AQMP Update

STMPR Advisory Group Meeting

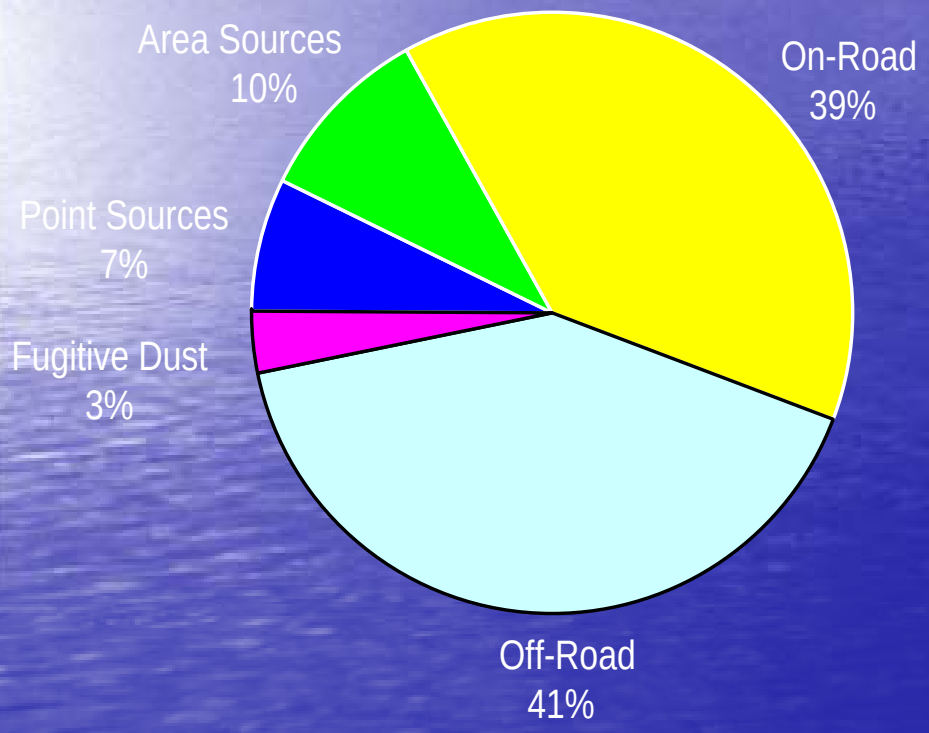
March 14, 2007

Proposed Modifications to Draft 2007 AQMP

- Emissions Inventory
- Attainment Demonstration
  - PM2.5 Standard
  - 8-Hour Ozone Standard
- Control Strategy

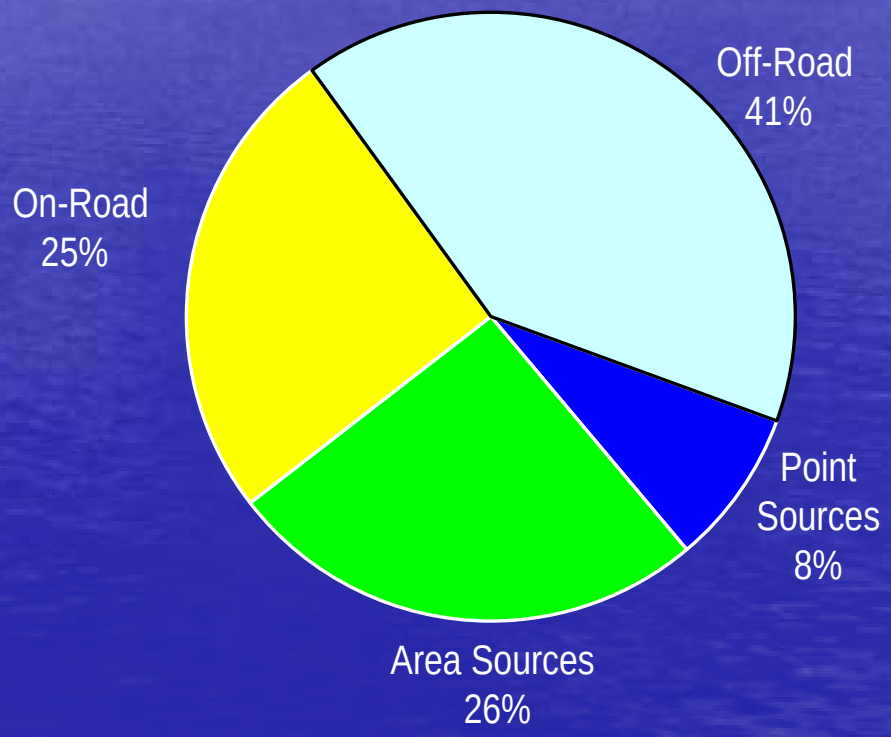
Emissions by Major Category

PM2.5, 2014



(NOx, SOx, PM2.5)

