



U.S. General Services Administration

# Federal Acquisition Service

Federal Fleet Sustainability  
Metropolitan Washington Council of Governments

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## Federal Acquisition Service

- 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



## Energy/Environmental

## Requirements – Acquisitions/Fuel U.S. General Services Administration

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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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- GSA Automotive
  - Mandatory source of supply for non-tactical vehicle purchases by Executive and DOD Agencies 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



## FY2012 AFV Offerings

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- 391 Bio Diesel (B20)
- 230 E85
- 109 Hybrid Electric
- 67 Compressed Natural Gas
- 19 Liquid Natural Gas
- 11 Low Greenhouse Gas (GHG)–emitting (conventionally fueled)
- 10 Battery Electric
- 39 Liquid Propane Gas
- 1 Flex Fuel Hybrid

877 Alternative Fuel and Alternative Fuel Capable Vehicles  
An Increase of 375 over FY11



## 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 FY2012

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#### ➤ Light Duty Hybrid vehicles

- Sedans:
  - (SIN 8H) Honda Insight, Toyota Prius, (9H) Ford Fusion
- SUV (4x2 and 4x4):
  - (98H, 99H) Ford Escape, (100H, 105H) Chevrolet Tahoe
- Pickup (4x2 and 4x4):
  - (50H, 55H) Chevrolet Silverado

#### ➤ Electric Vehicles

- Sedans:
  - (SIN 8E) Chevrolet Volt, RP Automotive Nissan Leaf, RP Automotive Mitsubishi iMiev
- Cargo Vans:
  - (571E) Smith Electric Newton
  - (95E) Central Truck Zero
  - (30E) Northside Brasada Ford Azure Dynamic Transit Connect





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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
- Limited configurations available





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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: (as of 1/12/2012)
    - 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
- Charging Time
- Station Access/Payment Collection
  - GAO Finding prohibiting use of EVSE by employees and public if funded with appropriated dollars
  - Does station take Federal fleet card?
- Data Collection: Fleet and Facility Energy Mandates





## GSA's 1<sup>st</sup> PEV & EVSE

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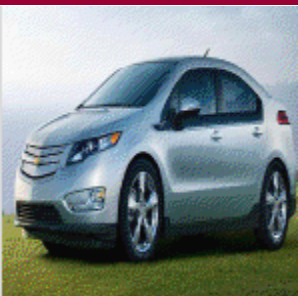


Delivered June 2011



Installed January 2012

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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 made awards for the pilot to the following companies:
  - AutoFlex, LLC offering Eaton
  - Carbon Day, LLC offering Coulomb Technologies
  - Siemens





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- 37 Chevrolet Volts to be delivered to DC Metro area
  - First two deliveries in Oct 2011
  - Remaining 35 deliveries between February and May 2012
  
- 5 Think Citys delivered to Baltimore, MD in November 2011
  - Charging stations installed and operational in December 2011
  
- Vehicle/Charging Station locations a combination of facilities
  - GSA-owned
  - GSA-leased
  - Agency-owned
  - Agency -leased



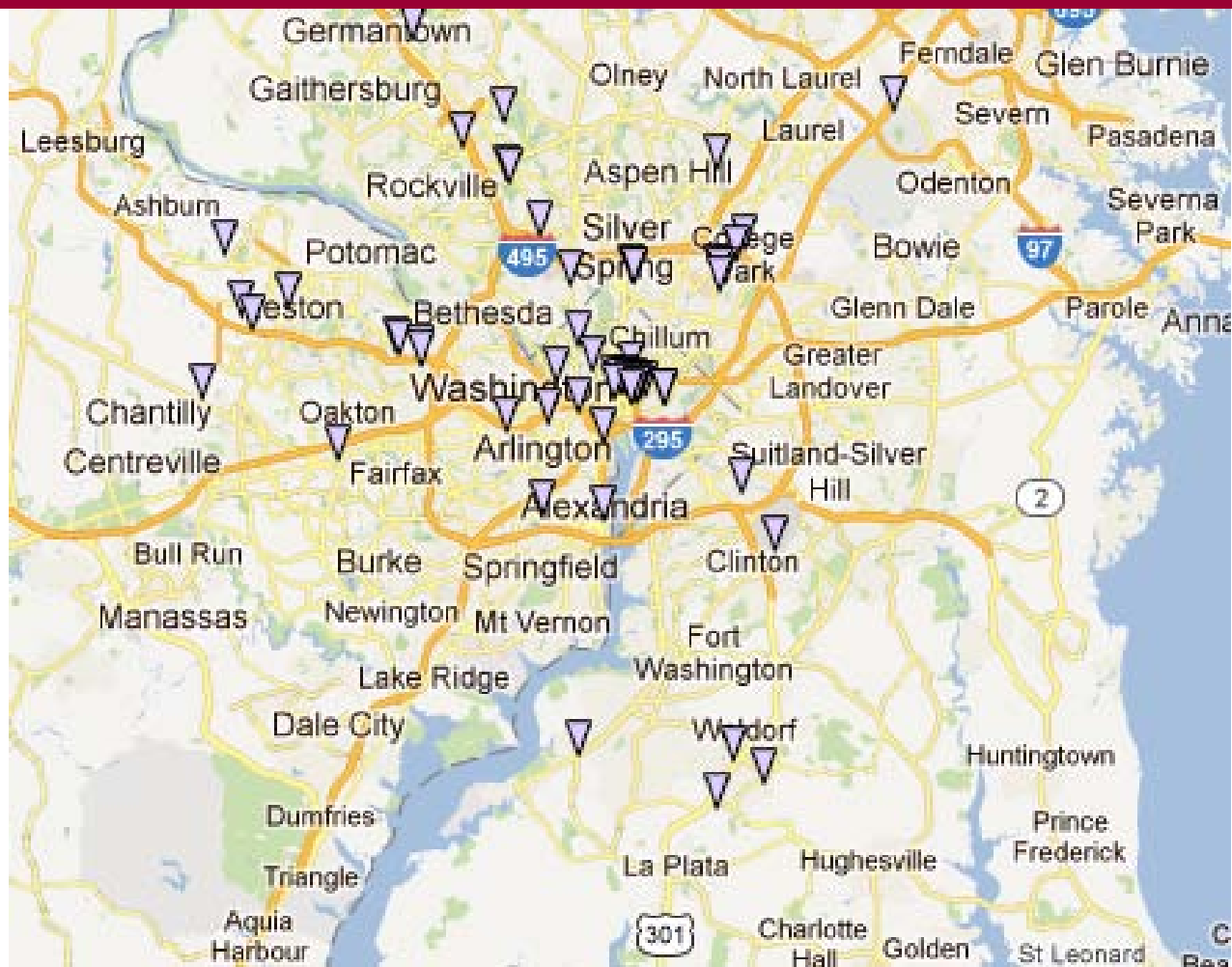
## DC Metro Area Level 2 Charging Stations

(Source: DOE AFDC Station Locator)

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- 61 sites w/ Level 2 charging station within 25 miles of 701 9th Street NW, Washington, DC
  - 58 public access
    - 49 private
    - 5 @ UMD
    - 4 government
    - 0 federal
  - 3 private access





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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](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!

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