

# ***EPAct Fleet and Stakeholder Workshops***



**National Conference of  
State Fleet  
Administrators**

**Ted Sears, NREL**

**October 1, 2009**

**NREL/PR-7A2-46707**

# Who Are We Bringing Together?

## State Fleets:

Agencies, DOTs, and universities/colleges

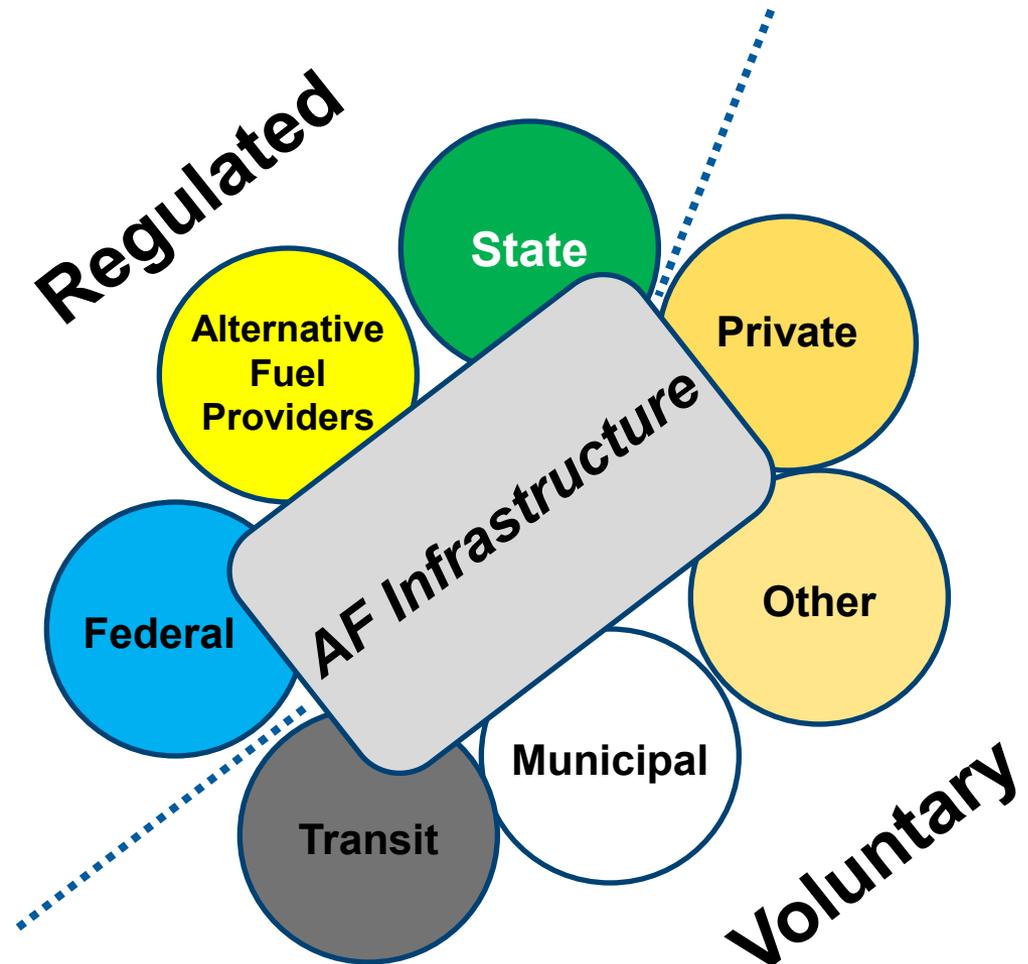
## Alternative Fuel

## Providers:

Gas, electric, and gas & electric utilities; municipal power generators; and electric cooperatives

## Federal:

Civilian and military fleets, individual agencies as well as GSA



# Why?

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- Many regulated fleets lack access to the alternative fuels needed for EPA Act compliance.
- Many voluntary fleets suffer the same fate.
- Fuel providers, marketers, and distributors may be willing to install alternative fuel infrastructure or otherwise supply alternative fuels if sufficient demand exists.
- The existing alternative fuel infrastructure may be underused.

