

# OBD Update

EPA/OTAQ Briefing for  
STAPPA/ALAPCO  
February 9, 2005



# Topics for Discussion



- General On-board Diagnostics (OBD) Activities Underway at EPA
  - High Mileage Study
  - State and In-use OBD Data Analyses
  - OBD Future Concepts
  
- OBD Inspection & Maintenance (I/M) Support Activities
  - OBD Testing & Tampering Investigations
  - Weber State Grant
  - State Communications



# General OBD Activities

## High Mileage Study



- Characterizes how OBD system fares as vehicles age and accumulate mileage (in-use durability)
- Supports targeted certification and compliance efforts and strengthens technical knowledge of OBD systems
- Demonstrates how OBD functions in older vehicles, as well as repair costs and emissions captured relative to other testing methods (Lab IM240)

# General OBD Activities High Mileage Study



- ~30 vehicles remain in 300 car study
  - Tier 1 vehicles with >100,000 miles
- Testing is expected to be finished by end of June
- An analysis of the completed data set will follow
  - Interim report (153 vehicles) currently undergoing peer review will be published soon
  - Final report will be issued later this year

# General OBD Activities Data Analyses



- Improved Collection and Analyses of State OBD Data
  - EPA is currently using data provided via state calls to assist in identifying compliance issues
  - EPA is developing an electronic mechanism to gather additional data and will create a database to store the information
    - Data will be analyzed to detect trends
    - Results will be shared
  
- Collection and Analyses of In-use Data
  - EPA collects in-use data from OEMs as part of the Agency's regular certification and compliance activities
  - OBD Data is included
    - MIL status
    - Ready codes
    - Trouble codes
  - We are now receiving MY2001 data, analysis will begin soon
  - Results will be shared as appropriate



# General OBD Activities

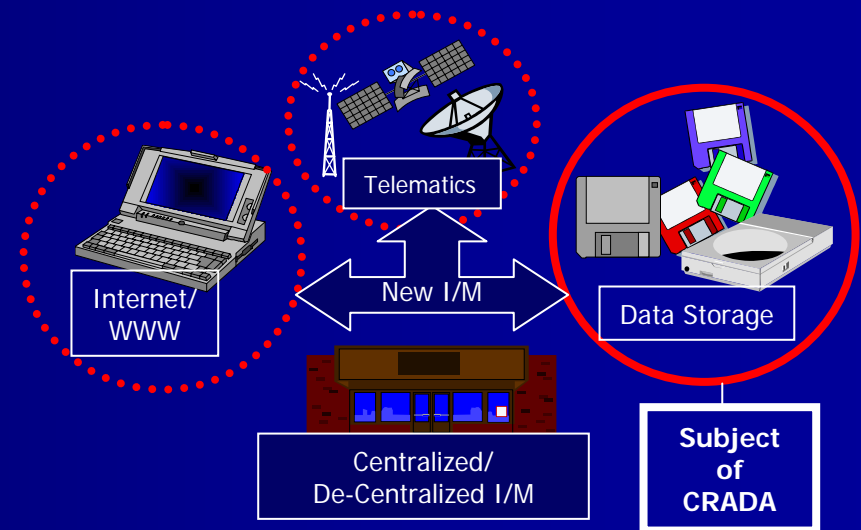
## OBD Future Concepts

(More Passive Inspection)



*Cooperative Research and Development Agreement (CRADA)  
for a Portable Data Storage Device...*

- Device is designed to automatically retrieve OBD I/M test data when connected to a vehicle
- Device stores the data for a single vehicle
- Software is used to retrieve data from device memory and print, save, and/or e-mail report of results



# OBD I/M Support Tampering Investigations



- OTAQ tested devices at its National Vehicle and Fuel Emissions Laboratory
  - 6 performance chip devices
  - 7 oxygen sensor simulators
- Over the past two years, OECA has sent 11 investigative inquiries to companies who sell performance enhancing devices/software
- OTAQ continues to pass along information to OECA; OECA ultimately decides what remedies to pursue



# OBD I/M Support Weber State Grant

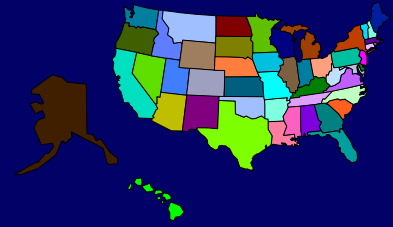


- EPA has provided additional funding to improve the Weber State web site (<http://www.autocenter.weber.edu/>)
- Purpose of the grant is to enhance existing clearinghouse to address state need for timely OEM-specific information
- Weber is forming a focus group of states to assure customer satisfaction
- All OEMs will be encouraged to participate, currently only a few are active
- Project is scheduled for completion in Oct '05





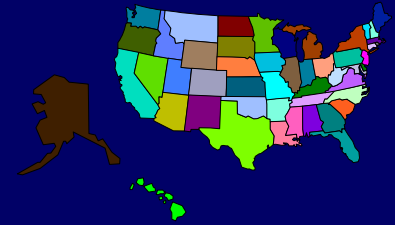
# OBD IM Support State Communications



- ~Bi-monthly conference calls with states
- 28 states, 3 regions, and CARB participate
- Mutual benefit to EPA and the states
  - Information is shared among the participants
  - In-use/compliance information is shared with EPA
- Many issues that require subsequent EPA investigation/action are raised during the calls
  - Regulatory implementation and compliance issues
  - OEM-specific information



# OBD IM Support State Communications

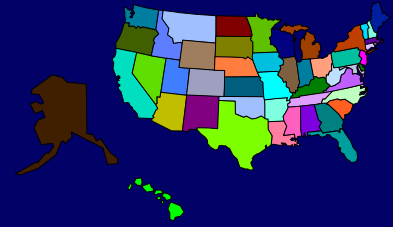


## *EPA's Proposed Plan for Improvement...*

- EPA will work with regions, states, and CARB to prioritize outstanding policy and technical issues and to develop a timeline for addressing them
- Weber Clearinghouse will serve as a repository for all information discussed during the calls
- EPA will participate in STAPPA's mobile source subcommittee conference calls to update states on work the Agency is doing



# OBD IM Support State Communications



*How STAPPA/ALAPCO can help...*

- Participate in setting the agenda for state calls
- Involve Air Directors as well as I/M program managers
- Encourage consistent participation by all states
- Encourage states to communicate with each other

