

Overview of South Coast AQMD Incentive Programs and Their Funding Structure



Fred Minassian

Technology Implementation Manager

California NGV Partnership (CNGVP)

Goals & Objectives

1. Promote RD&D and deployment and commercialization efforts to advance NG engine and fueling technology
2. Increase awareness and urge the active participation among local, state, and federal policymakers regarding the use of NGVs and NG as a low emission fuel
3. Promote availability of incentives and technical assistance for deployment of NGVs and infrastructure

Goals & Objectives

4. Encourage the purchase of dedicated NGVs by conducting public outreach for local, state, and federal purchasing programs
5. Establish as its goal the deployment of specific numbers and types of light-, medium-, and heavy-duty NGVs and infrastructure during the next 3, 5, and 10 years

Organization Structure

- The Partnership is led by a Steering Committee managed by the Chair
- The Vice-Chair manages the Steering Committee in absence of the Chair and will become the next Chair
- The Steering Committee is comprised of Voting and Associate members

Organization Structure

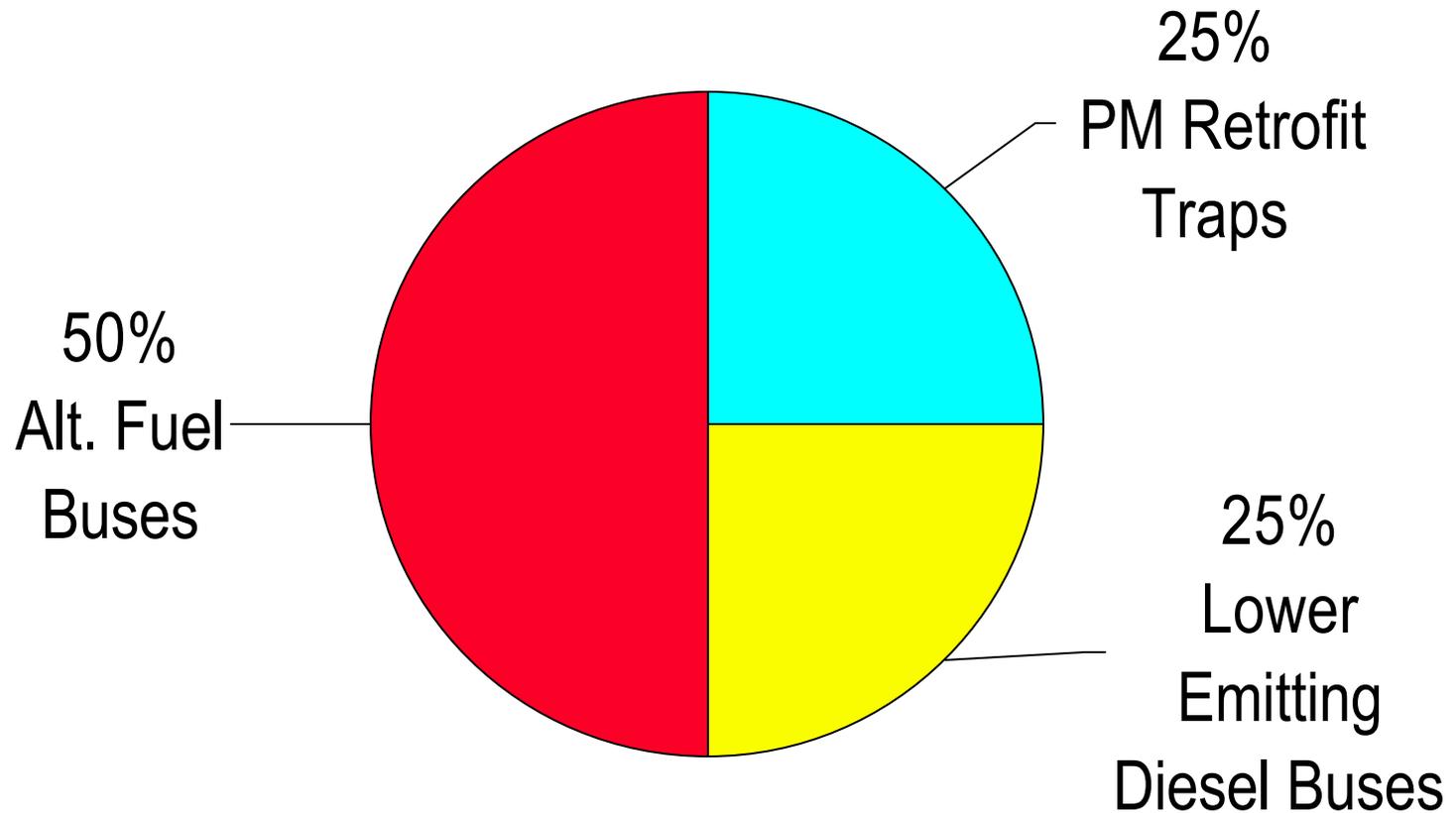
- Voting Members Decide on Partnership's activities, project plans, budget, and expenditures
- Associate Members Play a supporting role by providing specific technical expertise and input

