Board Hearing

Guidelines for Implementation

Proposition 1B: Goods Movement Emission Reduction Program

February 28, 2008 - Sacramento

Air Resources Board

California Environmental Protection Agency

Overview

- Statutory basics
- Program structure
  - Local agency projects
  - Equipment projects
- Program implementation
- Issues and recommendations

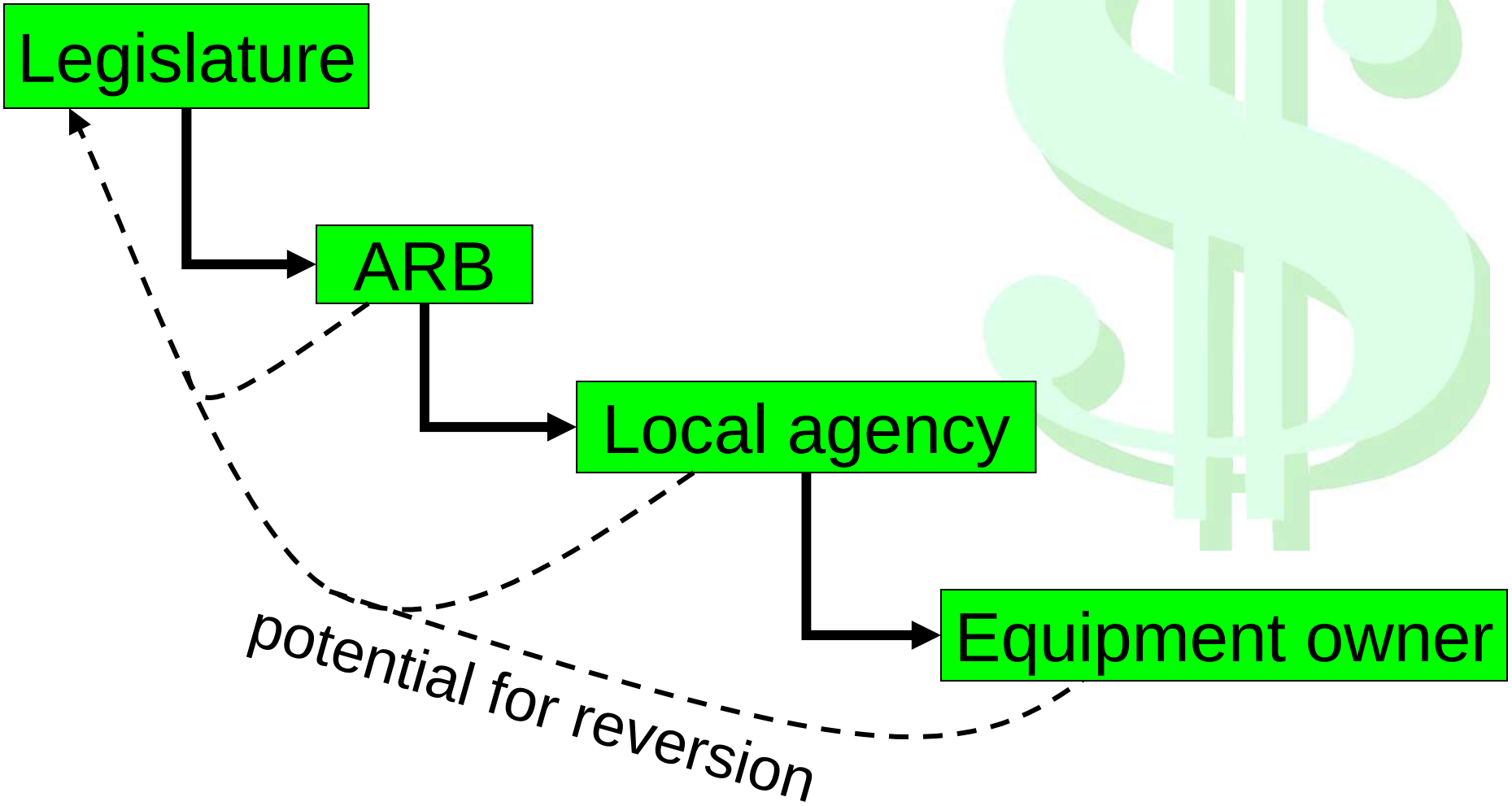
Goods Movement - Health Impacts

- Premature death
- Asthma and bronchitis
- Heart disease
- Increased cancer risk near facilities
  - Ports, rail yards, high truck traffic roads, distribution centers

