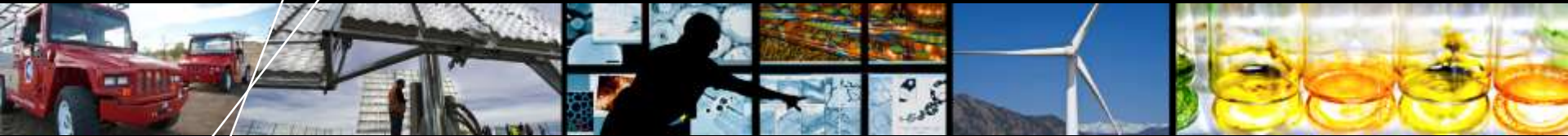


EPAct Program Update



EPAct State and Alternative Fuel Provider Fleet Program

Ted Sears

NASEO – Transportation Committee Meeting

Savannah, GA

September 9, 2014

Agenda

- State and Alt Fuel Provider Fleet Requirements Under EPA Act
- Program Status and Data
- Available Tools to Accomplish Program Goals
- Program Initiatives
- Discussion



State Fleet Requirements Under EPA Act

Fleet Requirements – SFP

- Energy Policy Act of 1992 (EPA 92) requires certain **State and Alternative Fuel Provider (SFP)** fleets to acquire alternative fuel vehicles (AFV) if:
 - Fleet has **50** non-excluded light-duty vehicles (LDVs) total
 - Fleet has \geq **20** non-excluded LDVs in a single Metropolitan Statistical Area (MSA) or consolidated MSA (CMSA) with \geq **250,000** population in 1980
- Current annual AFV acquisition requirements:
 - **States – 75%** of annual non-excluded LDV acquisitions
 - **Alternative Fuel Providers – 90%** of annual non-excluded LDV acquisitions
- Alternative Fuel (AF) use requirement
 - Alternative Fuel Providers must **use AF** when AFV operating in area in which AF is available

Fleet Compliance Options – SFP

- Initially, fleets could only comply by **acquiring AFVs**
 - **AFVs** (think FFVs, CNG, or Propane dedicated or bi-fuel vehicles, and EVs) and **Conversions**
 - **Exemptions** available if no appropriate AFV model or AF available
 - Fleets may earn and **bank/trade credits** for excess acquisitions
- Congress later allowed fleets to meet up to 50% of annual AFV acquisition requirements through **purchase for use of biodiesel**, if blend **≥20% biodiesel (B20)**
 - One acquisition credit for every **450** gallons of **B100**
- This (**AFV acquisition** and **biodiesel**) is termed **Standard Compliance (SC)**
 - EISA 2007 authorized DOE to allot credit levels for **Electric Drive Vehicles** (hybrids, PHEVs, MD/HD EVs, NEVs) and investments in alternative fuel infrastructure and certain other electric drive technologies

Credit Allocations Under the 133 Final Rule

Credit Category	Credit Allotment	Limitations/Other
HEV	½ credit	
PHEV	½ credit	
FCEV	½ credit	
NEV	¼ credit	Not included in covered LDV count
Medium- or heavy-duty HEV	½ credit	Not included in covered LDV count
Alternative Fuel Infrastructure	1 credit per \$25,000 invested*	Maximum of 5 credits if private infrastructure, 10 credits if publicly accessible infrastructure; credit allocated in model year placed into operation
Alternative Fuel Non-Road Equipment	1 credit per \$25,000 invested*	Maximum of 5 credits per fleet per model year
Emerging Technology	2 credits for initial \$50,000 invested and 1 credit per \$25,000 thereafter, or 1 credit per pre-production vehicle*	Maximum of 5 credits if counting based on amount invested, per fleet per model year

* Aggregation of dollar amounts allowed

Fleet Compliance Options – SFP

Under EPCRA 2005, **Alternative Compliance (AC)** Option Added

- Instead of earning credits for AFV acquisitions or biodiesel use, fleet opts to demonstrate **petroleum reductions** (think **AF use**) equal to amount of AF that would have been used if all of fleet's AFVs ran on AF 100% of the time
- Adds **petroleum reduction options** (e.g., increased efficiency, idle reduction, vehicle miles traveled reductions)
- Increases **flexibility** for some options
 - For example, biodiesel may be used to achieve >50% of requirements and be in blends <B20

State-Specific Fleet Requirements

- **Many are aligned with federal EPCa requirements, some go further, and some require a different approach**
- **There is no preemption of or release from the federal EPCa requirements for covered fleets**

