



Proposition 1B: Goods Movement Emission Reduction Program

Proposed Updates to Program Guidelines

January 25, 2013



Air Resources Board

California Environmental Protection Agency

Overview



- Current program
- Progress
- Proposed revisions
- Staff recommendations

Prop 1B: Goods Movement Emission Reduction Program

- \$1B to reduce emissions from freight transport in the four priority trade corridors
- Upgrade diesel trucks, locomotives, ship berths, cargo equipment, and harbor craft
- Goal: Reduce emissions/health risk as quickly as possible in heavily impacted communities

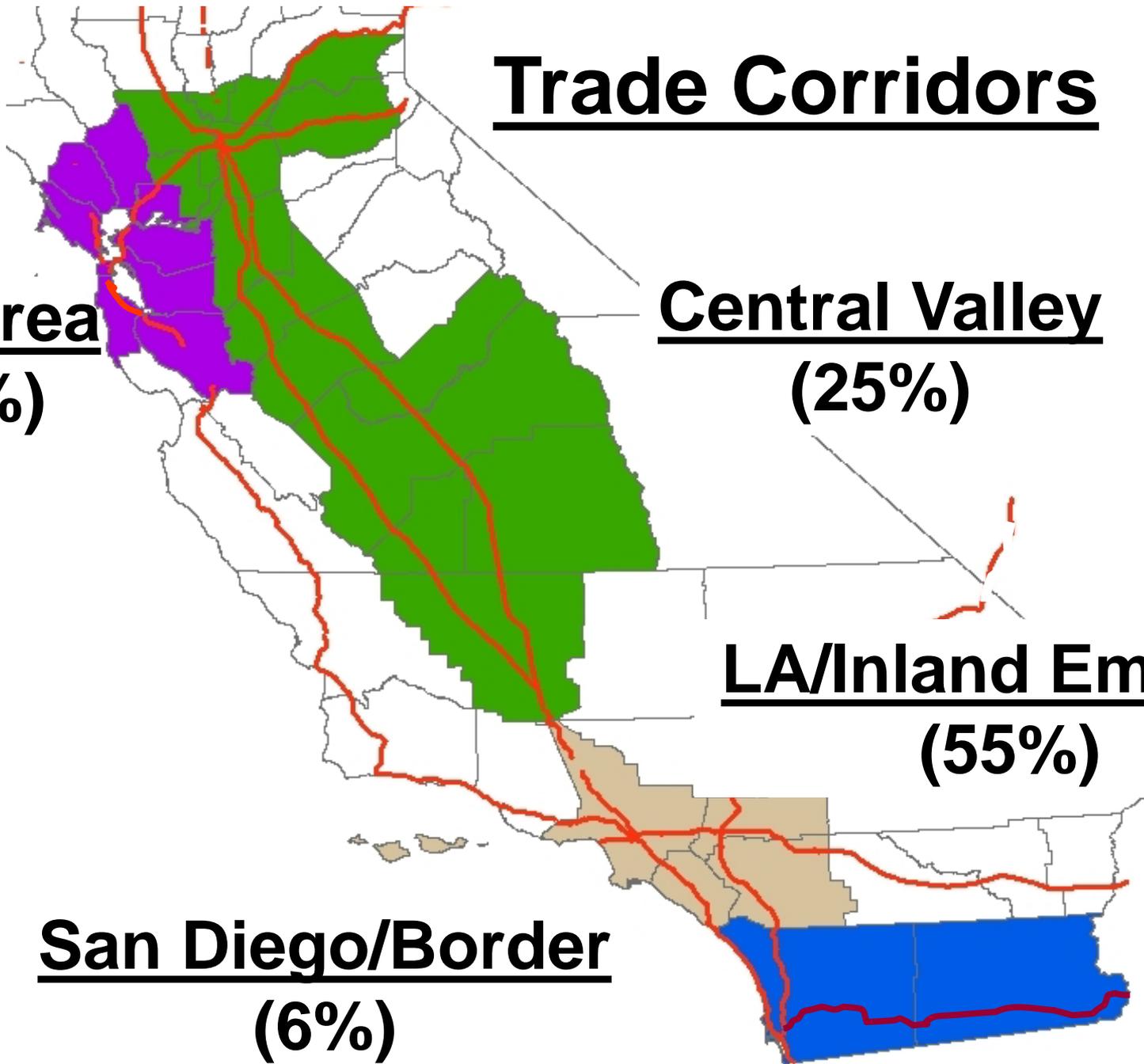
Trade Corridors

Bay Area
(14%)

