

GSA ZEV & EVSE Offerings

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EV Charging Challenge Winners!

Overall average increase in ZEV utilization: 309%!

Winner for highest agency-wide increase in utilization:

- Judiciary!

Winner for most all-electric miles driven in BEVs:

- Department of the Army!

Winner for the highest MPG for PHEVs:

Social Security Administration!



Fleet Electrification Background



U.S. Vehicle Electrification Initiative

Advancing the EV Market

- Executive Order 14037 (50% of auto sales ZEVs by 2030)
- Proposed CAFE standards
- Building out nation's public EV charging infrastructure
- Domestic production and manufacturing
- EV tax credits and direct payments

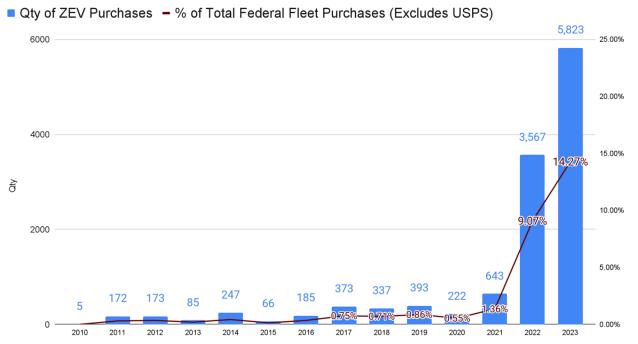
Leading by Example

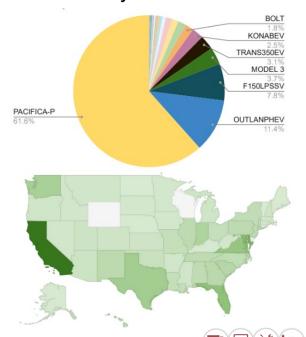
- E.O. 14057 (100% of light-duty vehicle acquisitions as ZEV by 2027; 100% of all acquisitions by 2035)
- Federal fleet electrifying today
- GSA providing EVSE acquisition paths to support ZEVs
- Agencies are already piloting and building out electric vehicle infrastructure at Federally-occupied facilities



Federal Electric Vehicle Orders

FY23 Orders by Model and State





Fiscal Year

Battery and Plug-in Hybrid EV Comparison

Battery Electric Vehicle (BEV)

Plug-in Hybrid Electric Vehicle (PHEV)

Operate on 100% electricity



Operate on electricity & gas

Optimal for less than 200 miles / day



Optimal for short trips <30 miles/day

Need Level 2 charger or higher



Level 1 or Level 2 charger will suffice

Available in sedan, SUV, pickup & more



Available in sedan, minivan & SUV



EVSE by Recharging Time

Electric Vehicle	Electric Range	Level 1 Recharge Time (hrs)	Level 2 Recharge Time (hrs)	DC Fast Recharge Time (hrs)
Chrysler Pacifica PHEV	32/520	12	2	N/A
Ford Escape PHEV	37/520	10	3.3	N/A
Mitsubishi Outlander PHEV	38/420	8	4	N/A
F150 Lightning	230	72+	10-14	0.7-2
Nissan Leaf	149	30	7.5-11	1
Mustang Mach-E	224	95+	8-10	0.75
Hyundai Kona	258	50	9.5	1
Volkswagen ID.4	275	50	7.5-11.5	0.5-0.7

EV Charging Infrastructure

Level 1 Charging 120V





J1772

- J1772 is standard
- 4-6 miles per hour of charge time

Level 2 Charging 240V





J1772

- J1772 is standard
- 10-20 miles per hour of charge time
- \$\$

DC Fast Charging 480V









NACS, CCS, CHAdeMO

- Most vehicles use CCS
- 100+ miles per hour of charge time
- \$\$\$



FY2024 Zero-Emission Vehicle (ZEV) Offerings



FY24 Light Duty ZEV Offering Highlights





SIN, Make, & Model	Vehicle Type	Incremental
8E Nissan Leaf	Subcompact sedan BEV	\$5,095
9E Tesla Model 3	Compact sedan BEV	\$25,238
10E Ioniq 6	Midsize sedan BEV	\$0
20P Chrysler Pacifica	Minivan PHEV	\$9,797
34E Ford E-Transit	Full-size Cargo Van BEV	\$3,660
55E Ford F150 Lightning	Crew Cab Pickup BEV	\$4,907

★ Check GSA's ZEV Fact Sheet for a complete list.



