



PROPANE BUS FLEET CASE STUDY

ALVIN INDEPENDENT SCHOOL DISTRICT

Transportation Center
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Alvin, Texas 77511
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BACKGROUND FACTS

Fifth-largest propane school-bus fleet in Texas
19,705 students; 250 square miles
Transports 1,242,000 student trips annually
Annual school-bus fleet mileage: 2,185,921 miles
Current annual propane use: 203,687 gallons
Other fuels: 198,632 gallons diesel; 74,331 gallons gasoline

FLEET FACTS

Total school buses: 160 <ul style="list-style-type: none"> • 82 propane • 78 diesel 	Total other vehicles <ul style="list-style-type: none"> • 4 propane • 4 diesel • 97 gasoline
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Refueling facilities: 1
On-site propane storage: 18,000 gallons
Years using propane: 29 years

PROPANE COST SAVINGS

Annual savings to district through use of propane:
Current (September 2009) average price for propane is \$1.08/gal vs. \$1.81/gal for diesel. We also receive a \$0.50/gal. federal tax rebate for propane used. We have received \$339,784 in rebates in the last three years. Vehicle maintenance is also 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

Propane engine shows promise of fuel mileage that comes close to the mileage we experience with diesel. Our new propane buses have been averaging 6.12 mpg versus 6.62 mpg for diesel.
Driver comments: "Wow!" Bus accelerates quicker, shortening route time for students."
Environmental considerations: These engines require no particulate trap or 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 footprint due to the decreased use of lubricants and coolant. Engine life average is about 260,000 miles before retiring.

--John Ralph

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RAILROAD COMMISSION OF TEXAS

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