Central Valley
(25%)

LA/Inland Empire
(55%)

San Diego/Border
(6%)



Core Elements

Required by statute:

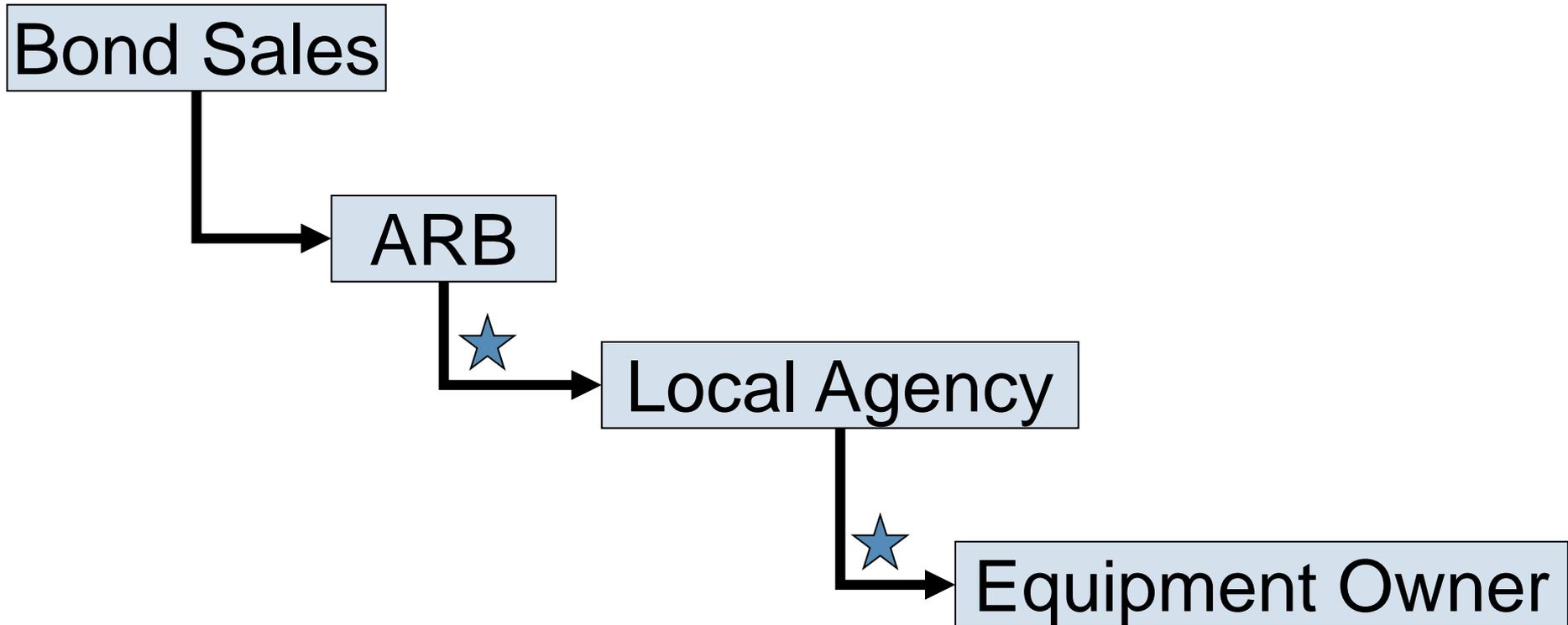
- Program guidelines
- Local agency role
- Early or extra reductions (PM/NO_x)
- Match funding
- Competitive process

Reductions Must be Early or Extra

Key existing ARB rules/requirements:

- Statewide Truck and Bus Rule
- Port and Rail Yard Truck Rule
- Truck Idling and Refrigeration Unit Rules
- Locomotive/Rail Yard Agreements
- Ship Fuel and At-Berth Rules
- Cargo Handling Equipment Rule
- Harbor Craft Rule

State Bond Funding Flow

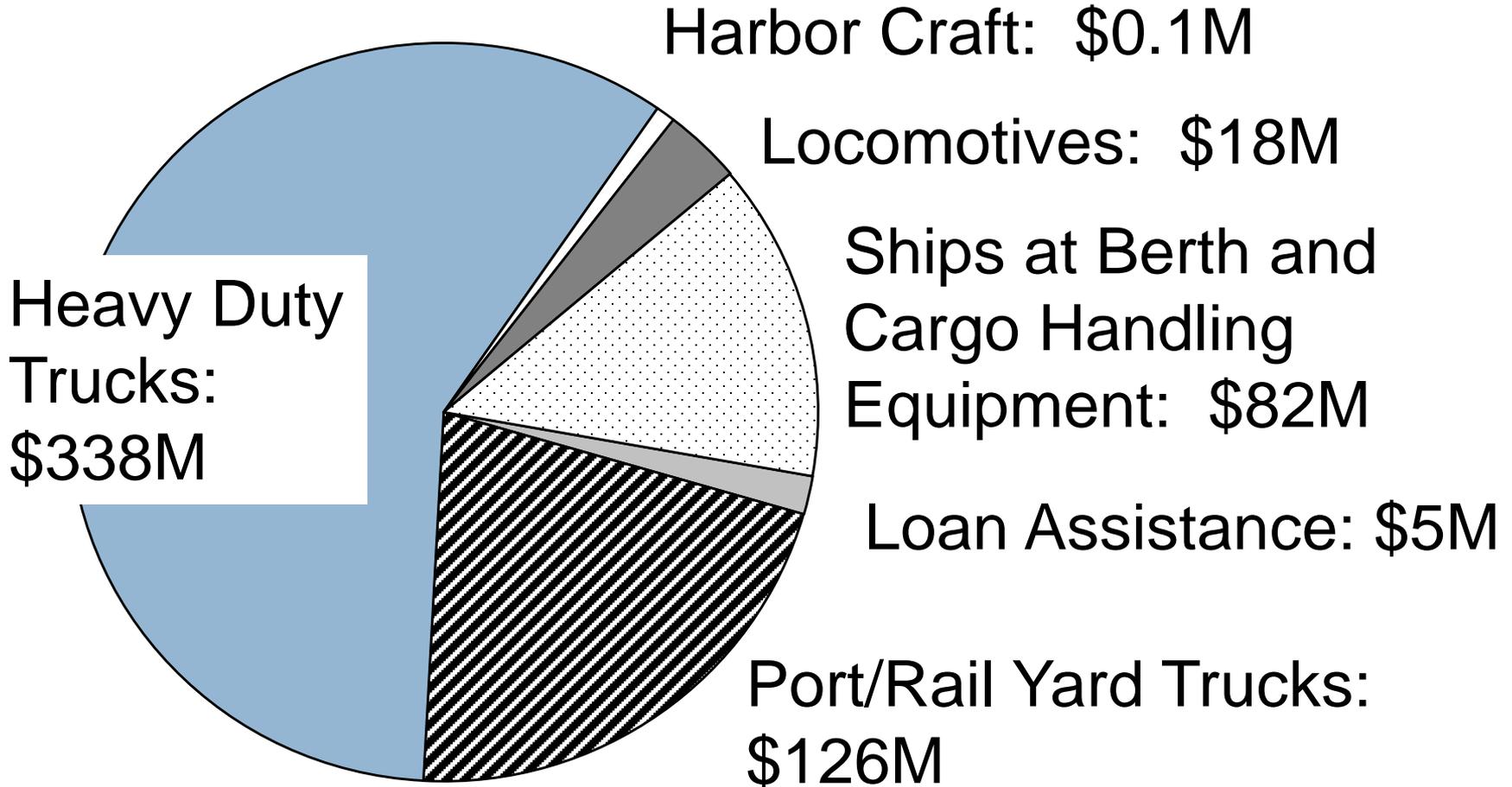


- Received funds to date (\$587M)
- ★ Competitive process to select projects

Progress



Funding To Date

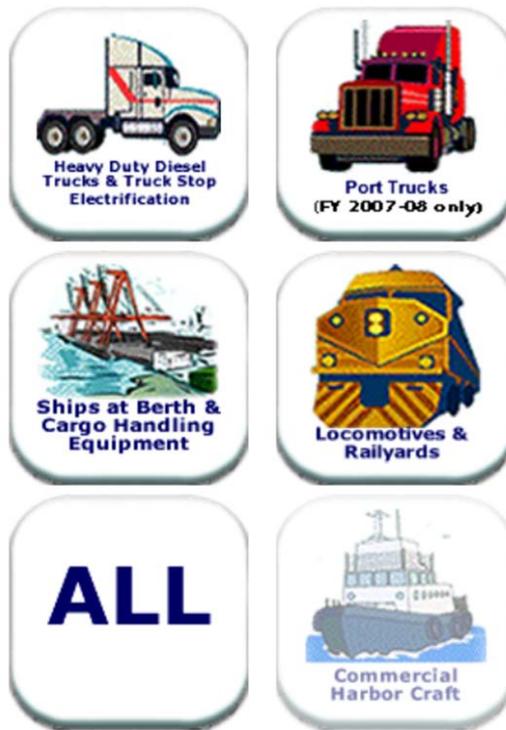


Project Results

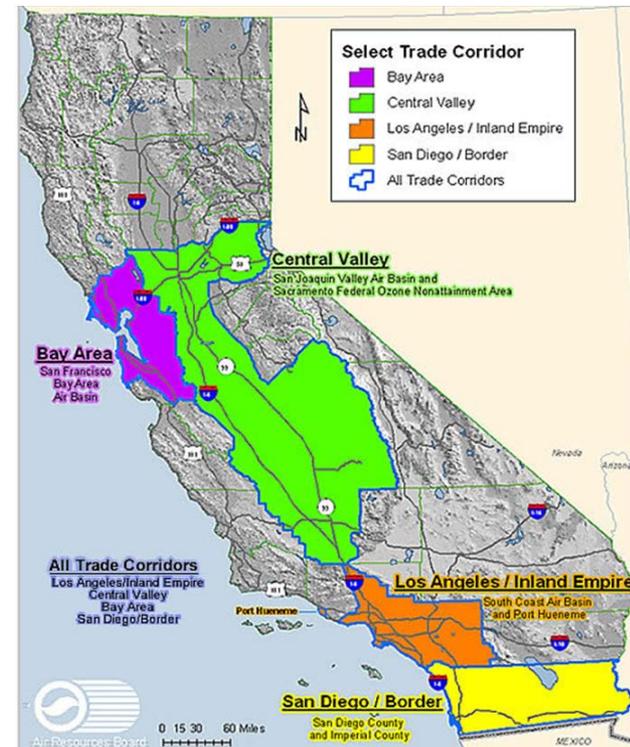
- 10,700 cleaner diesel and natural gas trucks
- 25 low-emission locomotives
- 37 ship berths w/ grid-based power
- 1 harbor craft upgrade
- Estimated emission reductions
 - 4.8 million lbs. PM
 - 132 million lbs. NOx

Goods Movement Online Database

Source Category



Trade Corridor



Community and Local Agency Input

- Public workshops – November 2012
- Local agency input
- Stakeholder input

Proposed Revisions to Program Guidelines



- Eligible projects
 - ▣ Regulatory requirements
 - ▣ Technology
 - ▣ Cost
- Program administration

Heavy Duty Diesel Trucks

- Revise eligibility requirements
 - ▣ Include Class 6
 - ▣ Model year revisions
 - ▣ Minimum mileage
- Require MY2010-emission levels
 - ▣ 83% cleaner than MY2007 (NO_x)
- Streamline implementation