* Exceptions apply to many of these requirements



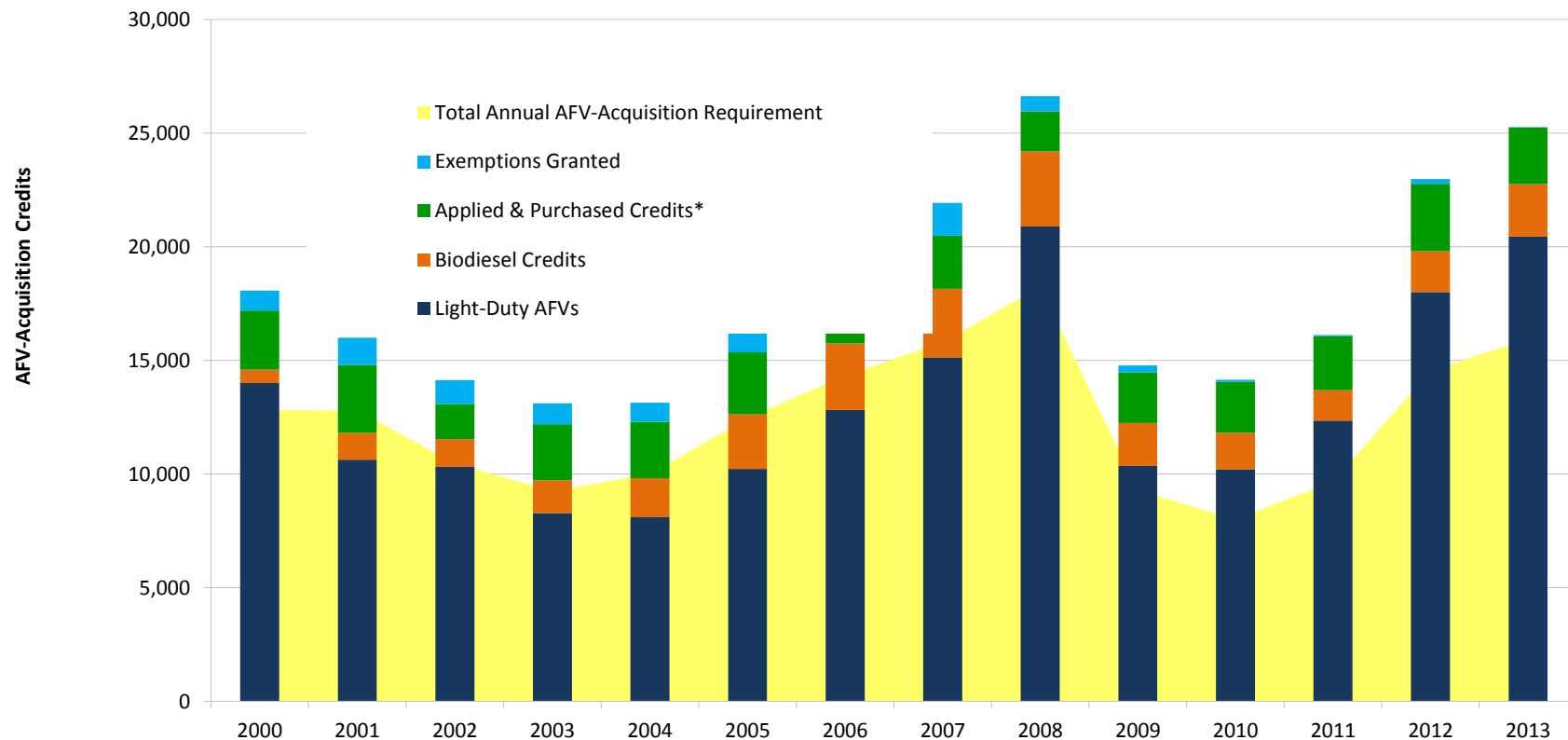
SFP Program Status and Data

SFP Fleet Overall Status

- ~300 fleets submit an annual report each year
- 10-20,000 AFVs acquired annually, most now are FFVs (a few hundred NGVs/year)
 - Since program began in MY97, 60% FFVs, ~25% NGVs, ~10% LPGVs
- 5 to 6M gallons of B100 used annually, several times the amount for which fleets receive credit
- 100% Fleet Compliance
 - Handful of fleets do require some handholding to come into compliance
- Relatively few fleets in newer AC option (~12)

SFP Program Data

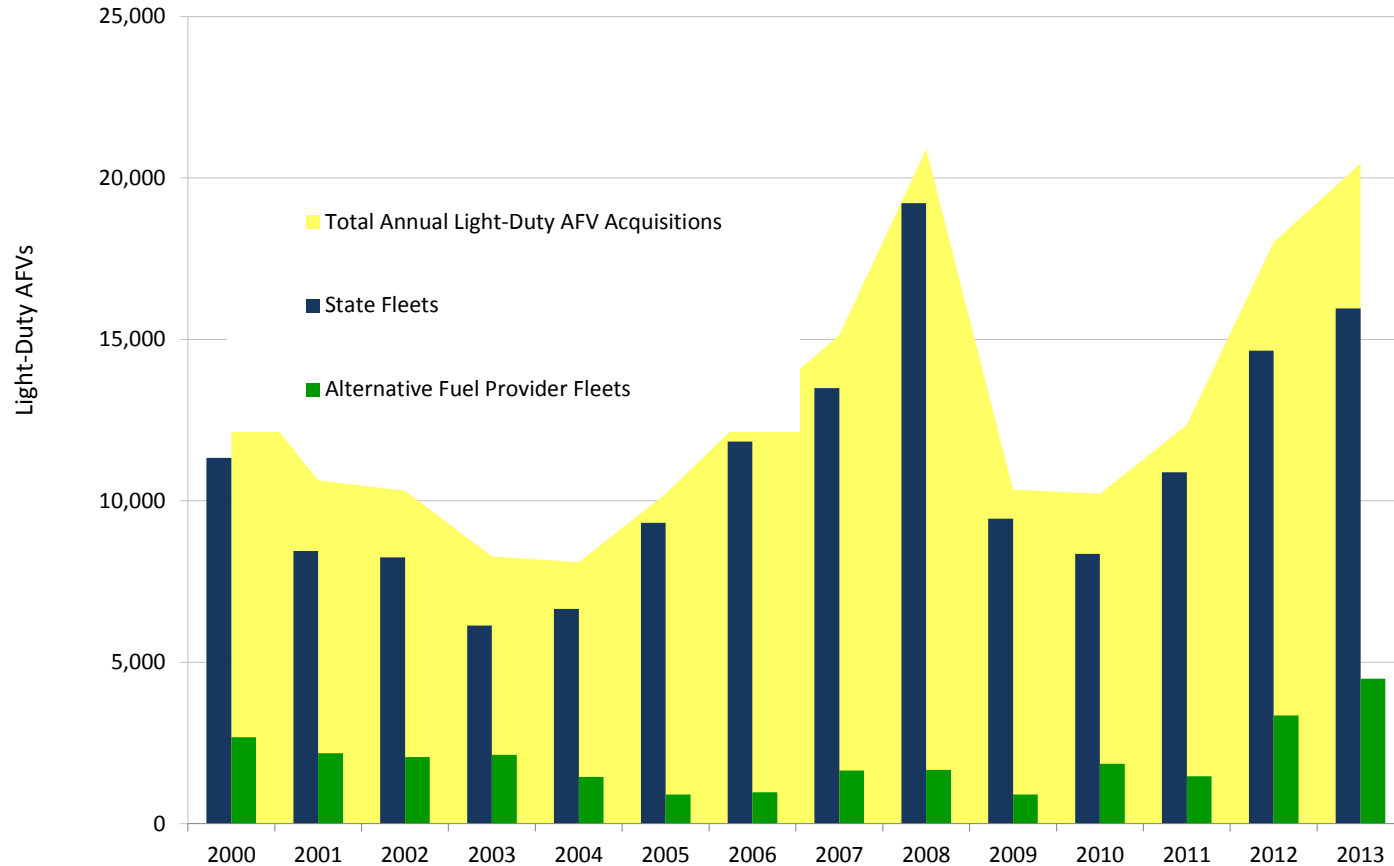
Standard Compliance Methods



*Purchased credits can be banked for future use.

