



U.S. General Services Administration

Federal Acquisition Service

Electric Vehicle Working Group
Metropolitan Washington Council of
Governments

AFV Team
Office of Motor Vehicle Management

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- Federal Fleet Energy & Environmental Mandates
- GSA's Role in Vehicle Acquisitions
- Fleet Electrification – Options and Considerations
- GSA's Plug-In Electric Vehicle Pilot Overview
- Rolling Out PEVs in the Washington, DC Metro Area
- Q&A



Energy/Environmental Requirements – Acquisitions/Fuel

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- Acquire 75% of light duty, covered vehicles as alternative fuel vehicles
 - 2011 Presidential Memorandum increases this to 100% by 2015
- Acquire 100% low-greenhouse gas emitting vehicles
- Decrease petroleum consumption by 2% per year, from a 2005 baseline, through 2020
- Increase alternative fuel year by 10% annually over the previous year through 2015
- Utilize environmentally preferred products



GSA's Role in Vehicle Acquisitions

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➤ Office of Motor Vehicle Management

- GSA Automotive
 - Mandatory source of supply for vehicle purchases under [FPMR 101-26.501](#)
 - Schedule 751 for commercial leases
 - MAS Schedule 23V offers environmentally friendly products
 - Purchase 60,000 vehicles annually
- GSA Fleet
 - Strategic vehicle source (optional)
 - Managed-lease program oversees 1/3 of the federal fleet
 - Over 100,000 AFVs in inventory
 - Short Term Rental program



FY2013 AFV Offerings

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- **1,070 Bio Diesel (B20)**
- **236 E85**
- **99 Hybrid Electric**
- **46 Compressed Natural Gas**
- **10 Liquid Natural Gas**
- **24 Low Greenhouse Gas (GHG)–emitting (conventionally fueled)**
- **10 Battery Electric**
- **42 Liquid Propane Gas**

1,537 Alternative Fuel and Alternative Fuel Capable Vehicles
An Increase of 72.1% over FY12



Overall Challenges to New Technology Adoption

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- Funding vehicles (e.g. incremental)
- Access to alternative fuels (E85, CNG, electricity, etc)
- Funding new infrastructure – public and private
- For Federal government, there is often a mismatch between
- Access to fuel
- Agency vehicle configuration requirements, and
- Alternative fuel vehicle availability



Electrification Options in FY2013

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➤ Light Duty Hybrid vehicles

- Sedans:
 - (SIN 8H) Ford CMAX, (9H) Ford Fusion, Hyundai Sonata, Chevrolet MalibuEco
- SUV (4x2 and 4x4):
 - (100H, 105H) Chevrolet Tahoe
- Pickup (4x2 and 4x4):
 - (50H, 55H) Chevrolet Silverado

➤ Electric Vehicles

- Sedans:
 - (SIN 8E) Chevrolet Volt, Ford CMAX Energi, Ford Fusion Energi, Ford Focus BEV, RP Automotive Mitsubishi iMiev
- Cargo Vans:
 - (84E) Electric Vehicle Institute-LCF
 - (95E) Electric Vehicle Institute-LCF, Central Truck Zero
 - (124N) Electric Vehicle Institute-LCF
 - (134E) Electric Vehicle Institute-WI





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- More expensive up front (Incremental Cost)
- Cheaper to fuel
- Cheaper regular maintenance
- Batteries are very expensive to replace
- May have limited geographic availability
- Limited maintenance options
- Cleanliness of electricity depends on source



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- GSA customers through GSA Schedules can acquire a variety of EVSE brands/models, installation services, and ancillary services such as station software packages
 - Available products include:
 - Clipper Creek
 - Coulomb Technologies
 - Eaton
 - Leviton
 - Merit Builders
 - Schneider Electric
 - Siemens



Charging Stations (EVSE) - Key Considerations

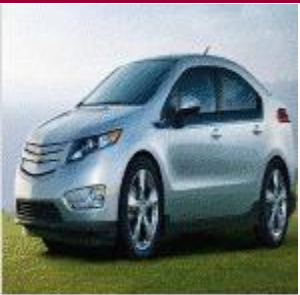
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- Site Planning and Installation Costs
- Safety
 - NEC 625 approved; UL certification
- Time to charge
 - Level 2 (208-240V) = 4-10 hours
- Station Access/Payment Collection
 - GAO Finding prohibiting use of EVSE by employees and public if funded with appropriated dollars
- Data Collection: Fleet and Facility Energy Mandates



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Electric Vehicles

- Vehicle orders placed in May 2011
- 101 Chevrolet Volts, 10 Nissan Leafs, 5 Think City EVs
- 9 Pilot Cities - including Washington, DC metro area
- More than 20 participating agencies



Electric Vehicle Charging Stations

- Participating agencies required to install a Level 2 charging station/connector per vehicle
 - GSA offered to acquire Level II EVSE
- GSA EVSE awards made to:
 - AutoFlex, LLC offering Eaton
 - Carbon Day, LLC offering Coulomb Technologies
 - Siemens

