History of EVs in the Federal Fleet

Current EV Offerings

Market Forecast
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FedFleet 2020
The Federal Fleet is Mostly Larger Vehicle Types

- Light Trucks: 43%
- Medium & Heavy Trucks: 22%
- SUVs: 13%
- Sedans: 14%
- Buses: 1%
- Ambulance: <1%
- Passenger Vans: 7%

FedFleet 2020
US Market: 1.80%
Federal: 0.86%
Historical Federal Context for EVs

2010 - First GSA EV Purchases & Requests for Employee Charging

2012 - GSA Launches 1st EV Initiative

2014 - GSA Fleet Expands EV Initiative

2015 - E.O. 13693 & FAST Act

2016 - EV Deployment Initiative

2018 - E.O. 13693 Replaced with E.O. 13834

2019 - Federal fleet service cards accepted at EV charging stations
Model Year 2010 | Model Year 2020
---|---
Number of Configurations | 3 | 9

EV Configurations Offered Through GSA Fleet
Current Offerings: Electric Sedans

SIN 8E - Chevy Bolt - BEV
SIN 8E - Nissan Leaf - BEV
SIN 9P - Ford Fusion Energi - PHEV
SIN 8P - Hyundai Ioniq - PHEV

For more info, checkout the EV factsheets at gsa.gov/AFV
Current Offerings: Larger Electric Vehicles

- SIN 20P - Chrysler Pacifica - PHEV
- SIN 96P - Mitsubishi Outlander - PHEV
- SIN 98P – Ford Escape - PHEV
- SIN 98P - Kia Niro - PHEV

For more info, checkout the EV factsheets at gsa.gov/AFV
## Schedule EVs

<table>
<thead>
<tr>
<th>Passenger/Cargo Van</th>
<th>Shuttle Bus Phoenix MotorCars-Zues</th>
<th>Transit Bus Proterra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zenith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-120 mile range</td>
<td>100 mile range</td>
<td>55-350 mile range</td>
</tr>
<tr>
<td>$98K-$109K</td>
<td>Up to $263K</td>
<td>$660K-$771K</td>
</tr>
<tr>
<td>Seats up to 16</td>
<td>12-20 passengers</td>
<td>Charging stations up to $316k</td>
</tr>
</tbody>
</table>

- Low Speed Electric Vehicles Also Available
# Charging Station Basics

## Level 1
- 2-5 miles of range/hour
- 120 volt. 7-21 hours for full charge. Cord provided with vehicle. Wall outlet or dedicated station.
- Stations/Cordset: $0-$1,500
- Harder to capture data

## Level 2
- 10-20 miles of range/hour
- 240 volt. 2-10 hours for full charge. Most can collect data w/ subscription services.
- Station: $500-$10,000
- Data: $200-$300 annually
- Works with any type of EV

## DC Fast Charge
- 60-80 miles of range/ ½ hour
- 350+ volt. Full charge in 1-2 hours or less for full charge. Collect data with subscription services.
- Station: $13,000-$50,000
- Data: $200-$600 annually
- Not all EVs can use
How to Plan for EV Deployment

**Deployment tools**
Lists sent to HQs, FSRs can access maps

**Telematics Data**
Once deployed, use data to find optimal use cases

**Site Assessments**
Determine needs for additional electrical infrastructure
Options for Purchasing EVSE

• GSA blanket purchase agreement (BPA)
  • Pre-negotiated and pre-competeted solution open to all GSA customers
  • Level 1, 2, and DC fast charge stations from 5 different manufacturers + data network plans

• GSA Schedules (GSAAAdvantage.gov)
  • Level 1, 2, and DC fast charge stations from 12 different manufacturers + data network from 3 different manufacturers
  • Station prices range from $500 - $40,000

• Open Market
  • Use when desired configurations / specifications are not available from GSA
  • Reference Federal Acquisition Regulation (FAR) Parts 13 and 15
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EV Offerings are Set to Increase Significantly

- **GM**: 20 EVs by 2023
- **Ford**: 40 Hybrids & EVs by 2022
- **Jeep**: 14 EVs by 2022
- **Hyundai**: 16 BEVs by 2022
- **Nissan**: 12 BEVs by 2022
Electric Trucks on the Horizon
Five Electric Trucks Expected by 2021, with Likely Availability for Federal Customers
Factors Impacting EV Market

- Costs, battery technology and vehicle advancement
- Consumer demand
- Subsidies and government incentives
- Uncertainty pertaining to domestic CAFÉ standards; conversely, increasing emissions regulations and climate awareness abroad
- More efficient/cleaner diesel engine technology in larger truck segment
- Emerging mobility models of autonomy, connectivity, and shared mobility
If Nothing Else, Remember….

Electric vehicles already have an established and successful history in the federal fleet.

Current GSA electric offerings can support a wider range of missions than ever before.

Stay on the lookout for falling prices and new vehicle types going electric in the near future.

FedFleet 2020
Resources

- [www.gsa.gov/afv](http://www.gsa.gov/afv)
  - Guidance on AFV regulations & the AFV Guide
- [www.gsa.gov/evse](http://www.gsa.gov/evse)
  - Guidance on charging stations and the charging station BPA
- Contact us at [gsafleetafvteam@gsa.gov](mailto:gsafleetafvteam@gsa.gov)