Steering Committee Function

- Create, assign and direct specific tasks to Working Groups
- Decide on funding, policies, projects, and activities
- Ensure progress in achieving Partnership's goals
- Meet four times per year
- Contractual agreements and administrative tasks shall be carried out by SCAQMD Executive Officer and his designee after approval by the Steering Committee
- SCAQMD will provide administrative support

**Lower-Emission
School Bus Replacement
and PM Retrofit Program**

State's Funding Distribution



Recent School Bus Awards

Fiscal Year	New CNG Buses	New Diesel Buses	PM Traps	Total Award (MM\$)
00 - 01	102	67		\$17.9
01 - 02	39	20		\$6.8
00 - 02			1058	\$7.4
Total	141	87	1058	\$32.1

New Program Announcement

PA 2003 -05 (FY 2002 -2003)

- **TOTAL : \$10.9 Million (Additional Money)**
 - \$5 Million from EPA
 - \$4.4 Million State Clean Backup Generator (BuG) Program
 - \$1.5 Million CARB Lower-Emissions School Bus Program
 - All Funds Will Be Awarded in Compliance With AB1390 (Firebaugh)

Funding Targets

- \$7.9 Million for 67 new CNG Buses (Replacement)
 - 10% of Funds for CNG Infrastructure (Slow fill)
- \$3.0 Million for 430 PM Trap Retrofits (on 1994 and newer Diesel Buses)
- \$250,000 for PM Traps on Backup Generators in Schools (Private Schools can apply as well)

Carl Moyer Incentive Program Update

General Guidelines

- Assists in the Purchase of Low-Emission Heavy-duty Engine Technologies
- Requires 30% NO_x Reduction for New Vehicles and 15% NO_x Reduction for Repowers/Retrofits
- On-Road Applications - Diesel to Alternative Fuel Conversion Only
- Off-Road Applications - Diesel to Alternative-Fuel Conversion or to Diesel Conversion Allowed

Carl Moyer Program Available Funds FY 2001-02

SOURCE	YEAR	AMOUNT
CARB	FY 01-02	\$7,055,564
Rollover Funds	FY 99-00	\$13,000
	FY 00-01	\$4,865,562
Turnback Funds	FY 98-99	\$412,000
	FY 99-00	\$197,893
	FY 00-01	\$2,883,065
TOTAL		\$15,427,084

