

Welcome to GSA Fleet's Desktop Workshop



Audio: Everyone is automatically muted. Listen via your computer audio if possible.



Presentation & Certificate: You can download a copy of the presentation at <https://www.gsa.gov/gsa-fleet-training>

Additionally, a copy of the presentation along with a certificate will be emailed after the session.



Questions: Use the Q&A window to ask questions at any time. You may get a typed response or it may be answered aloud at the end of the presentation.



Recorded: The session will be recorded.

Recordings of GSA Fleet Desktop Workshops are available at: <http://bit.ly/DtWRecordings>

Desktop Workshop

New Electric Vehicle Charging Station Contracts

You can download a copy of this presentation at: <https://www.gsa.gov/gsa-fleet-training>

Presented by: Caitlin Dorame
June 2022

Agenda

- ❑ Administration Priorities
- ❑ Why a BPA?
- ❑ Who can use the BPA?
- ❑ EVSE BPA highlights and timeline
- ❑ What's available on the BPA?
- ❑ A Complete Solution
- ❑ Site planning
- ❑ Workplace Charging
- ❑ Resources
- ❑ Question & Answer



Administration Priorities

Transportation
Electrification primary pillar
of climate agenda

Public Sector Electrification

**Government to Lead by
Example**

Fleet Goals

100% Light-duty Acquisitions as Electric by 2027 | 100% of all Acquisitions as Electric by 2035 | Intermediary Targets | Update an Annual ZEV Strategic Plan | Telematics for Operational Data | Consolidate Agency-Owned Vehicles with GSA

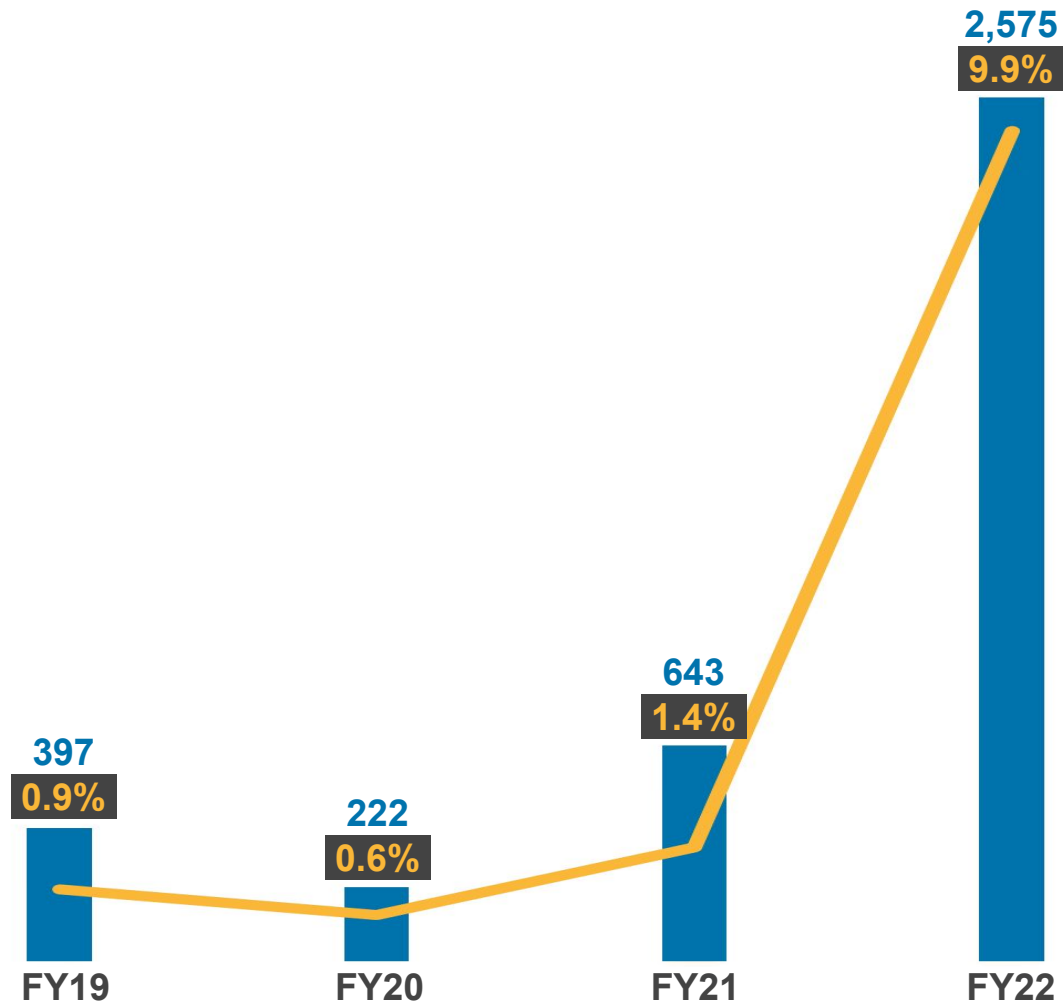
EO 14057 [E.O. Fact Sheet](#), [Official Release](#), and [Memo](#)

How are we doing?