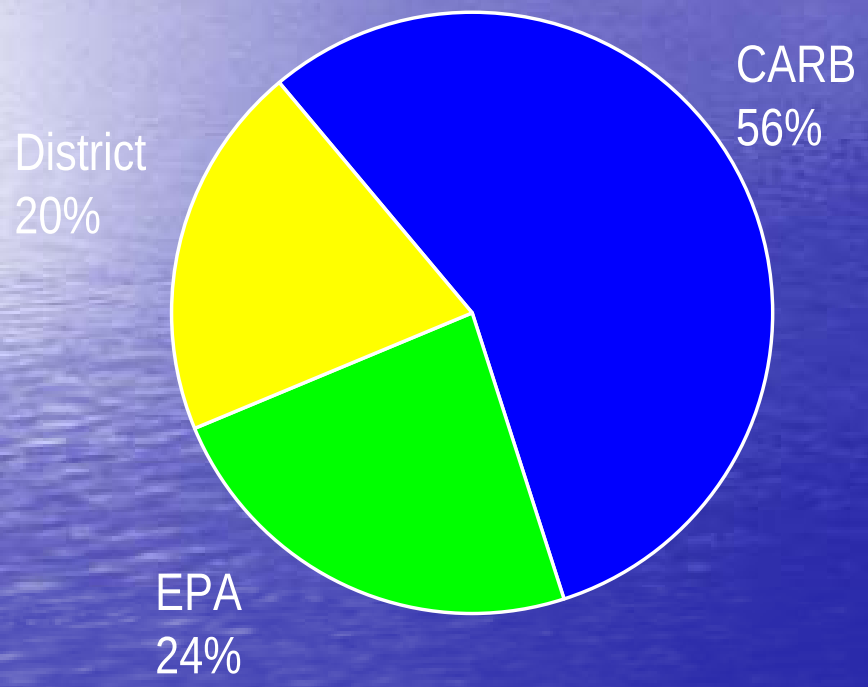
8-Hr Ozone, 2023



(VOC, NOx)

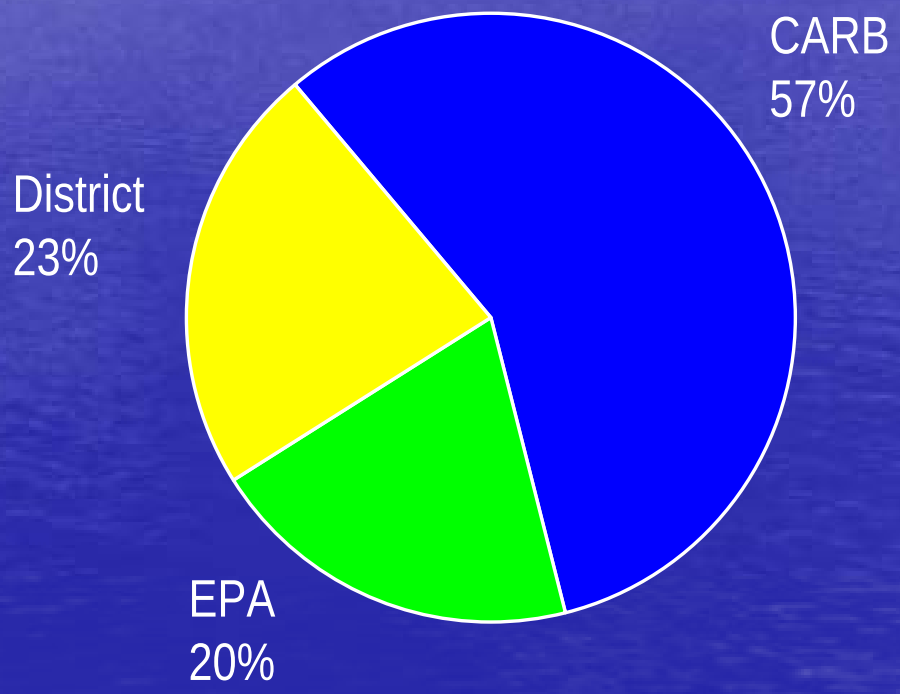
Emissions Responsibility by Agency

PM2.5, 2014



(NOx, SOx, PM2.5)