Proposal Received

On Road

Class 7-8	\$4,619,359
Transit	3,698,781
Others	<u>867,634</u>
	\$9,185,774

Off-Road

Other	19,499
Forklifts	39,808
Construction	<u>1,886,032</u>
	\$1,945,339

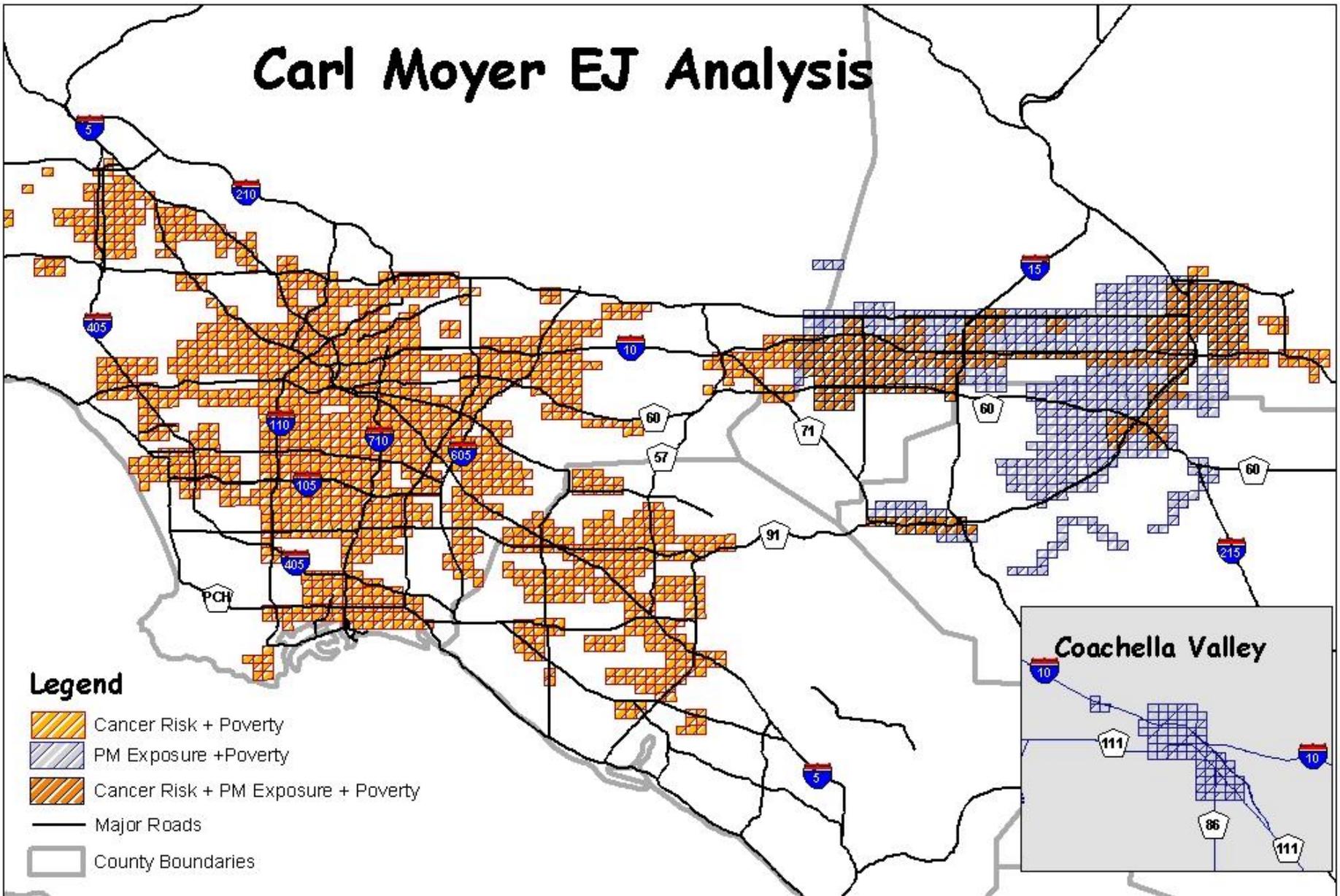
Marine Vessels	\$5,359,169
----------------	--------------------

GRAND TOTAL	\$16,490,282
--------------------	---------------------

Disproportional Impact Areas

- Poverty Level
 - Census Tracts with at least 10% of population under the poverty level
 - And Either -----
- Toxics Exposure
 - 1,000 in a million and above cancer risk
- PM Exposure
 - Highest 15% Concentration
 - Above 46 micrograms per cubic meter-annual avg.

Carl Moyer EJ Analysis



Legend

-  Cancer Risk + Poverty
-  PM Exposure + Poverty
-  Cancer Risk + PM Exposure + Poverty
-  Major Roads
-  County Boundaries

Funding Recommendations

AQMD Funding Category	AQMD Funding Budget	Total Project NOx Reductions (tons/year)	Total Project PM Reductions (tons/year)	Number of Vehicles ²	Total Awards
ON-ROAD	\$7,000,000				
Class 7/8 Trucks	\$3,000,000	64.91	1.73	119	\$2,563,503
Other	\$2,000,000	28.90	1.18	82	\$1,355,871
Transit Buses	\$2,000,000	94.97	4.35	166	\$1,360,000
On-Road Sub Total		188.78	7.25	367	\$5,279,373
OFF-ROAD	\$4,500,000				
Marine	\$1,000,000	38.85	2.35	21	\$1,754,409
Construction	\$2,000,000	82.90	7.92	21	\$1,692,146
Forklift	no minimum	2.74	0.00	7	\$47,371
Other	no minimum	0.63	-0.02	1	\$19,499
Off-Road Sub Total		125.13	10.25	50	\$3,513,425
Grand Total		313.90	17.50	417	\$8,792,798

