



AGENDA: 4

Bay Area Air Quality Management District Mobile Source Committee

January 23, 2014

**CMP projects with proposed grant awards
over \$100,000**

**Damian Breen
Deputy Air Pollution Control Officer**

Overview

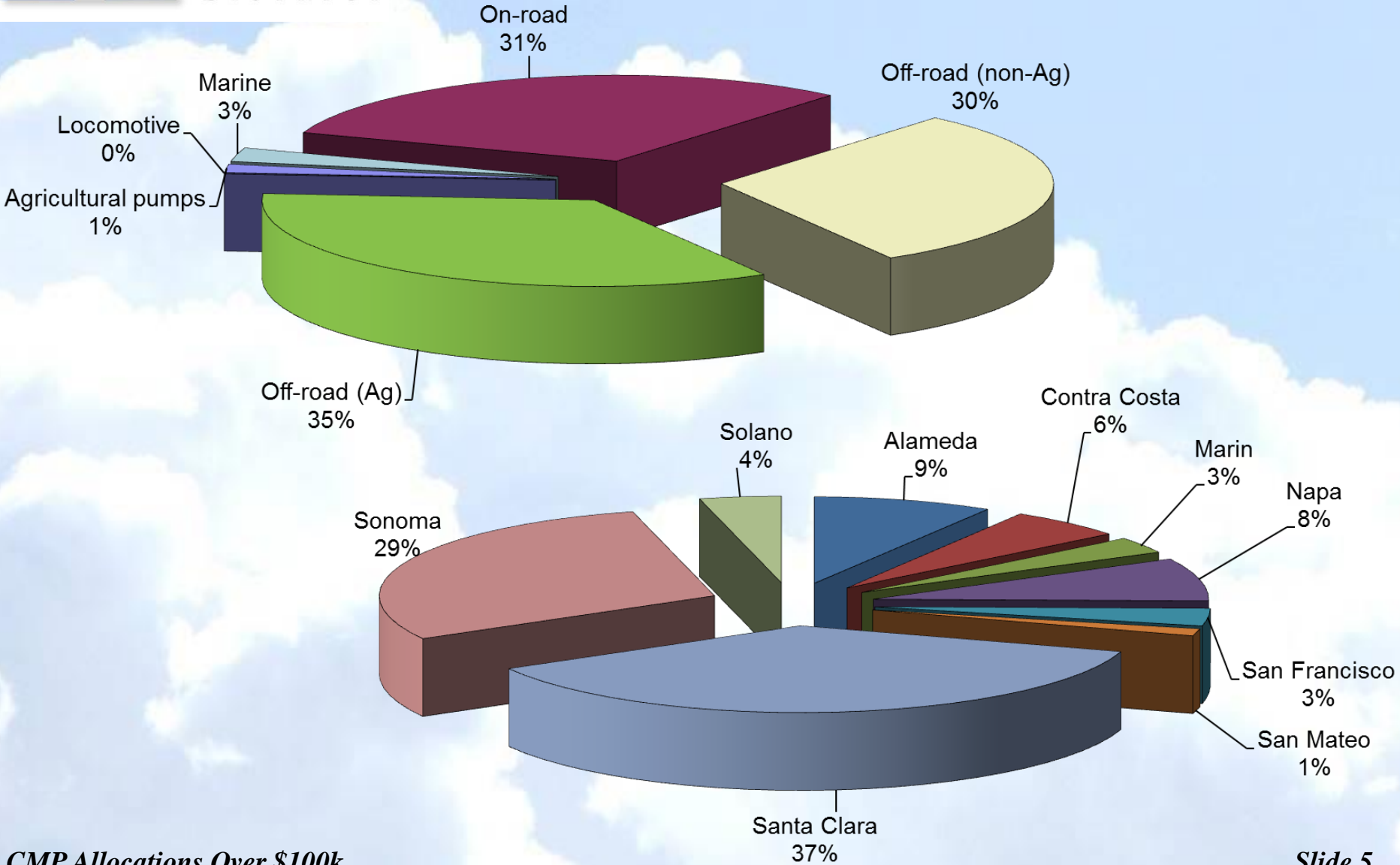
- Background
- Proposed Projects
- Recommendations

- **Carl Moyer Program (CMP)**
 - Created in 1998 to reduce emissions from heavy-duty engines
 - Voluntary program that funds surplus emission reductions
- **Mobile Source Incentive Fund (MSIF)**
 - AB 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
 - CMP projects eligible for MSIF funding
- **In 2013, AB 8 reauthorized CMP & MSIF funding to 2024**

- On **2/4/13** District Board of Directors:
 - Approved participation in CMP Year 15
 - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000
- **CMP Project Recommendations over \$100k**
 - 5 Projects to reduce emissions from: 20 off-road tractors, 2 off-road loaders, and 3 airport baggage tows
 - \$1,286,674 in total awards
 - Emission reductions: Over 5.5 TPY of criteria pollutants