Status to Date

62 ZEV Models awarded in FY22 | Maximizing Budgets through Financing Opportunities | Looking for opportunities to place ZEVs where anticipated ZEV models may have closed | Focusing on Infrastructure | Looking to GSA's EVSE BPAs | Updating annual Zev Strategic Plan

ZEV Purchases by Fiscal Year



more than 2,500 orders for zero-emission vehicles have been placed as of June 6

that's **almost 10% of all new acquisitions**

these ZEV's will require support for acquiring charging infrastructure

- ZEVs / all acquisitions
- total new ZEV acquisitions

Why a Blanket Purchase Agreement?

- ❑ Simplifies the process of obtaining recurring products from a set of contractors
- ❑ Addresses IT & Security Requirements at the BPA level reducing redundancy
- ❑ Discounts from MAS prices
- ❑ Technical Team vetted products
- ❑ SOW for purchases under \$250K only required for hourly services

Who can access the BPA?

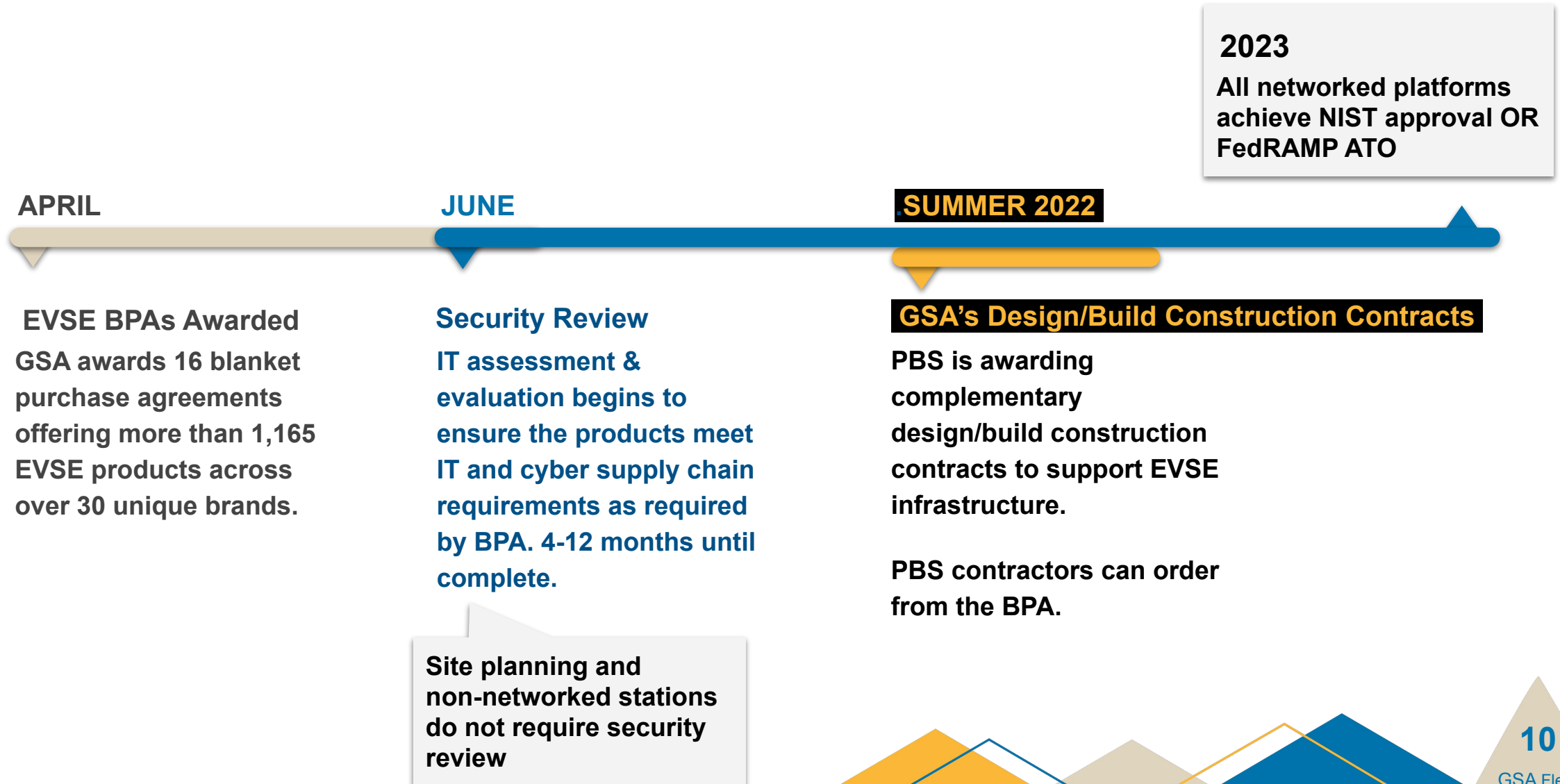
- ❑ Any agency or entity that can lease or purchase vehicles from GSA
- ❑ Tribes
- ❑ State, Local & Tribal Governments
 - ❑ Emergency/disaster preparation, response/major disaster recovery (Stafford Act (42 U.S.C. 5121-5207));
 - ❑ When expending Federal grant funds in response to Public Health Emergencies (42 USC § 247d);
 - ❑ Cooperative Purchasing Program
 - ❑ Procuring IT (networks and software)
 - ❑ Law enforcement and security solutions in support of everyday missions (40 U.S.C § 502 (c))
- ❑ PBS Contractors through FAR FAR Subpart 51.1 Class Deviation CD-2022-04