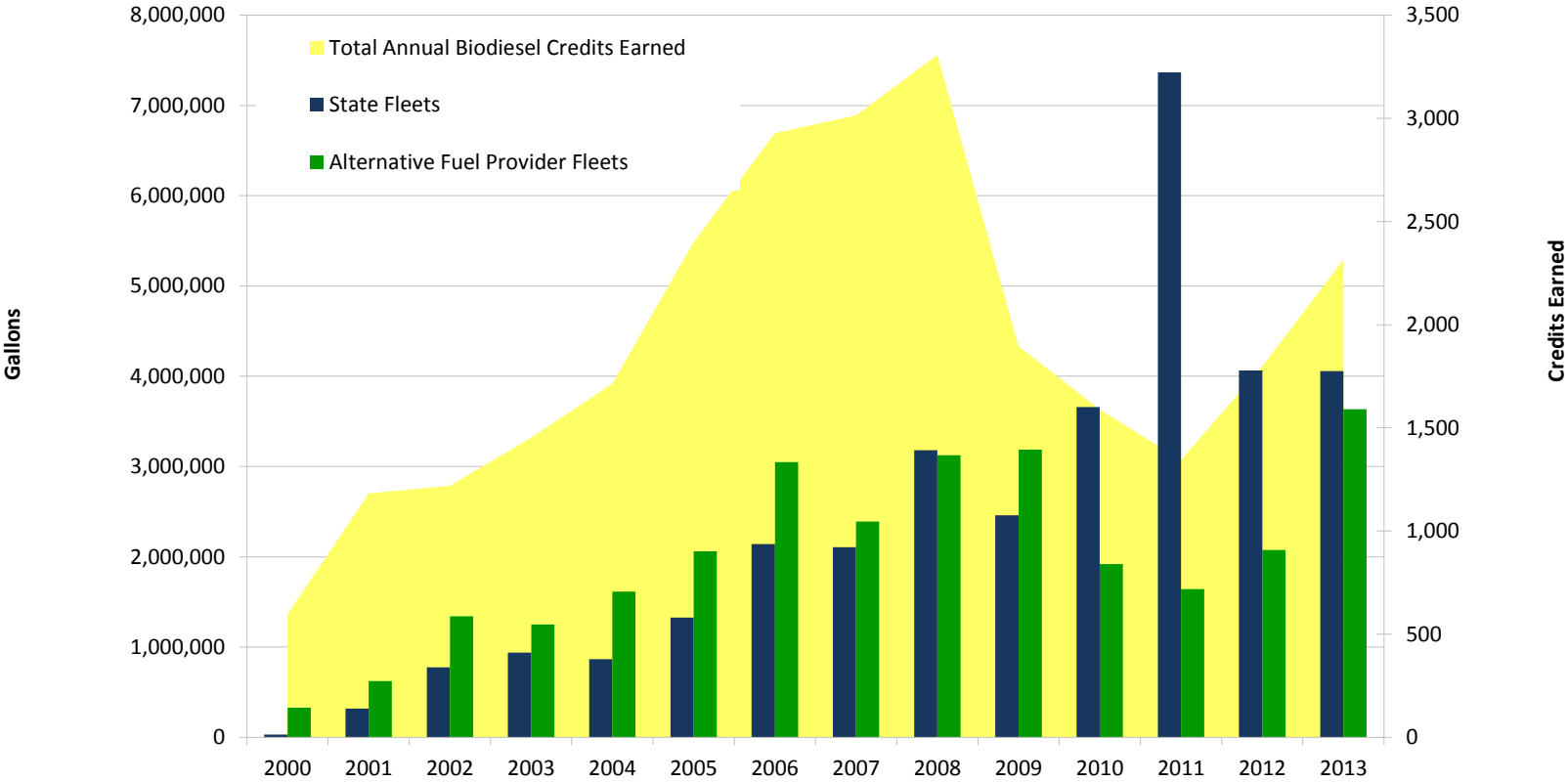
SFP Program Data

Light-Duty AFV Acquisitions



SFP Program Data

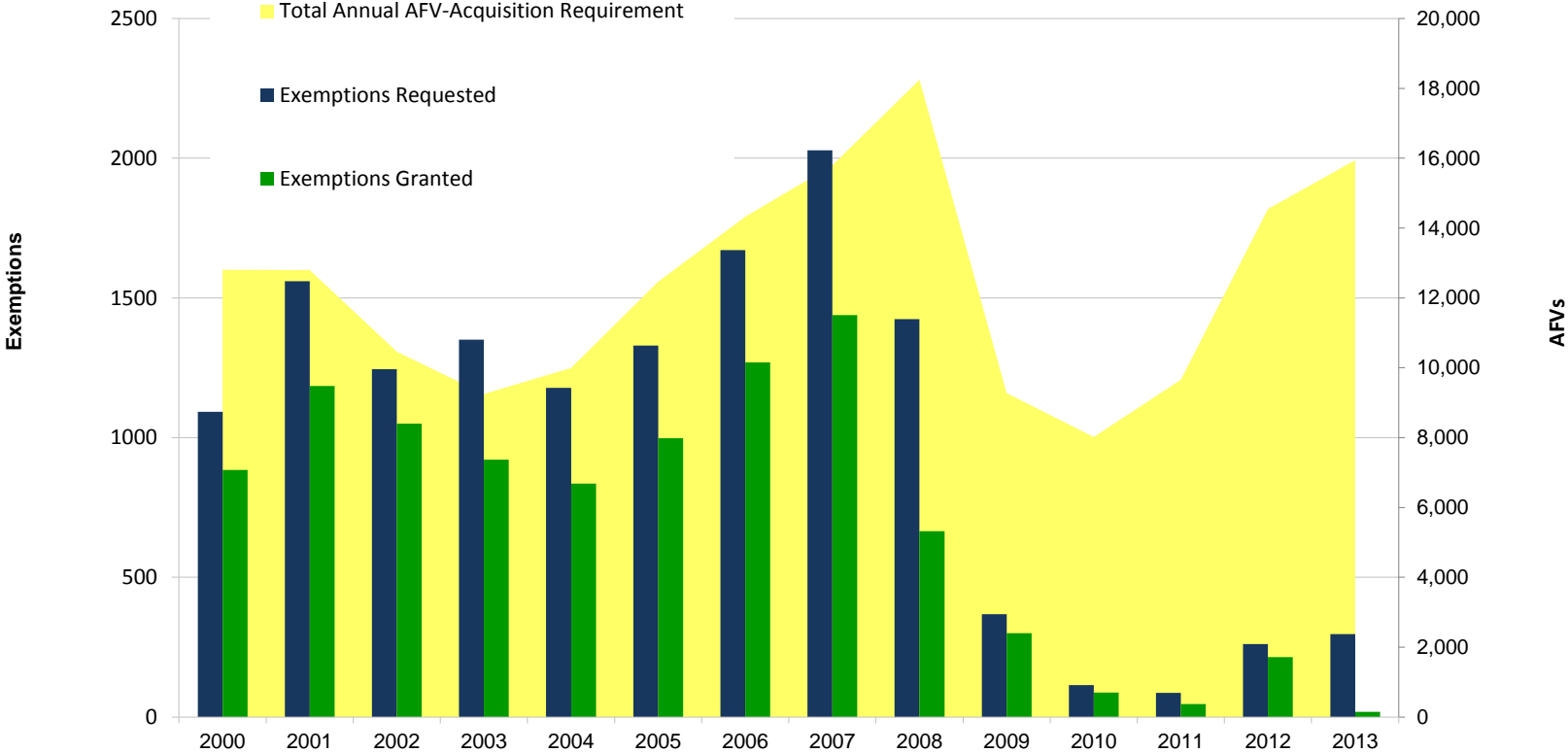
Annual Biodiesel (B100) Use and Biodiesel Credits Earned



