

PROPANE SCHOOL BUS FLEET CASE STUDY

ALVIN INDEPENDENT SCHOOL DISTRICT

TRANSPORTATION CENTER

2780 W. Hwy. 6

ALVIN, TX 77511

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Fleet Maintenance Manager: Juan Mejias, jmejias@alvinisd.net, 281-331-6888

BACKGROUND FACTS

5th largest propane fleet in State of Texas

250 sq. miles, 15,334 students

Transports 1,242,000 students annually

Annual school-bus mileage – 2,185,921 miles

Current annual usage of propane – 203,687 Gallons

Diesel - 198,632 Gallons

Gasoline - 74,331 Gallons

FLEET FACTS

Total School Buses 160

- o 82 Propane
- o 78 Diesel

Total Other Vehicles

- o 4 Propane
- o 4 Diesel
- o 97 Gasoline

Refueling facilities: 1

Gallons on-site propane storage: 18,000 gallons

Years using propane: 29years

PROPANE COST SAVINGS

Annual Savings to District through Use of Propane:

Current average price (May 09) for Propane is \$.78/gal vs \$1.54/gal for Diesel. We also receive a \$.50/gal rebate for Propane used. In the 2007-08 school year, we received \$109,563.80 in rebates. Vehicle maintenance is reduced due to greater brake and tire life with Propane mainly due to the inherent braking of the throttled engine and less weight on the steering axle.

ADDITIONAL COMMENTS/QUOTES

The new generation Propane engine shows promise of fuel mileage that comes close to the mileage we experience with Diesel. A demo Propane bus was impressive while doubling the mileage we experienced with current Propane powered-buses.

Driver comments: "Wow!". Bus accelerates quicker shortening the route time for students.

Environmental considerations: These engines require no particulate trap or the related services. The emissions are lower due to the inherent cleaner burning fuel. The emission system has proved itself for over 30 years of use. The engine has a smaller environmental foot print due to the decreased uses of lubricants and coolant. (Engine life average is about 260,000 miles before retiring.)