OaklandInternational





Oakland International Airport's Air Quality Improvement Program

Clean Cities Conference Fort Lauderdale, Florida May 4, 2004

Outline of Presentation

- Facts About OAK
 - Airport Expansion & Mitigation Measures
- Trip Reduction Program
 - Employee Incentives
- Alternative Fuel Program
 - Landside
 - Infrastructure
 - Airside
- Challenges with Establishing GSE Alternative Fuel
- Questions/Comments

Oakland International Airport Today



- OAK served 13.6 million passengers in 2003 and 12.7 million passengers in 2002
- OAK has over 200 daily departures to 38 nonstop destinations, including NYC Boston, Mexico & Costa Rica
- April 2004 OAK broke ground on its terminal expansion, which includes 12 new gates. (New construction uses green building design criteria)

Port Mission: Sustainable Development

The Port of Oakland is committed to sustainability or the "triple bottom line," which includes:

- economic vitality,
- social equity and
- environmental responsibility



Trip Reduction Program

Employee Incentives:

- Vanpool/carpool parking
- Port employee purchase program to encourage hybrid vehicles for personal use
- Port reimbursement funds available towards purchase of personal vehicle (electric, CNG or hybrid)



- Trip reduction survey to institute an Airport employee program (8,000 employees at the Airport)
- Reduced AirBART passes

Trip Reduction Program

Additional Efforts

- BART Connector to Oakland Airport
- Consolidation of rental car facilities
- Consolidated/shared hotel shuttles
- Provide public transit information to passengers and employees



Survey Says...

- Of Airport Employees Surveyed:
 - 87% Drive Alone
 - 42% live 21+ miles
- Reasoning:
 - Convenience/Flexibility
 - Ability to make en route stops
 - Cost
- Challenges in Developing a Trip Reduction Program:
 - Diverse work schedules
 - Addressing en route stops & "convenience" factor

Airport Employees Include:

Concessions/Restaurants

Bus Drivers

Maintenance Staff

Janitorial Staff

Security

FAA Tower Staff

Airline Staff

Air Cargo Staff

Airport Managerial Staff

Flight Kitchen

North Airfield Tenants

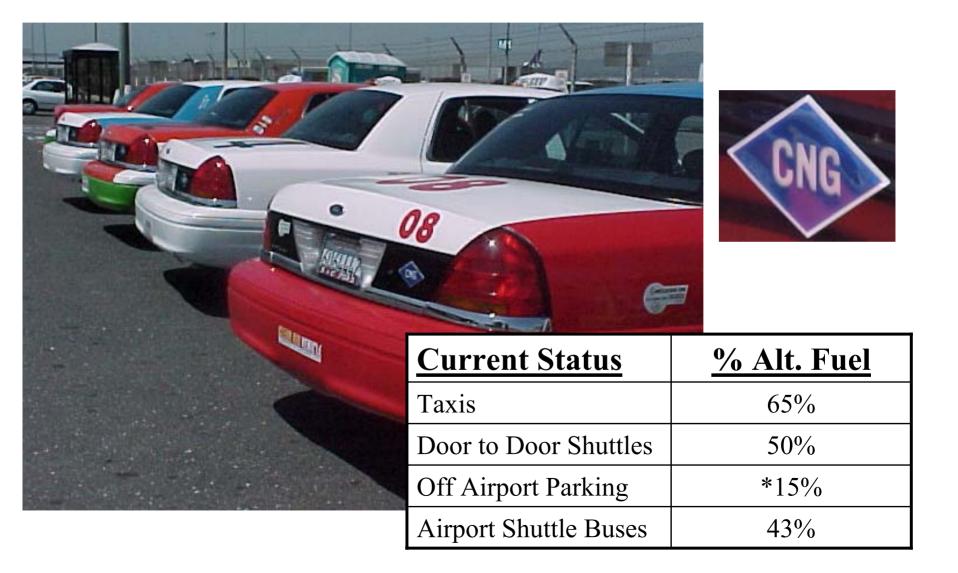
Alternative Fuel Program: Landside

Ground Transportation Providers

- 50% alternative fuel requirement for:
 - Taxis
 - Door to Door Shuttles
 - Off Airport Parking
 - Hotel Shuttles
 - Airport Shuttle Buses
- Package Delivery Companies
 - Airborne Express owns 4 CNG vans



Alternative Fuel Program: Landside



Alternative Fuel Program: Landside

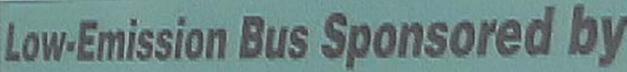
Airport/Port Vehicles:

- CNG for light & medium duty vehicles
- Low-sulfur diesel fuel for heavy vehicles
- 30 Electric Vehicles used for Parking Lot
 Patrol, Operations & Security





- 15 CNG buses for parking lot shuttle
- 19 CNG vans owned by Port leased to Door-to-Door operators at a discount





Alternative Fuel Program: Infrastructure

Fueling & Charging at the Airport

- CNG fueling station
 - Servicing taxis, shuttles, refuse trucks, port vehicles and the public
- Four electric charging stations in parking lots
- Applied for State SEP Grant for electric charging station for GSE



Alternative Fuel Program: Airside

Gates

- Preconditioned air and ground power at <u>all</u> gates
 - Required for the construction of new gates
 - Older gates will be retrofitted

Ground Service Equipment (GSE)

- 100% conversion of GSE Fleet by 2010
 - GSE Inventory being conducted to meet goal
 - Creative incentives and financing needed!!!



Challenges Associated with Converting Airside Fleet (GSE)

- Not Airport owned or operated
- Longevity of GSE equipment (10-15⁺ yrs)
- Airline resistance due to:
 - Finances
 - Setting precedent at any one airport may lead other airports to request similar fleet conversions
 - Current conversion requirements established with Southern California and Texas
- Possible federal preemption due to interstate commerce (since GSE service aircraft)
- "Mitigation" does not qualify for funding (Air21, Carl Moyer)

Questions/Comments?

Renee Dowlin, AICP
Oakland International Airport
Airport Environmental Planner
Rdowlin@portoakland.com