

## THE PROPANE AUTOGAS CALCULATOR

See how much your fleet could save by switching to propane autogas with this tool. Download the free app for Apple® and Android™ devices today.

To learn more about why propane autogas is the right fuel for your fleet, visit [propane.com/on-road-fleets](http://propane.com/on-road-fleets).



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# PROPANE AUTOGAS VS. DIESEL

## CHOOSE LOWER COST-OF-OWNERSHIP



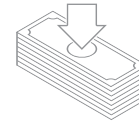


# PROPANE AUTOGAS PAYS OFF

If you have a diesel-fueled fleet, you know all the additional costly expenses that come with today's diesel technology. Propane autogas will empower you to save more over time by offering a lower total cost-of-ownership.

## THE PROPANE AUTOGAS ADVANTAGE

**LOWER  
-COST OF-  
OWNERSHIP**



### LOWER TOTAL COST-OF-OWNERSHIP

The costs of diesel add up quickly: expensive fuel, additional fluids, and pricey particulate filters. These are the most influential reasons why propane autogas vehicles save more money, from purchase to retirement of the asset.

**SUPERIOR  
COLD WEATHER  
PERFORMANCE**



### POWERFUL VEHICLES

Choose from a wide selection of OEM-supported vehicles that are EPA- and CARB-certified — without sacrificing the horsepower, torque, and towing capacity you'd get from their conventionally fueled counterparts.



**REDUCED  
DOWNTIME**

### MORE UPTIME

With propane autogas, you can skip the downtime typically caused by diesel's extra repairs and maintenance. Propane autogas vehicles also provide superior cold-weather performance compared with diesel.

**FLEXIBLE  
INFRASTRUCTURE  
TO MEET YOUR NEEDS**



### AFFORDABLE, FLEXIBLE INFRASTRUCTURE

Fleets can choose private, on-site refueling infrastructure scaled for their needs, or take advantage of flexible public or private refueling networks.

**CLEAN  
ENERGY**



### SAFE FOR EVERYONE

Propane autogas vehicles operate quieter than diesel models, allowing drivers to better focus on their passengers and the road. Standard safety features designed into propane autogas vehicle fuel systems provide added peace of mind for everyone.

### CLEAN, AMERICAN-MADE FUEL

By using propane autogas, your organization can reach its sustainability goals without additional, costly emissions technology. You're also supporting our country's economy — nearly 90 percent of propane supplies are produced in the U.S.



# SAVE ON THE 3 F's

Propane autogas lowers fleets' total cost-of-ownership by saving more money in these three key areas.

1

## FUEL

The cost of wholesale propane falls between the price of oil and natural gas, the fuel's two sources. As a result, propane autogas is consistently less expensive than diesel, even as fuel prices fluctuate.

2

## FLUIDS

New, lower-emissions diesel technology comes with an added inconvenience: diesel emissions fluid to purchase, store, and change. This is on top of needing more oil by volume compared with propane autogas. In cold temperatures, diesel vehicles also require anti-gels to prevent clogging of fuel filters and lines. Propane autogas provides reliable performance without additional fluids.

3

## FILTERS

To meet emissions requirements, new diesel technology requires diesel particulate filters that must be cleaned. Excessive idling will accelerate cleaning intervals. Either way, extra maintenance expenses are piled on top of additional upfront costs.

*"Day-to-day maintenance on a propane bus is a lot less than on a diesel model. You don't have the multi-thousand-dollar particulate filters, and you don't have to put any other fluid in. I could change the oil on a propane engine three times for the cost of one diesel service."*

**Brian Urwin**

Shop Manager, Student Transportation Inc.,  
Omaha, Neb.





# SPEND TIME ON THE ROAD... NOT ON REPAIRS

New diesel vehicles may offer fewer emissions than older diesel technology, but they're also susceptible to expensive, time-wasting repairs that aren't an issue with propane autogas.

## COMMON DIESEL HEADACHES

Without proper preventative maintenance, diesel fleets can expect to spend time and money replacing injectors, exhaust gas recirculation valves and coolers, turbochargers, dirty aftercoolers, and irregular closed crankcase filters.