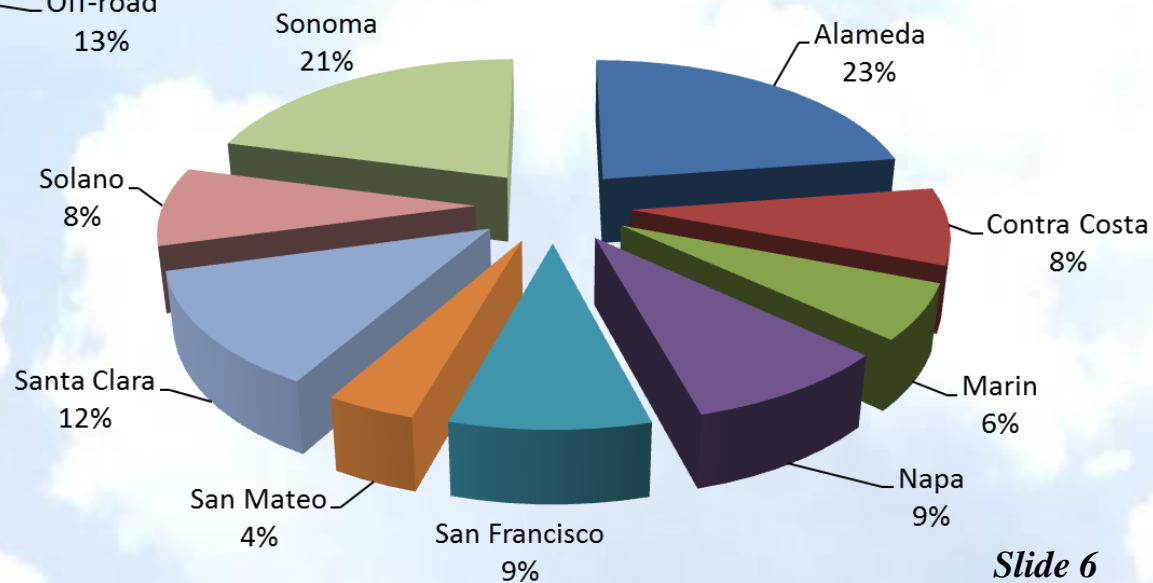
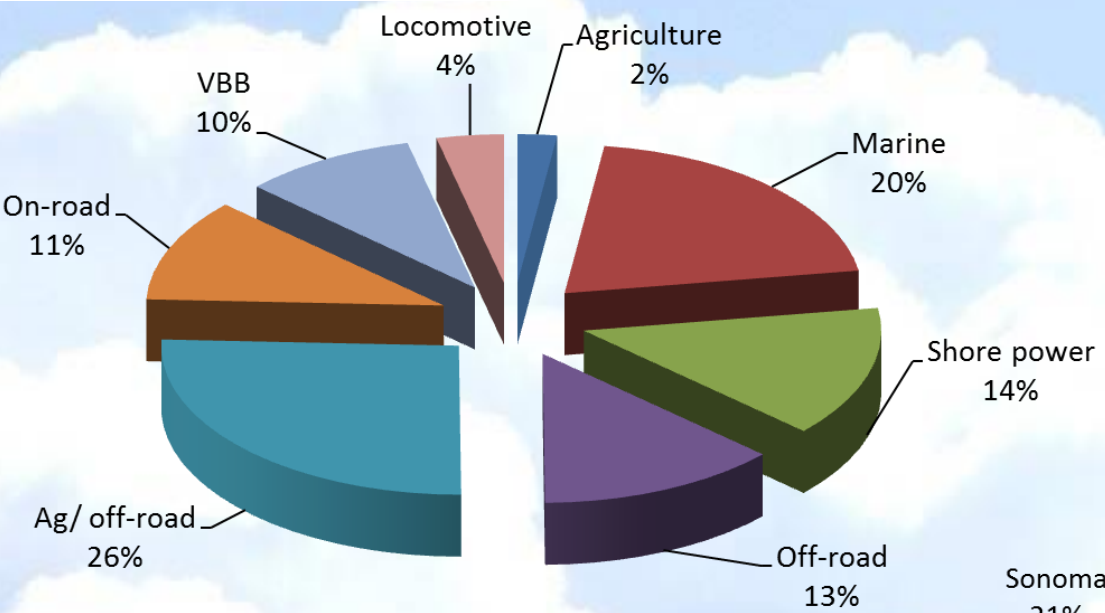


CMP/ MSIF and VIP Funds Awarded as of 1/7/14





CMP/ MSIF and VIP Funds Awarded CMP Years 11-15



Recommendations

Request the Committee recommend the Board of Directors:

1. Approve Carl Moyer Program projects with proposed grant awards over \$100,000.
2. Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program projects.



