



CITY OF BEVERLY HILLS STAFF REPORT

Meeting Date: February 3, 2011
Item Number:
To: Honorable Mayor & City Council
From: Chad Lynn, Director of Parking Operations
Fred Simonson, Maintenance and Operations Manager *FLS*
Subject: CURRENT AND FUTURE OPPORTUNITIES FOR ELECTRIC
VEHICLES IN THE CITY OF BEVERLY HILLS MUNICIPAL FLEET
Attachments: None

INTRODUCTION

The City Council has requested additional information on our current Electric Vehicle (EV) utilization in the City's fleet, and the identification of additional opportunities to increase our EV fleet going forward. This oral presentation will provide an overview of what we have done and where opportunities may be available as early as the next Fiscal Year budget. We will also discuss the pros and cons of EVs related to the City's operational needs and some of the electric vehicle industry issues in general. We will also discuss other alternative fuel options, many already in place in the City of Beverly Hills. There is also a cost associated with EVs that will be discussed and after this overview; we hope to receive additional direction from Council.

DISCUSSION

The City currently has two electric only plug-in vehicles. One is assigned to Facilities and the other is an off-road, small chassis ATV used by the Community Services Parks Division. The City also utilizes seven hybrid vehicles (gas and electric), primarily for parking enforcement operations. The City's fleet also has four Compressed Natural Gas (CNG) street sweepers and will be replacing its Solid Waste collection trucks and other large vehicles powered with CNG. Fleet staff continually looks for fuel efficiency in all replacement vehicles, working with the end-user Departments and industry experts.

A resurgence in interest for EVs has resulted in many municipalities and other agencies looking for appropriate opportunities to include EVs in their fleets. Beverly Hills has a long history participating in these programs and began this process many years ago as a

participant in the Electric Vehicle Leasing Program in the mid and late 1990's. EVs are certain to become more important in fleet operations and may lead the way in gaining public acceptance of electric vehicles. Even with the benefits and proliferation of EVs, there are challenges for fleet applications:

- Capital Costs – Grants and energy savings don't cover the full cost of EVs which are more expensive than traditional gas vehicles, with a premium of roughly 50%.
- Infrastructure Requirements – Infrastructure improvements in the City would be necessary for the City's fleet and could attract visitors as well as residents to the City. The improvements necessary will require coordination between City Departments and private interests. The "charging stations" are expensive to install and maintain but would be an integral part of a public/private partnership to encourage EVs.
- Functionality – Electrics are not practical at this time for heavy utility work because of the size and weight of the batteries and are limited in range for sedans – generally less than 100 miles.
- Limited Utilization – In most cases, EVs would need to charge for a lengthy period limiting them to "one-shift" status precluding a second or third shift utilizing the vehicles such as parking enforcement operations.
- Recycling and Disposal – Routine maintenance seems much easier, however, dismantling and recycling the batteries could be expensive and problematic; future regulations regarding hazardous material disposal may compound the problem.
- Electric Supply – Increased use of the grid, even off-hours may create problems for the availability of power such as "brown-outs" and major service interruptions.

Despite these challenges, there are opportunities, such as addressing the City's overall carbon footprint, especially with electricity purchased from a renewable source. Maintenance costs would surely be reduced with an expectation of technological improvements on the horizon. Grants and financial incentives are available and these can help with the capital costs. As with any new technology (the first electric vehicle was in 1838), opportunities will avail themselves with the use of the vehicles.

The City is currently awaiting response from the Charge Point America grant, which could provide complete or partial funding for public and fleet charging stations in the City's public parking facilities as part of a study in conjunction with the Department of Energy. The City has identified 12 parking facilities and 28 charging station opportunities and Edison has expressed an interest in working with the City.

The Public Works & Transportation Department looks forward to working with City Staff, the Council, the Commissions and the private sector to find those opportunities to incorporate EVs in the City's fleet.

FISCAL IMPACT

Replacement vehicle costs would increase with the incorporation of Electric Vehicles.

Charging stations would require installation charges and ongoing maintenance fees. Monthly service fees for network connectivity would begin in January 2014.

RECOMMENDATION

The Public Works & Transportation Department would like direction from Council if they wish to accelerate an Electric Vehicle Program for the City of Beverly Hills. Staff recommends replacing eligible vehicles with EVs that meet the performance requirements and can demonstrate a value to the City.



David Gustavson

Approved by