

FUEL PRICES AND YOUR BOTTOM LINE

When drivers see their own data, performance improves and so does safety, efficiency, and the bottom line.

Fuel prices in recent weeks have skyrocketed in some areas to over \$5 per gallon. Typically, fuel is one of the top five largest budget expenses for a motor coach company. Fuel can also be one of the most controlled costs as well.

Fuel surcharges can be added to customer invoices and continuous searching of the best daily market prices for ordering, but shouldn't the focus be on how to adjust both the drivers' and the operational teams' behaviors be adjusted to increase MPGs and lower overall fuel costs?

How Speed and Behaviors Affect Bus Fuel Consumption

The speed that a bus travels has a definite impact on MPG

Fuel economy decreases rapidly at speeds above 50–60 mph. Engines must work much harder to overcome air drag. This may impact MPG by as much as 30% at speeds over 60 mph.



The most fuel-efficient speed is usually in the 35–50 mph range, allowing the engine to operate efficiently.



Real driver data allows companies to coach safer habits, reduce risk, and improve financial performance at the same time.

Driver behaviors also have a strong impact on MPG

Frequent and aggressive acceleration and heavy braking in city driving can reduce fuel efficiency by 10% to 40%. This along with multiple vehicle starts and stops directly impacts MPG.

The longer the bus runs consecutively the better MPG that will be attained. Over the road trips versus inner city trips tend to have better MPGs overall.

Idling is one of the easiest challenges to overcome to gain MPG

Leaving a bus engine idling wastes significant fuel, with studies suggesting it can use 0.7 to 1 gallon per hour. The most common idlers in a company may not be the drivers. Telematics show that technicians and cleaners are some of the most prevalent idlers in a company. Coordination with the shops and cleaning crews helps to cut down on idling as well.

Vehicle scheduling may be one of the less considered methods to improve fuel economy

Operations teams need to be very efficient in the use of the fleet to have less vehicles on the road with dead head miles to and from the pickup locations which also saves fuel. Consideration should be given to booking trips that can be tied together with the same bus and driver within compliance regulations.

Key Factors Influencing Fuel Efficiency

There are several practices that should be considered to increase fuel efficiency

Tire pressure monitoring may not always be viewed as a fuel-saving measure, but under-inflated tires increase rolling resistance and waste fuel. Seasonal temperature changes also affect rolling resistance and tire wear. Premature tire wear can significantly increase fleet maintenance costs, especially as tire prices continue to rise.



Managing driver behavior, vehicle speed, and idling time habits can deliver major fuel savings across the entire fleet operation.

Acceleration tactics and speed management also can increase fuel economy. Gradual acceleration and coasting techniques are much more fuel-efficient in urban settings. Coupled with encouraging drivers to use Cruise Control in highway settings, approximately **5% to over 30% in fuel consumption** can be realized on highway trips by maintaining a consistent speed and preventing erratic acceleration. The savings are optimized by preventing constant throttle changes, with potential for over 30% better fuel economy compared to erratic driving. Driver education is key in these aspects of fuel efficiency.

Governed speeds on buses is a mechanical method to improve MPG. Many companies have their buses governed between 68 and 72 miles per hour. Consider adjusting those down to a safe and reasonable speed to save fuel.

All the topics discussed here focus on fuel savings and have collateral impacts on the overall operation of the fleet.

This may include:

- Reduced maintenance costs from fewer regens on engines that do not idle as often.
- Improved safety scores with regulatory agencies as well as risk management scores being reviewed by insurance companies for underwriting purposes based on driver behaviors.
- Reduced tire costs by prolonging tire life with proper inflation and rotations.

The mission that began as a fuel saver will pay itself forward throughout the operation.

Smarter Data. Faster Insights. Stronger, Continuous Support.

For more information on this topic or if you have suggestions for future topics, please reach out to Mike McDonal at mmcdonal@saucontech.com.