

Propane Autogas Propels Rural North Carolina Paratransit Fleet

WITH PROPANE AUTOGAS, ICPTA IS ABLE TO PRIORITIZE THE PHYSICAL HEALTH OF ITS PASSENGERS AND THE FINANCIAL HEALTH OF ITS CONTINUING SERVICE.

The Inter-County Public Transportation Authority (ICPTA) paratransit van fleet completes more than 600 daily trips across five rural counties around Elizabeth City, North Carolina, as it provides transport for the general public to nutrition sites, medical appointments, and other locations so passengers may access services or attend activities related to daily living. With the physical health of the passengers and the financial health of the service as top priorities, ICPTA's director of transportation, Herb Mullen, researched a variety of alternative fuel options to improve both facets. He found propane autogas provided the lowest total cost-of-ownership of any fuel while also being the most cost-effective option to reduce emissions. ICPTA was ready to make the switch.

In 2015, ICPTA began transitioning its vehicles using Environmental Protection Agency (EPA) certified bi-fuel conversion systems. Mullen worked with the local government to secure federal funding to help purchase these systems. Today, 80 percent of the fleet runs on propane autogas with plans to continue transitioning the full fleet as they retire older vehicles. Not only has propane autogas provided a clean ride for the thousands of passengers that utilize ICPTA every year, but the fleet has also saved more than \$100,000 over five years.

EQUIPMENT FLEET PROFILE

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**E-350 PROPANE AUTOGAS
PARATRANSIT VANS**

87%

**OF THE FLEET OPERATES ON
PROPANE AUTOGAS WITH
PLANS TO REACH 100%
IN THE NEAR FUTURE**

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**2000-GALLON ON-SITE
REFUELING STATION**

"We couldn't have funded the transportation we've done over the past four and a half years without propane saving us money."

HERB MULLEN

Director of Transportation





SAVING ON FUEL

On average, propane autogas costs between 30 and 50 percent less than gasoline or diesel. As of 2020, ICPTA saves an average of \$0.90 per gallon on propane autogas compared to gasoline, or about 36 percent. Since January 2015, that's a savings of \$133,610. Over the lifetime of a single vehicle, ICPTA saves an average of \$19,204 on just fuel.

ELIMINATING RANGE ANXIETY

ICPTA has a service area of over 1,000 square miles, and the average vehicle drives more than 300 miles per day. In rural North Carolina, this wide service area created concerns about range. To eliminate that worry, the vans run on a bi-fuel system with a 30-gallon propane autogas tank, which allows the vehicles to operate on propane autogas as the primary fuel, but still have a reserve tank of gasoline when needed.

Plus, drivers are able to complete round trips without having to refuel their vehicles. Previously, drivers would have to stop at a gas station to refuel before returning to base. Now, ICPTA has its own 2,000-gallon propane autogas refueling station conveniently located at its facility where drivers can refuel at the end of their shifts when they return to base. Mullen estimates that drivers save 20 minutes in labor time thanks to the bi-fuel systems and propane autogas refueling station.

FOCUSING ON PUBLIC HEALTH

One of the goals of ICPTA is to provide its service while promoting an improved quality of life. By operating its vehicles on propane autogas, ICPTA is reducing the amount of harmful nitrogen oxide (NOx) emissions in its communities. This is profoundly important because the majority of ICPTA's passengers use its service to go to their medical appointments, and according to the EPA, NOx emissions are a known trigger for issues like asthma, bronchitis, and other respiratory problems. ICPTA is putting the health of its passengers first.

"The drivers like it because it's so much easier for them to fuel up. They don't have to go to a regular gas station or deal with the fuel cards. They enjoy the convenience of the refueling system."

HERB MULLEN

FOR MORE INFORMATION

To learn more about propane autogas vehicles and the fleets that use them, visit **Propane.com**.

THE PROPANE EDUCATION & RESEARCH COUNCIL was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.

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PROPANE HIGHLIGHTS

\$19,204

**ESTIMATED SAVINGS OVER
THE VEHICLE'S LIFETIME FOR EACH
VAN THAT RUNS ON PROPANE
AUTOGAS AS ITS PRIMARY FUEL
INSTEAD OF GASOLINE.**

\$133,610

**ICPTA HAS SEEN SIGNIFICANT
SAVINGS OVER THE PAST FIVE
YEARS, AS OF JUNE 2020.**

CLEAN

**ICPTA HAS REDUCED ITS PROPANE
FLEET'S NITROGEN OXIDE (NOX)
AND GREENHOUSE GAS EMISSIONS,
CREATING A CLEANER ENVIRONMENT
FOR PASSENGERS.**

CONVENIENT

**PROPANE AUTOGAS SUPPLIERS
AND VEHICLE MANUFACTURERS
WORK DIRECTLY WITH ICPTA'S
MAINTENANCE TEAM TO TEACH
THEM HOW TO SERVICE THE
PROPANE AUTOGAS SYSTEMS.**