

COUNTY OF SACRAMENTO
CALIFORNIA

For the Agenda Of:
May 3, 2005
10:30 A.M.

APPROVED
BOARD OF SUPERVISORS

MAY 3 - 2005
Cindy A. Turner 32
Clerk of the Board

To: Board of Supervisors
From: Department of General Services
Subject: Light Fleet Vehicle Acquisition Policy – Gasoline/Electric Hybrid and Sport Utility Vehicles
Contact: John W. Newton, 876-6191

Overview

The proposed policy (Attachment 1) would specify, as a first option, the purchase of gasoline/electric hybrid vehicles (hybrids) for light fleet acquisitions/replacements to the extent they are available for purchase. The proposed policy would also prohibit the acquisition of sport utility vehicles (SUV) without the express approval of the Director of General Services. Denial of such approval could be appealed to the County Executive on a case-by-case basis.

Recommendation

Approve the attached "Light Fleet Vehicle Acquisition Policy."

Measures/Evaluation

Approval of the proposed policy will result in significant, measurable reductions in fuel consumption for each hybrid vehicle purchased and for each vehicle purchased in lieu of a conventional SUV. Associated reductions in various airborne pollutants will be a direct benefit of the proposed policy.

Fiscal Impact

Unit acquisition costs for hybrids are significantly higher than for comparable non-hybrid vehicles; however, costs of ownership over the life of the vehicles are expected to be nearly equal to comparable non-hybrid vehicles, depending on the future cost of fuel.

Reductions in purchases of SUV will reduce both unit acquisition costs and life-cycle costs associated with maintenance and fuel consumption.

BACKGROUND

In October 1999, the County of Sacramento and the City of Sacramento approved a "Heavy-Duty Low-Emission Vehicle (LEV) Acquisition Policy." The policy was amended in September 2000 to include specific vehicle acquisition guidelines for heavy equipment. The purpose of the policy was to reduce NOx emissions from the two large local government fleets in the Sacramento area. The direction specified in the policy was to require 20 percent of heavy vehicle replacements in

2002 to be LEV, increasing in increments to a 50 percent requirement in 2004. Attachment 2 reflects the County's success in complying with the policy since its implementation.

The increasing availability of hybrid vehicles has enabled General Services' Fleet Services Division to adopt an internal policy that hybrids will be purchased to the extent they are available for light fleet additions and replacements. At present, the County's light fleet include 32 hybrid vehicles, all of the passenger car type. General Services is proposing to formalize the hybrid acquisition policy and also to include a provision intended to significantly reduce acquisition of SUV.

Need To Increase Fuel Efficiency Nationwide

In the last two decades oil consumption has risen 36 percent in the United States and all of that increase has occurred in the transportation sector. All other sectors have actually declined by 19 percent over the same time period. In 1987, legislation required the manufacture of more energy-efficient appliances and, as a result, household energy use has fallen. The average refrigerator uses one-third less power than it did 15 years ago. However, oil consumption in the transportation sector continues to increase at a staggering rate. A major reason for the large increase is the growing number of SUV and other light duty trucks which are less fuel-efficient than most cars, but which now account for more than one-half of all new vehicle sales. (Data sources: Energy Information Administration, Department of Energy's Transportation Energy Data Book; The New York Times, June 20, 2004).

DISCUSSION

Currently available hybrid sedans are routinely capable of delivering fuel economy of 40+ miles per gallon (mpg). The average fuel economy for the County's existing fleet of non-hybrid vehicles is approximately 20 mpg. Continued upward pressure on the price of automotive fuels, together with no prospect of significant relief in the foreseeable future, clearly indicates the wisdom of converting the County's light fleet to hybrid technology as quickly as possible. In addition, the Sacramento region's continued non-attainment status for NOx emissions mandates that large fleet operators do more to help bring the region into compliance. A vehicle acquisition policy that will work in the direction of someday reducing fleet fuel consumption by nearly half is indisputably prudent.