Program Implementation Summary

Number of Vehicles by Category

	On-Road		Off-Road	
	Trucks	Buses	Marine	Other
FY 1998-99	104	120	8	128
FY 1999-00	58	143	26	67
FY 200-01	588	507		222
FY 2001-02	201	166	38	29
TOTAL	951	936	72	446

Summary of Overall Emissions Reductions

	On-Road		Off-Road	
	NOx	PM	NOx	PM
FY 1998-99	65		356	
FY 1999-00	327		213	
FY 200-01	467	16	60	1
FY 2001-02	187	7	126	10
TOTAL	1046	23	755	11

RFP Re-Release

- \$6.6 Million
- Closes September 10th, 5 p.m.
- Disproportional Impact
- Cost Effectiveness

Future Funding

- Prop. 40 approved March 2002
 - \$50,000,000
 - Distributed over 2 years
 - ~\$8 - 10,000,000 for AQMD
- Initiative 51 (November Ballot)
 - 30% of sale tax from automobiles
 - Permanent source of funding
 - \$26 million statewide

NO_x and PM Reduction Programs

NOx and PM Reduction Programs

- RECLAIM Executive Order Emissions Mitigation
 - NOx and CO
- RECLAIM Air Quality Investment Program (AQIP)
 - NOx
- Rule 1309.1 Priority Reserve
 - NOx, SOx, PM10, ROG, CO
- State Emissions Mitigation
 - NOx and PM
- State Backup Generator
 - NOx and PM

RECLAIM EO Emissions Mitigation

- Total Allocation: \$22.5 Million
- Board Approved Projects: \$12.1 Million
 - Marine Vessels: \$10.3 Million
 - Agricultural Pumps: \$1.8 Million
- Estimated Annual NO_x Emission Reduction: 770 Tons
- Estimated Annual PM Emission Reduction: 40 Tons
- 4-Year NO_x Cost Effectiveness: \$3,600/Ton

RECLAIM AQIP

- Total Allocation: \$2 Million
- Board Approved Marine Vessel Projects: \$1.5 Million
- Proposed School Bus Programs: \$0.5 Million
 - September 13 Board
- Marine Vessels
 - Estimated Annual NO_x Emission Reduction: 155 Tons
 - Estimated Annual PM Emission Reduction: 9 Tons
 - 4-Year NO_x Cost Effectiveness: \$2,700/Ton

Tug Boat



Tug Boat Engine



Rule 1309.1 Priority Reserve

- Total Allocation: \$10.5 Million
- Board Approved Projects
 - Microturbines: \$6.2 Million
 - Infrastructure: \$2 Million

State Emissions Mitigation

- Total CARB Allocation: \$29.5 Million
- Board Approved Projects: \$26.6 Million
 - Construction Equipment: \$11.2 Million
 - Marine Vessels: \$7 Million
 - On-Road: \$2.5 Million
 - Other (Forklifts, Infrastructure, GSE, etc.): \$5.9 Million
 - PM Trap Retrofit: \$3.1 Million
- Estimated Annual NO_x Emission Reduction: 910 Tons
- Estimated Annual PM Emission Reduction: 60 Tons
- 4-Year NO_x Cost Effectiveness: \$6,700/Ton

