





## EVSE - Get Plugged In!

**A Client Enrichment Series Presentation** 

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#### **Introductions**

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## Agenda

**Fleet Electrification EV Overview EVSE BPA EVSE Construction IDIQ Ordering Paths** Resources

#### U.S. Federal Fleet Electrification Initiative

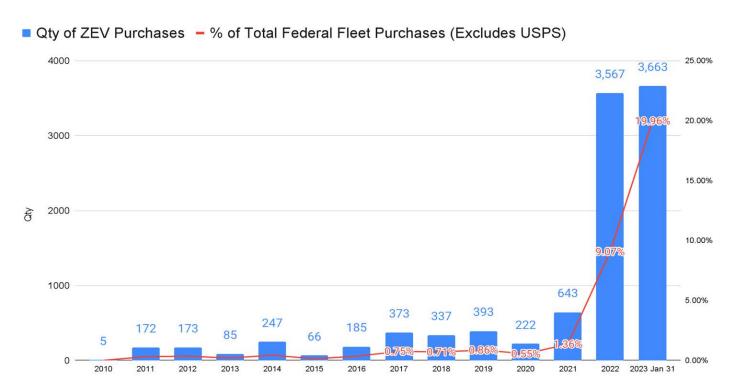
# Advancing EV Market

- 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

# Leading by Example

- 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 ZEVs
- Looking to pilot and build out electric vehicle infrastructure at Federal Facilities

## Federal Fleet Electric Vehicle Orders



Fiscal Year

#### **EV Overview**

## Zero Emission Vehicles (ZEV)

- Battery Electric Vehicles (BEV)
  - Powered entirely by electricity
  - No fuel tank or exhaust pipe
  - Teslas, Chevy Bolt, Hyundai Kona
- Plug-in Hybrid Electric Vehicle (PHEV)
  - Have an electric motor and a fuel based internal combustion engine (ICE)
  - Travels about 30 miles on battery then shifts to gas powered
  - Ford Escape PHEV, Wrangler PHEV, Pacifica PHEV

## Types of Charging Stations

- Level 1, Level 2, DC Fast
- Charging Ports
  - Single port, double port.
  - Tip: Clarify the scope. Does the customer want 2 ports or 2 stations?

#### EV Charging Infrastructure by Type

#### Level-1 Charging 110V/120V

## Level-2 Charging 208V/240V

## DC Fast Charger 208V/480V









- 3-19 kWh
- J1772 is standard (Teslas come with adapter)
- 10-20 miles per hour charge time
- \$500-\$12,000 (charger only)











Tesla, SAE Combo, CHAdeMO

- Max output of 350 kWH
- Most vehicles use CCS
   (Tesla comes with adapter)
   Nissan Leaf uses CHAdeMo
- 50-90 miles in 30 minutes
- \$32,000+ (charger only)

- 1.3-2.4 kWh
- J1772 is standard
- 4-6 miles per hour charge time
- \$0-\$3K (charger only)
- Finding a charger <u>plugshare.com</u> or <u>DOE Alternative Fueling Station Locator</u>
- Sites like <u>abetterrouteplanner.com</u> help drivers plan for charging on trips

## **EVSE by Recharging Time**

MY2021 Electric Vehicle	All Electric Range/Total Range/Mile	Level 1/120V Recharge Time (hrs) Least Expensive	Level 2/240V Recharge Time (hrs) Moderately Expensive	DC FAST (50-150 kW) Recharge Time (hrs) Most Expensive
		4-6 miles of range per hour. Charging cord provided. Plug into existing outlet or station	full charge. Stations can	<b>50–90 miles of range</b> <b>per 30 mins</b> . Full charge in 30 minutes-1 hour.
Nissan Leaf (base)	149	30	7.5	1.8
Chevy Bolt	259	64	9	1.4
Chrysler Pacifica PHEV	32/520	14	2	N/A
F150 Lightning	230-320	72+	10-14	41-122 minutes
Mustang Mach-E	211-300	95+	14	1 hour
Hyundai Kona	258	50+	9.5	1 hour
Ford Escape PHEV	37/530	10	3.5	N/A
Jeep Wrangler PHEV	22/370	12	2.4	N/A