BPA Award Highlights

- Includes hardware, software, O&M, make-ready/site assessment services & more!
- Contract Length: 60 Months
- 16 offerors were awarded, including 9 small businesses
- Over 30 EVSE brands and 1,165 line items
- Onboarding Opportunities
- PBS Contractors can buy from FAS BPA holders creating a 1 stop shop for stations & installation
- View all offerings, pricing and BPA-holder information at gsa.gov/evse



EVSE Complete Solution Timeline



What's on the BPA?

Services

CLIN 0006

Site assessment
Validation
Permitting
Basic installation
Utility coordination
Wiring
and more

Hardware

CLINs 0001, 0002,
0003, & 0011

Level-1 Charger
Level-2 Charger
DC Fast Charger
Solar Charging
Portable Charging
Accessories

Management Software & Network Plans

CLINs 0007 & 0008

Power management
Network plans
Real-time analytics
Data plans
Cloud software

Warranty Plans

CLIN 009

Parts-only
Parts & labor
Onsite repair
Replacement
1-5 year coverage

Charging as a Service

CLINs 002, 003, &
010

Assembly
Activation
Ongoing operator &
driver support
Charging data &
analytics
Power management,
and basic installation

EV Charging Station Infrastructure

Level-1 Charging 110V/120V



NEMA 15

- J1772 is standard
- 4-6 miles per hour charge time
- \$0-\$3K

Level-2 Charging 208V/240V



J1772

- J1772 is standard (Tesla's come with adapter)
- 10-20 miles per hour charge time
- \$500-\$12,000

DC Fast Charger 208V/480V

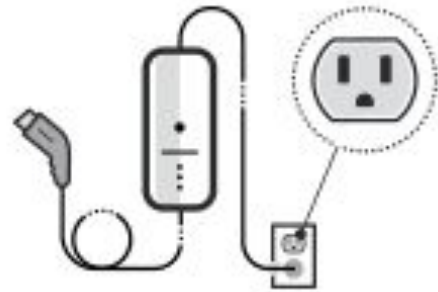


Tesla, SAE Combo, CHAdeMO

- Most vehicles use CCS (Tesla comes with adapter) Nissan Leaf uses CHAdeMO
- 50-90 miles in 30 minutes
- \$32,000+

- Finding a charger plugshare.com or DOE Alternative Fueling Station Locator
- Sites like abetterroutepanner.com help you plan for charging on trips

Level-1 Chargers



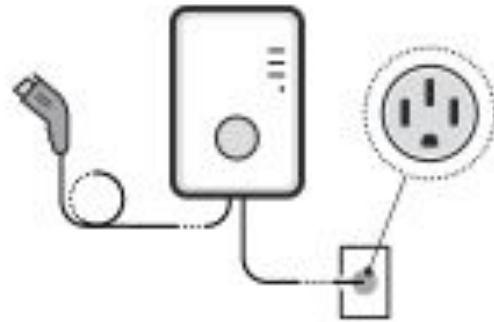
AV
AeroVironment™

BEAM

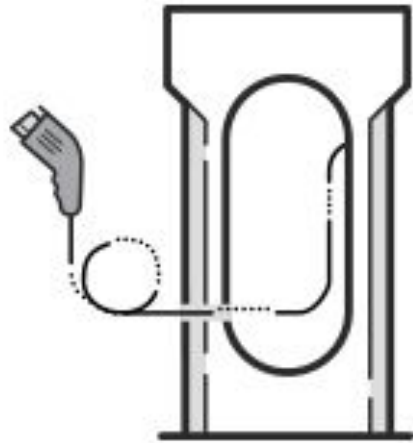
CLIPPERCREEK
A division of Enphase Energy, Inc.

LE LIVINGSTON
ENERGY GROUP

Level-2 Chargers



DC Fast Chargers



ABB

 efacec

blink[®]

loop
ev charging network

BTCPPOWER

-chargepoint+



SIEMENS

LE LIVINGSTON
ENERGY GROUP

SemaConnect

NUVVE

heliox



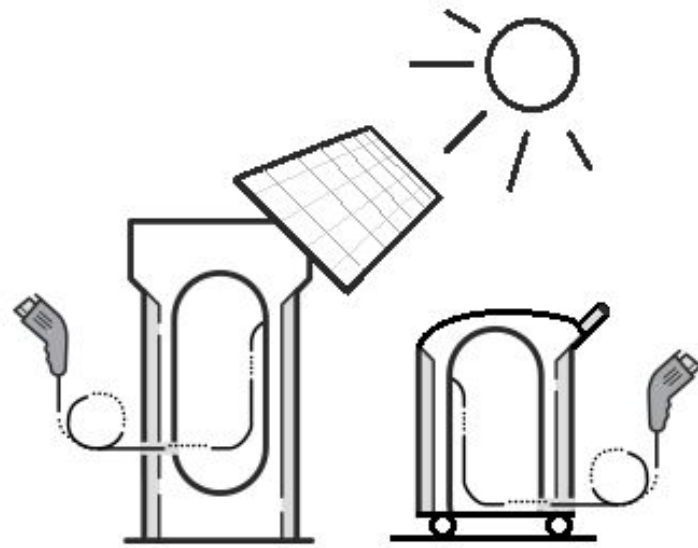
TRITIUM

 **Rhombus**
Energy Solutions



FREEWIRE

Solar and Portable Solutions



LE LIVINGSTON
ENERGY GROUP

F
FREEWIRE

BEAM

heliox

Station Mgmt. & Network Support



Take-Away

Site planning services and non-networked Level-1 / Level-2 stations are available for ordering through the BPA today! ordering.

