: setback of 30 ft from unprotected opening or 25 ft from an 0 exterior wall.
 - Structured Parking: sprinkler system (up to date on maintenance) and Class 1 Standpipe.
 - Fire Nozzle * (not a requirement to purchase)

PBS National Site Assessments

- PBS Special Projects Division (SPD) awarded a large site assessment to Parsons Government Services covering all regions.
 - Comprehensive analysis of existing electric distribution system's capacity to support conversion of all GOVs stationed at a facility.
 - capacity to support conversion of all GOVs stationed at a facility.
 Phase 1-2 Includes 235 buildings with electrical assessments with recommendations and ROM for implementation of P100 level 2 charging infrastructure
 - Phase 3 added 137 buildings and expanded scope to include ROM for FLS
 - Phases 1-3 are completed
 - O Phase 4 in planning phases

GSA Public Buildings Service (PBS) EVSE Program

- EVSE Inflation Reduction Act (IRA) Funded-Projects \$25M from IRA Emerging and Sustainable Technologies (E&ST)
 - 33 EVSE projects across 24 states
 - 790 level 2 charging ports
 - Use EVSE D/B IDIQ(PIB 24-02) and FAS BPA
 - Potential for additional EVSE initiatives

PBS EVSE Salient Characteristics

- FedRAMP Authorized
- Ability to meet GSA Authority to Operate (ATO) IT Security Requirements
- RFID and Credit Card to authenticate & initiate payment
 - Ability to swipe or tap to pay
 - Mobile Application not supported at this time
- Open Charge Point Protocol (OCPP) compliant
- Level 2 charger(s)
- Network capable station connecting via cellular connection
- Cable management system
- Ability to extract data programmatically to 3rd party solution

Security Requirements yment

EVSE Procurement: Additional Considerations

EVSE Planning

- → Plan for long term to scale quickly & keep overall cost down
- → Allow for payment collection if needed for POV charging
- → Network capability if station(s) will not be in secure location

Per GSA P-100 (GSA's Stds) 2:1 EV to Port ratio, federal fleet EVSE infrastructure must minimally include:

- Level 2 chargers (dual port)
 Fire/Life/Safety compliant
- For GOVs is required a 50% ratio of ports to cars.
- At least one ABAAS compliant space

*Level 2 will be sufficient for most agencies except possibly for LE missions.

Lessons Learned

- Start early
- Begin facility assessments ASAP to understand existing electrical capacity & identify necessary infrastructure upgrades for EVSE installation
- Plan for long term to scale quickly & keep overall cost down
- Allow for payment collection if needed for POV or GOV charging, but less expensive, scalable, repeatable solutions may allow you to meet your needs faster
- Envision operational needs and develop policy for usage/charging behaviors
- Consider realistic lead times for electrical infrastructure
- Leverage Utility companies agreements, rebates and/or incentives

Non-Traditional Funding Opportunities

- State/local government and utility incentives
- Leverage Utility agreements/Rebates/Incentives lacksquare
- **Energy Savings Performance Contracts** lacksquare

EVSE can be included if:

- The vendor is agreeable.
- Project financing can cover the cost within the allowable 25 year term.

Check with your Agency legal counsel!

DOE's EV Utility Finder

Federal Funding Programs

(only some apply to federal agencies)





Sites in Action

John Joseph Moakley US Courthouse

- → Status: Site Host Agreement Approved.
- → Scope: 18 level 2 ports
- → Funding: IRA
- → Leveraged utility incentives

Thomas O'Neill Federal Building

- → Status: Site Host Agreement Approved
- → Scope: 68 level 2 ports
- → Funding: IRA and RWA
- → Leveraged utility incentives

GSA Electrification POCs & Resources

For project support or questions, please contact pbs-evse-solutions@gsa.gov

For IDIQ contract questions, contact the IDIQ COs at pbs-ev-idiq@gsa.gov

For questions on the EVSE BPA, please contact <u>GSAFleetAFVTeam@gsa.gov</u>

For questions on EVSE in leased space, please contact Elizabeth Brown at elizabeth.brown@gsa.gov

Governmentwide Design/Build and Construction IDIQ Contracts for EVSE Installation and Related Infrastructure

- Ordering Guide
- IDIQ contractor points of contact
- Additional information and resources

GSA's "One-Stop Shop" for Fleet Electrification

Comprehensive information about GSA's EVSE products and services