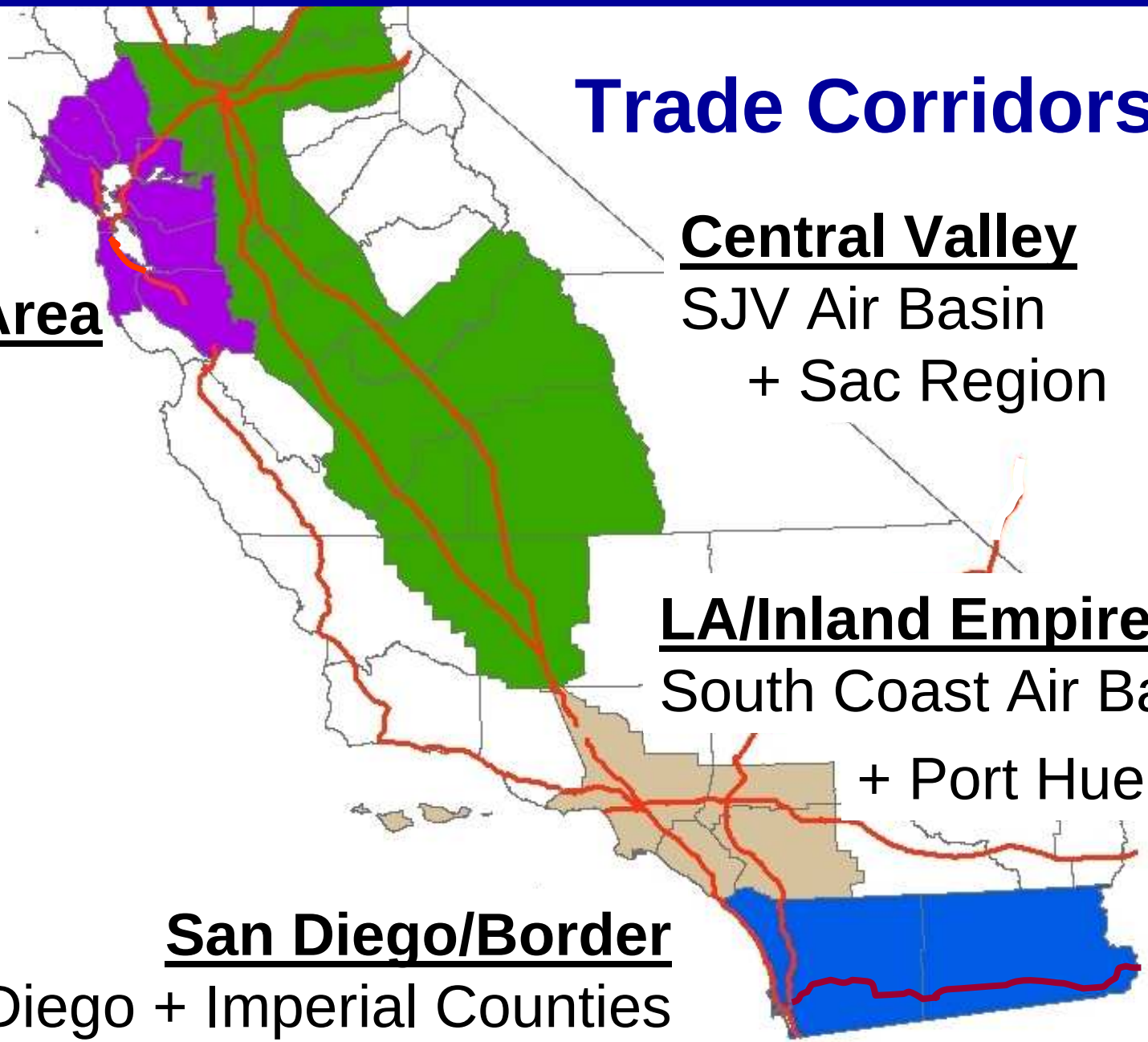
Program Authority

- Proposition 1B in 2006
  - $1 billion to reduce freight emissions
  - Reductions not required by law or regulation
- Governor's Executive Order S-02-07
- Implementing legislation
  - Senate Bill 88 and Assembly Bill 201
  - ARB to adopt Program Guidelines
  - First $250 million in FY2007-08 budget