#### **U.S. Federal Fleet Electrification Initiative**

- EVSE Installations have a plan!
- → 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
- → Charging parameters are limited by vehicle

#### 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 cars to ports.

At least one ABAAS compliant space

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

#### **EVSE Site Assessments**

- PBS Special Projects Division (SPD) awarded a large site assessment to Parsons Government Services.
  - Award Amount: \$2,030,152.73
  - Comprehensive analysis of existing electric distribution system's capacity to support conversion of all GOVs stationed at a facility.
  - Includes 235 buildings
- SOW: AE to complete a comprehensive analysis of the existing electrical distribution system's capacity to fully support conversion of all GOVs station at the facility.
- Will help us to identify where upgrades are needed.

## **EVSE BPA Award Highlights**

Includes hardware, software, O&M, make-ready/site assessment services & more! Over 30 EVSE brands and 1,165 line items

16 offerors were awarded, including 9 small businesses

PBS Contractors can buy from FAS BPA holders creating a one stop shop for stations & installation

Onboarding Opportunities

<u>Contract</u> <u>Length</u>

**60 Months** 

View all offerings, pricing and BPA-holder information at <u>gsa.gov/evse</u>

#### **EVSE BPA Benefits**

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

#### What's on the EVSE BPA?

#### **Services**

**CLIN 0006** 

Site asse sment
Validation
Permitting
Basic installation
Utility
coordination
Wiring
and more

#### **Hardware**

CLINs 0001-0005, 0010 & 0011

Level-1 arger

Level-2 Charger

**DC Fast Charger** 

**Portable Charging** 

**Solar Charging** 

Accessories

Management Software & Network Plans

CLINs 0007 & 0008

Power

management Network plans Real-time analytics

Data plans Cloud software Warranty Plans

CLIN 0009

Charging as a Service

CLINs 0002 & 0003

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

Activation
Ongoing operator &
driver support
Charging data &
analytics
Power
management, &

basic installation

#### **EVSE BPA Product Brands**

#### Levels 1 & 2



#### Level 3 (DC Fast)



#### **Solar & Portable**



#### **Software & Network Plans**



#### **EVSE BPA Resources**

## **GSA.gov/ElectrifyTheFleet**

- → Subpage: GSA.gov/EVSE
  - Under EVSE BPA information subsection
    - 2022 EVSE BPA fact sheet
      - Overview of EVSE BPA products, services, and brands
    - EVSE BPA offerings spreadsheet
      - Full of available products and services, including pricing and specifications, as well as vendor contact information
    - EVSE BPA ordering guide
      - Step by step guide for placing orders through the BPAs

## Fleet Electrification: GSA's Complete Infrastructure Solution

#### Infrastructure is a critical first step to successfully electrify the Federal Fleet

# Product & Service BPAs

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



# Design/Build Install IDIQs

- Construction, design & build
- Feasibility studies & site assessment
- Repair and alterations
- Electrical upgrades
- Testing, commissioning, & utility coordination
- Self-service, assisted acquisition, contract support or delegation of procurement authority

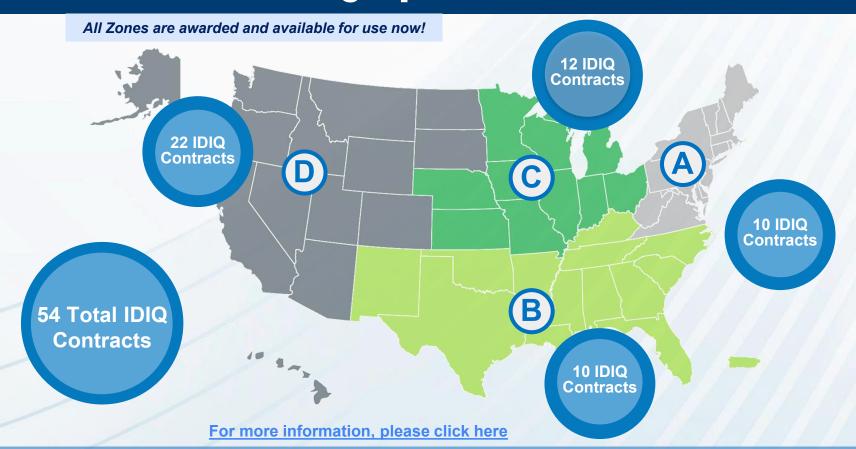
# Governmentwide Design/Build Construction IDIQ Overview