State Backup Generator

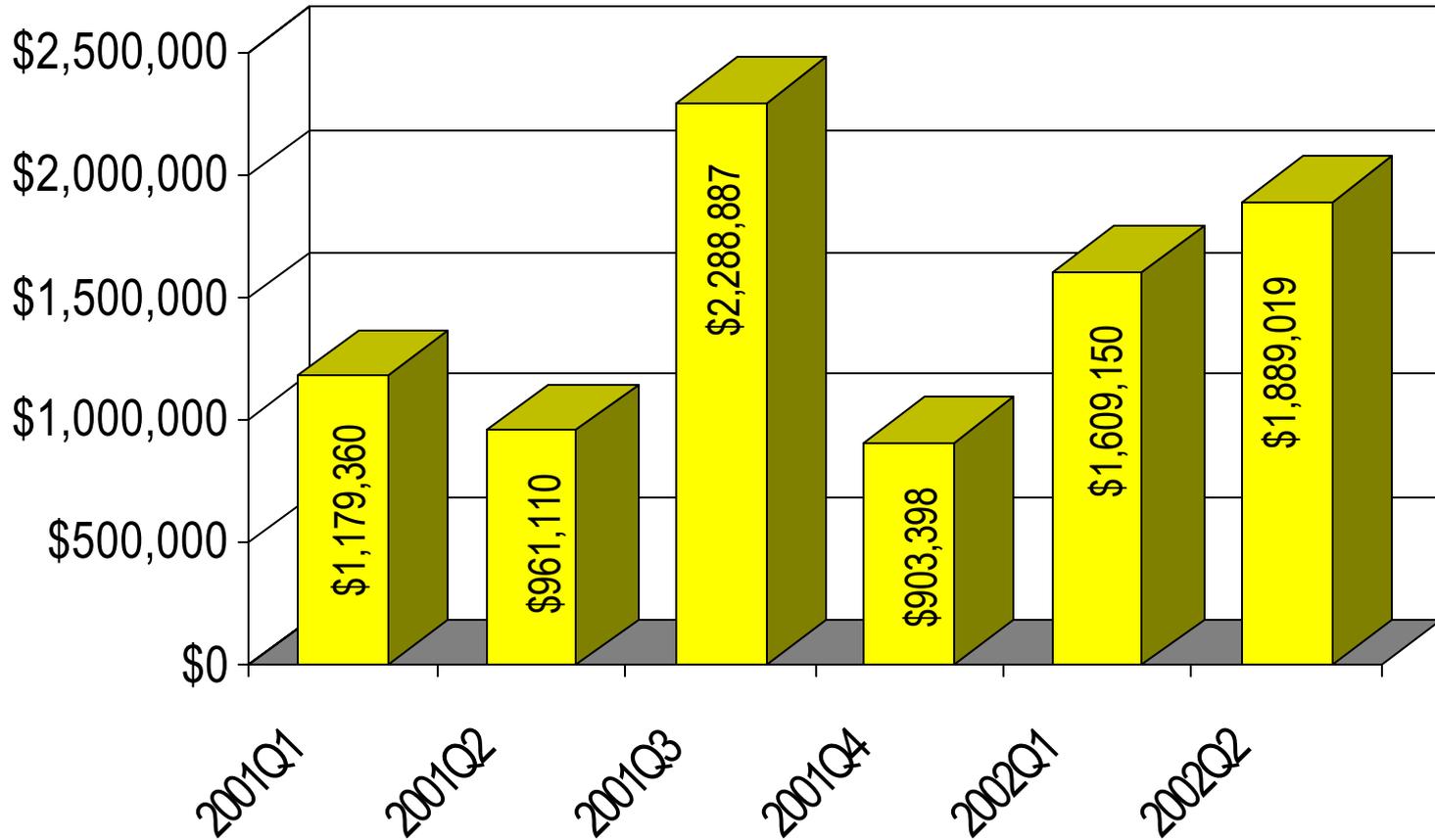
- Total CARB Allocation: \$5.6 Million
- Board Approved Projects
 - Ski Resort Equipment: \$1 Million
 - Snow Summit and Big Bear
 - Low-Emission Snow Making Machines
 - Generator PM Traps
- Lower-Emission School Bus Program: \$4.4 Million
 - Replacement
 - Retrofit
 - School Backup Generator PM Traps: \$0.25 Million

Rule 2202
Air Quality Investment
Program (AQIP)