*Includes only all gallons reported

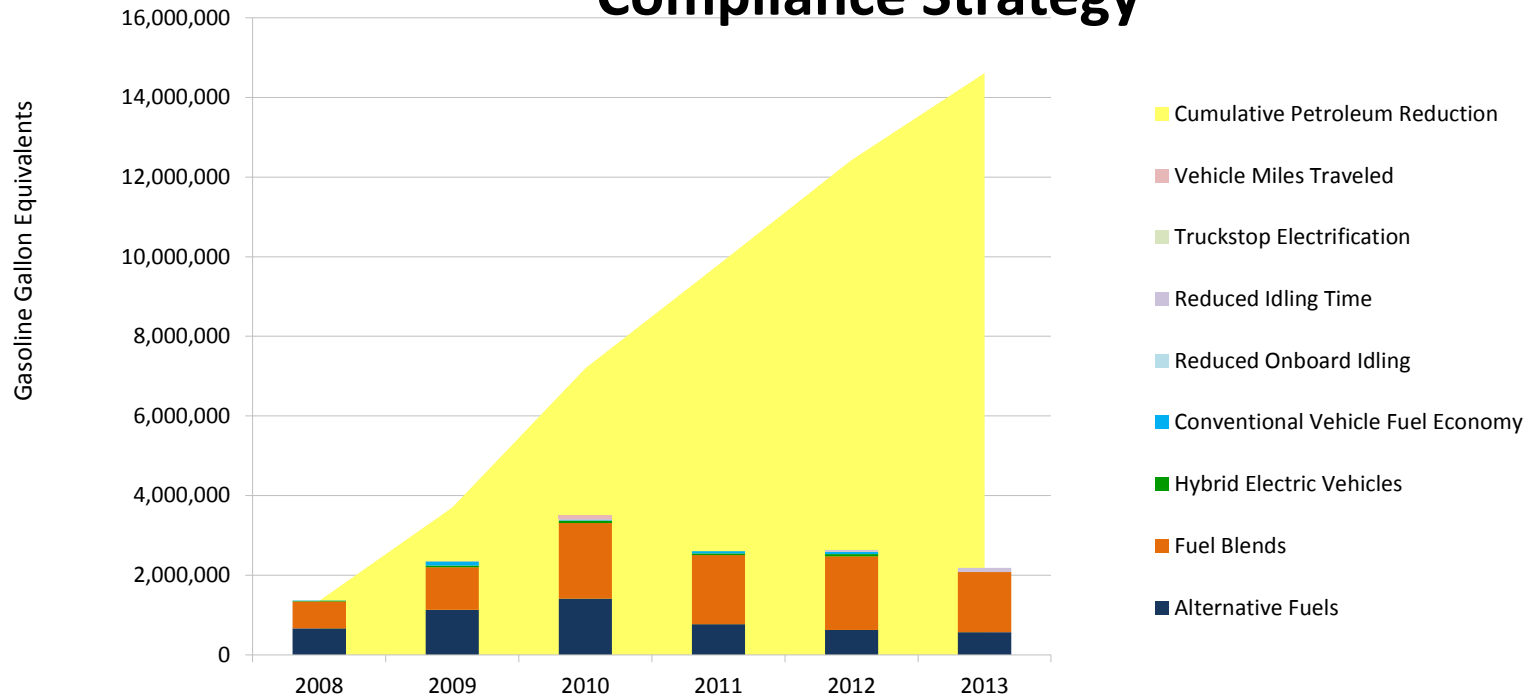
SFP Program Data

Annual Exemptions Requested and Granted Compared to Total AFV-Acquisition Requirement



SFP Program Data

Petroleum Reductions Achieved by Alternative Compliance Strategy



MY2012 AC efforts = over 2.6m GGE of petroleum reduced from 12 fleets

MY2011 = over 2.6m GGE

MY2010 = over 3.4m GGE

MY2009 = over 2.4m GGE



Available Tools to Accomplish Program Goals

EPAct Website & Outreach/Compliance Assistance

<http://www1.eere.energy.gov/vehiclesandfuels/epact/resources.html>

EPAct Transportation Regulatory Activities

EPAct Transportation Regulatory Activities
 SEARCH
Search Help ▶

EERE » Vehicle Technologies Office » EPAct Transportation Regulatory Activities » Resources

Site Map | Printable Version | Share

- Home
- About
- Covered Fleets
- Compliance Methods
- Alternative Fuel Petitions
- Resources
- Guidance Documents
- Statutes & Regulations
- Program Annual Reports
- Fact Sheets
- Case Studies
- Newsletter
- Workshops
- Tools
- Key Terms
- FAQs

Resources for EPAct Transportation Regulatory Activities

These resources help [covered fleets](#) meet their Energy Policy Act (EPAct) requirements and educate the public about EPAct transportation regulatory activities. For additional help, find Alternative Fuel Transportation Program [contacts](#).

