
California Sustainable Freight Action Plan: Pilot Project Ideas

Bay Area Air Quality Management District

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Project Title: Vessel speed reduction zone

Project Location: Pacific Ocean – 24 NM from California Shore, Approaches to San Francisco Bay, Santa Barbara Channel

Project Summary:

Under this project, vessels that travel through the designation zones at 12 knots or less will qualify for incentive payments. Ideally the speed reduction zone will encompass the entire California coast, extending out to 24 NM. A reduced scope project would encompass the approaches to San Francisco Bay and the Santa Barbara Channel.

The goals of this project are 1) reduce emissions from ocean-going vessels transiting the California coast; 2) reduce impacts on migrating whales; and 3) conduct a study of vessel speeds over entire voyages to ascertain that emission reductions are maintained and a study on changes to incidences of vessels striking whales.

Detailed Description of project alignment with goals and components of the Sustainable Freight Action Plan:

This Vessel Speed Reduction Incentive (VSR) program will be modeled after the successful VSR programs operated since 2001 by the Port of Los Angeles (POLA) and Port of Long Beach (POLB), and build upon the successful pilot VSR program conducted in 2014 by the Santa Barbara and Ventura air districts.

Working with shipping companies, ports, shipping industry experts, and stakeholders, a contractor with shipping industry experience and expertise will assist in data analysis and design of the program. The primary data set we will utilize for the analysis is the marine vessel Automated Identification System (AIS). This data coupled with Marine Exchange port call data will allow us to identify existing average speeds by vessel type, shipping operator, and routes. Applications for incentive funding will be handled by a contractor.

In cooperation with ARB, the project participants will conduct a study with shipping lines to track vessel speeds during entire port to port journeys. The goal of the study is to confirm that emission reductions achieved through reduced speeds off the California Coast are not offset by increased speeds during other parts of the journey. In cooperation with NOAA, a monitoring program on incidents of whale strikes by transiting vessels will be conducted during peak whale migration periods.

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Project Costs:

Estimated Annual Costs:

Incentives: \$4,000,000-\$6,000,000

Contractor: \$120,000

Program Management: \$100,000

One time cost for studies: \$250,000

Project Timeline:

5/2016-11/2025

This project would last for ten years, at which time it is estimated that cleaner engines will be common in most ocean going vessels, in compliance with MARPOL requirements.

Means for measuring progress toward meeting goals over time:

- Number of participating vessels
- Verification of emission benefits
- Verification of reduction of vessel strikes on whales

Potential interagency and other partners:

The Port Authorities of California, CARB, and U.S. EPA are potential funding partners for this project. Coastal air districts could also be approached for funding a portion of the VSR incentives and/or the technical study of the GHG emission reductions. The U.S. DOT/MARAD, U.S. Coast Guard, Pacific Merchant Shipping Association, and the American Bureau of Shipping (ABS) would be engaged for technical and regulatory support. NOAA would assist in defining shipping lanes through federal marine sanctuaries, and track incidences of whale strikes by ocean-going vessels.