

Los Angeles Unified School District
Transportation Services Division



Green Schools Conference

"Greening the Fleet"



Transportation Services Division

Supporting the educational process through safe, dependable and cost-efficient transportation and fleet services.

- For 2009-10, transport approximately 52,000 students on the traditional school year calendar and provide full service scheduling of 97,000 curricular and non-route bus trips.
- Operate five major garage facilities serving approximately 3,300 District owned vehicles such as buses, trucks, autos, vans, and motorcycles.



Key Indicators

- 🍃 Students Transported: 52,347^(a)
- 🍃 Average age of bus fleet: 17 years
- 🍃 Number of Routes: 1,842^(a)
 - District: 961
 - Contract: 881
- 🍃 School Bus Miles Traveled: 30.8 million^(b)
 - District: 15.0 million
 - Contract: 15.8 million
- 🍃 Gallons of fuel consumed: 3.3 million gallons^(b)
 - Diesel: 2.0 million
 - Gasoline: 1.0 million
 - Compressed natural gas (CNG): 0.3 million pge^(c)

(a) October 2009.
(b) 2008-09.
(c) Per gallon equivalent.



LAUSD Fleet Replacement Goals

- 🍃 Optimize student safety on buses
- 🍃 Optimize vehicle life-cycle
- 🍃 Reduce maintenance and operational costs
- 🍃 Reduce emissions and carbon footprint
 - Unlike old diesel buses, new buses are cleaner burning and emit close to zero particulate matter.
- 🍃 Leverage new technology for cost efficiency
- 🍃 Promote sustainability initiatives



Environmental Stewardship

- March 2001 - The Los Angeles Unified School District Board of Education adopted resolution to support Rule 1195 by the South Coast Air Quality Management District (SCAQMD) to reduce school bus diesel exhaust emissions.
- Summer 2001 - The District switched to ultra-low sulfur diesel fuel.
- September 2003 – As part of the effort to reduce bus diesel exhaust emissions, the Board of Education adopted the Healthy Breathing Initiative to:
 - Contract for newer and cleaner fuel burning buses.
 - Utilize the cleanest model buses for field trips.
 - Instruct the Superintendent to create a dedicated funding stream to provide for life-cycling of District buses.
- November 2007 – Board of Education adopts the Hybrid and Alternative-Fuel Vehicle Resolution and directs staff to begin replacing administrative and light duty vehicles with hybrid, or other alternative energy vehicles.



Environmental Stewardship

- 🍃 LAUSD has been operating alternative-fueled buses since 1994.
 - Owns and operates 143 CNG buses, the largest CNG school bus fleet among school districts in California
- 🍃 All 1994 or newer diesel buses and trucks have been retrofitted with diesel particulate traps.
- 🍃 New bus contracts are required to provide buses that run on alternative fuels such as CNG, propane or gasoline in an Ultra Low Emission Vehicle (ULEV).






Bus Replacement Funding

- 🍃 The Division has been aggressively replacing its oldest buses with cleaner fuel burning buses in the last three years.
- 🍃 Purchases are funded by:
 - Utilizing Measure Y Bond funds approved by voters in 2006.
 - Leveraging funds from the South Coast Air Quality Management District (SCAQMD) Lower-Emission School Bus Replacement Program.
 - US Department of Energy's Clean Cities Petroleum Reduction Technology Vehicle Pilot Program – Recent award partially funded the purchase of 90 propane buses.