Funding Flow



Basics



Trade Corridors

Central Valley
SJV Air Basin
+ Sac Region

Bay Area

LA/Inland Empire
South Coast Air Basin
+ Port Hueneme

San Diego/Border
San Diego + Imperial Counties

Projects Under SB 88

Reduce diesel PM, NOx, SOx, ROG

- Heavy diesel trucks
- Freight locomotives
- Commercial harbor craft
- Cargo equipment at ports and rail yards
- Shore power for cargo ships
- Truck stops/distribution centers

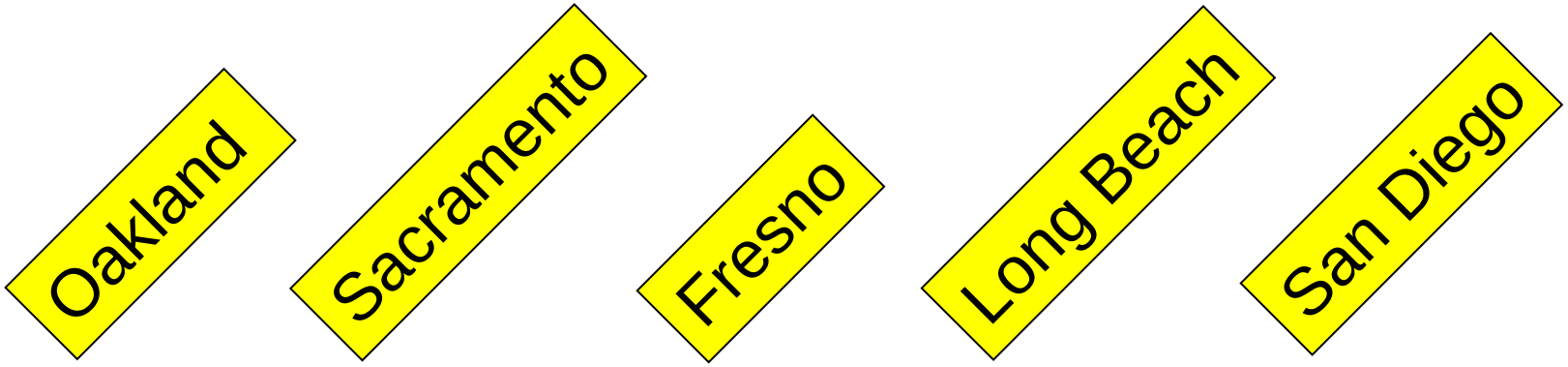
Funding Direction in SB 88

- Quickly reduce emissions and health risk in heavily impacted communities
- Projects compete within source category based on emission reductions
- Maximize non-State match $ and consider:

Emission reductions	Cost-effectiveness	Achieve AQ stds, cut toxics	Greenhouse gas reductions
Health benefits	Leveraging $	Regulatory/ SIP needs	Advanced technology
Category contribution	Reductions/ State $	Attainment status & risk	Location w/high emissions