Agencies **CAN** purchase ALL BPA Offerings through MAS, but will need to evaluate each product at the agency level to ensure it meets agency-specific privacy, IT and cyber supply chain requirements.

Find all offerings, pricing and attributes on gsa.gov/evse

GSA's Offers a Complete EVSE Solution

GSA's EVSE Hardware/ Software/Services BPAs

Hardware offerings for Level 1, 2 and DCFC

- Purchase and lease options
- Vendor Agnostic OCPP Stations & Software
- Data packages & Network services

Ancillary services

- Energy metering & load management
- Operation/maintenance plans
- Site assessment/make-ready charging solutions (no installation)

Compliant with Federal IT Security requirements

Product Onboarding / Offboarding opportunities

Small Business Preferences

**Products undergoing vetting by OCIO prior to opening for ordering but available for ordering through MAS.*

GSA's Design/Construction Contracts

Provide construction and design/build to support EVSE installations government-wide

Capabilities include but are not limited to:

- Feasibility Study/Site Assessment
- Repair and Alterations
- Electrical Infrastructure Upgrades (e.g., conduit, switchgear, modification of existing electrical distribution system)
- Testing/Commissioning/Utility Coordination
- Other related work (e.g., trenching, bollards, HVAC, fire protection)

National & Zonal IDIQs

Small Business Opportunities

**Award anticipated July 2022. Special Programs Division in ODC can take projects on today!*



Turnkey through FAR 51 Deviation

Assisted acquisition and self service options

GSA.gov landing page, fact sheets and triage

Preparing for EVSE Acquisition (FAR 8.4 Buys)

→ Supplies

FAR [8.405-1](#) (a statement of work is **NOT** required unless over SAT or \$250K).
Reviewing & selecting Best Value is providing Fair Opportunity to each BPA holder

→ Services (CLIN 006)

FAR [8.405-2](#) **a statement of work is required** SOW should include:

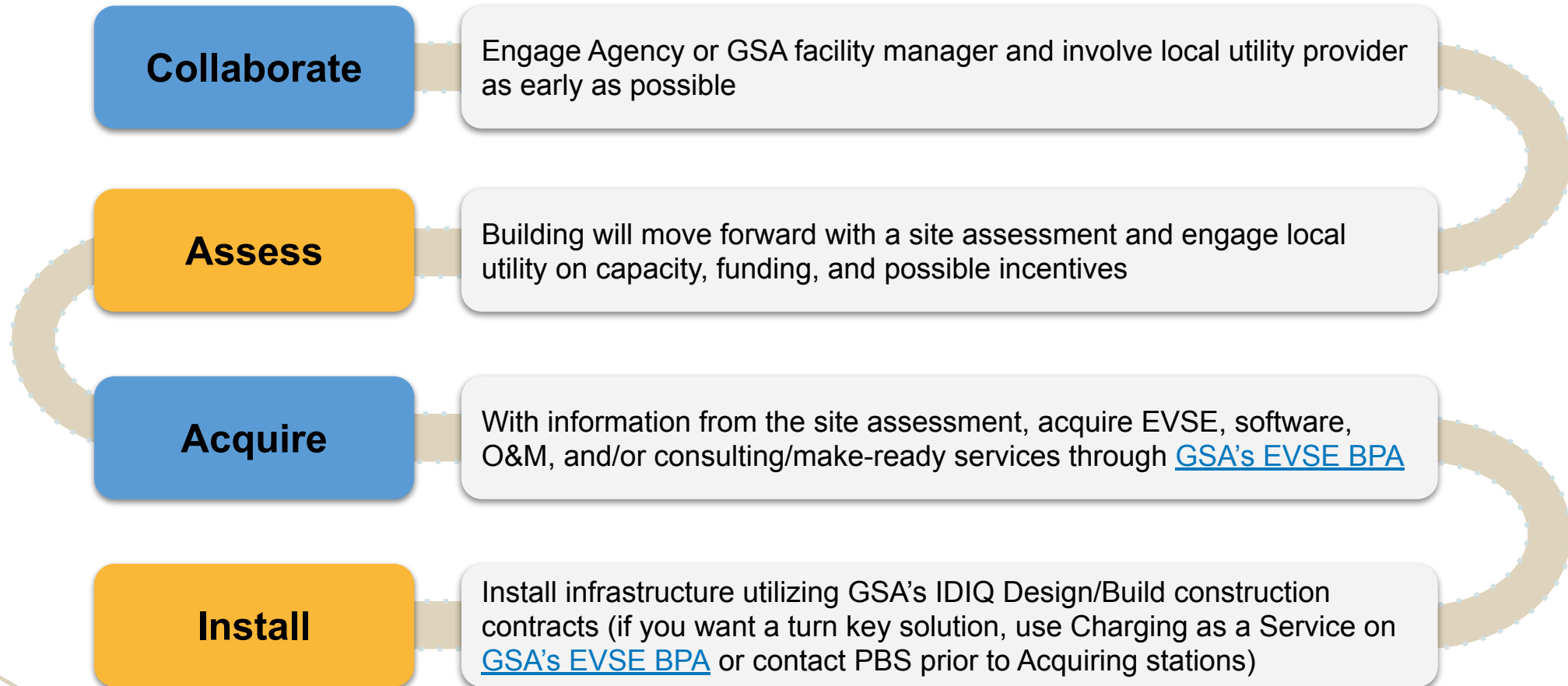
- the description of the supplies to be delivered or the services to be performed
- the basis upon which the selection will be made (evaluation criteria)
- quote due date

