

Greening Columbus' fleets

By SARAH WRIGHT
The Municipal

Emissions regulations and proactive decisions have spurred municipal fleet managers and governments to consider new practices and technologies to reduce their carbon footprint. Columbus, Ohio's, fleet is on the cutting edge. The city's efforts were recognized in 2011, when it was named the Greenest Fleet in North America by Government Fleet magazine.

Mayor Michael Coleman laid the blueprint out in his "Get Green Columbus" initiative, which included a Green Fleet Action Plan launched in 2008. Erin Miller, environmental steward with the mayor's office, said Coleman wants to make Columbus the greenest city with the best resources for future generations.

"It was important that we were in agreement with the mayor's Green Fleet Plan," added Kelly Reagan, fleet administrator for the city. He noted going green provided financial savings, in addition to reducing dependency on foreign oil and helping the environment.

Many of the objectives of the original plan have been met, including an overall reduction in fuel consumption of almost 2 percent; a significant increase in biofuels usage; implementation of CNG refuse trucks; retrofitting all eligible diesel vehicles with emission reduction equipment and anti-idling equipment; and increased purchasing of green vehicles. The next phase spans from 2011 to 2014 and will focus on further greening the city's fleet while strengthening Columbus's efforts to reduce its carbon footprint.

"We are stepping into the 21st century, using alternative fuels," said Reagan.

The fleet has embraced all manner of alternative fuels, incorporating biodiesel, ethanol, CNG, propane and electric into their fleet, plus hybrid and flex-fuel vehicles. The goal is to reduce annual petroleum use by 5 percent compared to 2010 levels by the end of 2014: A goal it's on track to achieve. In 2012, 74.5 percent of the city's bulk diesel purchases were biodiesel, and the city's CNG station pumped more than 51,100 gasoline gallon equivalents.

Electric vehicle options are being explored as well. Five vehicles

are expected to arrive this year to replace gasoline-driven units. With help from the Project Get Ready community network, Columbus has also completed an electric vehicle readiness plan that outlines ideal locations for vehicle charging stations. Grant money from the Department of Energy has allowed the city to install two stations so far for use by both city-owned and non-city vehicles.

Propane is another avenue the city explored for off-road vehicles. Fourteen propane-powered mowers have been purchased so far and will be in service during the 2013 mowing season. It made the purchase through a program offered by the Petroleum Education and Research Council and will receive a \$1,000 incentive per mower in exchange for one season's worth of data for PERC's research purposes.

Beyond implementing alternative fuel vehicles, Columbus has placed CNG infrastructure. "It was important to open stations to the public to build a market for it through infrastructure," Miller said. "We were fortunate a lot of stations came on board." With CNG stations being available to both the public and private sectors, "there is increased value since there is less cost the more you pump," Reagan said. He added as the city becomes a larger producer, the consumer will soon see a drop of 30-40 percent in cost.

Right-typing is another strategy the city employed. The fleet has a vehicle match application procedure that questions every





As a step to reduce emissions, Columbus, Ohio, has introduced CNG vehicles to their fleet, along with other "green" vehicles. By the end of 2013, the city is projected to have approximately 64 CNG vehicles in use, which will displace more than 229,000 gallons of diesel and save more than \$444,000 in fuel costs. (Photo provided)



As part of its green fleet initiative, Columbus made sure the infrastructure was in place to make newer technologies viable. The city's first CNG station was dedicated April 17, 2012, and a second city-owned CNG station should be completed by the first quarter of 2014. (Photo provided)



CNG has become a choice for fleet managers looking to cut back on greenhouse gas emissions. CNG-powered vehicles emit approximately 80 percent less emissions than diesel-fueled vehicles. (Photo provided)

application by looking at vehicles' routines and seeing what vehicle is actually required to perform it. If an application does not require a F-250, it will receive a small Focus instead, Reagan stated.

GPS is one of the latest technologies being implemented, most on-road vehicles are receiving GPS units which Reagan believes will provide big savings once installed. The GPS units can also calculate greenhouse gas emissions from vehicles, which will allow the city to calculate its carbon footprint. In September, 538 units were installed; the remaining units should be installed by the end

of third quarter of 2013.

"Look at all the alternatives, see what is cost-effective, and make a decision with a strategy in mind," Reagan recommended, adding leadership has to be behind the change. Not everyone got on board right away with Columbus's changes, he noted, but with the help of Miller and the mayor's vision they got the ball rolling. They made sure to remind everyone while equipment costs can be expensive, there is a generous return on investment on most equipment within a five- to 10-year time frame. ■

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