Heavy Duty Diesel Trucks

Replacement – MY1994-2006 engines

- \$50K for a new Class 8 truck
- \$40K for a used Class 8 truck
- \$35K for a new or used Class 7 truck
- \$25K for a new Class 6 truck

Zero-Emission Trucks

- \$65K – \$105K combined funding
- Priority ranking
- Expedited processing

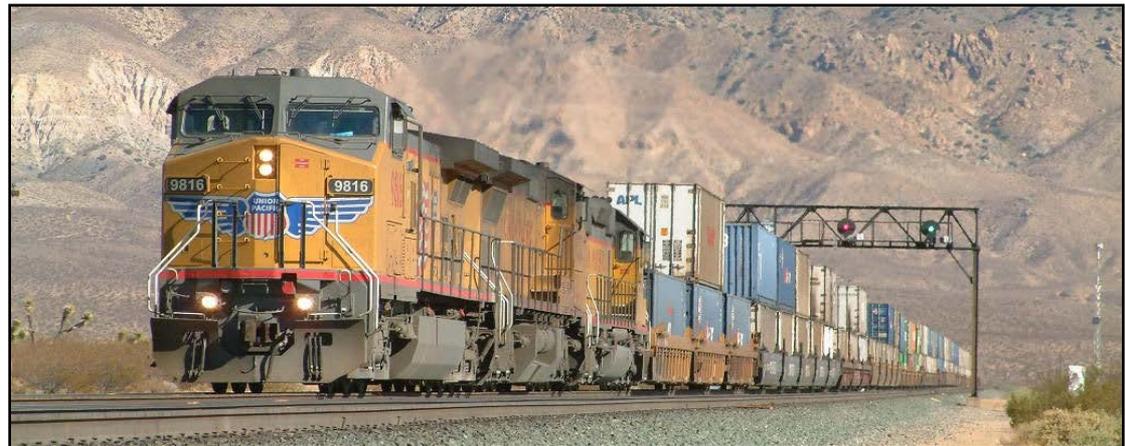
Prop 1B

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Locomotive and Rail Yards

- Require Tier 4 standard (available 2015)
 - ▣ 90 – 95% cleaner than uncontrolled
- Increase funding
- Operational flexibility



Locomotive and Rail Yards

Line-haul locomotive - upgrade to Tier 4

Up to the lower of:

- 70% or \$2.1M if operational by 2015, or
- 60% or \$1.8M if operational by 2016

Switcher/MHP locomotive - upgrade to Tier 4

Up to the lower of:

- 60% or \$1.8M if operational by 2015, or
- 50% or \$1.5M if operational by 2016

Ships at Berth and Cargo Handling Equipment

- Revise eligibility requirements
- Increase funding
 - ▣ Zero-emission technology
- Require a minimum cost-effectiveness



Ships at Berth and Cargo Handling Equipment

Grid-based shorepower

- Provide progress payments
- Up to \$3.5 million per berth

Rubber-tired gantry crane

- Up to \$500K
- Revise eligible cost

Commercial Harbor Craft

- Require Tier 3 standard or cleaner
- Increase funding
- Extend California operation boundary
- Require a minimum cost-effectiveness



Commercial Harbor Craft

Replacement or repower funding

- Lower of 50% or \$175/hp for tugs, tows, crew and supply vessels
- Lower of 80% or \$280/hp for other vessels

Hybrid power system

- Lower of 80% or \$100/hp
- Combine w/ replacement or repower funds
- All eligible vessel types

Program Administration

- Modifications to make Program more effective based on prior experience
- Streamlining:
 - ▣ Reduce documentation
 - ▣ Simplify reporting requirements
 - ▣ Allow solicitations prior to grant awards

Next Steps (Proposed)

FEB

- Notice of funding availability

MAR

- Spring Bond Sale

APR

- Local agency project applications

MAY

- Public review and ARB staff evaluation

JUN

- Board hearing to award grant funds

Staff Recommendations

- ❑ Adopt the 2013 update to the Guidelines
- ❑ Establish priorities for next rounds of funding as follows:
 - ❑ Trucks
 - ❑ Locomotives
 - ❑ Transition to zero-emission technologies