# What Workshops?

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- U.S. Department of Energy (DOE)-sponsored
- National Renewable Energy Laboratory (NREL)- and Clean Cities Coalition (CCC)-hosted series of four regional workshops
- Crossing DOE program/activity boundaries involving the Energy Policy Act (EPAAct)
  - Federal Fleets
  - State and Alternative Fuel Provider Fleets
  - Clean Cities

# Workshops Goals

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- Solve the infrastructure issue on a local basis.
- Single fleets typically insufficient to support infrastructure. Workshops foster links.
  - Bring to same room and table EPA Act-mandated fleets, voluntary fleets, and fuel providers
  - Facilitate cooperation needed for new infrastructure
  - Educate about existing under-used infrastructure

# Approach

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- Explicitly bring in the regulated fleets in the region of each workshop to:
  - Serve as anchor fleets
  - Identify specific needs
  - Identify willingness to use specific infrastructure
  - Help determine where the infrastructure should be located
  - Identify willingness to share infrastructure

# Approach

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- Background
  - EPA Act State and Fuel Provider Program
  - EPA Act Federal Fleet Program
  - Clean Cities Program

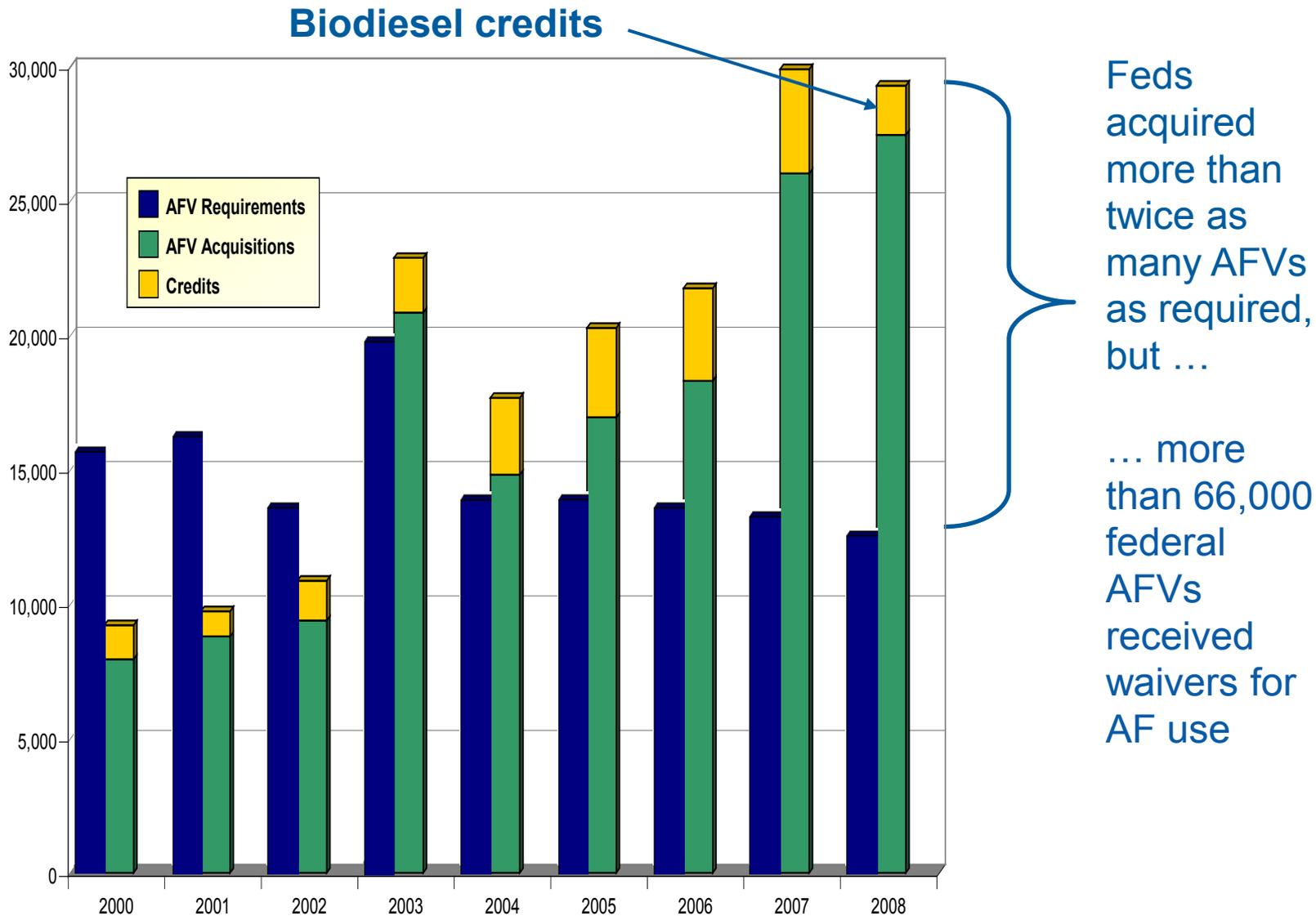
# SFP Fleet Overall Status

- ~300 fleets covered nationally
- 10-20,000 alternative fuel vehicles (AFVs) acquired annually. Nearly all are now E85 flexible fuel vehicles (FFVs)—and a few hundred natural gas vehicles (NGVs) per year
  - Since MY1997, 60% FFVs, ~25% NGVs, ~10% liquefied petroleum gas vehicles (LPGVs)
- 3-6 M gallons of B100 each year (over past 5 years)—several times amount credited
- Virtually 100% fleet compliance—usually a few that DOE needs to work things out with each year, but these do come into compliance
- Only a handful of fleets (~10) are in Alternative Compliance (AC), but MY2008 was first year

# Fleet Requirements – Federal

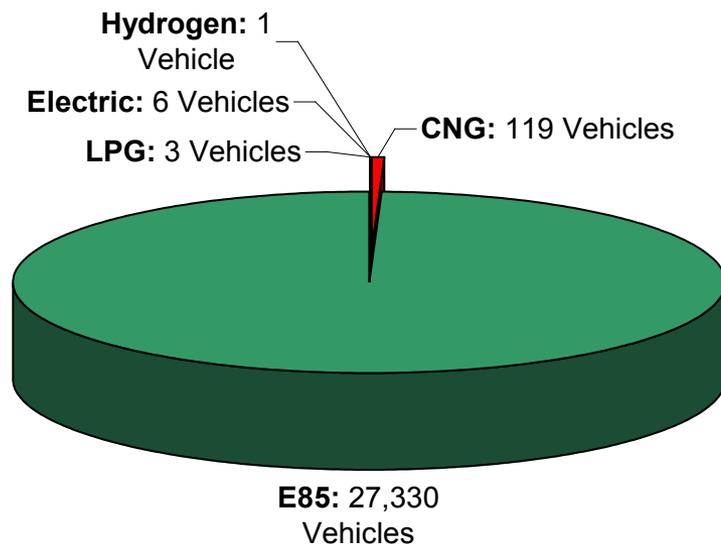
- **EPAct 1992:** Federal fleets must acquire AFVs
  - AFVs; Credits for Biodiesel Use
- **EPAct 2005:** AFVs must use AF unless they receive a waiver from DOE (AF unavailable or too expensive)
  - 53% of federal dual-fueled AFVs waived in FY2009
- **OMB:** Reduce the number of waivers received annually from DOE
- **E.O. 13423:** 2% annual petroleum reduction and 10% annual AF use increase requirements

