



Case Study: Propane Supplier Helps School Districts Reduce Costs and Emissions

Company: Propane AutoGas LLC (a division of Propane People Inc.)

Industry: Propane supplier

Location: Waterloo, Indiana

Challenge: To move school districts fleets from operating diesel buses to cleaner, cost-reducing propane autogas school buses.

By the Numbers:

- More than 150 propane school buses.
- Nearly 250 total propane vehicles.
- Six publicly accessible fueling stations.

Propane Autogas LLC, a division of Propane People Inc., provides fuel for more than 150 propane school buses operated by districts across Indiana, including DeKalb County Central United School District, Southwest Allen County Schools, Westfield Washington Schools and Wa-Nee Community Schools.

“We introduce school districts to the benefits of propane autogas so that school districts can experience emission reductions and fuel savings, and alleviate maintenance requirements,” said Mark Gibson, president of Propane Autogas LLC.

School districts may be familiar with the benefits of propane autogas, but may not have the means to establish a new fuel — whether it be room in their transportation budget or a location for fueling infrastructure. Propane Autogas LLC has developed four ways to help with the transition to this economical, emission-reducing alternative fuel.

1. Education

The company starts by providing information about the fuel itself. Propane autogas is a nontoxic, non-carcinogenic and non-corrosive fuel classified as a non-contaminant by the EPA.

The company then educates districts about the emission-reducing benefits of propane autogas. With the addition of propane buses, school districts cut harmful emissions and

greenhouse gases, which benefits both student health and the local community's air quality. Clean-operating propane emits fewer greenhouse gases and smog-producing hydrocarbons, no particulate matter, and extremely low levels of nitrogen oxides. According to a [West Virginia University study](#) released in 2019, propane school buses reduce nitrogen oxides by at least 95%.

"Since 2004, the district has worked hard to save money through energy-efficient upgrades," said Larry Johnson, director of transportation for Westfield Washington Schools. "By adding propane buses to our fleet, we demonstrate our commitment to being good stewards to our students, taxpayers and the planet."

Since many school transportation departments have seen their budgets cut, Propane Autogas LLC also focuses on cost savings. Propane autogas averages 50% less than diesel and 40% less than gasoline. And with no cold-start issues, propane buses save districts both time and money on equipment and staff. The buses "have no cold-start issues and warm up quickly, which is especially important during the long, cold Indiana winters," said Gibson.

Steven Teders, superintendent for DeKalb Central Schools agrees. "DeKalb County Central United School District sees many benefits in running propane buses versus their diesel counterparts, including better cold-weather starts, lower maintenance and reduced fuel cost for long-term savings," said Teders. "With the continued financial challenges and obstacles that school districts are facing, this is especially attractive."

All three major school bus manufacturers offer propane school buses, although most of Propane Autogas' customers have Blue Bird buses, which Gibson says is the "industry-leading solution." About 85% of the propane school buses operating in the U.S. and Canada are Blue Bird buses, which each come equipped with a Ford engine and ROUSH CleanTech propane autogas fuel system.

2. Funding

Since propane is classified as an alternative fuel by the U.S. Department of Energy, there are a number of incentive programs to encourage adoption, including state and federal funding.

Propane Autogas provides grant writing services to school districts ready to transition to propane-fueled buses. The well-versed grant writing team helps identify and secure school bus funding for districts needing fiscal assistance.

3. Fueling infrastructure

Propane Autogas also informs school districts about propane infrastructure options. It helps districts choose the right fueling option based on fleet size, routes, budget and facility space.

There are thousands of propane fueling stations for public use across the U.S., including six that Propane Autogas has in Indiana. However, many districts find having

a station on school property maximizes productivity. For districts looking for onsite infrastructure, Propane Autogas installs a no-cost fueling station in exchange for a fuel contract. This arrangement allows school districts to eliminate capital investment, leaving only the cost of fuel.

The company provides flexibility for their customers with dispensing options and fuel delivery services as well. “Propane Autogas LLC can set up a dispenser and customers can then choose to have us or another local propane company deliver the fuel,” said Gibson. He notes that the company’s fueling stations report on important data, like gallon usage, to assist with district costs and driving efficiencies.

For customers with up to four vehicles, Propane Autogas LLC installs a mobile dispensing unit with a 1,000-gallon tank at the customer’s location. As the customer expands its propane fleet, the company will provide a larger 3,000-gallon tank. The infrastructure may increase to an 18,000-gallon storage tank, which is either put underground or aboveground, based on location.

After installation, the company trains district employees on how to use their propane dispenser and how to fuel their vehicles properly and safely.

4. Maintenance

Propane Autogas offers maintenance for both propane infrastructure and servicing the buses. The company replaces or fixes fueling dispensers within a 24-hour window. If more maintenance time is required, the company arrives with a bobtail to directly fuel vehicles and keep customer operations running smoothly.

For the propane buses, Propane Autogas’ sister company, First Class Auto Repair, provides maintenance with certified propane mechanics. First Class Auto Repair services include general bus tune-ups and roadside assistance.

The company also explains how maintenance costs are reduced due to propane’s clean operation. Propane buses eliminate the need for additional fluids or filters; exhaust after-treatment or diesel emissions fluids; particulate trap systems; turbochargers or intercoolers. Filter packages cost about 60% less, and propane uses less engine oil. For example, an oil change for a Blue Bird Vision Propane bus uses about seven quarts compared with 25 to 30 quarts for a typical diesel engine.

Safe, Clean Student Transportation

School districts have myriad goals related to student safety and success. “Southwest Allen County Schools has developed and encouraged a culture of learning that embraces change, flexibility and innovation,” said Dr. Philip Downs, superintendent of Southwest Allen County Schools. “This stretches far beyond the curriculum and helps to guide many decisions throughout the district. One concrete example of this is our shift to propane buses to promote sustainability and cost containment.”

Across the nation, there are more than 20,000 propane school buses operating in over 1,000 districts. That number continues to grow as districts across Indiana and the nation experience firsthand the cost savings and emission reductions of propane buses, leading the way to safer and cleaner student transportation.

(Case study completed in 2020)

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About Propane Autogas LLC: Propane AutoGas is an alternative-fuel company based out of Northeast Indiana specializing in converting vehicles to run on propane. Our daily mission is to bring clean, efficient and cost-effective fuel to the masses. Propane autogas is the third most commonly used fuel in the world — behind gasoline and diesel. [Propane AutoGas](#) is here and ready to make the world a more environmentally friendly place.

About ROUSH CleanTech: ROUSH CleanTech, an industry leader of advanced clean transportation solutions, is a division of the global engineering company Roush Enterprises. ROUSH CleanTech develops propane autogas and electric propulsion technology for medium-duty Ford commercial vehicles and school buses. With more than 37,000 vehicles on the road, the Livonia, Michigan-based company delivers economical, emissions-reducing options for fleets across North America. Learn more at ROUSHcleantech.com or by calling 800.59.ROUSH.