## THE COST OF IDLING

Today's diesel engines are designed for minimal idling, which should not exceed five minutes. Excessive idling fouls injectors and damages EGR valves, turbochargers, and diesel particulate filters. It has also been proven to increase the need for engine emissions regenerations, which increases downtime and maintenance expenses.



*"Without proper preventative maintenance, EPA- and CARB-compliant diesel engines can have an array of issues that you just don't have with propane-autogas-powered engines. We don't worry about the downtime and maintenance that goes into cleaning or replacing diesel particulate filters — and those costs really add up."*

**Tim Stevens**  
President, Stevens Sausage,  
Smithfield, N.C.

# PROPANE AUTOGAS REFUELING OPTIONS

The best refueling option for your fleet depends on its size, routes, and refueling timing. Your local propane provider can help you select the right option for your situation.



## USING A PRIVATE OR PUBLIC NETWORK

Small-budget fleets with limited space, or fleets needing more fueling locations along their routes can take advantage of this option with no infrastructure investment. Network refueling stations are accessible 24/7 through a card lock system.

If a network is not currently available in your area, a propane provider may create one for your fleet, if it's large enough. Alternatively, multiple fleets can team up to provide adequate load for requesting a refueling network.

Contact your infrastructure provider for options and more information.

Contact your local propane retailer for questions and information regarding fuel.

## STANDARD PRIVATE STATION

Best for small fleets needing a central refueling location

A 1,000- to 3,000-gallon tank and a single dispenser, which can support up to 50 vehicles

### OPTION 1

#### PROPANE PROVIDER OWNS INFRASTRUCTURE

The fleet is responsible for site preparation: crash protection and electrical.

COST FOR FLEET  
**\$1,500-\$15,000**  
(SITE PREPARATION)

### OPTION 2

#### FLEET OWNS INFRASTRUCTURE

The fleet will need to account for purchasing the propane tank, pump, motor, and dispenser.

COST FOR FLEET  
**\$20,000-\$60,000**  
(INFRASTRUCTURE)  
+  
**\$1,500-\$15,000**  
(SITE PREPARATION)

## ADVANCED PRIVATE STATION

Best for large fleets needing a central refueling location

Larger tanks (3,000 - 30,000 gallons), a canopy, and multiple dispensers to support 50 vehicles or more

### OPTION 1

#### PROPANE PROVIDER OWNS INFRASTRUCTURE

The fleet is responsible for site preparation: crash protection and electrical for a two-dispenser setup.

COST FOR FLEET  
**\$5,000-\$75,000\***  
(SITE PREPARATION)