Sample RFQs available at gsa.gov/evse

Benefit of BPAs

Fair Opportunity Has Been Given, so
Market Research can be from BPA
Offerings

Recommended Agency Steps for Infrastructure Planning



Infrastructure Planning - Best Practices

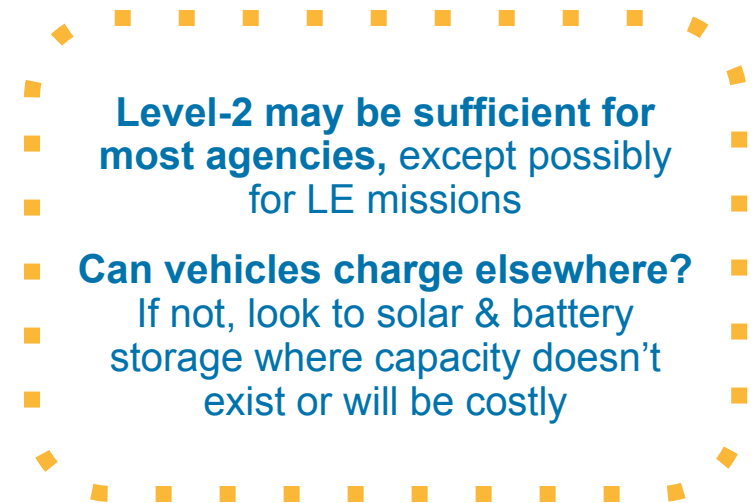
Requirements Development

- ❑ What are minimum requirements needed?
- ❑ Mount type
- ❑ Plan for long term to scale quickly & keep overall cost down (conduit can be installed for future stations)
- ❑ Allow for payment collection if needed for POV charging
- ❑ Network capability if station(s) will not be in secure location

Start with a Site Assessment (CLIN 006 on BPAs)

Engage with Utility (share expected load. Also, take advantage of incentives)

Solution should be **repeatable & standardized** as possible, lowest-cost option that will fit needs



Connecting the Dots: Using BPAs to Plan

1

Visit gsa.gov/evse

For a full list of available products, vendor information, and ordering guide

2

Agency Contracting Officer (CO) Determines Acquisition Threshold

Orders < SAT (\$250,000): the ordering activity must review product guide providing each BPA holder a fair opportunity unless only 1 BPA holder can meet need. Order >SAT (\$250K) provide an RFQ to all BPA Holders. SOWs are required for services (CLIN 006)

3

Agency CO Places Order Against BPA

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

Considerations

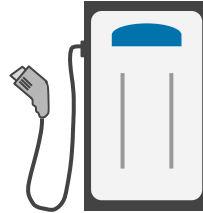
Site Assessment

- Available electrical service
- Parking spots
- Preferred placement
- Can the work be included in EVSE solicitation?

Use CLIN 0006 in BPA or site-prep category on MAS

List desired outcomes:

- Site selection
- Ability to meet current/future requirements

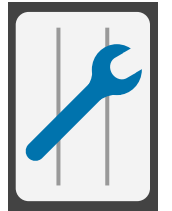


Charging Stations

- Level of Station(s)
- Networked / non-networked
- Does it need to accept WEX?
- Number of Ports
- Renewable solutions?
- Portable?

Installation

- Electrician/Engineers on Site?
- Assistance from GSA PBS IDIQ Contracts? (pbs-evse-solutions@gsa.gov)
- Open Market?
- Charging as a Service?



Take-Away

Site planning is a crucial step in the infrastructure development process. Involve your facility manager and utility company early in the process.

