

## CASE STUDY: RALEIGH POLICE DEPARTMENT

### PROGRAM SNAPSHOT

In May 2011, the Raleigh Police Department began working with Alliance AutoGas to shift their patrol car fleet to propane autogas. The environmental benefits and reduced vehicle maintenance needs of autogas vehicles, combined with the lower cost for fuel, were a driving force in the city's decision to launch their alternative fuel program.

With funding from a Department of Energy grant and guidance from Alliance AutoGas on every step of the process, converting their fleet to run on clean-burning, affordable propane autogas was a simple decision for the Raleigh PD. "The Police Department is pleased to play a leading role in the City of Raleigh's efforts to reduce dependence on foreign oil and to use cleaner energy," says Raleigh Police Captain Doug Brugger.

The fleet has converted 10 Ford Crown Victoria patrol vehicles to run on autogas, with an additional 10 vehicles slated for conversion.

### WORKING WITH ALLIANCE AUTOGAS

With the Alliance AutoGas complete program, the Raleigh police fleet had one point of contact through every aspect of the conversion process, including the autogas vehicle conversions, fuel station installation, autogas fuel supply, staff safety training and ongoing technical support. Alliance installed an on-site 1,000-gallon fueling station just outside the Raleigh North District stationhouse so officers will always have easy, reliable autogas fueling access.

"The city of Raleigh is able to make driving clean a priority with the switch to propane autogas, even in the face of shrinking municipal budgets," said Steve Whaley of Alliance AutoGas, who has worked closely with the Raleigh Police Department to make their autogas program a success. "No other fuel has the benefits of being cost-effective, clean and domestically produced, all while maintaining performance and range for fleets like law enforcement, who need vehicle dependability the most."

### RESULTS AND AUTOGAS BENEFITS

The Raleigh Police Department anticipates using about 26,000 gallons of autogas annually, which means they will save between \$15,000 - \$20,000 on fuel costs in 2012 alone. And because Alliance AutoGas installed the fueling station infrastructure at no up-front cost, the Raleigh PD was able to start saving immediately with their new autogas vehicles.

"We've saved approximately \$2,500 or \$3,000, and that's not having all 10 on the road," said Lynn Graham, manager at Raleigh's Office of Sustainability, referring to the first six-to-eight weeks of service. In an August 2011 interview, Raleigh Police Captain Doug Brugger estimated only eight gallons of gasoline are needed every few weeks.

The EPA-certified autogas conversions utilize the Prins VSI bi-fuel system from Alliance AutoGas co-founding partner American Alternative Fuel, enabling vehicles to transition seamlessly between autogas and gasoline with the push of a button. This feature is especially attractive to law enforcement fleets because it provides peace of mind if the autogas fuel tank ever runs low out of fuel station range. Another benefit of the versatile



Doug Brugger  
Police Captain  
Raleigh, NC

### FLEET STATISTICS

**FLEET TYPE:** Law Enforcement

**AUTOGAS VEHICLES IN FLEET:**  
10

**TOTAL ESTIMATED ANNUAL SAVINGS:**  
\$15,000 - 20,000

**ADDITIONAL VEHICLES SLATED FOR AUTOGAS CONVERSION:**  
10

**ANTICIPATED ANNUAL USAGE (gallons of gasoline displaced):**  
23,400 gallons

**ANNUAL MILEAGE (per vehicle):**  
35,000

**AUTOGAS FUELING:**  
Onsite autogas fueling infrastructure, including one 1,000-gallon autogas tank

**TIME OPERATING ON AUTOGAS:**  
10 months

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### RESULTS AND AUTOGAS BENEFITS (CONTINUED)

Prins VSI system is that it is easily transferable from one vehicle to another — meaning high-mileage fleets like the Raleigh PD can simply transfer the autogas systems to newer certified vehicle models when the older vehicles run their course.

The Raleigh Police Department also expects to experience savings on maintenance costs, such as fewer oil changes, due to the high-octane rating of autogas.

### MOVING FORWARD

The Raleigh Police Department is pleased with the performance of their first 10 clean-burning propane autogas cruisers, as well as the fuel savings they have experienced. The city is converting an additional 10 police fleet vehicles to run on autogas through the Alliance AutoGas complete program, continuing their mission to save taxpayer dollars while ensuring cleaner air for the Raleigh community.