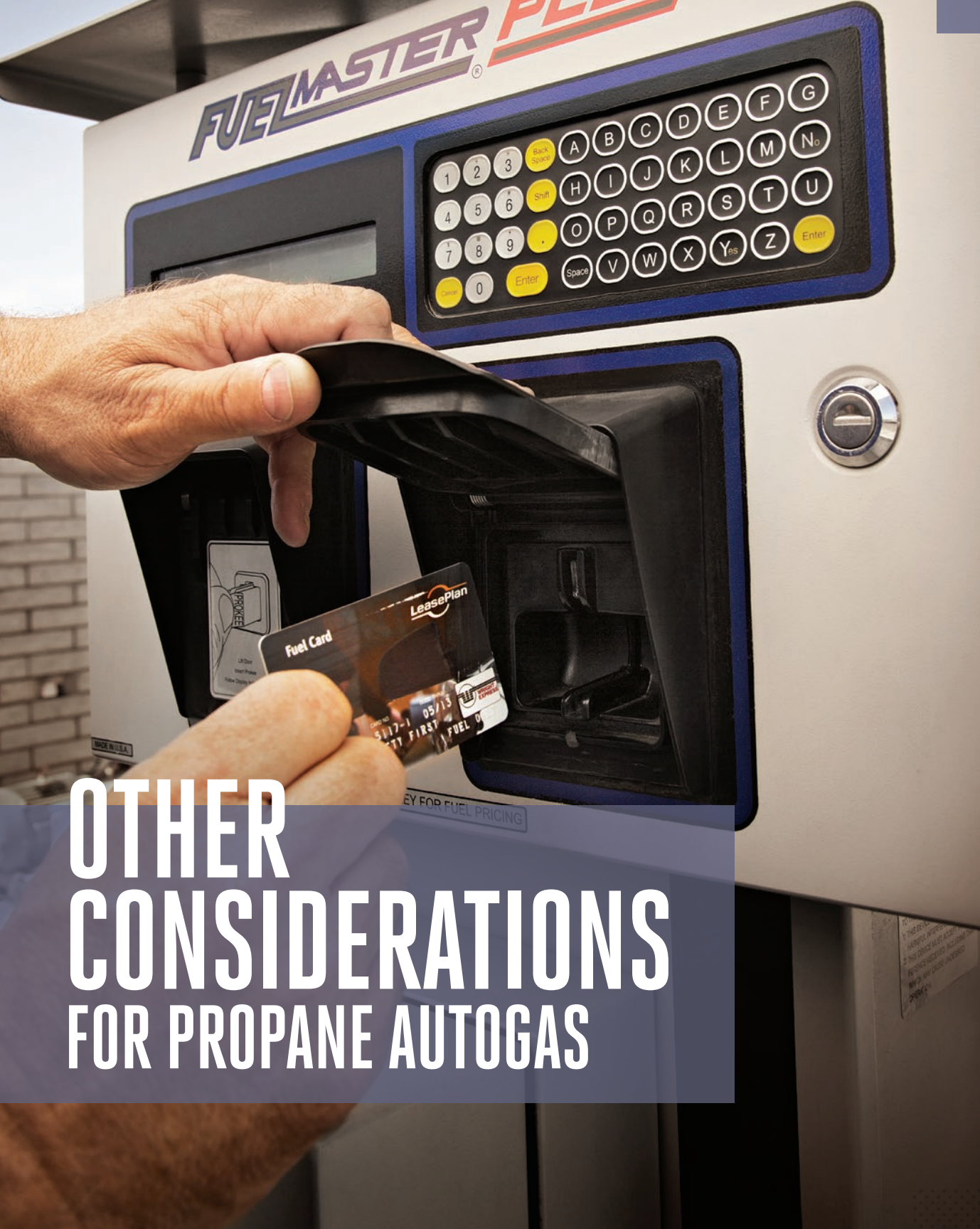
\*Price may vary based on region local permit requirements.

### OPTION 2

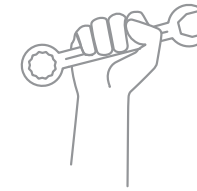
#### FLEET OWNS INFRASTRUCTURE

The fleet is responsible for the cost of a canopy, propane tank, pump, motor, and dispenser with card lock and vehicle tracking capability, which can vary based on the complexity of the station.

COST FOR FLEET  
**\$60,000-\$225,000**  
(INFRASTRUCTURE)  
+  
**\$5,000-\$75,000**  
(SITE PREPARATION)



# OTHER CONSIDERATIONS FOR PROPANE AUTOGAS



## MAINTENANCE FACILITY NEEDS

Switching from conventional fuel to propane autogas is quick and cost-effective, because the requirements for a propane autogas vehicle repair facility are generally the same as those for conventionally fueled vehicles. Other alternative fuels, however, may require different facility requirements than conventional fuels, like additional gas detection and ventilation equipment — costing fleets more to switch.

Contact your local Authority Having Jurisdiction (AHJ) for applicable codes regarding building or modifying a propane-autogas-powered vehicle repair or maintenance facility.



## PROPANE DISPENSER SPECIFICATIONS

There is a variety of technology available to use in your refueling station. It's important to choose a dispenser that will deliver a similar user experience to gasoline, is the correct dispenser for your vehicle, and will meet all applicable codes and regulations.

To learn more, download the Propane Autogas Dispenser Specifications guide from [propane.com/on-road-fleets/safety-and-training](http://propane.com/on-road-fleets/safety-and-training).

*"The local propane provider comes with a bobtail truck every other or every third week and fills up our tanks. We've had absolutely no issues at all, and we didn't have to make any alterations to our facilities and shop, either."*

**John Dufor**  
President, All-Star Transportation,  
Torrington, Conn.