Los Angeles County Metropolitan Transportation Authority One Gateway Plaza 3rd Floor Board Room Los Angeles, CA



Board Report

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REGULAR BOARD MEETING APRIL 28, 2016

Motion by:

DIRECTORS GARCETTI, SOLIS, FASANA AND DUPONT-WALKER

Related to Item 29

ZERO-EMISSION BUS TECHNOLOGY

As one of the largest transit agencies in the U.S., Metro needs to continue leading the nation in the application of best environmental and sustainable practices. After purchasing its first natural gas bus in 1995, Metro became the largest clean compressed natural gas (CNG) bus fleet in the nation with its last diesel bus retiring in 2011.

With the fast-paced evolution of new and clean technology, the transit industry is adopting and deploying new bus technologies that offer significant economic and environmental benefits. According to the American Public Transportation Association ("APTA"), 46.9 percent of U.S. public transportation buses are using alternative fuels or hybrid technology. Various transit agencies have embraced these advancements such as, but not limited to, the following: Philadelphia ("SEPTA"), Indianapolis ("IndyGo"), Seattle's King County Metro Transit, and Foothill Transit, which has the largest electric bus fleet in the country.

Although mile-range and mass production remains a challenge, continually improving technology and the steady decrease in cost is a clear indication that zero-emission bus vehicles are in high demand.

A strong commitment toward transitioning to a zero-emission bus fleet will position Metro to capitalize on Federal grant programs along with the State of California's cap-and trade programs. WE THEREFORE MOVE that the Board direct the CEO to:

- A. Develop an initial outline for a comprehensive plan to further reduce greenhouse gas emissions by gradually transitioning to a zero-emission bus fleet;
- B. Report which public transit agencies have deployed zero emission vehicle buses in the U.S.

C. Identify manufacturers that provide zero emission bus technology for large U.S. transit agencies.

- D. Report that provides the following information for zero emission buses:
 - 1. Greenhouse gases and air pollutant levels;
 - 2. Noise levels (i.e. decibels) comparison between conventional Clean Natural Gas ("CNG") and zero emission buses;
 - 3. Production challenges and opportunities to partner with other agencies in large procurements to achieve economies scale discounts; comparison of long-term maintenance costs.
 - 4. Chronological timeline of the advancements and forecasts in zero emission bus technologies;
- E. Provide a report on all mile-range and run times for all current MTA bus routes.

F. Identify possible Federal, State and local funding sources that are eligible for the purchase of zero-emission bus vehicles.

- G. For this new bus procurement of advanced transit buses, include the following:
 - 1. Zero emission bus technology cost options for the base order and all other bus purchase options.
 - 2. Increasing and maximizing seating capacity.

H. Report back on the above at the October 2016 MTA Board meeting and provide a semi-annual report thereafter on zero emission bus technology.