# Federal Fleet Overall Status – Acquisitions

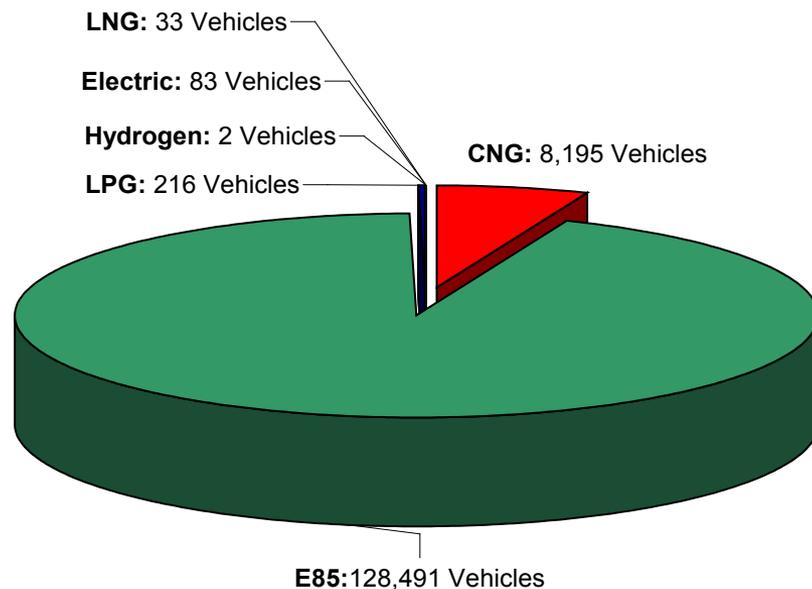


# Federal Fleet Overall Status – Acquisitions & Inventory

## Total FY2008 AFV Acquisitions by Covered Federal Agencies

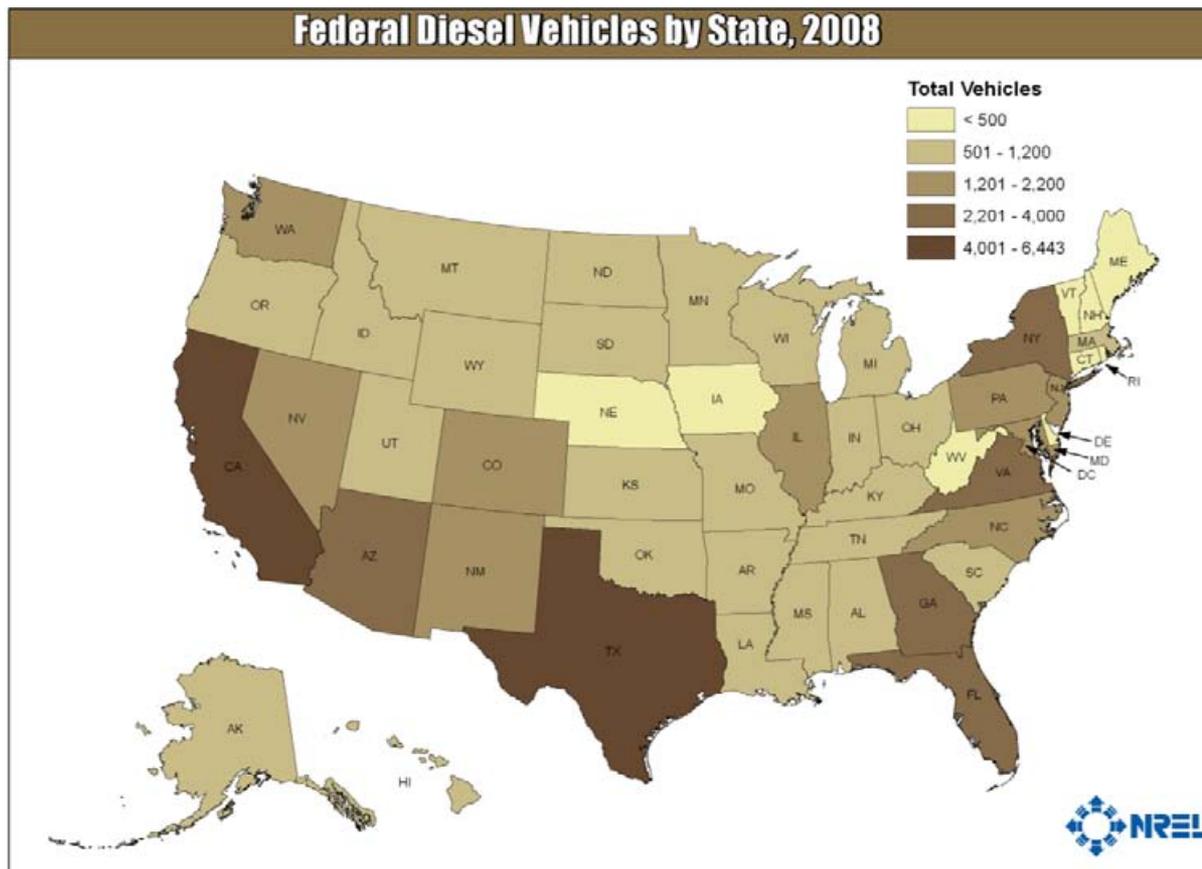


## Total FY2008 AFV Inventory of Covered Federal Agencies



# Federal Fleet Overall Status – Acquisitions & Inventory

More than 66,000 Federal Diesel Vehicles Nationwide



2008 Diesel Use:

- More than 41 M GGE diesel
- Less than 7 M GGE biodiesel

Use of biodiesel (B20 and up) can be a cheap alternative for acquisition credits.