Requirements and Results

Learn about EPAct requirements and compliance results for state and alternative fuel provider fleets.

- [Guidance Documents](#)
- [Statutes and Regulations](#)
- [Program Annual Reports](#)



Publications and News

Learn about EPAct transportation regulatory activities, success stories, news, and events.


- [Fact Sheets](#)
- [Case Studies](#)
- [Newsletter](#)
- [Workshops](#)



Tools and Questions

Find tools and answers to your questions to help meet your EPAct requirements.

- [Tools](#)
- [Key Terms](#)
- [Frequently Asked Questions](#)



Alternative Fuels Data Center

<http://www.afdc.energy.gov/tools>

The screenshot displays the Alternative Fuels Data Center website. The header includes the U.S. Department of Energy logo and navigation links. The main content area is titled "Tools" and is organized into three columns: Calculators, Interactive Maps, and Data Searches. Several tools are highlighted with orange circles:

- Calculators:**
 - Vehicle Cost Calculator:** Compare cost of ownership and emissions for most vehicle models. *mobile*
 - Petroleum Reduction Planning Tool:** Create a plan for your fleet to reduce petroleum consumption and emissions.
 - CHG VICE Model 2.0:** Evaluate ROI and payback period for natural gas vehicles and infrastructure.
 - AFLEET Tool:** Calculate a fleet's petroleum use, cost of ownership, and air pollutant and GHG emissions.
 - PEV Readiness Scorecard:** Assess your community's readiness for the arrival of plug-in electric vehicles.
 - GHGET Fleet Footprint Calculator:** Calculate your fleet's petroleum use and greenhouse gas emissions footprint.
- Interactive Maps:**
 - Alternative Fueling Station Locator:** Locate alternative fueling stations and get maps and driving directions. *mobile*
 - Transitmaps:** Analyze vehicle densities and locations of fueling stations and production facilities.
 - Biofuels Atlas:** Compare feedstocks and analyze biofuel production by location.
 - Truck Stop Electrification Sites:** Locate truck stops with electrification sites to reduce the need for idling. *mobile*
 - Coalition Locations:** Find Clean Cities coalitions and contact information for coordinators.
- Data Searches:**
 - Light Duty Vehicle Search:** Compare light-duty alternative fuel vehicles, electric vehicles, and hybrids.
 - Heavy Duty Vehicle and Engine Search:** Find medium- and heavy-duty alternative fuel vehicles, engines, and hybrid systems.
 - Fuel Properties Comparison:** Compare alternative fuel properties and characteristics.
 - Laws and Incentives Search:** Search for laws and incentives related to alternative fuels and advanced vehicles.
 - Find a Car:** Compare fuel efficiency, costs, carbon footprints, and emissions. *mobile*
 - State Information:** Find state information about alternative fuels and advanced vehicles.



Program Initiatives

- **FleetDASH – Fleet Sustainability**
- **Enhancements to AC Option**
- **EPAct Stakeholder Workshops**

Introduction to FleetDASH

What:

Management tool to track participating Federal agencies' fleet fuel consumption, greenhouse gas emissions, and vehicle inventories.

Identifies instances where alternative fuel is well used and opportunities for improvement.

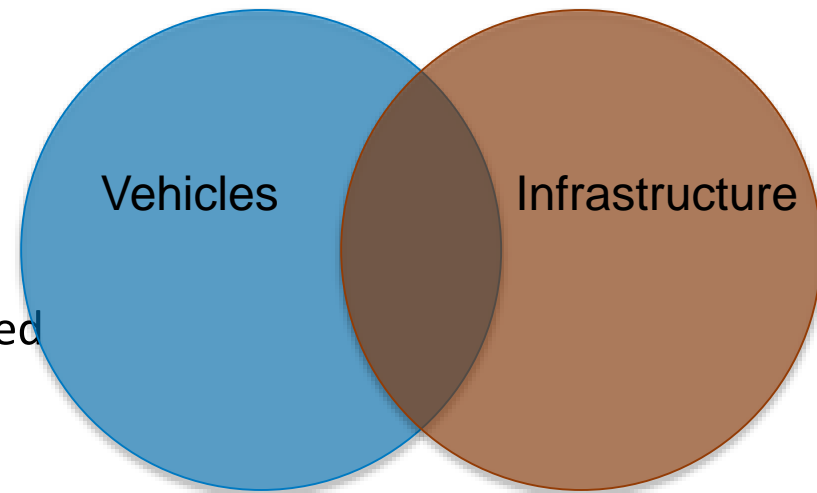
How:

Use available datasets in a standard platform to provide Actionable Business Intelligence.

Why:

DOE provides services, tools, and expertise to help covered fleets meet and exceed EPart requirements.

NREL maintains Alt. Fuel Station database; expertise in database development/management, automated analyses, GIS, and innovative web development.



Why FleetDASH for the States?

Leverages DOE/NREL Capabilities

- NREL maintains national alternative fuel station database
- Expertise in database management, automated analyses, GIS, and innovative web development

Streamlines Managing and Reporting Alternative Fuel Use

- Automated analysis of fleet fueling behavior and missed opportunities
- Scalable from entire fleet to individual vehicles

Presents Opportunities for Additional Analysis

- Inform acquisition assistance for AFVs
- Optimal ways to meet EPA regulatory compliance, deploy alternative fuels, and place