Public Process to Develop Program

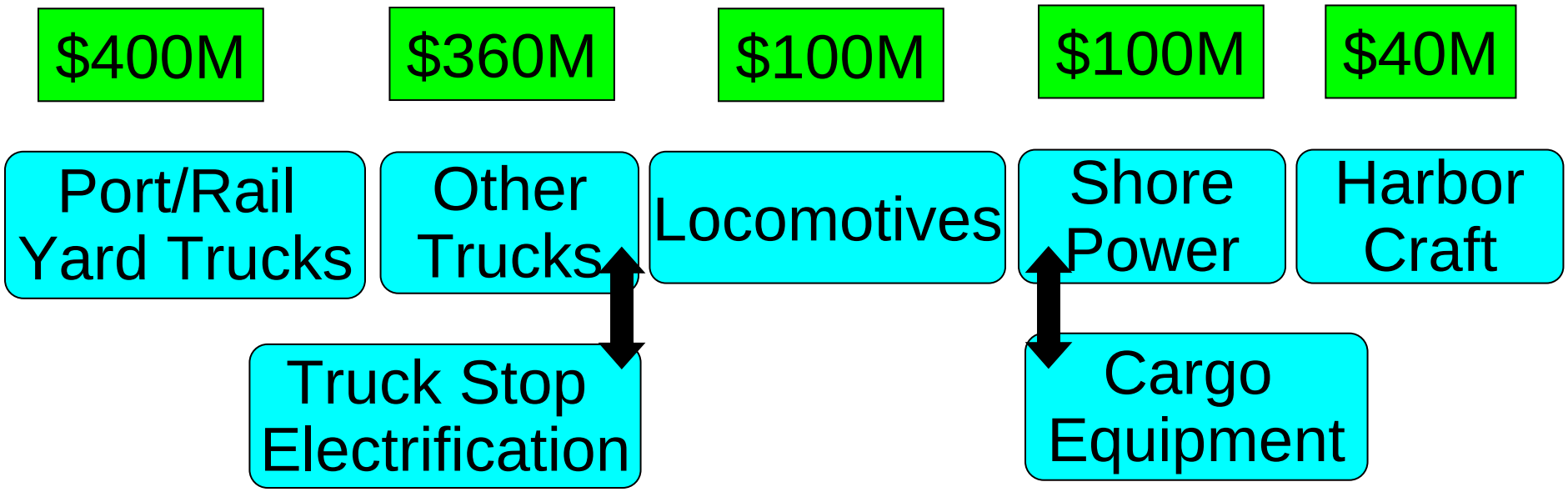
- Sep 2007: Draft concepts paper
- Oct 2007: 5 workshops
- Nov-Dec 2007: Stakeholder consultations
- Jan 2008: Staff report, 5 workshops
- Feb 2008: Proposed Guidelines, 1 workshop



January Staff Proposal
Corridor Funding Targets

	Percent in Each Corridor			
Factors	**LA/Inland Empire**	**Central Valley**	**Bay Area**	**San Diego/ Border**
Population (2007)	51	17	22	10
Freight emissions	45	26	20	9
SIP Needs	70	30	0	0
Average	*55%*	*25%*	*14%*	*6%*
Recommendation	**$550M**	**$250M**	**$140M**	**$60M**

Proposed Category Funding Targets*



** Includes administrative funding*

Equipment Project Options (FY2007-08 funds)

- Port/Rail Yard Trucks
  - *Retrofit*
  - *Repower*
  - *Replacement*
- Other Trucks
  - *Retrofit*
  - *Repower*
  - *Replacement*
  - *3-way truck transaction*
- Locomotives
  - *Switcher & Line-haul*
- Shore Power
  - *Grid & Non grid infrastructure*
- Harbor Craft
  - *Tugs/tows*
  - *Other vessels*
- Cargo Equipment
  - *Energy storage system*
- Truck Stop Electrification
  - *Electric infrastructure*

Specifications for Each Equipment Project Option

(updated for every funding cycle)

- Eligibility of existing equipment
- Equipment upgrade specifications and deadlines for completion
- Funding caps and project life
- Operating conditions and tracking devices
- Inspection and scrappage requirements
- Recordkeeping and reporting

Match Funding

- Bond funding caps ~ 1/5 to 1/2 of total cost
- Match ratio ranges from 5:1 to 1:1
- Match funds = remaining $ from private or public sources to cover project costs
- Projects using less State dollars have competitive advantage

(State $ = bond plus discretionary Moyer funds)

Local Agency Projects

Other Trucks

Equipment Project Options

Retrofit
Replacement

Harbor Craft

Equipment Project Option

Tugs/tows

Local Agency Applications

- Show qualifications as a local agency and ability to run a regional scale program
- By source category, describe/demonstrate:
  - Project proposal and schedule
  - Capacity to administer project, including scope
  - Project implementation plan
  - Full project funding and administration funds
  - Emission reductions and cost-effectiveness
  - Public participation