Facilities GSA's EVSE Solutions Supports



GSA-Owned and Operated Facilities

YES - PBS handles all installs and purchases



GSA-Owned Delegated Facilities

YES - GSA's involvement varied based on delegation of authority; GSA/PBS should be involved regardless



GSA-Leased Space

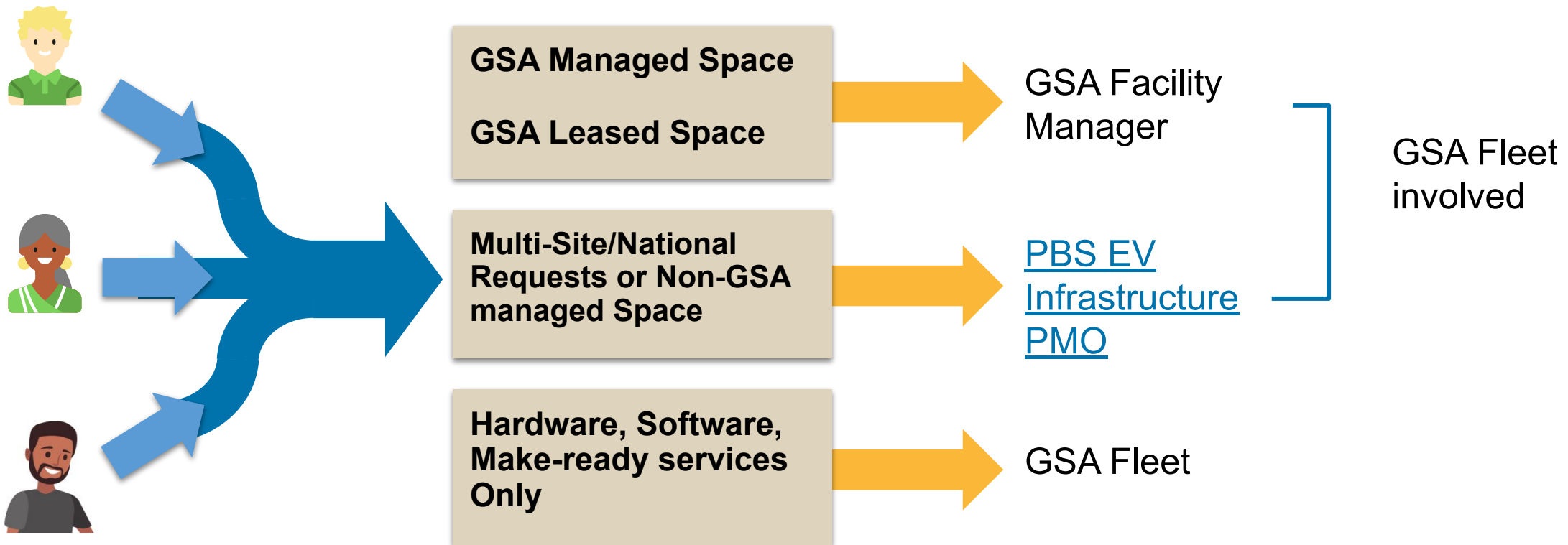
NO - Lessor can use BPAs for market research but can't buy from BPAs



Customer/ Agency Owned

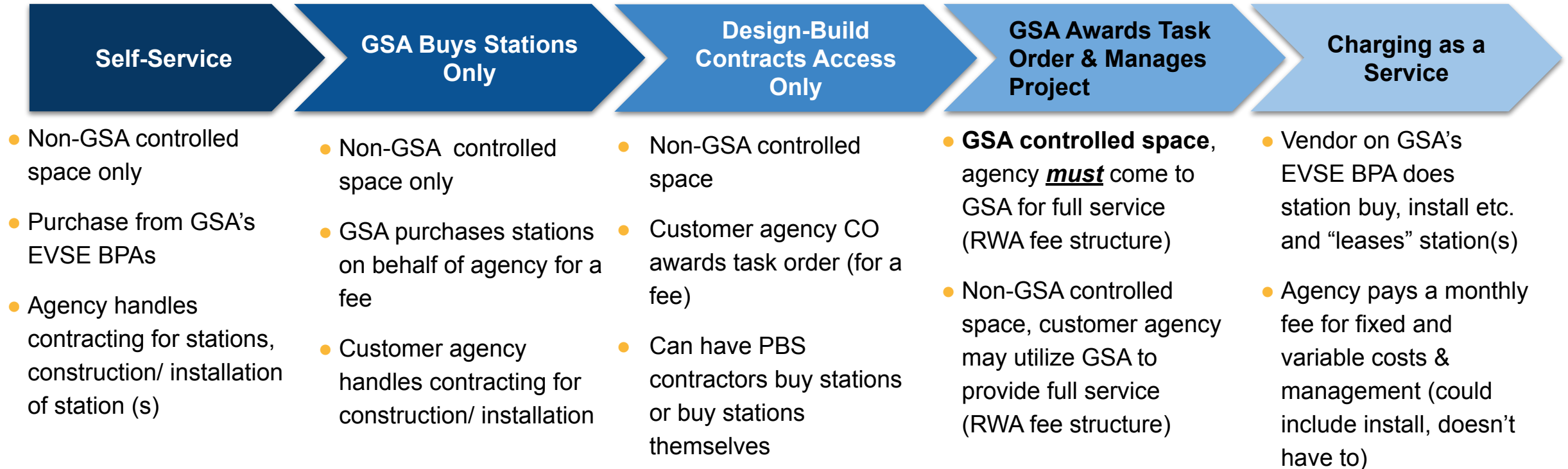
YES - Can use BPAs exclusively or BPAs & IDIQ

Working with GSA



Looking for install? Submit a Work Request through eRETA to get the ball rolling

Types of Assistance



Less Assistance
(Less Fees)



More Assistance
(Generally Higher Cost)

Estimated Installation Costs & Schedule

- Department of Energy NREL [Federal Workplace Charging Program Guide](#), estimates the installation costs for a
 - 120 V receptacle at ~\$500/port; and
 - ~\$2,000/port for Level 2

However, larger installations will most likely see a lower per-port cost, while smaller sites will probably see a higher per-port cost.