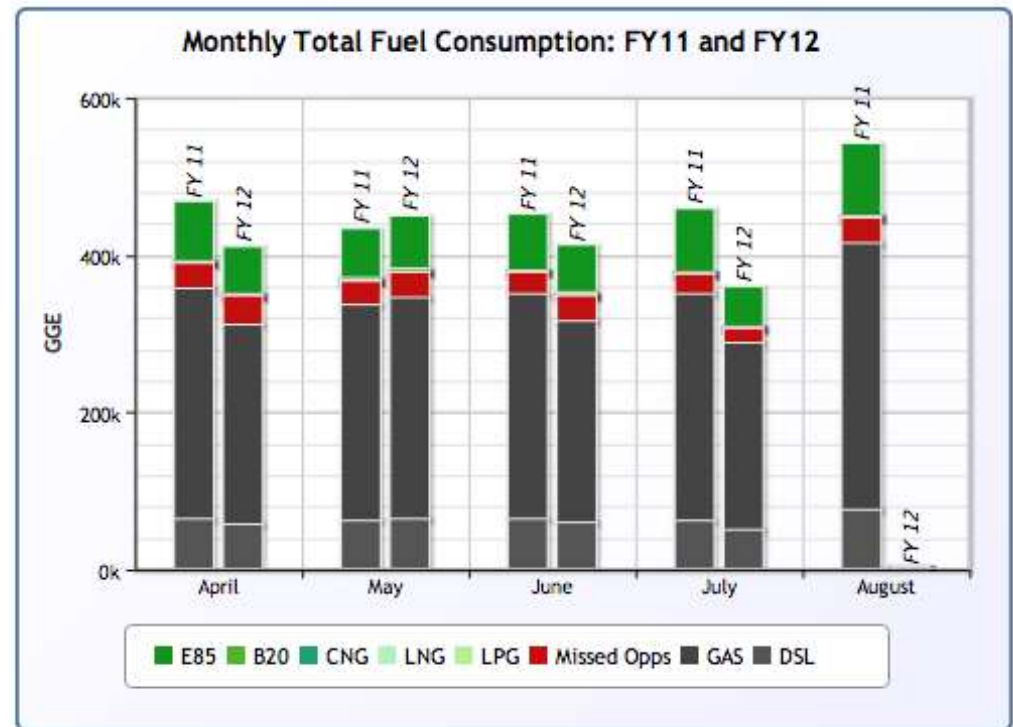
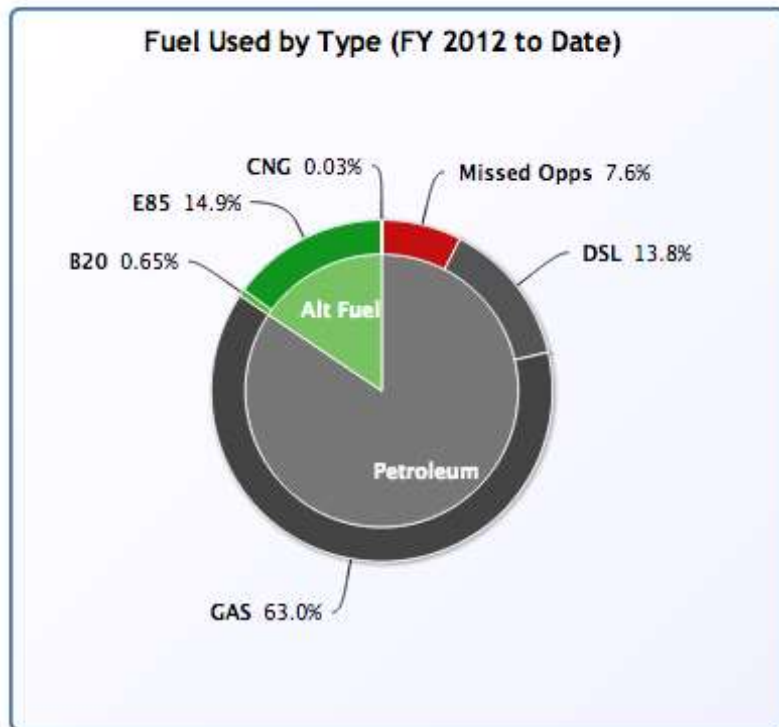
Fleet Sustainability Dashboard (FleetDASH)

- **Uses credit card transaction data to track fuel consumption in vehicles**
- **Identifies successes as well as “missed opportunities” for dual-fuel vehicles to use alternative fuel when it was available nearby**
- **Empowers fleet managers to identify and address sources of missed opportunities to use alternative fuel**
- **Built for Federal fleets -- FleetDASH currently contains data for GSA-leased vehicles of 16 agencies**

FleetDASH Tour

Track fuel consumption throughout the year.

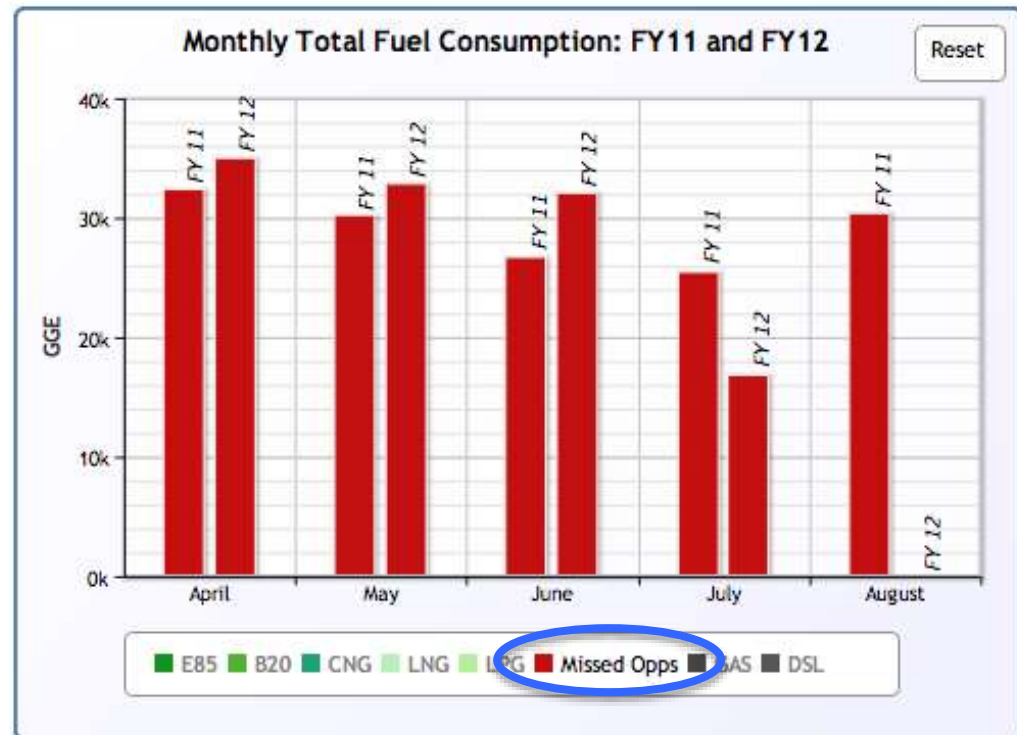
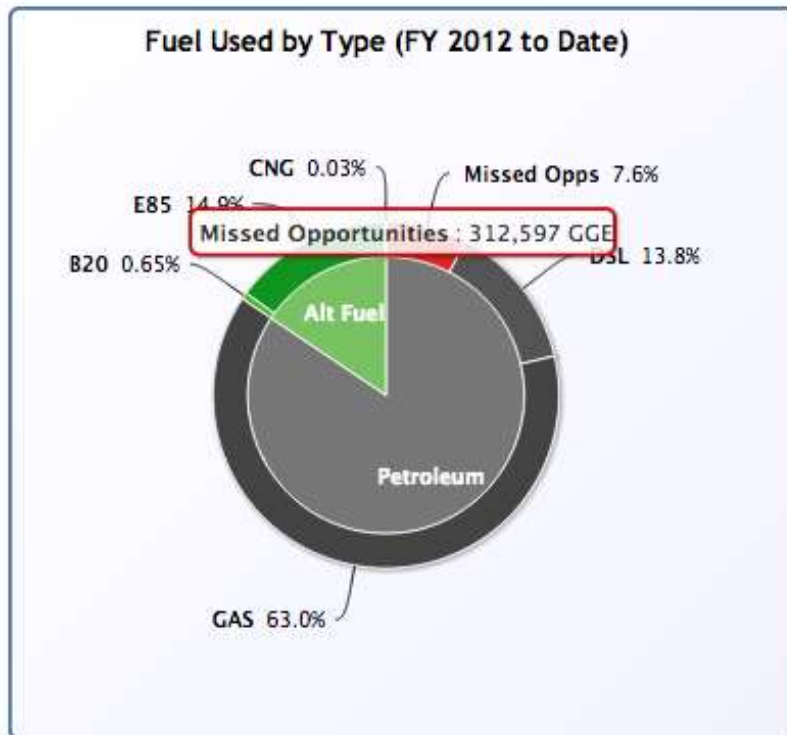
Sample Department Leased Fleet Fuel Use