# Approach

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- Available Tools
  - Vehicles and locations, station locator, and more
- Fuel Presentations
  - Individual fuels
- Breakout Sessions
  - Regions broken into distinct geographic areas

# Approach

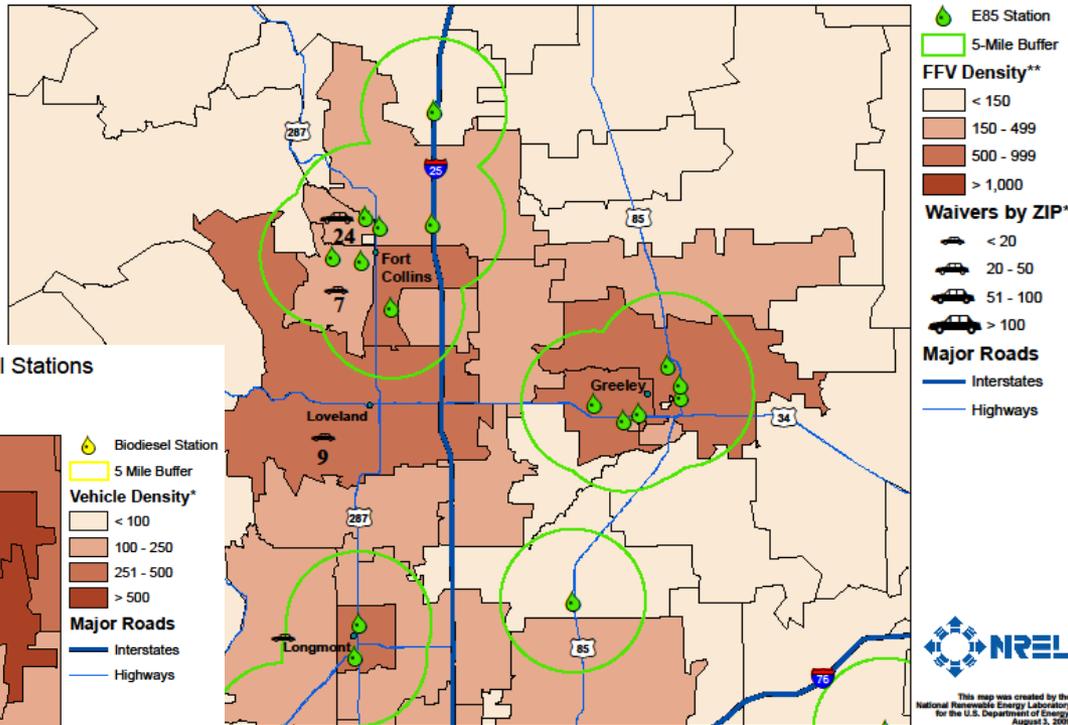
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- Tools
  - Waivered Vehicle Data for Federal Fleet
  - Info on SFP Fleets concerning local POCs/fleet locations
  - Station locator
- Combined provides for instructive and conversation-starting maps

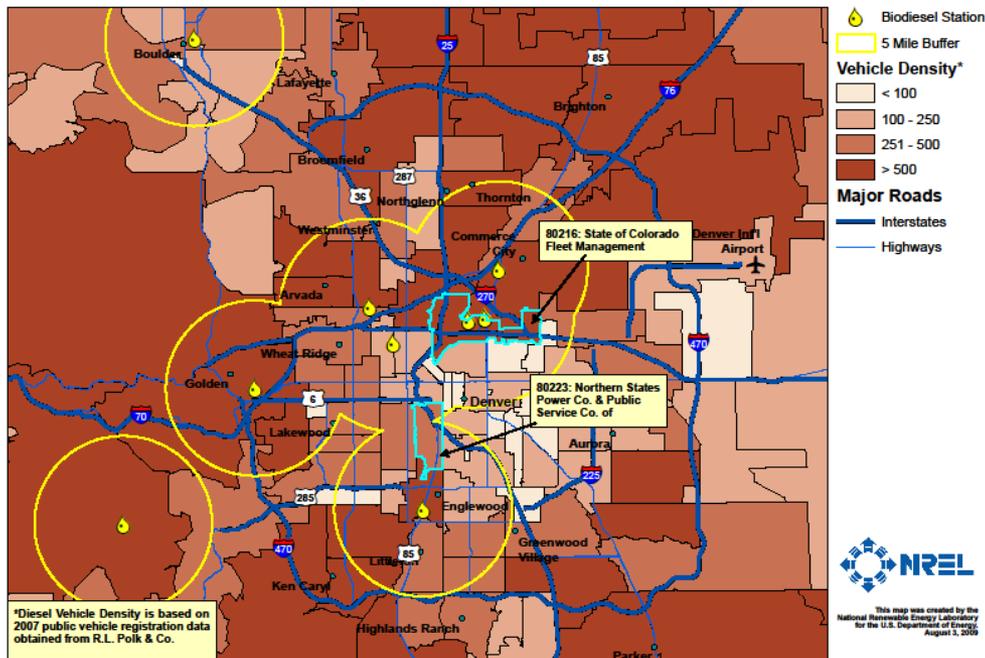
# Fleets and Fueling Locations by Region