- Electricians/engineers estimate installation is at the very least 50-60% of the total cost of the project (including materials). Therefore if a station is \$7,000 dollars, you can expect installation to be at least \$7,000-\$8,400 dollars.
- An EVSE-specific site assessment usually costs \$600+ dollars and is a great place to start.
- In GSA managed space, GSA will take your requirements and move ahead with conducting an assessment. An RWA is required.

Costs: Station Selection by Level

Charging Level	# of Ports	Voltage (V)	Charge Time	Est. Cost
Level 1	1	110/120V	4-6 miles per hour	\$0-\$3K
Level 2	1 or 2	208/240V	10-20 miles per hour	\$2-12K
DC Fast Charging	1 or 2	480V or 208V	50-90 miles in 30 minutes	\$30K+

Sample ZEV Offerings & Recharge Times

2022 Electric Vehicle	Range	Level-1 120V Recharge Time	Level-2 240V Recharge Time	DC FAST Recharge Time
Nissan Leaf (base)	149 miles	30 hours	7.5 hours	1 hour
Chevy Bolt EV	259 miles	64 hours	9 hours	1.4 hours
Ford Mach-E (base)	230 miles	95+ hours	14 hours	1 hour
Tesla Model 3 (base)	263 miles	24+ hours	8 hours	20-60 minutes
Hyundai Ioniq 5	303 miles	25+ hours	6-9 hours	18-60 minutes

Estimated RWA Costs

GSA is working on refined EVSE RWA Schedule/Process

- If Agency plans to pay for stations and manage contract, it will likely be a 1-2% contracting fee
- If Agency wants GSA to install stations via RWA then please use [this RWA table](#)
- Max fee is the regular RWA fee

Note:

- This new fee structure will apply to all project costs with the exception of certain personal property expenses.
- Commensurate with the implementation of the new fee structure, the flat fee for recurring RWAs will increase to \$500.

Rate	Range - Low	Range - High	Maximum Fee for Range
Flat \$500	\$0	\$1,999	\$500
25%	\$2,000	\$4,999	\$1,250
23%	\$5,000	\$9,999	\$2,300
21%	\$10,000	\$14,999	\$3,150
19%	\$15,000	\$19,999	\$3,800
17%	\$20,000	\$24,999	\$4,250
15%	\$25,000	\$49,999	\$7,500
14%	\$50,000	\$99,999	\$14,000
13%	\$100,000	\$149,999	\$19,500
12%	\$150,000	\$199,999	\$24,000
11%	\$200,000	\$249,999	\$27,500
10%	\$250,000	\$349,999	\$35,000
9%	\$350,000	\$449,999	\$45,000
8%	\$500,000	\$749,999	\$60,000
7%	\$750,000	\$1,249,999	\$87,500
6%	\$1,250,000	\$1,999,999	\$120,000
5%	\$2,000,000	\$2,999,999	\$150,000
4%	\$3,000,000	\$4,999,999	\$200,000
3%	\$5,000,000	∞	∞

Planning & Considerations

Agency Considerations

- Which vehicles will transition and when?
 - Fleet Manager/agency coordination
 - Fleet electrification plan
 - Which sites will require charging stations
- GOV/POV use
- Vehicles & Charging Stations: gsa.gov/afv

GSA Provides (funded through Agency RWA)

- EVSE site assessment & project management
- Parking lot reconfiguration
 - Conduit/trenching costs
 - Proximity to power
- Charging station type/level
- Service panel connections
- Upgrade electrical equipment
- Utility coordination
- Installation: pbs-evse-solutions@gsa.gov

**Agency must involve GSA when looking for EVSE in GSA-managed space*

Workplace Charging

Workplace Charging & the Fast Act

Section 1413 of the Fixing America's Surface Transportation (FAST) Act

- Authorizes GSA and all other Federal agencies to install, operate, and maintain electric vehicle (EV) charging stations for privately owned EV's (POV's) in parking areas used by Federal employees and authorized users
- Requires the collection of fees to recover these costs.