County policy is to retain most light fleet vehicles for 120,000 miles or twelve years. As such, given today's vehicle purchase and fuel costs, the life cycle costs of owning a hybrid versus a conventional sedan are nearly equal. A number of manufacturers have stated that hybrid vehicles in categories in addition to sedans are in the production pipeline, including pickup trucks and small SUV.

The benefits of a hybrid acquisition policy include:

- Fuel and energy consumption for acquired hybrids will be reduced by half
- Vehicle emissions will be correspondingly reduced
- Transparent transition for the vehicle operator
- If fuel prices continue to increase, the ownership advantage will also increase

- Excellent public relations for the County of Sacramento
- Progress toward compliance with prospective new policies and regulations for ultra-low emission vehicles

Two disadvantages of a hybrid acquisition policy are:

- Life cycle costs of hybrid ownership will be less advantageous if fuel prices decline
- Additional training for County mechanics will be required

General Services believes the benefits of hybrid ownership significantly outweigh the few drawbacks. Therefore, the proposed policy specifies, as a first option, the purchase of hybrid vehicles for light fleet additions and replacements to the extent they are available for purchase. The policy also establishes goals for acquisition of hybrid vehicles as a percentage of the County light fleet.

Sport Utility Vehicles

The County fleet presently contains 100 SUV. Of those, 79 are assigned to law enforcement departments. There are some County applications where the use of SUV offers a net benefit, in spite of higher costs for acquisition, fuel, and maintenance. That benefit is almost always related to the additional payload capacity (passengers and/or cargo) of SUV. General Services believes, however, that with the exception of relatively few applications, virtually all light fleet transportation needs can be satisfied with vehicles smaller and less expensive than SUV. Accordingly, the proposed Light Fleet Acquisition Policy includes a provision that the County will not purchase SUV without the express approval of the Director of General Services. A requesting department would be able to appeal an adverse decision to the County Executive. In each case, however, the policy provides that the decision-making process begin with the presumption that vehicles smaller than SUV would be an acceptable substitution.

The advantages of minimizing SUV purchases are clear:

- Acquisition costs can be reduced from \$6,000 to \$15,000 for each vehicle substituted for an SUV.
- Annual fuel consumption will be reduced approximately 50 percent for each standard sedan substituted for an SUV. Savings will be less if the substitution is with other than a standard sedan.
- Emissions will be reduced in proportion to reduced fuel consumption.

FINANCIAL ANALYSIS

Unit acquisition costs for hybrids are significantly higher than for non-hybrid vehicles. Costs of ownership over the life of the vehicles are expected to be nearly equal to non-hybrid vehicles, depending on the future cost of fuel. Reductions in purchases of SUV will reduce both unit acquisition costs and life-cycle costs associated with maintenance and fuel consumption.

ATTACHMENT 1

LIGHT FLEET VEHICLE ACQUISITION POLICY

Purpose

To establish a comprehensive policy governing the purchase of County vehicles that will maximize fuel efficiency, lower emissions, control costs and still provide operationally capable vehicles. It is the intent of this policy to establish vehicle acquisition criteria, limit the use of gasoline-only sport utility vehicles (SUV) to work assignments where they are essential, and to set goals for the purchase of hybrid technology (gasoline/electric) vehicles (hybrids) to increase their percentage of the County light vehicle fleet. It is the intent of this policy to realize net cost savings through fuel conservation and to protect the public health by lowering emissions.

Background

The Board of Supervisors has adopted ordinances and policies defining the use of County-owned vehicles and designating the Department of General Services as the organization responsible for purchasing, maintaining, and disposing of County vehicles and for specifying specific policies governing the use and operation of most County vehicles. This policy applies to the responsibility of the Department of General Services with respect to the acquisition of light fleet vehicles. The provisions of this policy are applicable to all County-owned vehicles without regard to the revenue source or fund from which they are acquired.