Bay Area Air Quality Management District Mobile Source Committee

January 23, 2014

Participation in Year 16 of the Carl Moyer Program

**Damian Breen
Deputy Air Pollution Control Officer**

Overview

- Background
- CMP Year 16 (fiscal year 2013-2014)
- Recommendations

Funding Sources

- **Carl Moyer Program (CMP)**
 - Created in 1998 to reduce emissions from heavy-duty engines
 - Voluntary program that funds surplus emission reductions
- **Mobile Source Incentive Fund (MSIF)**
 - AB 923 allowed \$2 motor vehicle registration fee surcharge (12/04)
 - CMP projects eligible for MSIF funding
- **In 2013, AB 8 reauthorized CMP & MSIF funding to 2024**

Year 16 Funding

- ARB allocation
 - \$56.5 million statewide
 - Up to \$10.1 million for the Bay Area
 - 5% allocation for administrative costs
 - Up to \$1.5 million in required match
- Proposed \$5 million MSIF allocation for matching funds and additional CMP projects

Year 16 Implementation

- 2011 ARB CMP Guidelines
- Impacted Communities
 - Priority given to projects reducing emissions in highly impacted communities
 - At least 50% of funds for projects in most impacted areas
- Projects over \$100k brought to the Board for approval
- Schedule
 - First-come, first served process
 - Call for project applications summer 2014
 - Funds must be obligated by June 2015, and invoices paid by June 2016

Recommendations

Request the Committee recommend the Board of Directors:

1. Adopt a resolution authorizing the Executive Officer/APCO to execute all necessary agreements with the California Air Resources Board (ARB) relating to the Air District's receipt of Carl Moyer Program funds for fiscal year 2013-2014 (Program Year 16).
2. Allocate \$5 million in Mobile Source Incentive Funding to provide the required match funding and additional monies for projects eligible for funding under the Carl Moyer Program.

Bay Area Air Quality Management District Mobile Source Committee

January 23, 2014

Overview of Transportation Fund for Clean Air (TFCA) Policies

Damian Breen
Deputy Air Pollution Control Officer

- Background
- Historical TFCA Distributions & FYE2014 C/E
- TFCA Policy Overview and Key Policy Drivers
- Summary of Historical TFCA Policies and Methodology for Calculating C/E
- Next Steps