8-Hr Ozone, 2023



(VOC, NOx)

Revisions to Attainment Demonstration

- Revised Modeling Based on Latest Inventory Changes
- Updated Reductions and Carrying Capacities
- PM2.5 Attainment
  - Reductions from CARB's Strategy Not adequate
  - Attainment Based on District's Additional Measures
- Ozone Attainment
  - NOx-Heavy Control Strategy Most Appropriate

Needed Pollution Reduction (tons per day)

	2014	2023
NOx	203 (31%)	383 (76%)
VOC	59 (11%)	116 (22%)
SOx	24 (56%)	---
PM2.5	14 (14%)	---

Key Issues

- PM2.5 Attainment by 2015 and Specific Control Strategy
- 8-hour Ozone Attainment by 2023 and “Black Box” Measures

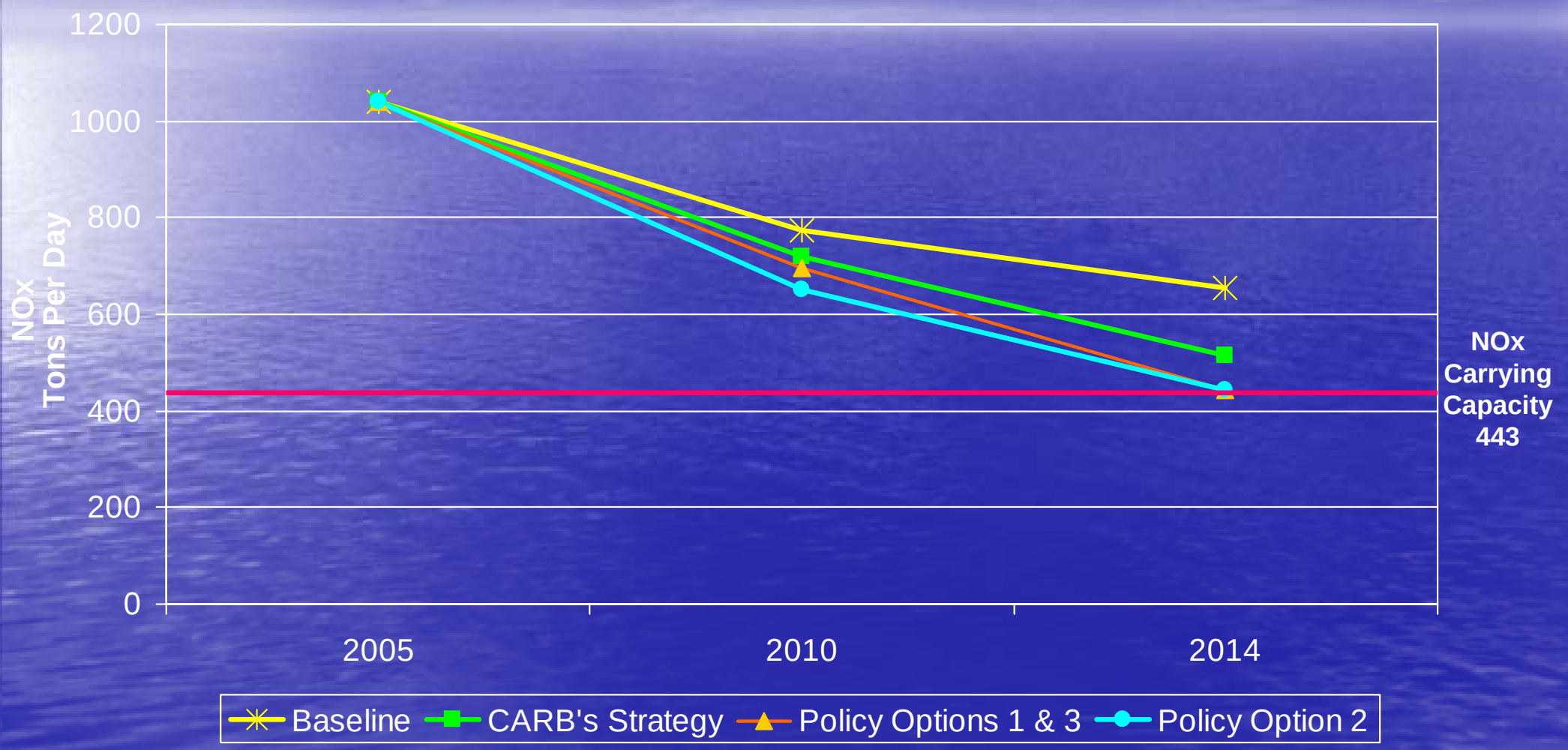
PM2.5 Attainment

- Attainment Date Fast Approaching
- CARB's Strategy Not Attaining Standard until 2020
  - Not an Acceptable Public Policy Option
- AQMD Staff Offers three Policy Options to Achieve the Needed Reductions by 2015