FY24 ZEV SUV Offering Highlights







SIN, Make, & Model	Vehicle Type	Incremental
98E Hyundai Kona	4x2 Compact SUV BEV	\$11,551
98P Kia Niro EX	4x2 Compact SUV PHEV	\$10,398
91E/96E Nissan Ariya	4x2/AWD Compact SUV BEV	\$9,710/11,778
100E/105E Hyundai Ioniq 5	4x2/AWD Intermediate SUV BEV	\$5,046/15,036
99P Hyundai Tucson	4x4 Compact SUV PHEV	\$11,306
105P Jeep Grand Cherokee	AWD Intermediate SUV PHEV	\$22,719





FY24 HD & Specialty ZEV Offering Highlights

SINs	Vehicle Types
624E	Electric Day Cab Tractor
531W, 533W	Electric Stake/Flatbed Cabover Truck
377D-377I	Electric Heavy Duty Low Floor Transit Buses
212E, 281E	Electric Type II Ambulance, Electric Wheelchair Van
320E-323E, 338E-339E	Electric School & Adult Work Buses
397E, 398E	Electric Intercity Motorcoaches



EVSE Program Planning



Define your situation

Where you are	What you need	Whom to contact
Space GSA manages	EVSE, installation, or both	Your local PBS representative or lease administrator
Multiple sites GSA manages	EVSE, installation, or both	pbs-evse-solutions@gsa.gov
Space GSA does not manage	EVSE installation or both EVSE & installation	pbs-evse-solutions@gsa.gov
Space GSA does not manage	EVSE or ancillary services only	GSAFleetAFVTeam@gsa.gov

EVSE Project Planning

- → Develop your team involve GSA PBS early in the process
- → Plan EVSE before acquiring ZEVs
- → Coordinate with your utility company
- → Conduct site assessments
- → Consider realistic lead times
- → Think long term to scale quickly & keep overall cost down
- → Collect lessons learned
- → If working with GSA, submit 2 separate RWAs for managed chargers
 - One for the EVSE and install
 - One for O&M/cloud services

Other scope considerations:

- □ Network capability
- □ Payment collection
- ☐ Signage
- □ Bollards
- ☐ Lighting
- ☐ ABAAS requirements



What's actually needed to charge an EV?

All levels:

- → Independent circuit per port (recommended)
- → Appropriate metering strategy to monitor usage
- → Payment processing capability (for POV charging)
- → Building infrastructure to include:
 - spare capacity/ampacity
 - room on existing panel boards
 - life safety requirements for enclosed parking
- → ABAAS considerations

Level 2:

- → Charging station hardware
- → Conduit to run power/networking
- → Concrete pad for pedestal mounts
- → Parking bollards (recommended)

Level 3/DC Fast:

- → Transformer (likely)
- → Additional electrical equipment, depending on the facility

All EVSE is recommended to have a service plan for operation and maintenance.

EVSE Best Practices

- ★ Start early.
- ★ Slow is smooth, smooth is fast. Avoid action without planning.
- ★ Begin facility assessments ASAP to understand existing electrical capacity & identify necessary infrastructure upgrades for EVSE installation.
- ★ Evaluate your EVSE needs with respect to fleet size, operational requirements, etc.
- ★ Plan for long term to scale quickly & keep overall cost down.
- ★ Establish policy/protocols for vehicle usage/charging and create a culture.