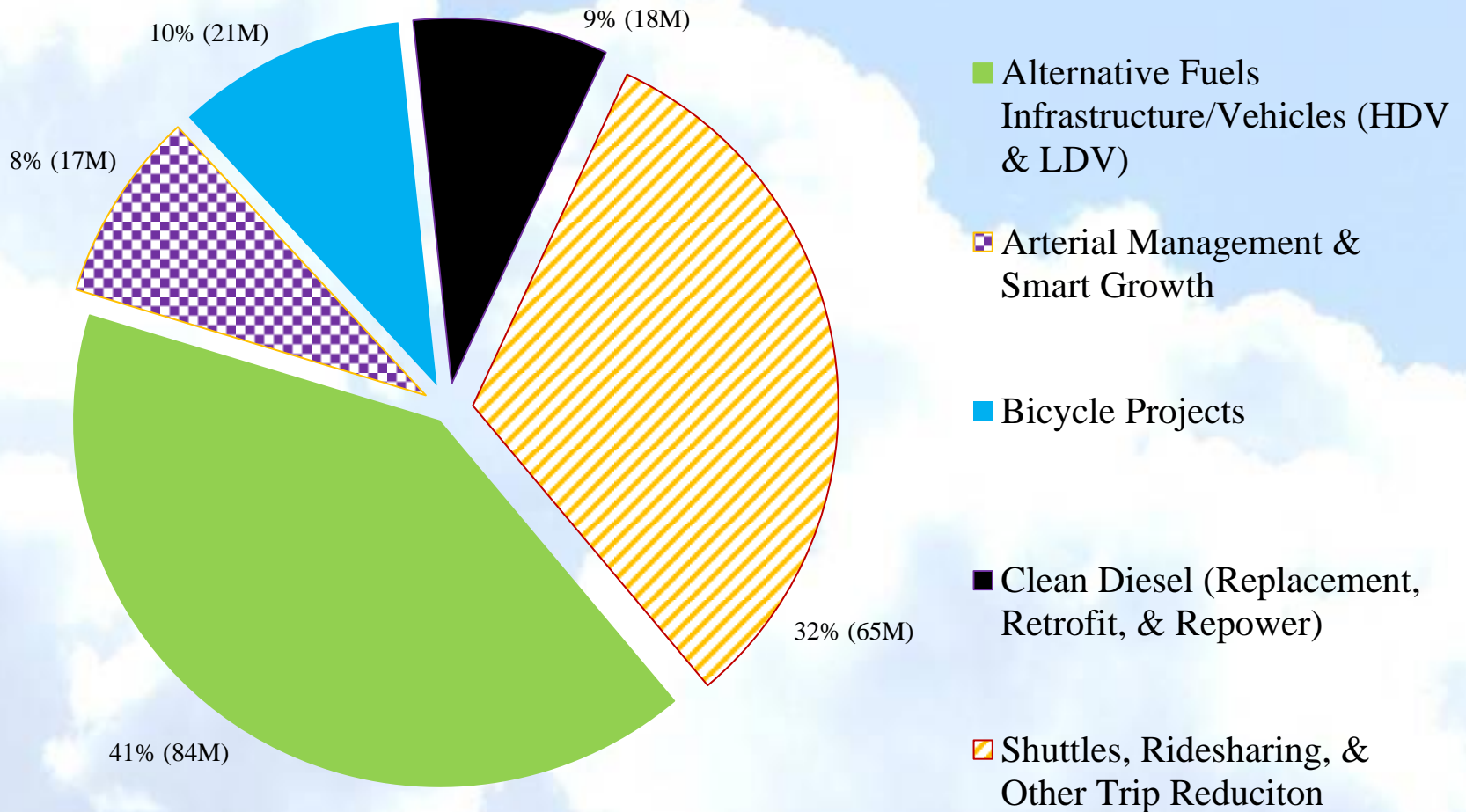
Background

Transportation Fund for Clean Air (TFCA)

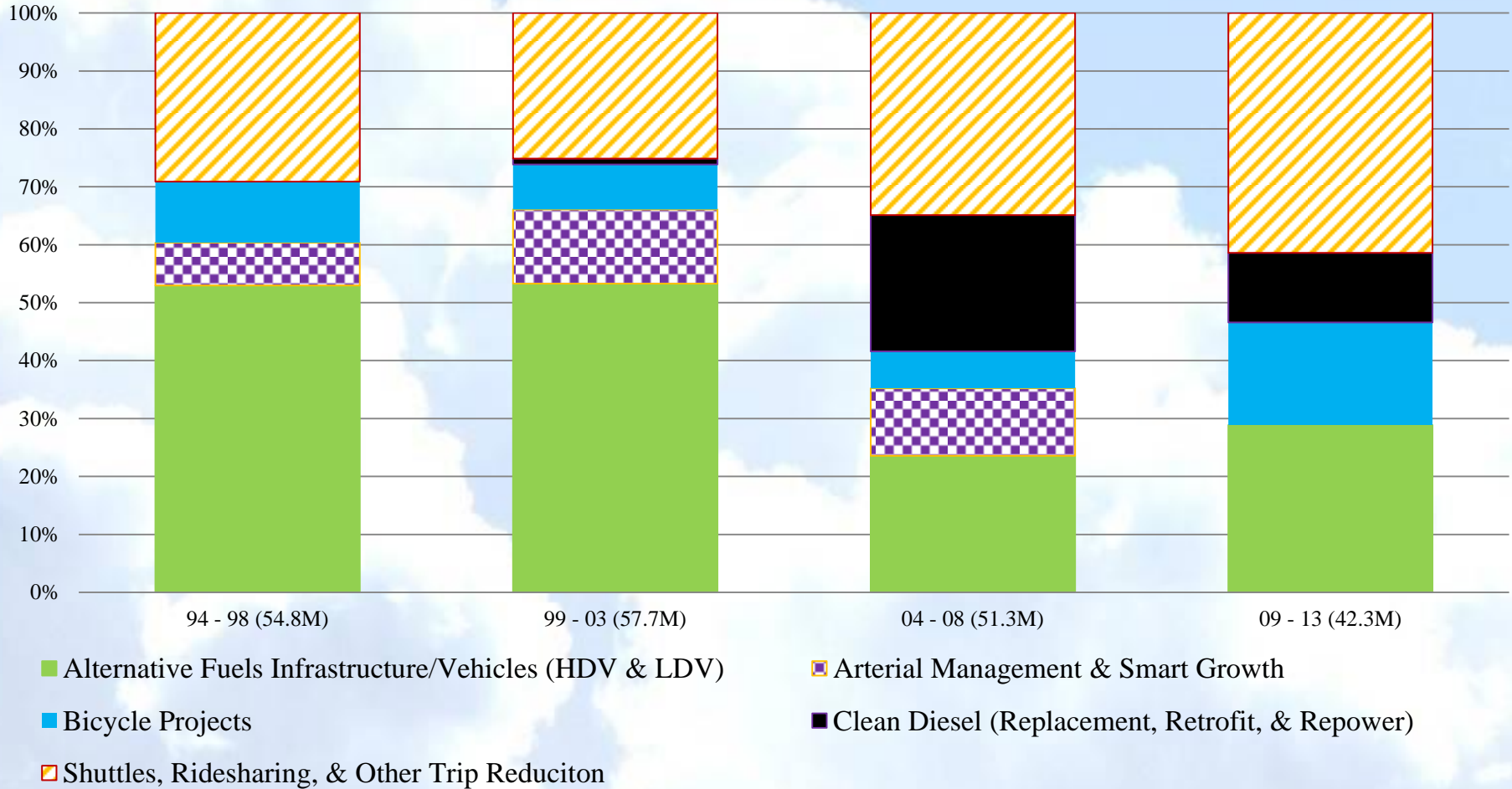
Since 1992, funding from \$4 surcharge on Bay Area motor vehicles for projects that reduce on-road vehicle emissions