District Staff's Proposed Policy Options for PM2.5 Attainment

- Policy Option 1
  - District's Proposed Additional Mobile Source Control Measures (71 t/d NOx)
- Policy Option 2
  - CARB 2003 AQMP Commitment for Defined Measures in 2010 with Additional Reductions by 2014
- Policy Option 3
  - Same Rate of Reduction under Policy Option 1
  - Incentive Programs
    - $600 million per year

Comparison of Rate of Reductions Under Various Policy Options



Proposed Additional Mobile Source Measures

	Implementation Proposal
Construction/ Industrial Equip. (15.8 tpd – NOx)	• Move Up Proposed Fleet Average Limits (Equivalent to Replacing Tier 0 and 1 with Tier III or Better by 2014)
HD Truck Retrofits/ Modernization (20.9 tpd – NOx) (6.3 tpd – NOx – Port Trucks)	• Increase Target Vehicles by 15% (Up to Model Year 2005); ~ 21,600 HD Vehicles • ~15,000 Port Trucks by 2012 Implemented Under Ports Clean Air Action Plan
Locomotives (11 tons/day NOx)	• 100% Tier III (as Provided in Port Clean Air Action Plan)

Proposed Additional Mobile Source Measures

	Implementation Proposal
Ground Support Equipment (0.8 tpd – NOx; 0.3 tpd – VOC)	Additional Reductions to Meet Original MOU and for GSE Not Covered by MOU or CARB Off-Road Rule Proposal
Fuel Reformulation and Alternatives (5.2 tpd – NOx – Gaso.; 3.9 tpd – NOx – Diesel)	10 ppm Sulfur Content Cap on Gasoline Fuels; 10% Use of Diesel Alternatives
Pleasure Craft (1.1 tpd – NOx; 2.9 tpd – VOC)	Evap/Ex. Standards; Accelerated Turnover

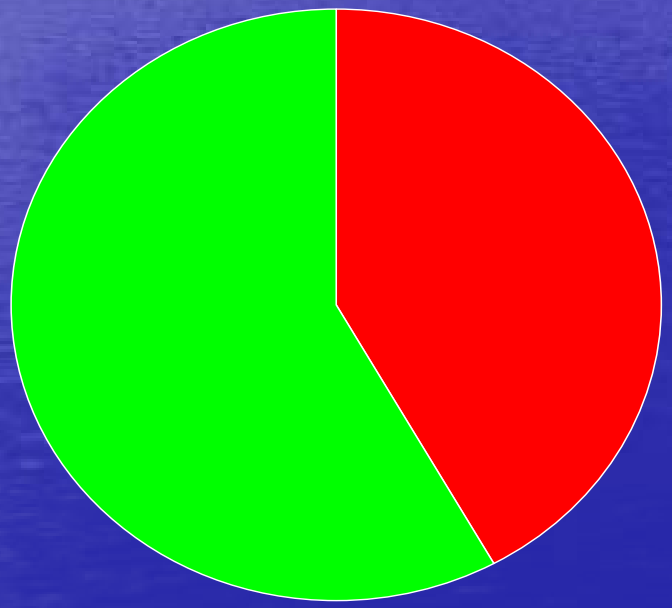
Proposed Additional Mobile Source Measures

	Implementation Proposal
Light-Duty Vehicles (3.65 tpd – NOx 2 tpd – VOC)	• 100,000 ATPZEVs by 2014; 1 MM by 2020 • Greater Deployment of OBD III
Cargo Handling Equipment (1.1 tpd – NOx)	Additional Reductions as Identified in Ports Clean Air Action Plan
Transport Refrigeration Units (1.12 – NOx)	Additional Reductions Through NOx Retrofits