**Per the FAST act, you are not required to recoup costs for fleet stations that receive incidental POV use.*

Workplace Charging Revenue Options

Collecting Fees to Recover Costs

- Reimbursable Utility Account
- [Pay.gov](https://www.pay.gov)
- Third Party Charging Network Provider
 - Physical check mailed or an ACH wire transfer (usually a fee)
- HR as a deduction in Payroll



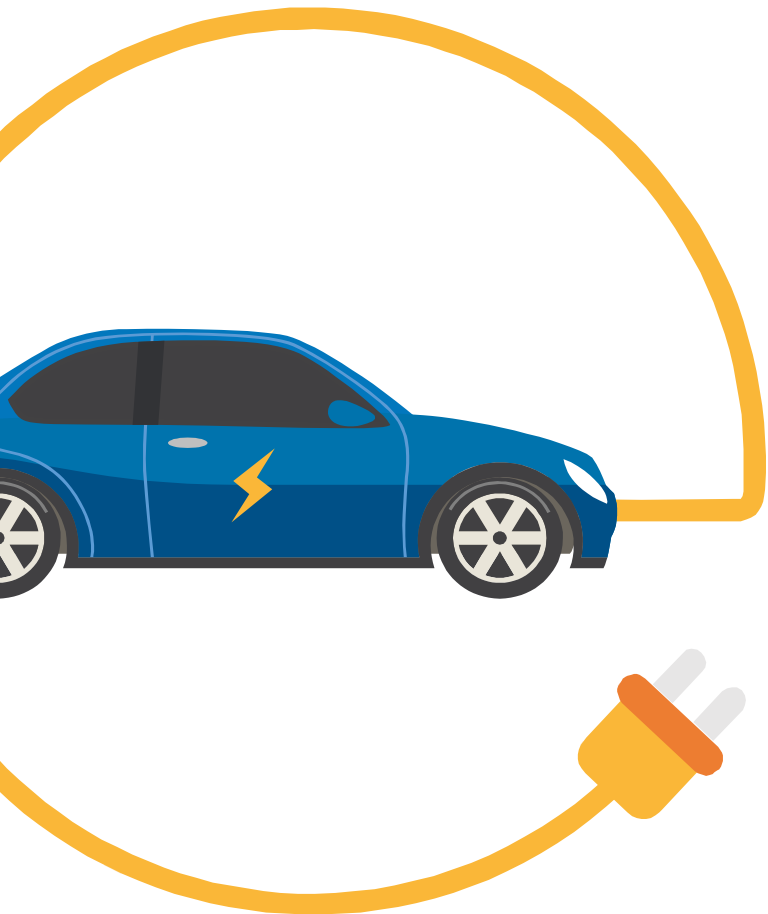
Workplace Charging Cost Models for POV Charging

Option 1 (ex: FDA White Oak)	Cost
Flat Fee	\$1.25
Price per kWh	\$0.13
Cost of electricity for standard EV per kWh to GSA	\$2.73
EVCS for standard EV Revenue Generated	\$5.15
Standard EV Charge Net Income	\$2.42

Option 2 (lower flat-charge fee)	Cost
Flat Fee	\$0.75
Price per kWh	\$0.15
Cost of electricity for standard EV per kWh to GSA	\$2.73
EVCS for standard EV Revenue Generated	\$5.25
Standard EV Charge Net Income	\$2.52

● additional workplace charging resources available at DOE's [Alternative Fuel Vehicle Data Center](#)





Future Events

Virtual and in-person customer vendor days

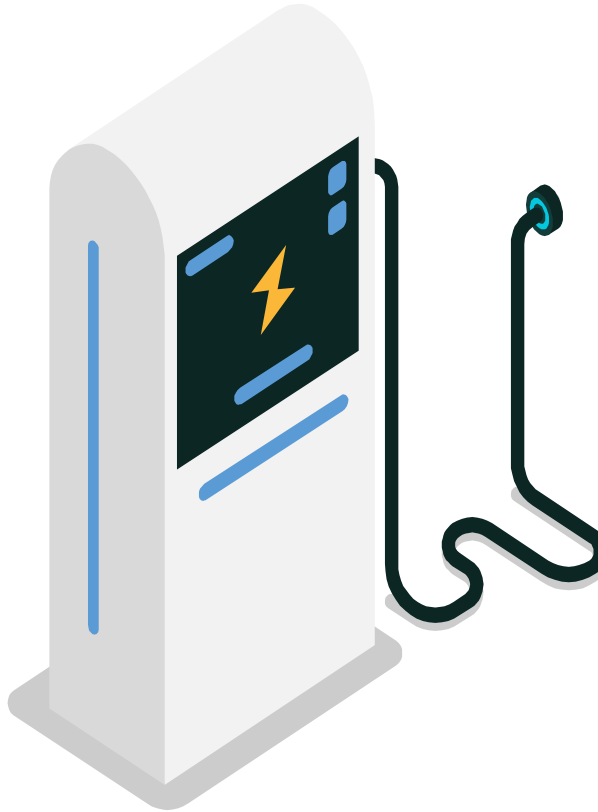
- October 2022, in-person **Customer / EVSE-Vendor Day** at GSA's Headquarters at 1800 F Street in Washington, DC!
- **FedFleet 2023**

Resources

EVSE Station Acquisition,
ZEVs, Planning for ZEVs and
other general EVSE resources



Local GSA Fleet Management
Center at gsa.gov/fsr or
GSA Fleet ZEV Team at
gsafleetafvteam@gsa.gov



gsa.gov/evse

Design & Build services, Site
Planning, Installation Assisted
Acquisition



Facility Manager
For Multi-site Locations or general
questions:
GSA Center for EV Infrastructure at
pbs-evse-solutions@gsa.gov



Thank you!

gsa.gov/evse

gsafleetafvteam@gsa.gov



QUESTIONS?



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