- 60% of TFCA funds awarded directly by the Air District:
 - Air District led projects and programs (Spare the Air, Enhanced Mobile Source Enforcement & Commuter Benefits Project)
 - TFCA Regional Fund Program (competitive program)
- Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies (County Program Manager Fund)
- Board adopts policies and evaluation criteria annually
- TFCA is the sole funding source that can be used to fund **trip reduction and light-duty alternative fuel vehicle-based** projects

Allocation of TFCA Funding (60%) 1992 – 2013 (\$206M)



Allocation of TFCA Funding (% of Total) 1994 – 2013



TFCA Policy Overview

- Policies govern the following:
 - Applicant eligibility
 - Project eligibility parameters
 - Cost Effectiveness (C/E) in reducing emissions
- TFCA Policies have remained very similar over time
- Over the past 20 years, TFCA program has evolved; refinements reflect improvements resulting from:
 - Lessons learned from 20 years of experience
 - Input received from public and other stakeholders
 - Effort to align TFCA methodology for evaluating cost-effectiveness with changes overtime to other District grant programs

Project Useful Life (PUL) & Cost Effectiveness (C/E)

- **C/E thresholds have varied (\$/ton):**
 - Baseline TFCA C/E range = \$50,000 - \$120,000
 - Exceptions for C/E Baseline:
 - Alt. Fuel Vehicle Projects (FYE 1999 - Present) = Max. \$90,000 - \$500,000
 - Demonstration Projects (2009 – Present) = Max. \$500,000
- **PUL limits have varied (1998 – Present):**
 - Light-Duty Vehicle projects: 3 – 7 years
 - Heavy-Duty Vehicle projects: 5 – 20+ years
 - Demonstration projects: 3 – 20+ years
 - Bicycle projects: 10 – 20 years