FleetDASH Tour

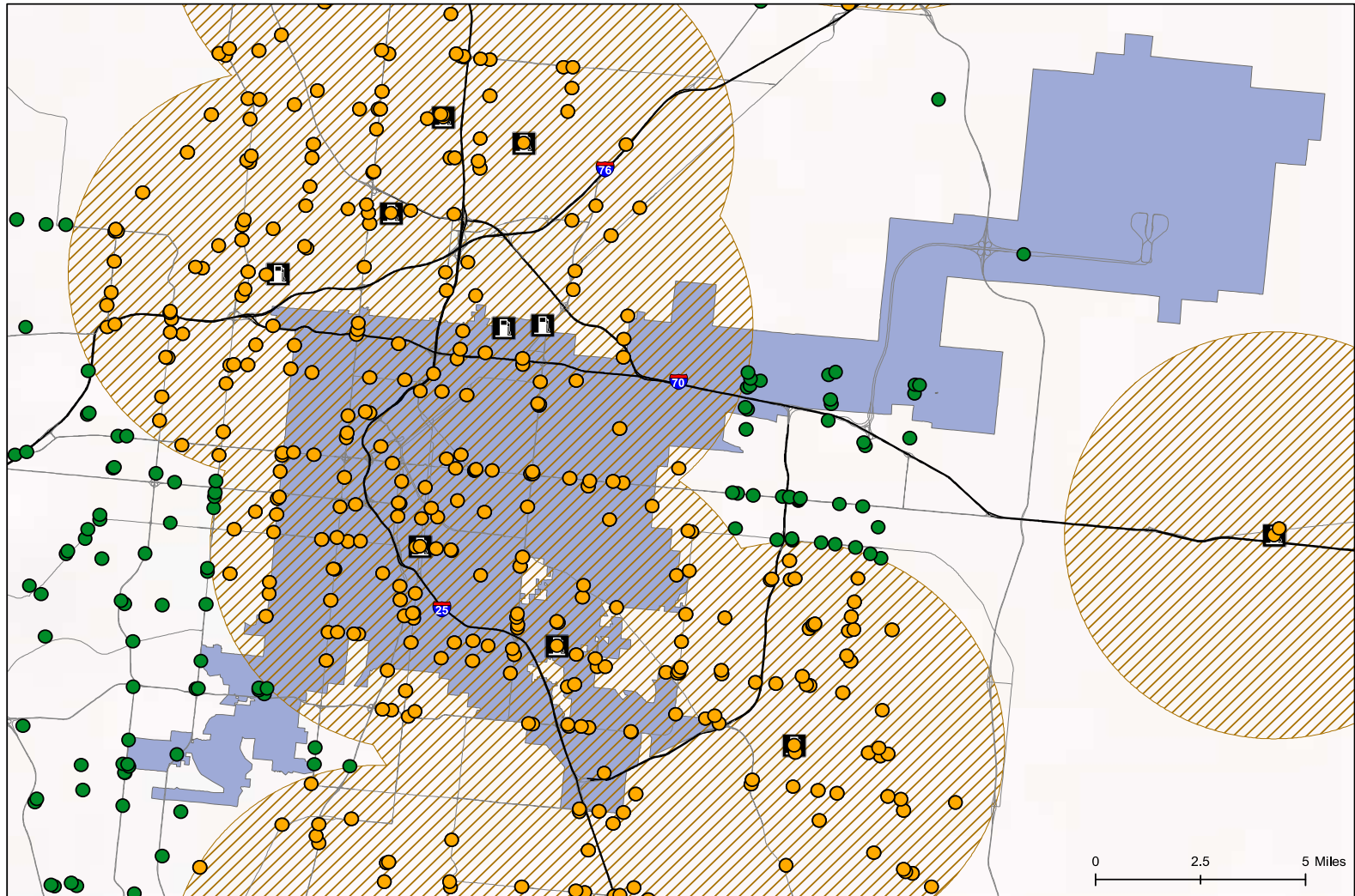
Quickly identify trends in the behavior fleets want to address

Sample Department Leased Fleet Fuel Use



Scope of Missed Opportunities

Denver, Colorado: FFV Fuel Purchases



Stations where Federal FFV Purchased Fuel: 2011

- Stations Within 5 Miles of E85 Station
- Stations Farther than 5 Miles from E85 Station