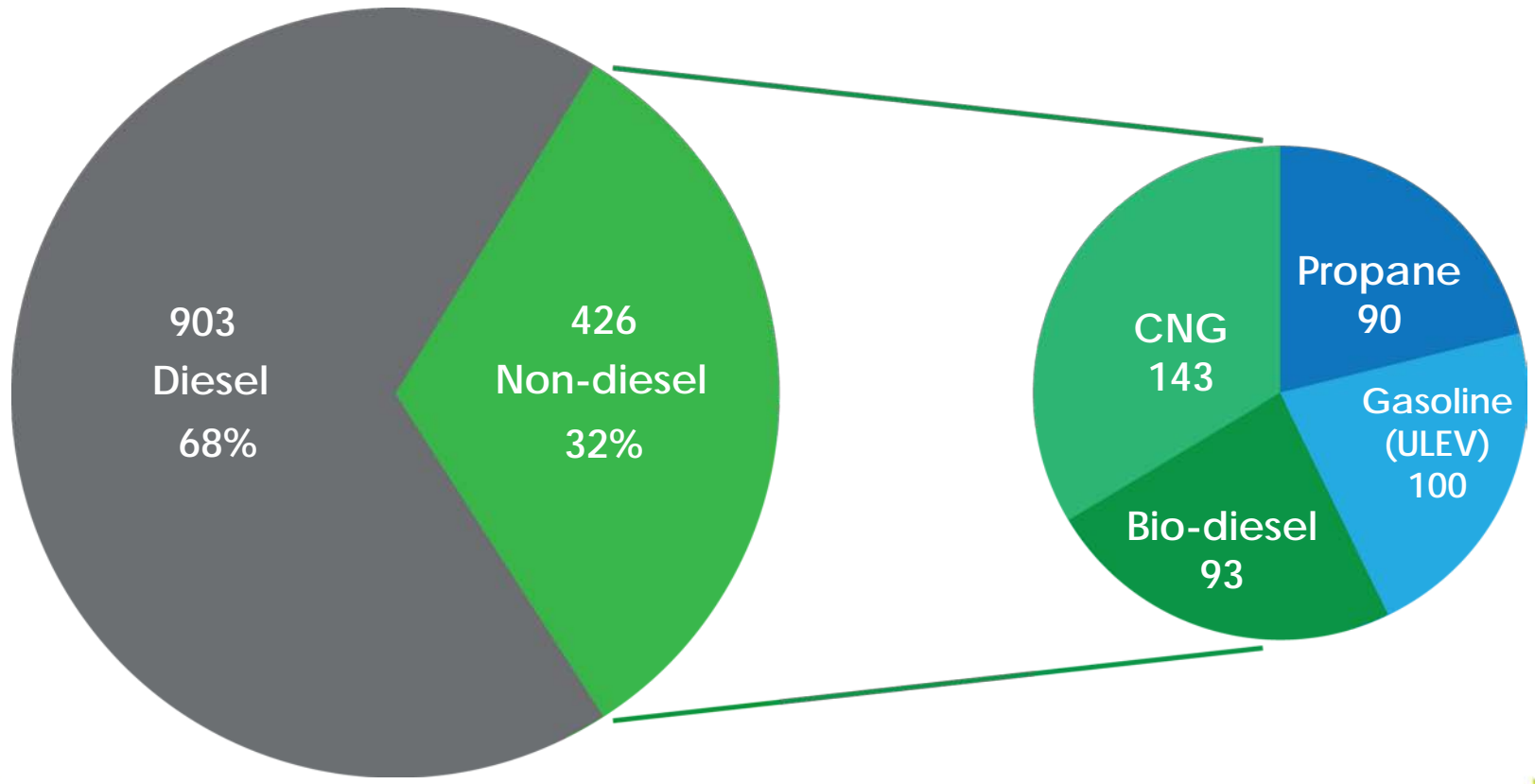
Recent Alternative Fuel Activity

-  100 gasoline ultra-low emissions vehicle (ULEV) buses purchased and operational
-  90 propane buses
-  Biodiesel wetline program