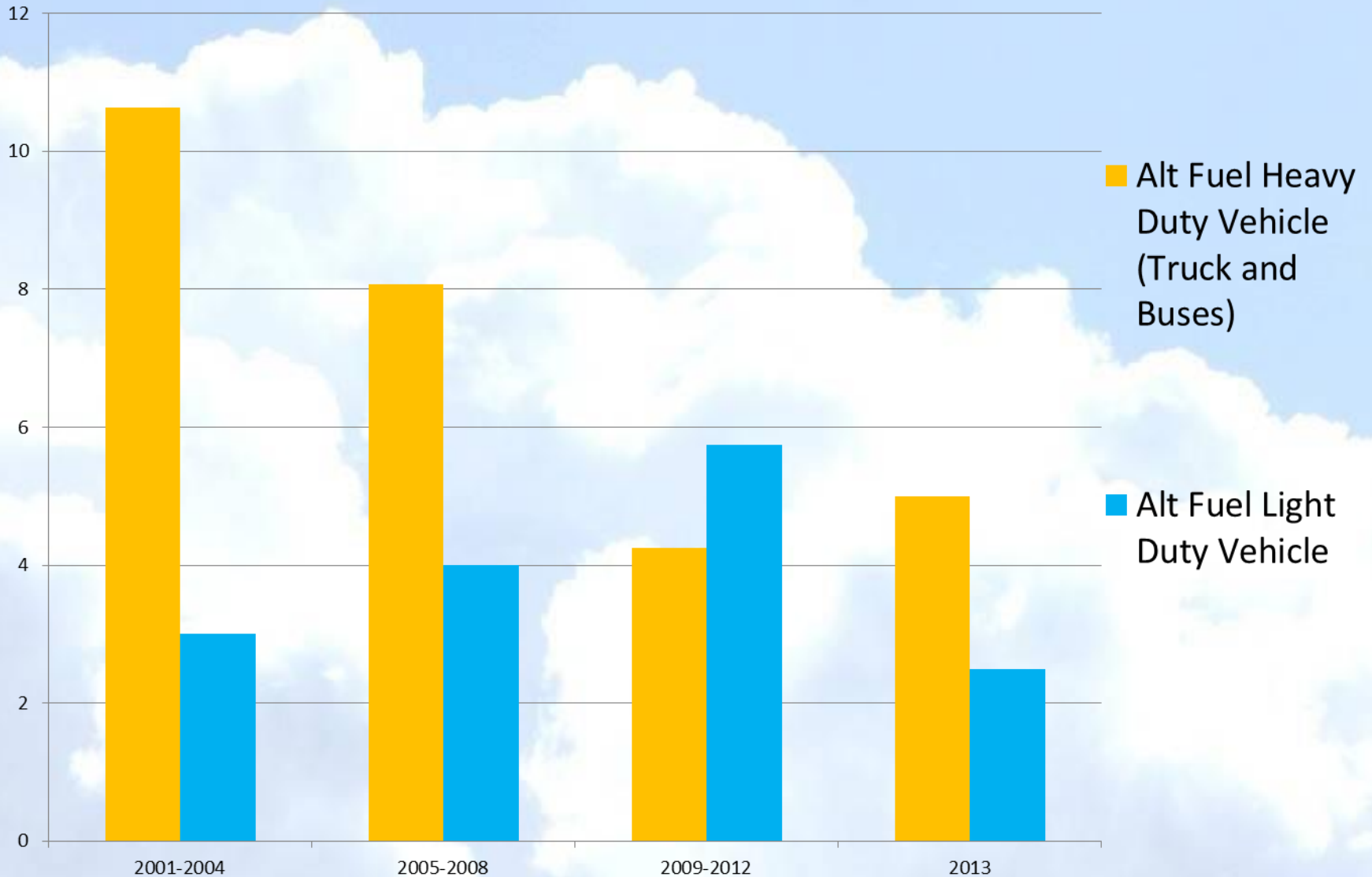
Key Policy Drivers

- New Air Resources Board (ARB) Diesel engine regulations
- Change in state and federal engine emissions standards
- Changes in methodology for calculating C/E from Carl Moyer and other ARB programs
- Identification of diesel PM as a Toxic Air Contaminant (TAC)
- Community Air Risk Evaluation (CARE) program and Board's direction to prioritize funding for projects in highly impacted Bay Area communities

Summary of C/E and PUL Limits FYE 2014 Projects and Programs

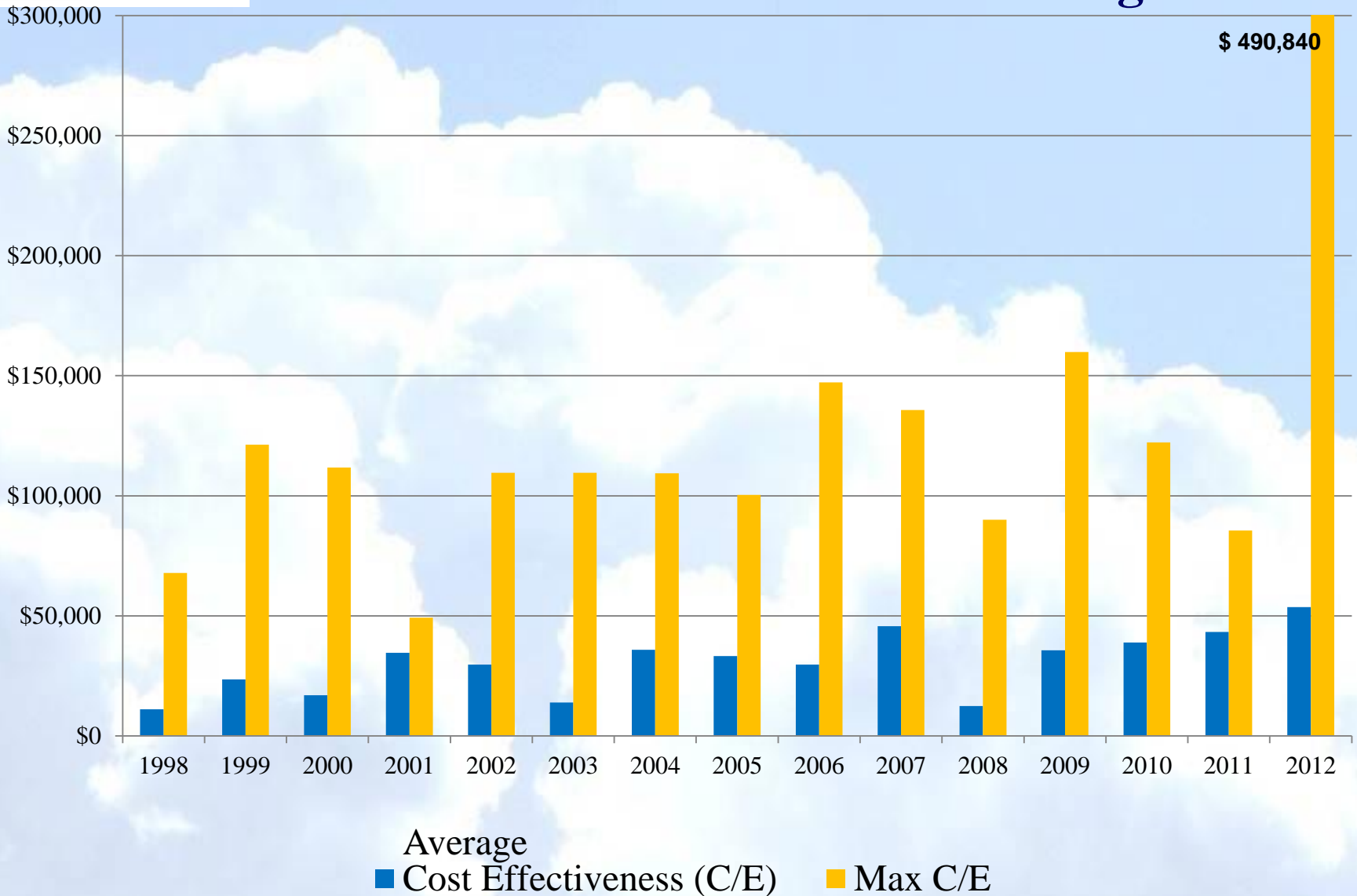
Air District Sponsored Projects and Programs	MAX. C/E (per ton)	PUL (years)
Regional Bicycle Sharing Pilot	\$500,000	5
Rebates for Purchase of Plug-in Electric Vehicles (PEV) (for Public Agencies)	\$450,000	3
Rebates for Purchase of PEVs (for Bay Area Residents and Private Fleets)	\$250,000	2
PEV Infrastructure	\$250,000	2
Shuttle & Ridesharing (Pilot in CARE Area)	\$500,000	1
Shuttle & Ridesharing (Pilot)	\$125,000	1
Shuttle & Ridesharing (Ongoing)	\$90,000	1
Bike Racks and Lockers	\$90,000	10