Over the last two decades oil consumption in the United States has increased steadily, rising 36% from 1980 to 2001 with the transportation sector being responsible for all of that increase. All other sectors actually declined by 19% over the past two decades. Legislation passed in 1987 required the manufacture of more energy-efficient appliances. As a result, household energy use has fallen because of power-efficient appliances, technology-smart homes, and tight, new building codes. The average refrigerator uses one-third less power than it did 15 years ago. Alternatively, oil consumption in the transportation sector continues to increase at a staggering rate. A major reason for the large increase is the growing number of sport utility vehicles and other light duty trucks which are less fuel efficient than most cars, but which now account for more than one-half of all new vehicle sales. (*Data Sources: Energy Information Administration, Department of Energy's Transportation Energy Data Book; The New York Times, June 20, 2004*).

As a public agency responsible for both the public health and the expenditure of public funds, the Board of Supervisors has a duty to make decisions that protect air quality and conserve public funds. In the area of automobile use, both of those goals can be achieved by purchasing the most fuel-efficient, lowest-emission vehicles available. Today, those vehicles are hybrid technology vehicles, which currently comprise approximately 1% of the County-owned fleet. SUV comprise about 3% of the County light fleet.

It is the policy of the Board of Supervisors that:

1. The standard fleet vehicle for normal County of Sacramento transportation is a four-door sedan. All vehicles purchased for the County of Sacramento fleet will be a) the most fuel-efficient and/or certified for the least emissions in the vehicle class, b) commercially available, c) practical, and d) reasonably cost-competitive for the class/type of vehicles needed for specific assignments. The acquisition of hybrid sedans for fleet additions or fleet replacements will be specified as a first option, to the extent they are available for purchase. It is intended that the acquisition of hybrid vehicles will be competitive with non-hybrid vehicles with respect to overall life-cycle costs. Acquisitions of hybrid vehicles for other vehicle classes will be specified, to the extent they are available for purchase.
2. There is a presumption that a hybrid vehicle, if available, is a satisfactory substitute for any light fleet vehicle of the same class, with the exception of Sheriff's patrol vehicles. Departments that require other than an available hybrid vehicle, of the requested class, must provide justification by the Director of the requesting department which must be approved by the Director of General Services. Adverse decisions may be appealed to the County Executive. Submittal of any justification and/or appeal under this section will be in accordance with a procedure specified by the Department of General Services.
3. Sport utility vehicles (SUV) will be purchased for fleet additions or fleet replacements only when justified based on work assignment. Justifiable work assignments include rough terrain/off-road travel on a routine basis or passenger/cargo/trailer-towing requirements on a routine basis. There is a presumption that vehicles smaller than SUV are acceptable substitutes for an SUV acquisition. Departments that require an SUV must provide justification by the Director of the requesting department which must be approved by the Director of General Services. Adverse decisions may be appealed to the County Executive. Submittal of any justification and/or appeal under this section will be in accordance with a procedure specified by the Department of General Services.
4. There is established a goal to increase hybrid vehicles to at least 10% of the current eligible fleet by the year 2010 when this policy will be reviewed. The eligible fleet includes those vehicles with similar functionality to available hybrid vehicles. This goal will be based on the availability of hybrid vehicles and cost considerations through 2010.

The Director of General Services or his/her designee will, on an ongoing basis, determine the most economical time to replace County vehicles. Factors to be considered in determining replacement criteria will include vehicle age, accumulated usage, condition, maintenance/cost history, and suitability of assignment.

ATTACHMENT 2

County of Sacramento Compliance With Heavy-Duty Low-Emission Vehicle (LEV) Acquisition Policy

LEV and Standard Emission Vehicles	2002-03	2003-04	2004-05
Total Purchased	59	58	6
Low Emission Vehicles Purchased	54	58	6
Percentage of LEV to Standard Emission Vehicles Purchased	91.5%	100%	100%