PEV Pilot Expansion Slated For Fall 2013





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- 37 Chevrolet Volts delivered to DC Metro area
- 5 Think Citys delivered to Baltimore, MD
- Vehicle/Charging Station locations a combination of facilities
 - GSA-owned
 - GSA-leased
 - Agency-owned
 - Agency-leased

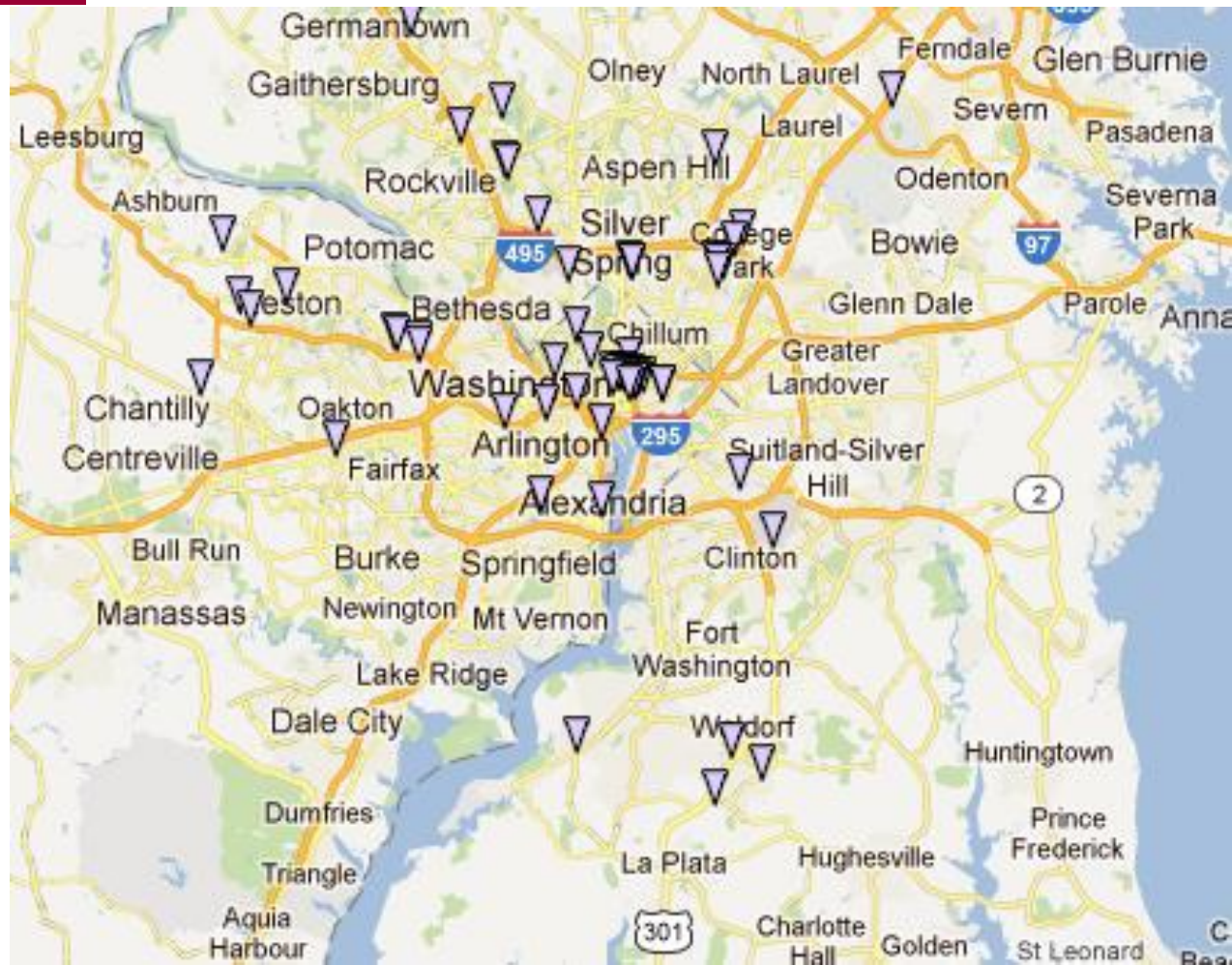
GSA DC Metro Area Level 2 Charging Stations

(Source: DOE AFDC Station Locator)

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- 61 sites w/ Level 2 charging station within 20 miles of 1800 Pennsylvania Avenue
- 58 public access
 - 49 private
 - 5 @ UMD
 - 4 government
- 3 private access





Other Resources

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➤ GSA

- <http://www.gsa.gov/automotive>
- <http://www.gsa.gov/gsafleet>
- <http://www.gsa.gov/fleetsolutions>
- <http://www.gsa.gov/vehiclepolicy>
- <http://www.gsaadvantage.gov>

➤ Department of Energy

- http://www1.eere.energy.gov/femp/program/fedfleet_management.html

➤ Environmental Protection Agency

- <http://www.epa.gov/greenvehicles>
- <http://www.epa.gov/epp/pubs/products/fleets.htm>



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Thank You!

Alternative Fuel Vehicle Team