## GIS Analyses

Waivered Federal Fleet FFVs, Public FFV Density (by ZIP) & Existing E85 Stations  
Northern Colorado



Public Diesel Vehicle Density by ZIP code and Existing Biodiesel Stations  
Denver Metro Area, Colorado

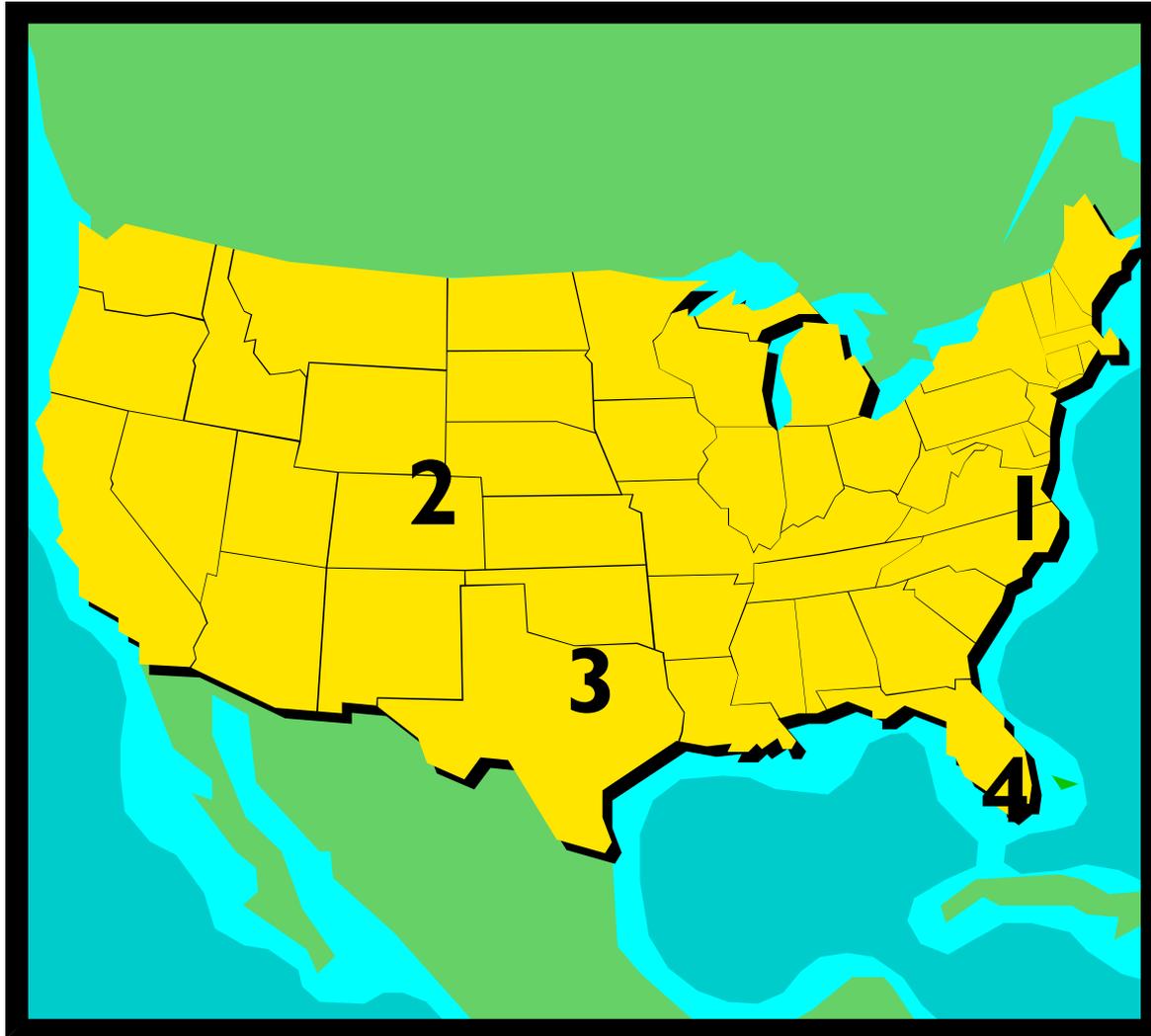


# So Where's this Leave Us?

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- Fleets need help to increase use of alternative fuels, either to meet regulatory requirements, fleet initiatives, or voluntary commitments
  - Teaming with other fleets to create sufficient demand for alternative fuels
  - Fuel providers willing to install infrastructure
- Breakouts provide opportunity for fleet and fuel representatives to discuss needs and next steps
- The beginning of an ongoing dialogue!

# Where/When Were They Held?



1. Williamsburg, VA:  
June 16
2. Denver, CO: Aug. 5
3. Dallas/Ft. Worth, TX:  
Aug. 18
4. Miami, FL: Sept. 17

# Workshop Results

- Attendance averaged 50 stakeholders
- Questionnaires
- Team-led breakout sessions by REGIONS with MAPS – floating fuel providers
- Lessons learned
  - Successful
    - Capable CCC coordinator
    - Demand and active participation
- Preliminary indications
  - As many as 10 new alt fuel infrastructure sites
  - Helping open access to fuel at private stations
  - Helping stations know fleets out there with demand
  - Access to one another's fuel

# Next Steps for Workshops

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- Follow-ups
- Additional EPAAct Workshops
- Fuel Retailer Workshops (follow-up workshops)
- EPAAct Workshop Toolkit

# Steps for Your Fleet: Infrastructure Development Strategies

## **Know your fleet**

- Inventory your fleet and estimate fuel demand by location