Historical Average PUL 2001 – 2013



Historical Cost Effectiveness

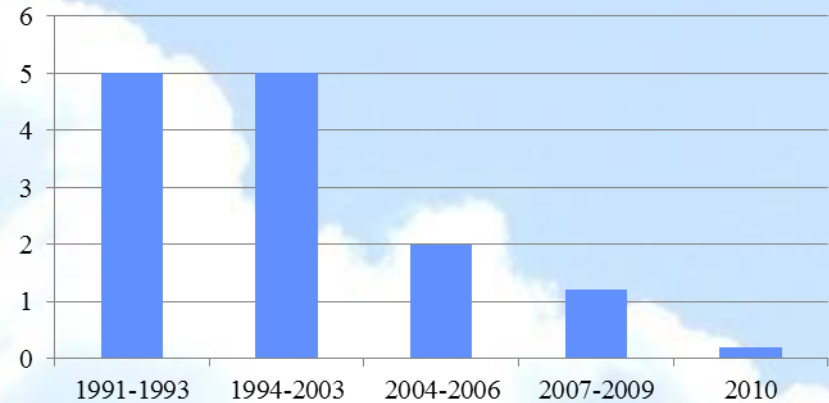
Average and Max



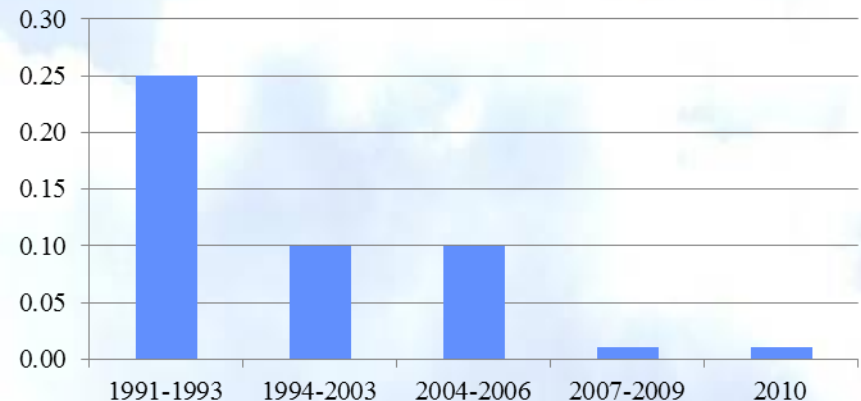
Emissions Standards for Heavy- Duty Diesel Vehicles (1991 –Present)

- Engine standards have become progressively more stringent
- Standard is used to determine baseline for calculating C/E
- The more stringent the standard (baseline), the fewer emissions that are “reduced”
- More stringent standards cause C/E to increase if PUL/usage and \$ awarded remain constant

