

**Metro**Los Angeles County  
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Los Angeles, CA 90012-2952213.922.2000 Tel  
metro.net**PLANNING AND PROGRAMMING COMMITTEE  
MAY 14, 2014****SUBJECT: METRO'S PARTICIPATION IN THE SOUTH COAST AIR QUALITY  
MANAGEMENT DISTRICT'S (SCAQMD) ZERO EMISSION TRUCK  
DEMONSTRATION PROJECT****ACTION: APPROVE RECOMMENDATIONS****RECOMMENDATION**

Authorize the Chief Executive Officer to:

- A. Execute a \$2 million Funding Agreement with SCAQMD for Metro's participation in the Zero Emission Truck Demonstration Project; and
- B. Include \$750,000 in the FY 15 budget for this effort.

**ISSUE**

At the February 2014 Board meeting, staff presented on "Opportunities for Smarter Sustainable Highways". Additionally, Metro staff was directed to identify \$2 million for Metro's participation in the SCAQMD's Zero Emission Truck Demonstration Project, and report back to the Board within 60 days. This Board report is an update on the funding staff has identified. Approvals of the recommendations listed above are needed to formalize Metro's involvement with SCAQMD in their demonstration project.

**BACKGROUND**

In 2011, the Metro Board authorized staff to form a Countywide Zero Emissions Truck Collaborative, whereby members would work collectively to promote and/or demonstrate zero emission trucks, which would further help improve air quality, public health, mobility and sustainability for the region. Since 2012, SCAQMD has shared with the members of the Collaborative its intent to move forward with an Overhead Catenary System (OCS) powered zero emission truck demonstration project. While trains, trolleys, and light rail vehicles are powered via OCS all over the world as mature and proven technology, this power source has not been adapted for use by Class 8 trucks in the United States. In late 2013, SCAQMD shared with the Collaborative that \$2 million in funding was needed so the project can move forward.

## **DISCUSSION**

The SCAQMD is moving forward on a zero emission truck demonstration project where three Class 8 trucks would be retrofitted and powered by electricity when driven on a one-mile test facility. The test facility will provide electricity via an OCS, and subsequently enables those three retrofitted trucks to operate in a zero emissions mode. The project will be located in the City of Carson utilizing a section of Alameda Street, and the duration of the project is 39 months. Of that duration, it is anticipated that the actual demonstration will last approximately 12 months.

## **IDENTIFIED FUNDING**

Staff identified General Funds as an eligible funding source for use in this demonstration project.

## **DETERMINATION OF SAFETY IMPACT**

There is no impact to safety by approving this action.

## **FINANCIAL IMPACT**

Funding for this demonstration project is eligible for bus and rail operations and capital.

Funding for the remaining one month of FY 14 is not needed. For the FY 15 budget, staff will request \$750,000 in General Funds in cost center 0441. The cost center manager and the Executive Director, Engineering and Construction will be responsible for requesting and budgeting the necessary funds in future fiscal years.

## **ALTERNATIVES CONSIDERED**

The Board can direct staff to not participate in the SCAQMD's zero emission truck demonstration project. However, not participating in this project is inconsistent with the Board's previous actions supporting zero emissions trucks. Metro's role on the Countywide Zero Emission Truck Collaborative is to support the development of zero emission technologies, advance its commercialization, while providing air quality, public health, and mobility improvements. Because there have been no previous demonstration projects where trucks are retrofitted to run on electricity via an OCS, this would be an opportunity for Metro to support the development of a new zero emission technology and better understand the technology & energy requirements. Lastly, not participating in this project does not align with Metro's values regarding Innovation and Technology (actively participating in identifying best practices for continuous improvement) and Sustainability (committing to reduce greenhouse gas emissions).

## **NEXT STEPS**

With the Board's approval of the recommendations in this Board Report, staff can start to formalize our funding commitment by entering into a funding agreement with SCAQMD. Staff will provide progress updates of the demonstration project to the Board.

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