Administration Funding Caps

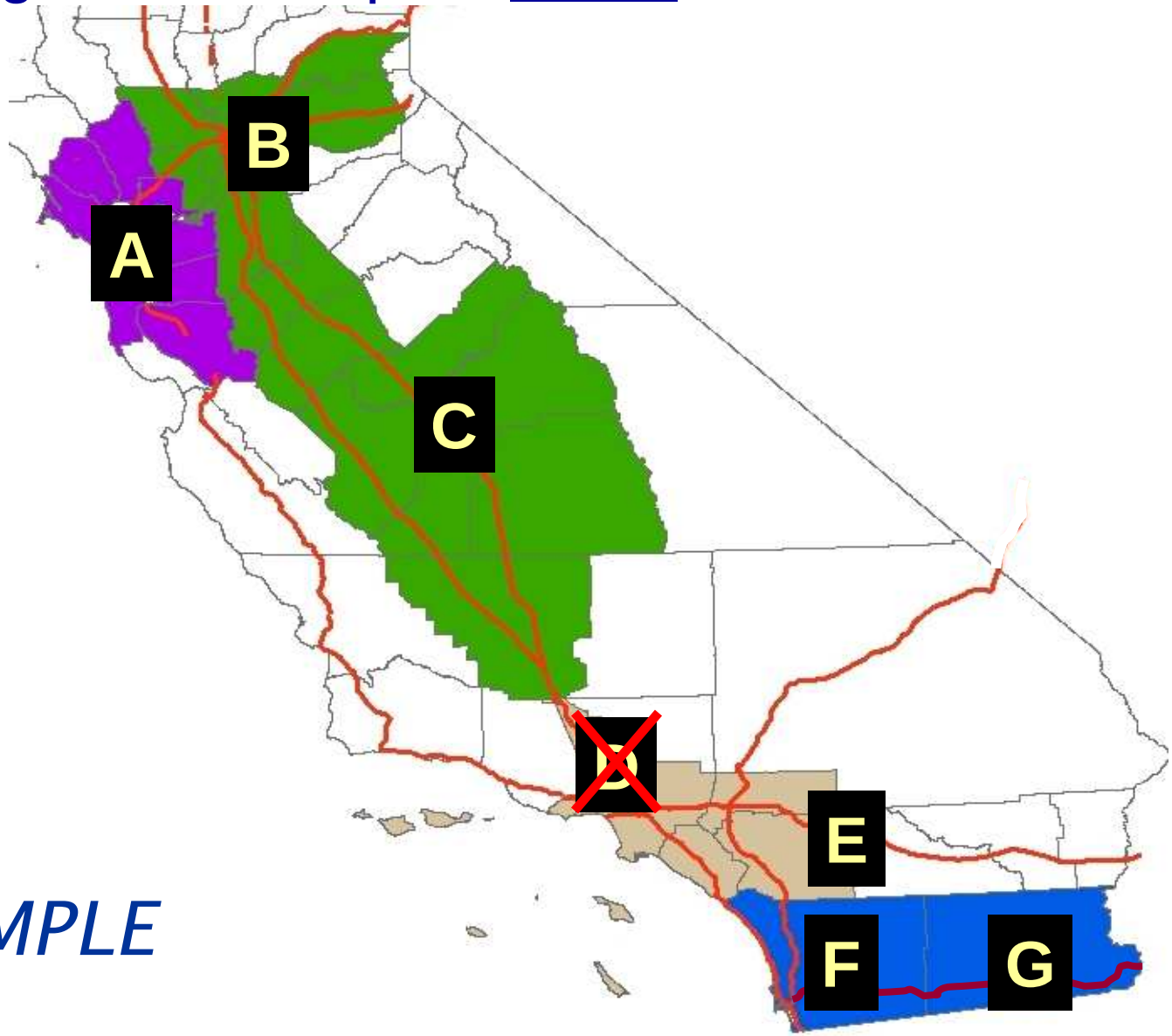
- Percent of grant available to local agency:
  - 2% for grid-based shore power
  - 3% for non-grid shore power, locomotives, cargo cranes, truck stop electrification
  - 4% for harbor craft
  - 5% for trucks
- May use across categories, subject to caps
- None for ports/agencies able to impose fees on freight movement sources

Selecting Local Agency Projects
ARB Process

- List of applications being considered
- Competitively ranked project list
  - Emission reductions in California
  - Reductions/State $
- Public workshops
- Recommended funding levels
- Board hearing to adopt projects for funding
- Grant agreements with local agencies

Category: Other Trucks

Local agencies compete <u>within</u> each trade corridor



EXAMPLE

Deadlines

For FY 2007-08

- From grant agreement with ARB:
  - 18 mos to sign contracts with equipment owners
- Then project completion/final payment in:

  1 yr for cargo cranes
  18 mos for trucks
  2 yrs for locomotives, non-grid shore power
  3 yrs for truck stop electrification
  4 yrs for harbor craft, grid-based shore power