NO_x (g/bhp-hr)

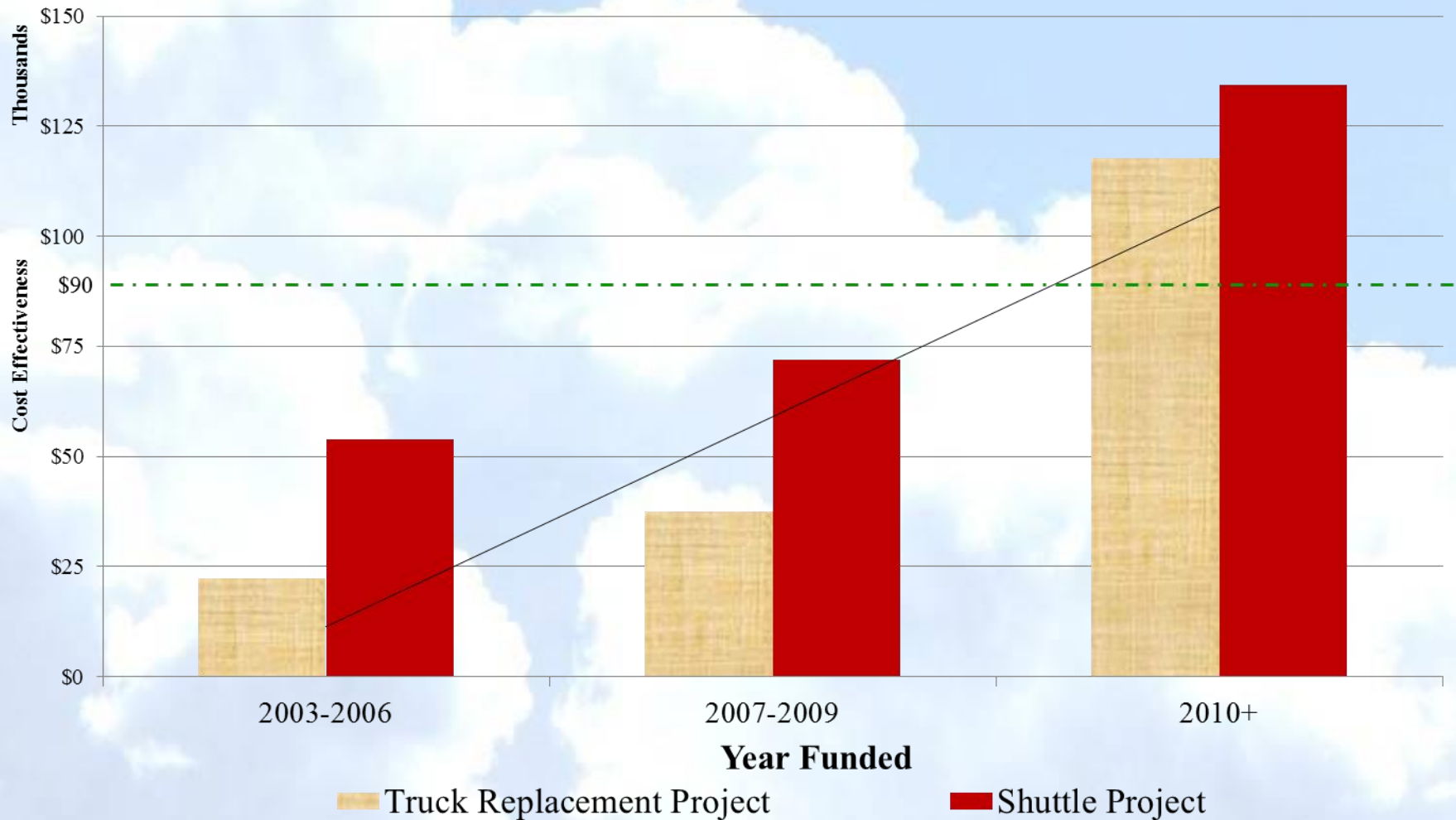


PM (g/bhp-hr)



EXAMPLE: Effect of Changing Emissions Standards on C/E

(For natural gas truck and shuttle projects funded in 2003)



Summary and Next Steps

- Standards have become progressively more stringent; cannot provide same funding levels at the same C/E.
- To maintain same max. C/E levels: Options: 1) reduce project funding amounts, 2) restrict funding to high usage scenarios.
- New regulations further limit opportunities to provide funding to all of the same project categories as were previously funded.
- Next Steps:
 - Continue to explore opportunities to streamline and improve TFCA program and to ensure Policies prioritize funding for projects that maximize public health benefits.
 - Return to committee in May with recommendations for FYE 2015 policies and funding allocation.