## **Locate and use existing alt fuel stations**

- AFDC Tools – station locator and mobile locator
- Concentrate on fleet locations with most vehicles first

## **Locate other nearby fleets lacking alt fuel access**

- Use available data
- E.g., Section 701 waiver data; aggregate demand

## Partner with Clean Cities

- Fosters networking with non-feds to aggregate demand, attract development

## Attract new public refueling stations

- Identify stations with existing interest in providing alternative fuel
- Determine how much alternative fuel your and partner fleets will require
- Identify fuel providers and infrastructure developers operating in your area
- *E85 Retail Business Case: When and Why to Sell E85*

# Tools and Links

**TransAtlas:** <http://rpm.nrel.gov/transatlas/launch/>

**PREP:** <https://www.afdc.energy.gov/afdc/prep/index.php>

**Alt Fuel Station locator:** <http://www.afdc.energy.gov/afdc/locator/stations/>

**Mobile Locator:** [www.afdc.energy.gov/stations/m/](http://www.afdc.energy.gov/stations/m/)

(accessible from internet-capable mobile devices)

**State Specific info:** <http://www.afdc.energy.gov/afdc/states/>

**Laws & Incentives:** [http://www.afdc.energy.gov/afdc/incentives\\_laws.html](http://www.afdc.energy.gov/afdc/incentives_laws.html)

**Light Duty Vehicle Search:** <http://www.afdc.energy.gov/afdc/vehicles/light>

**Heavy Duty Vehicle Search:**

<http://www.afdc.energy.gov/afdc/vehicles/heavy>

**State Assessment for biomass resources:**

<http://www.afdc.energy.gov/afdc/sabre/index.php>

**Data, Analysis & Trends:**

<http://www.afdc.energy.gov/afdc/data/index.html>

**Fuels Page:** <http://www.afdc.energy.gov/afdc/fuels/index.html>

**Vehicles Page:** <http://www.afdc.energy.gov/afdc/vehicles/index.html>

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