School Bus Fleet 2009-10

Conventional Diesel vs Non-diesel Fuel

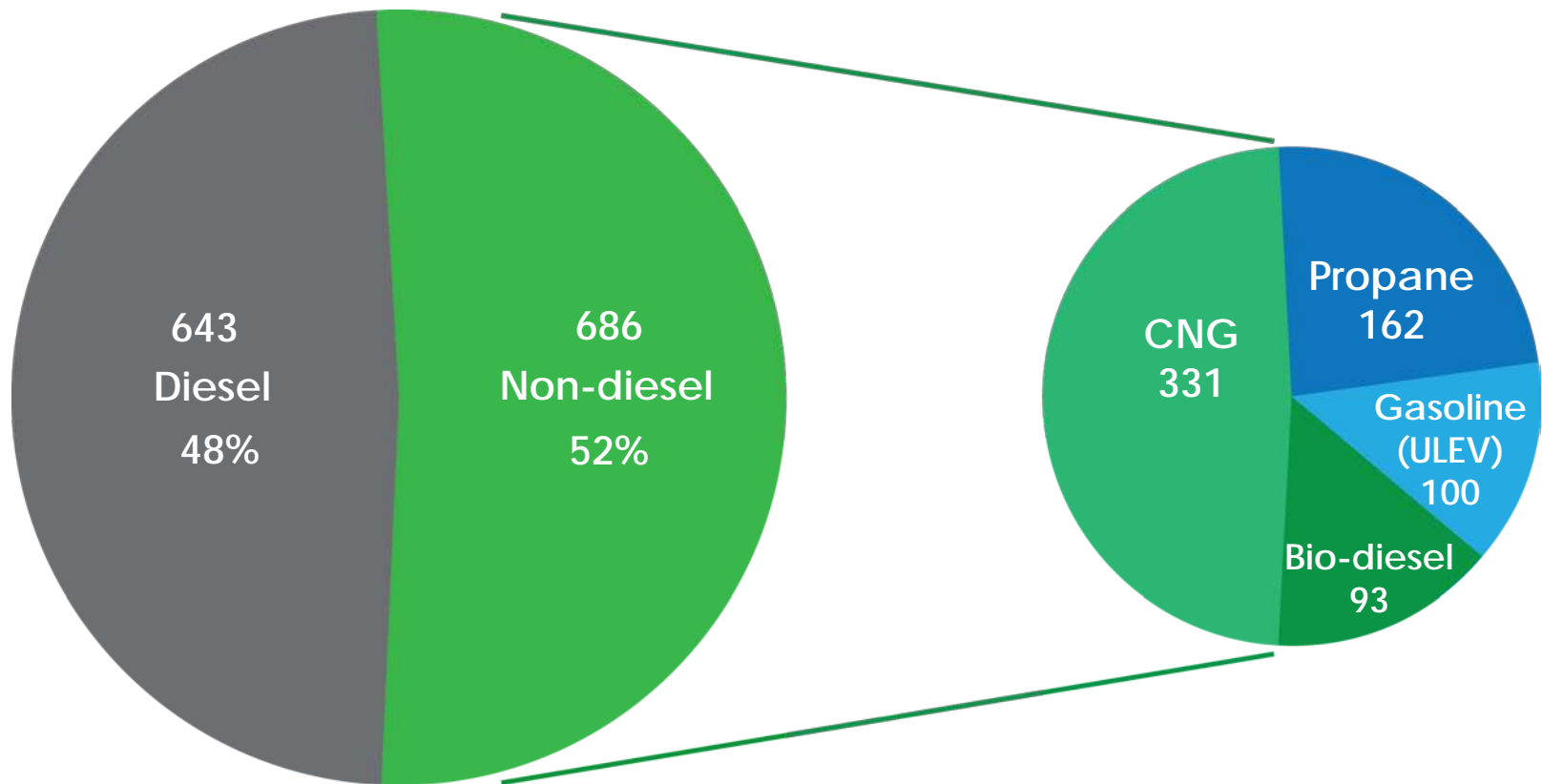


1329 Total Yellow Fleet



School Bus Fleet in 2010-11

Conventional Diesel vs Non-diesel Fuel¹



1 – Total includes pending awards from AQMD

Challenges

- 🍃 Finding reliable and sustainable funding sources
- 🍃 Complying to stricter regulations such as CARB Rule 2025
- 🍃 Updating facility infrastructure to support multiple alternative fuel types
 - Fuel stations
 - Expand existing CNG facilities at Gardena and Sun Valley
 - Install propane fueling stations at three garage sites
 - Garage modernization
 - Vapor recovery at fueling islands
 - Air evacuation systems
 - Parking capacity
- 🍃 Training employees on changing technology
 - Propane
 - Hybrid
 - GPS



Outlook

- 🍃 California Fleet Rule for Public Agencies Section 2022 and 2022.1: To reduce emissions, the Division has been retrofitting white fleet vehicles that weigh over 14,000 lbs. with particulate traps. The District anticipates to be fully compliant by 2012.
- 🍃 Collaborated with the District's AB32 Committee to determine the District's green house gas emission footprint.
- 🍃 Awaiting grant approval from the SCAQMD to purchase an additional 260 new alternative-fueled buses.
- 🍃 Purchase light duty hybrid alternative-fueled vehicles for District operating departments.
- 🍃 Expand biodiesel fueling capacity pending approval from Water Resources Board.
- 🍃 Expand CNG fueling capabilities at parking facilities.
- 🍃 Utilize GPS vehicle tracking system to monitor fuel consumption.

