

BOARD MEETING DATE: September 4, 2015

AGENDA NO. 5

PROPOSAL: Execute Contracts to Cosponsor Sustainable Transportation Energy Pathways 2015-2018 Program 

SYNOPSIS: The Sustainable Transportation Energy Pathways (STEPS) Program at the U.C. Davis Institute of Transportation Studies is continuing their multidisciplinary research consortium that brings together the world's leading automotive manufacturers, energy companies and government agencies to understand sustainable vehicle and energy solutions and requests continued funding for 2015 through 2018. This action is to execute a contract with U.C. Davis to cosponsor the STEPS 2015-2018 Program in an amount not to exceed \$240,000 from the Clean Fuels Fund (31).

COMMITTEE: Technology, July 24, 2015; Recommended for Approval

RECOMMENDED ACTION:

Authorize the Chairman to execute a contract with the U.C. Davis Institute of Transportation Studies to support the STEPS 2015-2018 Program in an amount not to exceed \$240,000 from the Clean Fuels Fund (31).

Barry R. Wallerstein, D.Env.
Executive Officer

MMM:FM:LHM:mg

Background

On October 5, 2012, the Board approved the allocation of \$120,000 from the Clean Fuels Fund (31) to cosponsor the 2011-2014 Next Sustainable Transportation Energy Pathways (STEPS) Program for 2013 and 2014. NextSTEPS was a four-year multidisciplinary research consortium, part of the U.C. Davis Institute of Transportation Studies (ITS-Davis). ITS-Davis is continuing their multidisciplinary research consortium that brings together the world's leading automotive manufacturers, energy companies and government agencies to seek to illuminate the critical factors and

dynamics necessary to transition to a sustainable transportation system by means of exploring the difficult technical, economic and behavioral questions required to inform industry planning and government policy. Through this research, STEPS aims to create transparent, realistic scenarios and transition analyses, which are disseminated to decision-makers through workshops, seminars, working papers, presentations and publications. Program areas continue to include, but are not limited to, consumer behavior, infrastructure system analysis, environmental impact, vehicle technology evaluation and integrative scenarios will be compared and analyzed with reference to the four energy pathways (hydrogen, biofuels, electricity and fossil fuels) best suited to the transportation sector.

Numerous research projects pertaining to the advancement of alternative fuel technology were completed during NextSTEPS. STEPS 2015-2018 will focus primarily on expediting and expanding the implementation of advanced technology and modeling infrastructure formats in a cost-effective manner.

Proposal

ITS-Davis has requested that SCAQMD join STEPS as a Program Sponsor for 2015-2018 in order to provide feedback on draft reports and attend high-level, invitation-only conferences and research workshops. The four explicit program goals of the STEPS 2015-2018 Program are to: 1) optimize scenarios for mass transition to alternative fuels and vehicles in California, 2) model evolving relationships between future sources of mobile energy and the existing oil and gas industry, 3) describe current trends and inform policymakers of strategies for Global Urban Sustainable Transport, and 4) continue development of a wide range of models in order to progress research and improve trend recognition. This action is to execute a contract with ITS-Davis to support the STEPS 2015-2018 Program.

Benefits to SCAQMD

The STEPS Program has a direct relevance to SCAQMD's priorities in evaluating changes to criteria emission levels and vehicle technology options. Outreach resulting from the STEPS 2015-2018 Program will broaden the public knowledge base and help expedite introduction of near-zero and zero-emitting vehicles in the South Coast Air Basin, identified as a key strategy for the attainment of the ozone standard. SCAQMD will receive access to member-exclusive workshops, a member-specific interaction plan, access to preliminary research and a seat on the STEPS advisory board. This proposed project is included in the *Technology Advancement Office 2015 Plan Update* under the category of "Assessment and Technical Support of Advanced Technologies and Information Dissemination."

Sole Source Justification

Section VIII.B.2. of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. These requests for sole

source awards are made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interest of the SCAQMD. Specifically, these circumstances are B.2.d.(1): Project involving cost sharing by multiple sponsors and B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations.

U.C. Davis is an educational institution and their Institute for Transportation Studies is internationally recognized for its multidisciplinary approach to transportation studies. Over the past 15 years, ITS-Davis has built strong research programs in environmental vehicle technologies and fuels, climate change, air quality, and other environmental impacts, and travel behavior and transport system modeling. Research conducted by U.C. Davis has the potential for far-reaching policy implications.

Resource Impacts

Participation in the ITS-Davis STEPS 2015-2018 Program at the Program Sponsor level has been set at \$60,000 annually. SCAQMD’s cost-share will not exceed \$240,000 from the Clean Fuels Fund (31). Over \$5 million in cost sharing so far has been committed by energy companies (Aramco, BP, Chevron, Center for High Technology - India, Shell, Sinopec and Sempra), automotive manufacturers (BMW, Chrysler, Daimler, Ford, General Motors, Honda, Nissan, Renault, Toyota and Volkswagen), and government agencies (CARB, CEC, Caltrans, U.S. DOE and U.S. DOT). The funding amounts from various cosponsors are listed in the table below:

STEPS 2015-2018 Program Sponsors

Organizations	Funding	Percent
7 Energy Companies	\$1,680,000	31%
10 Automotive Companies	\$2,400,000	43%
5 Government Agencies	\$1,200,000	22%
SCAQMD (<i>requested</i>)	\$240,000	4%
Total	\$5,520,000	100%

Sufficient funds are available for the proposed projects from the Clean Fuels Fund (31), established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.