Selecting Equipment Projects
Local Agency Process

By funding category

- Solicit applications from equipment owners
- Competitively rank projects *(like ARB process)*
- Submit request for funds to ARB
- Award funds to top project and continue down the list until funds are exhausted (remainder of list may be backup projects)
- Conduct pre-inspections and sign contracts

Category: Port Trucks
Corridor: LA/Inland Empire
Local Agency: Ports of LA/Long Beach

EXAMPLE

Public Participation

- Input on local proposals
- For local agency and equipment projects:
  - Solicitations and list of applications on web
  - Competitively ranked projects on web
  - Project status information on web
- Input on ARB funding decisions
- Annual progress reports on web
- Annual community meetings in corridors
- Input on updates to Guidelines

Reducing Greenhouse Gases

- Considered in category funding targets
- More efficient power: shore power, truck stop electrification
- Fuel savings: locomotive, cargo cranes
- Local agencies to promote truck efficiency retrofits

Accountability

- Verification of eligibility
- Equipment inspections
- Enforceable legal agreements
- Ongoing project evaluations
- Periodic audits (including financial)
- Regular reporting requirements

Implementation: Funding

Proposed Priorities for $250M in FY2007-08 Funds

- Eligible projects ready for quick implementation
- Truck retrofits to add diesel PM filters
- Truck replacements at the Ports of LA & Long Beach

Early Grant Recommendations

Funds	Air District	Equip. Project Options
$13.8M	South Coast	•Replace 130 port trucks •Replace 130 other trucks
$5.7M	SJ Valley	•Retrofit 450 trucks •Replace 60 trucks
$0.8M	Sac Metro	•Replace 15 trucks
$3.4M	Bay Area	•Retrofit 75 port trucks •Shore power at 2 berths
$1.3M	San Diego	•Retrofit/replace port trucks •Retrofit 115 Imperial trucks
$25.0M		

$1 Billion Program Benefits

- About 7,800 tons of diesel PM emissions
- And 190,000 tons of NOx emissions
- SOx emissions through shore power
- 1.3 million tons of carbon dioxide
- Greatest benefits in communities near goods movement facilities

Implementation: Schedule

Program Schedule

Feb 28	Board considers Guidelines, funding targets, and $25M in early grants
Mar	Notice of Funding availability issued
Mar/Apr	Local agency applications due
Apr/May	Public process on proposals
May 22	Board considers $225M in projects
May 22-Jun	Grant agreements signed
July +	Local agency implementation begins

Key ARB Requirements

Requirements	Program Benefits
Drayage Truck Rule	Early & Extra
Locomotive Agreements	Extra
Shore Power Rule	Early & Extra
Commercial Harbor Craft Rule	Early & Extra
Cargo Equipment Rule	Extra
Proposed Truck Rule	*Early & Extra*

Carl Moyer Incentive Program

- Draft guideline proposals are complementary for similar equipment
- For a single equipment project
  - Cannot combine funds from both programs (except for discretionary Moyer funds)
  - Cannot apply for bond funds with an active Moyer application
- Equipment owners are encouraged to evaluate the best funding “fit” for projects

Key Stakeholder Issues

- Equipment project specifications
- 100% California operation
- Project funding caps and life
- Early grant for South Coast
- Fund reversion
- Trade corridor funding targets

Impact of SIP Changes

	Percent in Each Corridor			
Factors	**LA/Inland Empire**	**Central Valley**	**Bay Area**	**San Diego/ Border**
Population (2007)	51	17	22	10
Freight emissions	35	37	20	9
SIP Needs	68	32	0	0
Average	*51%*	*29%*	*14%*	*6%*

Equipment Project Specifications

- Other Heavy Duty Trucks
  - Expand eligibility for oldest trucks
- Locomotives
  - Include locomotive safety device
- Shore Power
  - Align with approved regulation
- Harbor Craft
  - Add pro-rated option

Minor Technical Clarifications

- Align equipment project application requirements
- Clarify equipment specifications
- Ensure internal consistency

Recommendations

Direct staff to

- Evaluate updates to Guidelines for each appropriation
- Develop recommendations for first update to Guidelines
  - Feasibility of loan programs
  - Continuation of 100% CA operation, including tracking devices

Recommendations

Staff recommends that the Board

- Adopt the proposed Guidelines, which include funding targets for trade corridors and categories
- Approve priorities for FY2007-08 funds
- Adopt the list of local agency projects for $25 million in early grants