EVSE Applications



Wall mounted (Ceiling mounted also available)



Pedestal mounted



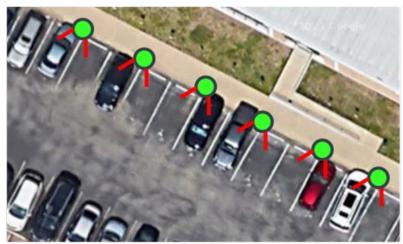
Solar/portable stations



Ports vs Stations



single-port Charging Station



dual-port Charging Station



Things to consider

Per GSA P-100, Federal fleet EVSE infrastructure must minimally include:

Level 2 chargers (dual-port)

Lots with less than 5 GOVs = 2 ports

Lots with 5 - 15 GOVs = 4 ports

Lots with greater than 15 GOVs = 30% ratio of vehicles to ports

At least one ABAAS compliant charging space

Networked chargers / FEDRAMP authorized

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



Awareness Tips

- ★ Level 1 utilization considerations (non-GSA buildings ONLY): GFCI/dedicated circuit, monitoring usage
- ★ Life safety/fire protection: new requirements in parking garages/enclosed parking.
- **★** ABAAS
- ★ Utility Incentive programs (<u>EV U-Finder</u> from DOE)



Electric Vehicle Supply
Equipment (EVSE)
Blanket Purchase
Agreements (BPAs)



EVSE BPA Highlights

Benefits:

- → Streamlined contracting vehicle
- → Pre-competed
- → Pricing discounts
- → Technical evaluation of products
- → Includes additional requirements on top of MAS such as IT security

Access:

- → Federal agencies
- → Contractors with PBS' Governmentwide Design/Build & Construction EVSE IDIQs
- → Lessors of PBS managed sites
- → Cities & states for emergency or disaster preparation, public health emergencies, or through the cooperative purchasing program

Visit gsa.gov/EVSE for BPA information and resources



EVSE Product Offerings

Levels 1 & 2 (CLINs 0001-0002)

Level 3/DC Fast (CLIN 0003)





Solar & Portable (CLINs 0004-0005)

Software & Networks (CLINs 0007-0008)







EVSE BPA Services

Available on CLIN 0006

Also available:

- Operation & maintenance plans
- Charging as a service
- > Accessories

□ Station activation
 □ Affixing or securing station
 □ Basic installation
 □ Commissioning
 □ Consulting services
 □ Facility design
 □ Facility preparation
 □ Permitting/inspection

- Site validation
 - □ Strategic planning

Site assessment

Project management

Utility coordination



How to Use the BPA

Visit gsa.gov/EVSE

- Self-service!
- Work directly with the vendors
- View available products and an ordering guide at gsa.gov/EVSE

Agency Contracting Officer (CO) Determines Acquisition Threshold

- 1. Orders < \$10K: place directly with the BPA holder
- 2. Orders > \$10K and < \$250K: provide each BPA holder a fair opportunity
- 3. Orders > \$250K: send Request For Quote (RFQ) to all BPA holders that offer needed product/service

Agency CO Places Order Against BPA

- Follow FAR 8.405(C) requirements
- Order and delivery arrangements are made by the agency



Charging Made Easy: One Streamlined GSA Solution

Charging Station BPAs

- Hardware offerings for Level 1, 2 & DC Fast
- Ancillary products & 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
- Testing, commissioning, & utility coordination
 - Small business set-aside

gsa.gov/ElectrifytheFleet

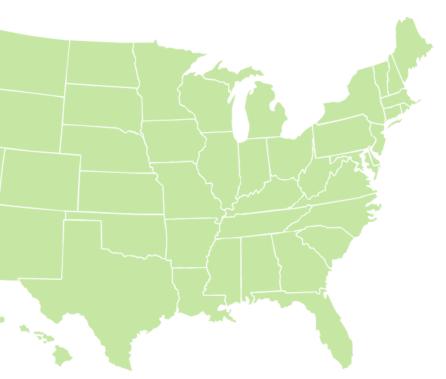
FAR 51 Deviation allows IDIQ contractors to buy from BPAs