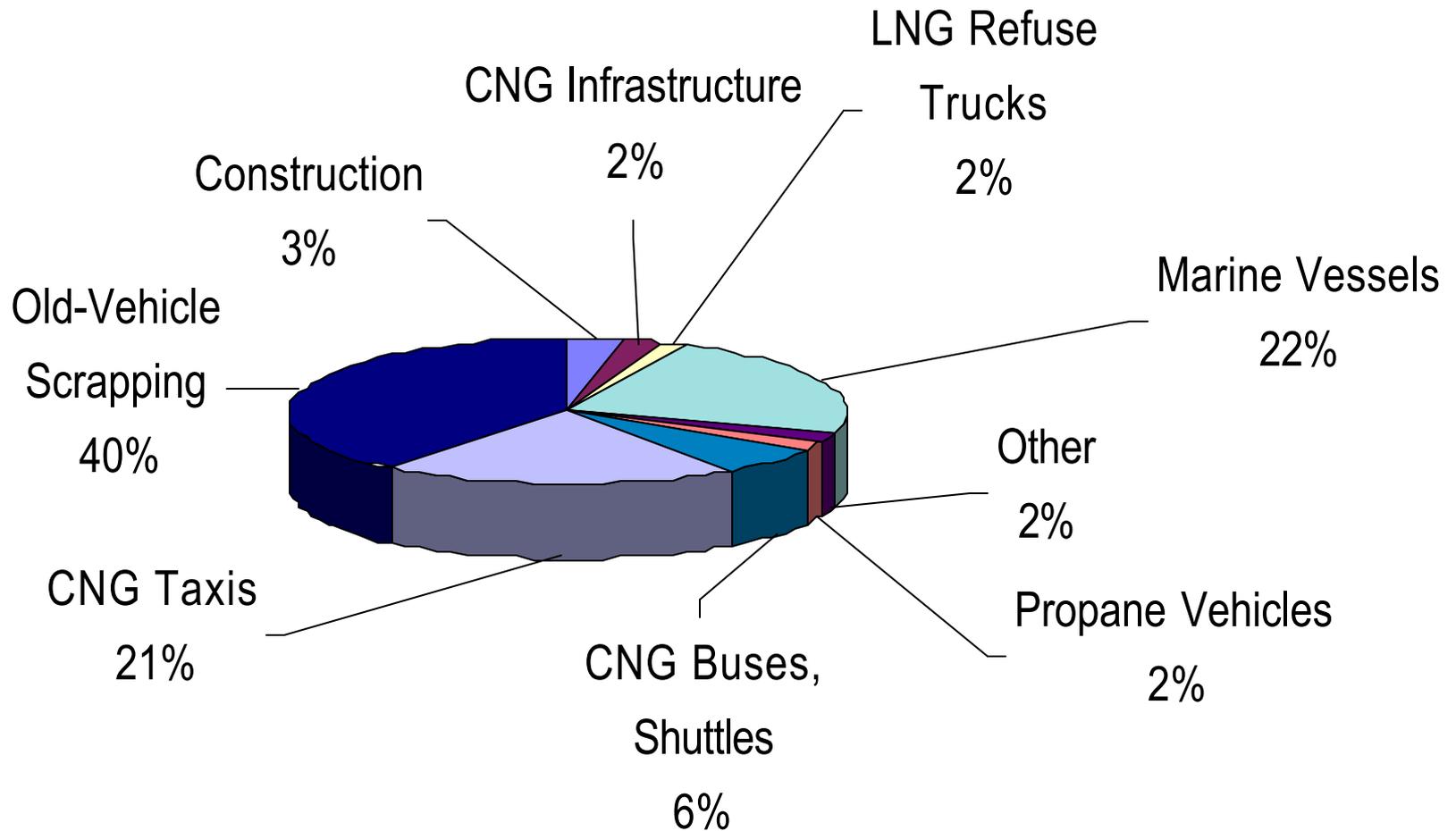
Air Quality Investment Program Background

- Rule 2202 employer compliance option
- Funds allocated to Program quarterly in varying amounts
- Revenue used to purchase emission reductions

AQIP Funds Collected



AQIP Fund Distribution



Zero Emission Vehicles Incentive Program

ZEV Grant Program

- \$8.8 Million Available Statewide
- Reduces incremental cost of ZEVs
- Up to \$9,000 per new or substantially upgraded ZEV through 2002
- SCAQMD Local Administration approved (\$2M initial allocation)
- Vehicles must be freeway capable; CARB certified
- All applicants eligible, including federal fleets 1/1/02

Vehicle Availability

- Limited “full-function” electric vehicles in the near term which qualify for incentive.
 - Toyota Rav4 EV (retail)
 - Nissan Altra (selected fleets)
 - Ford Th!nk City (US version Fall 2002)
 - DC eMotion mobility (2003 car-sharing)
- City electric vehicles (CEVs) demonstrations
- Many neighborhood electric vehicle (NEV) models

Example of Eligible ZEVs