Ozone Attainment

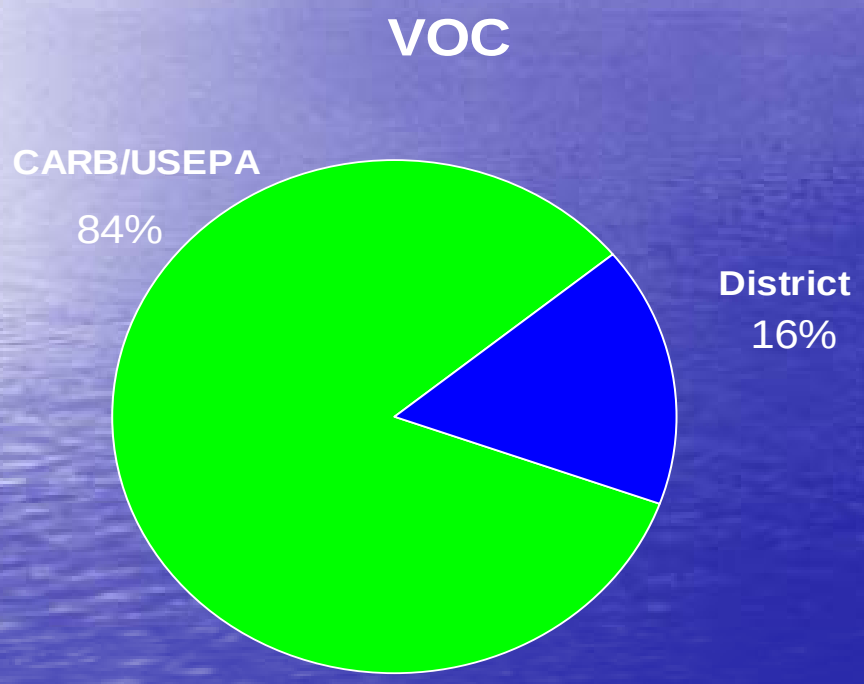
- Significant Reductions Needed for Attainment
  - NOx: 383 t/d (76%)
  - VOC: 116 t/d (22%)
- Focus Primarily on Mobile Sources
- Undefined “Black Box” Measures (41%)
- Extensive Penetration of Advanced Technology Vehicles, Zero- or near-Zero Transportation Systems; Cleanest Trucks, Off-Road Equipment, Ships, Trains, and Aircraft

8-Hour Ozone Attainment Strategy

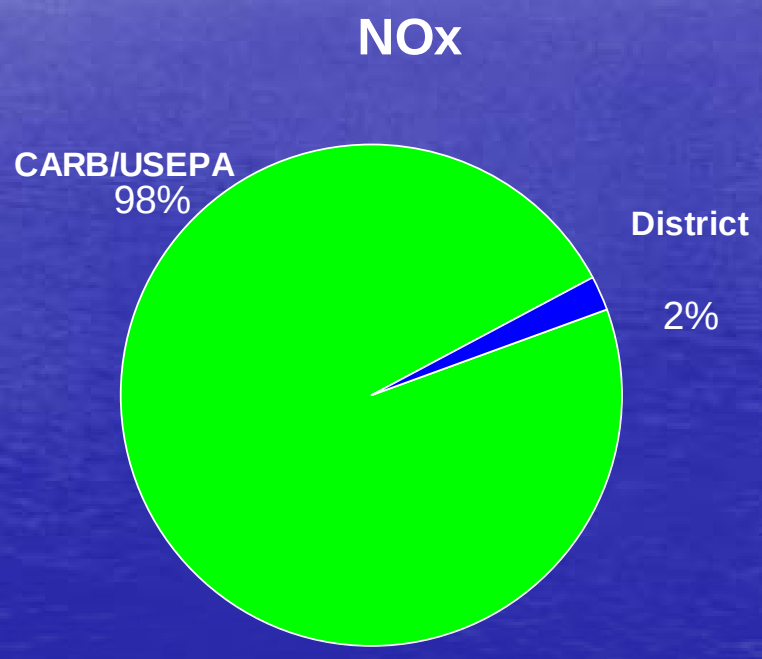


Total Reductions = 499 tpd

Reduction Responsibility By Agency



Total Reduction =116 TPD



Total Reduction = 383TPD

Bump-Up Requests

- Reclassification of Non-Attainment Status
- South Coast Air Basin
  - “Severe-17” to “Extreme”
  - 2021 to 2024 Attainment Date
- Coachella Valley Portion of Salton Sea Air Basin
  - “Serious” to “Severe-15”
  - 2013 to 2018 Attainment Date

Schedule

- Public Workshops (4) – Mar 13-15, 2007
- Draft Socio-Econ Assessment – April 2007
- Regional Hearings (5) – April 17 – 19, 2007
- Adoption Hearing – May 4, 2007
- CARB Hearing – May 2007
- Submittal to U.S. EPA – June 2007