Governmentwide EVSE Design/Build IDIQs



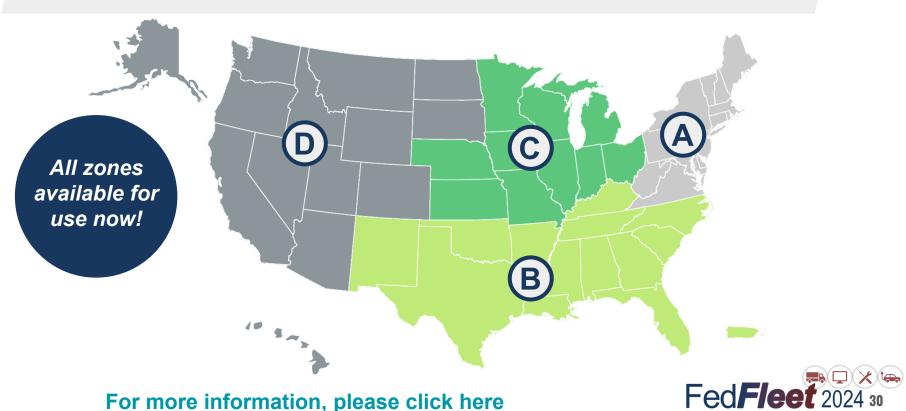
Governmentwide IDIQ Overview



- Covers any Federal agency location
 - Including GSA controlled space and non-GSA controlled space
- Four geographic zones
- \$500M total ceiling per geographic zone
 - Across all IDIQ contracts within each geographic zone
- 1 year base w/ four 1 year option periods
- Total small business set-aside
 - Most IDIQ contractors are socioeconomic small businesses



IDIQ Geographic Zones



For more information, please click here

EVSE Ordering Paths



GSA/PBS Full Service Award & Management

For buildings in or not in GSA's building portfolio

Submit requirements & funding through eRETA



Self-Service
Design &
Construction IDIQ



Self-Service for EVSE Products & Services BPA

For buildings not in GSA's Building Portfolio:

Agency requests DPA from GSA

One time contract access fee of \$1,625

Agency views offerings & orders from BPA holder



Delegated Procurement Authority

→ A Delegation of Procurement Authority (DPA) outlines the roles and responsibilities between the GSA IDIQ Contracting Officer (CO) and the Ordering Contracting Officer (OCO).

→ Other Federal Contracting Officers may issue task orde.

GSA Controlled Space

Non-GSA Controlled Space





Task orders may be placed by:

- GSA PBS Contracting Officers
- GSA PBS Contracting Officers
- Other Federal Contracting
 Officers with a DPA

DPA Benefits

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



Delegated Procurement Authority Continued

Receive a DPA in 3 Easy Steps

Visit our site to learn more about DPAs and these IDIO contracts.

Step 1

Ordering agency contacts

pbs-ev-idiq@gsa.gov to

request procedures for
providing a Reimbursable

Work Authorization (RWA) in
eRETA for \$1,625 per DPA.

Step 2

DPA requestor reviews the Ordering Guide and any supplemental training materials located here.

Step 3

DPA requestor completes the DPA Request Form located here.



GSA's Plans in our Buildings



- GSA is managing a nationwide site assessment project for 373 PBSowned buildings
 - Comprehensive analysis of existing electric distribution system's capacity to support conversion of all GOVs stationed at a facility
 - Determining quantity of Level2 stations that can be installed
 - Will help identify where upgrades are needed
- > Fire and Life Safety Data Call



Resources

gsa.gov/ElectrifyTheFleet
Comprehensive information

about GSA's ZEV and
EVSE products and
services, templates & more

pbs-evse-solutions@gsa.gov

For questions on EVSE installation or support in GSA facilities

gsa.gov/gsa-fleet-training

Upcoming and past training on ZEVs and EVSE



GSAFleetAFVTeam@gsa.gov

For questions on ZEVs or EVSE BPAs