- Ⓜ E85 Stations
Public/WEX Accepted
- Denver City Limits

- 5 Miles around
E85 Stations



This map was produced by the National Renewable Energy Laboratory for the Department of Energy, May 2012

FleetDASH: New Features

Vehicle Details (G11-1377G)

Customer Detail:

RANDAL PATTERSON
 Federal Supply Service, All Other
 GSA, AREA PROPERTY OFFICE - 12575 NORTH
 SKODA DRIVE
 MARANA AZ 856530000
 RANDAL.PATTERSON@GSA.GOV
 (520)4000308 - Ext:

Vehicle Detail:

Tag: G11-1377G
 Make/Model: CHEVROLET - IMPALA
 Fuel Type: Ethanol / Unleaded Gasoline
 Vehicle Type: Sedan/St Wgn Midsize
 BOAC: 479142
 SIN: 10B.11GA
 Garage Zip: 85653
 Date Assigned: 4/28/08
 Emergency Response: No
 Law Enforcement: No
 Avg Monthly Mileage: 537.00

- Vehicle/Transaction level detail reveals precisely WHO and WHERE

Search

Fleet

Missed Opportunity

Vehicles in the

Tag

[G111377G](#) ⓘ

[G414581G](#) ⓘ

[G411680H](#) ⓘ

[G107115H](#) ⓘ

[G410651E](#) ⓘ

Transactions corre

Station Name Address

Circle K - 01947 5501 E GOL
LINKS RD

Giant Store
6615 6150 S KOLB
RD

Giant Store
6615 6150 S KOLB
RD

Giant Store
6615 6150 S KOLB
RD

Vehicle 1 of 15 on this page

Total Use	This Month	Missed Opportunities	
	Total Fuel Use (GGE)	Total GGE	% of Total Fuel Use
44	44	41	93%
35	35	35	100%
14	14	14	100%
13	13	13	100%
9	9	0	0%

ply Service; All Other fleet

Station	GGEs Purchased	Missed Opportunity	Alternate Station
2013-02-01	4.05	Yes	Alternate Station
2013-02-04	12.81	Yes	Alternate Station
2013-02-08	14.23	Yes	Alternate Station
2013-02-14	10.18	Yes	Alternate Station



Forthcoming Program Initiatives

- **Improvements to AC Option**

AC Under the AFTP

- **AC in Practice**

- Since inception in MY 2008, rate of fleet participation in AC has been disappointing
- With emphasis on petroleum reduction, DOE would like to see an increase in the number of fleets opting for AC
- DOE now contemplating a number of revisions to enhance interest and involvement in AC



EPAct Stakeholder Workshops

EPAct Stakeholder Workshops

State Fleets:

agencies, DOTs,
universities/colleges

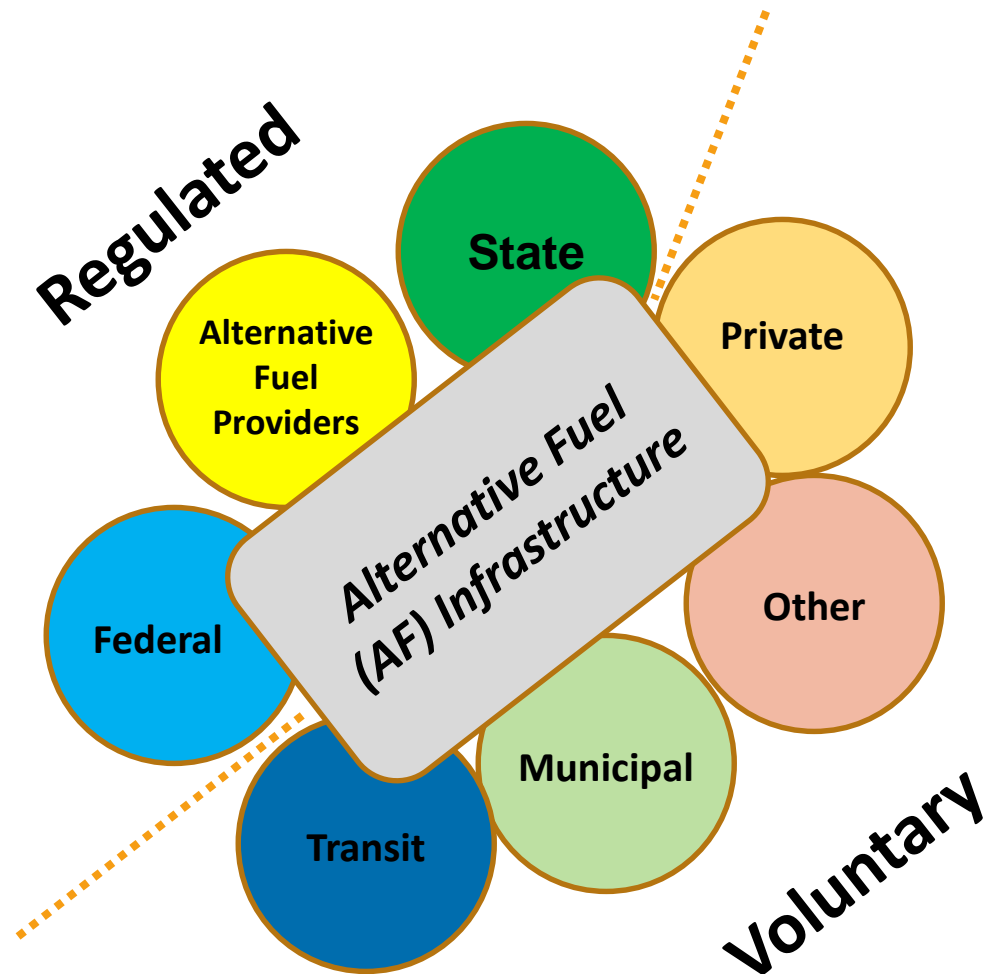
Alternative Fuel

Providers:

gas/electric utilities;
municipal power
generators; electric
cooperatives

Federal Fleets:

Civilian/military agency
fleets, GSA



EPAAct and Infrastructure Discussion Topics

- What is on your *WISH LIST*?
- Obstacles to implementation?
- What is the state of your fleet?
 - Internal thoughts/opinions on Alt Fuels
- What mandates/goals need to be met?
 - Internally or externally imposed: petrol use, cost, etc??
- Do you need tools or analytic support?
- Interested in partnerships w/ other fleets?

Contact:

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