

Evaluating Green Fleet Options

Cities and counties throughout California are considering adopting policies and programs to “green” their fleets by purchasing fuel-efficient and alternative-fuel vehicles. While many agencies already have experience in this area, some local officials have questions regarding green fleet options.

The Institute for Local Government (ILG) conducted a survey in 2010, through its climate change program, that asked local officials what questions they have regarding green fleet options. ILG used the survey results to develop information to help local officials evaluate their options related to green fleets. The project was funded by AAA Northern California, Nevada and Utah.

Benefits of Green Fleets

Taking steps to make agency fleets greener has other benefits in addition to potential fuel and cost savings and lessening dependence on foreign oil. Because transportation is the largest generator of greenhouse gas emissions, reducing fuel use helps to decrease such emissions.

Defining the Terminology

Fuel-efficient vehicles get better than average gas mileage, though they may still run on petroleum-based fuels, such as gasoline and diesel or a combination of petroleum-based fuel and another power source.

Alternative-fuel vehicles run on non-petroleum-based power. Some of these alternative fuels are produced domestically, reducing dependence on imported oil, and some are from renewable sources. Alternative fuels typically cost less than petroleum-based fuel and produce less pollution than gasoline or diesel.

Flexible-fuel vehicles, another type of alternative-fuel vehicle, can run on gasoline or a gasoline-ethanol blend of up to 85 percent ethanol, also known as E85.

Key Questions to Consider

Can public safety departments use fuel-efficient and alternative-fuel vehicles?

Fuel-efficient and alternative-fuel vehicles can be used for a variety of public safety purposes. Generally, most alternative-fuel vehicles do not meet the high performance standards needed by most public safety departments for pursuit vehicles. However, at least one public safety agency in California utilizes flexible-fuel vehicles as pursuit vehicles. Cities and counties typically use fuel-efficient or alternative-fuel vehicles in

their public safety departments for administrative or non-pursuit purposes. For example, in one city, police detectives who do not drive pursuit vehicles use hybrid vehicles.

Can we purchase fuel-efficient and alternative-fuel vehicles through the California Department of General Services' Master Vehicle Contract program and still work with local auto dealers?

Local agencies generally prefer to buy locally when possible. But they also like to take advantage of opportunities to save money and use taxpayer dollars wisely. While many local agencies find the potential cost savings of using the Department of General Services' (DGS) purchasing power attractive, they also want to support local auto dealers. In some cases, it's possible to do both.

DGS maintains Master Vehicle Contracts that cities and counties can use to purchase fuel-efficient and alternative-fuel vehicles at lower prices than might otherwise be available. DGS develops specifications for different types or classes of vehicles, such as hybrid sedans, and awards contracts to specific dealerships for a single model in each class. DGS awards contracts to two dealers for each class of vehicles; one dealer (based in Sacramento) covers Northern California, and one (based in Los Angeles) delivers to Southern California. While the DGS Master Vehicle Contracts apply only to selected dealerships, the contract specifications and pricing are publicly available. Using these publicly available resources as a starting point, local agencies can explore purchasing opportunities through local dealers.

What if our agency cannot afford to convert 100 percent of its fleet at one time?

Most agencies do not have the resources to convert their entire fleet to fuel-efficient or alternative-fuel vehicles at one time. However, many adopt policies to phase in the purchase of green vehicles, thus incrementally increasing the number of green vehicles in their fleets over time.

Do fleet maintenance staff need special training to work on fuel-efficient and alternative-fuel vehicles?

Local agency mechanics generally need some special training to work on hybrids and other alternative-fuel vehicles. When evaluating options for policies to acquire alternative-fuel vehicles, it's a good idea to include the cost of training mechanics if the agency is considering maintaining the vehicles itself.

Lessons Learned From Public Agency Experience

Based on their experience, public agencies report the following key lessons learned about green fleets:

- Leading by example helps local businesses and residents understand the green vehicle options available to them;
- Implementing a green fleet policy involves some trial and error to understand which vehicle types are the best fit for an individual agency;
- Contrary to popular opinion, some alternative-fuel vehicles can be used for public safety pursuit vehicles. Others are best suited for administrative purposes;
- Alternative-fuel vehicles may have higher initial capital costs, but the long-term benefits — especially fuel-related savings — outweigh the costs; and
- The evolving green vehicle technology and availability make long-term investment decisions challenging.

Highlights of Green Agency Fleets

Alameda County began integrating alternative-fuel and fuel-efficient vehicles into its fleet in 2002. Since then, the county added more than 130 hybrid vehicles and explored a variety of alternative-fuel technologies, including biodiesel, waste vegetable oil, compressed natural gas (CNG) and electric vehicles.

Culver City has a CNG fleet that includes 605 on-road and 15 off-road vehicles used by all city departments. A newly remodeled and expanded CNG fueling station supports the vehicles.

Contra Costa County uses a variety of alternative fuels, including biodiesel and CNG, to power its fleet, as well as hybrids and flexible-fuel vehicles that can use gasoline and ethanol. The county's fleet comprises 112 flexible-fuel vehicles, 140 hybrids and 46 CNG vehicles. Contra Costa County's Alternative Fuel and Vehicle Policy provides guidelines for using or buying alternative-fuel vehicles and alternative fuels for county agencies.

Lakewood maintains a fleet of about 100 light-duty vehicles, 27 of which are powered by CNG and include cars, vans and pickup trucks.

The City of Santa Monica adopted its first sustainability policies in 1994. Today, 87 percent (566 vehicles) of its municipal fleet runs on alternative fuels, including CNG, propane, hydrogen, biodiesel and electricity. (The fleet numbers do not include fire or police response vehicles.) In addition, its transit system includes 198 Big Blue Buses, which operate exclusively on alternative fuels.

Ventura County's fuel-efficient and alternative-fuel vehicles program includes a broad range of hybrid vehicles. The county adopted a no-idle policy for all diesel and gas vehicles that requires operators to turn off idling engines after one minute.

Tulare operates a green fleet that consists of 48 light vehicles, including seven police vehicles that use E85 ethanol, 17 refuse vehicles, 36 buses that use liquefied natural gas, and street sweepers and other light vehicles powered by CNG.

Additional Resources

For more information about green fleets, see the following:

- Institute for Local Government's [Greening Agency Fleets Resource Center](#)
- California Air Resources Board's [Advanced Clean Cars](#)

This whitepaper is a service of the Institute for Local Government (ILG) whose mission is to promote good government at the local level with practical, impartial, and easy-to-use resources for California communities. ILG is the nonprofit 501(c)(3) research and education affiliate of the League of California Cities and the California State Association of Counties. For more information and to access the Institute's resources on sustainable communities, visit www.ca-ilg.org/sustainability. To access this resource directly, go to www.ca-ilg.org/greenfleetoptions.

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