Electric Vehicle Supply Equipment (EVSE) Installation and Related Infrastructure

## Governmentwide IDIQ Overview



## **Geographic Zones**



## Geographic Zone Breakdowns

Zone A

Zone B

Zone C

Zone D

10 IDIQ Contracts

**3** - 8(a)

8 - SDB

3 - HUBZone

4 - VOSB

2 - SDVOSB

1 - WOSB

1 - EDWOSB

10 IDIQ Contracts

**3** - 8(a)

9 - SDB

1 - HUBZone

1 - VOSB

1 - SDVOSB

3 - WOSB

2 - EDWOSB

12 IDIQ Contracts

**2** - 8(a)

**10** - SDB

3 - HUBZone

2 - VOSB

2 - SDVOSB

**2** - WOSB

22 IDIQ Contracts

**6** - 8(a)

**18** - SDB

6 - HUBZone

6 - WOSB

2 - EDWOSB

1 - VOSB

For IDIQ contractor point of contacts, please click this link

## Ordering Contracting Officers (OCOs)

**GSA Controlled Space** 



**Non-GSA Controlled Space** 



#### Task orders may be placed by:

- GSA PBS Contracting Officers (COs) only
- GSA PBS Contracting Officers
- Other Federal Agency COs with delegated procurement authority from the IDIQ CO
- Leased Spaced contact your LCO

\*Delegation of Procurement Authority (DPA) not needed for GSA PBS Contracting
Officers

## **Governmentwide Construction IDIQ**

WITHIN IDIQ SCOPE

General
Construction
Services

EVSE Installation

Testing and Commissioning

**Utility Coordination** 

Electrical Infrastructure Upgrades

(e.g., switchgear, transformers)

Feasibility
Study
and/or Site
Assessment

Other Site Work (e.g. trenching, bollards)

Design/Build Services

OUT OF IDIQ SCOPE

Inherently Governmental Functions Stand-alone architectengineer design services

Personal Services Contracts

## **Ordering Path Options**



## GSA/PBS Awards & Manages

For buildings <u>in or</u>
<u>not</u> <u>in</u> **GSA's**Building Portfolio:

Submit requirements & funding through <u>eRETA</u>



GSA/PBS Provides
Contract Support



Self-Service Design & Construction



Self-Service for EVSE Products & Services

For buildings <u>not</u> in **GSA's Building Portfolio:** 

Agency submits requirements & funding through <u>eRETA</u>

Agency requests GSA
Delegation of
Procurement authority
from GSA

Agency views offerings & orders from BPA Holder

gsa.gov/ElectrifyTheFleet

#### Resources

For project support or questions, please contact pbsevsesolutions@gsa.gov







For questions on the EVSE BPA, please contact GSAFleetAFVTeam@gsa.gov

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



- 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





Questions?

www.gsa.gov/electrifythefleet











Catch CES sessions on VouTube

#### Broker Services - Today and in the Future

March 8th, 2023 1 p.m. - 2 p.m. EST Register Now

Visit <u>www.gsa.gov/ces</u>
Email <u>clientenrichmentseries@gsa.gov</u>

Bookmark and binge watch your favorites!

## Understand Your Workspace Usage With Daily Occupancy Data

March 16th, 2023 2 p.m. - 3 p.m. EST Register Now GSA's COVID-19 Resources for Customers

See our **Safer Federal Workplace** site

