

2012 Air Quality Management Plan



CLEAN FUELS PROGRAM ADVISORY GROUP

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Cleaning The Air That We Breathe...

Key Pollutants

- **Fine Particles (PM2.5)**

- Building Blocks

- ✦ SO_x, PM_{2.5}, NO_x, VOC, Ammonia

- **Ozone (summer smog)**

- Building Blocks

- ✦ VOC, NO_x



SCAQMD Board Directive



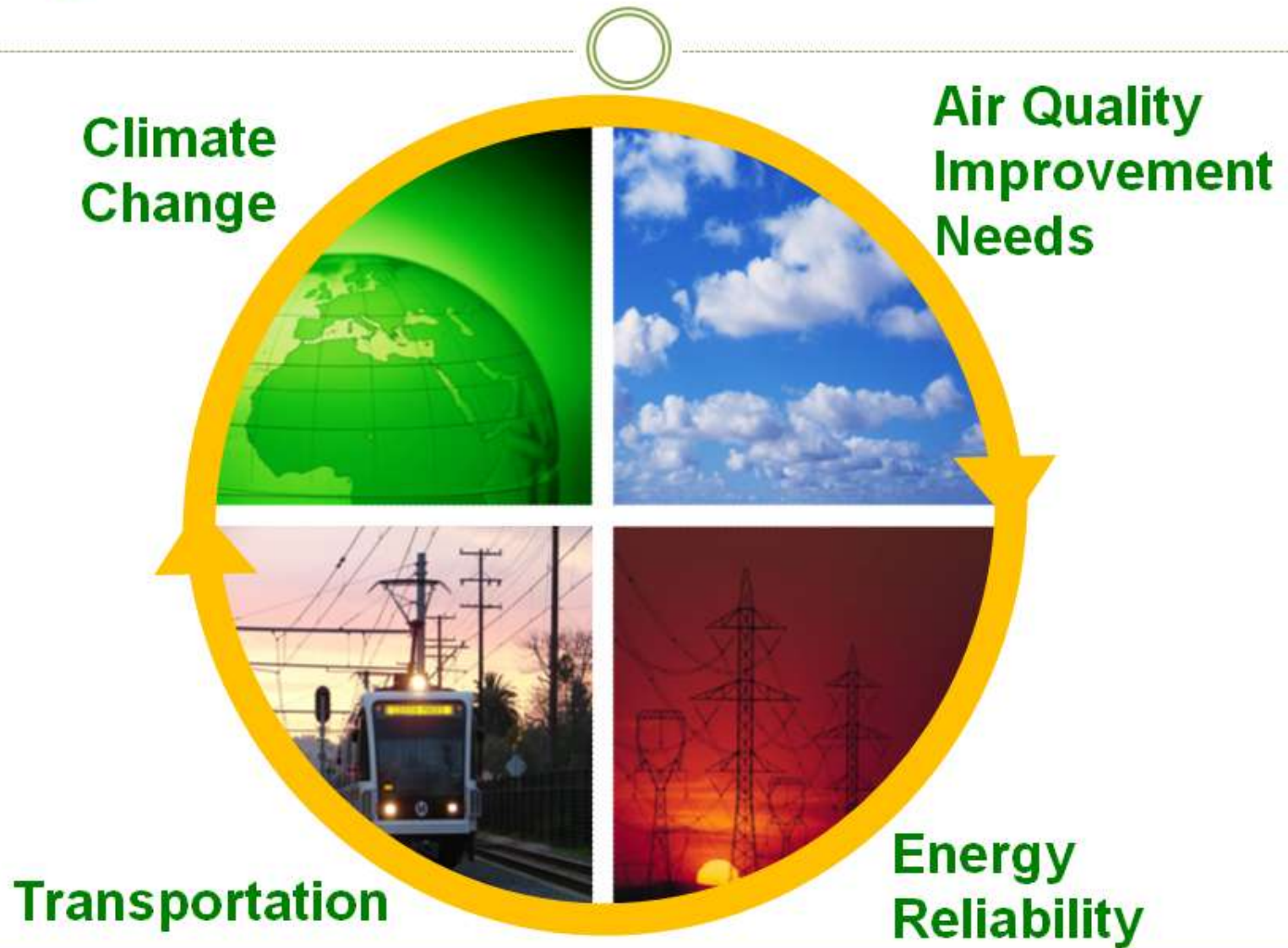
- **AQMP Design Principles**
 - ❑ Most Efficient Path to Clean Air
 - ❑ Minimize Socioeconomic Impacts
 - ❑ All Feasible Measures and Promote Fair Share Responsibility
 - ❑ Maximize Private/Public Partnership
 - ❑ Equitable and Expeditious Progress



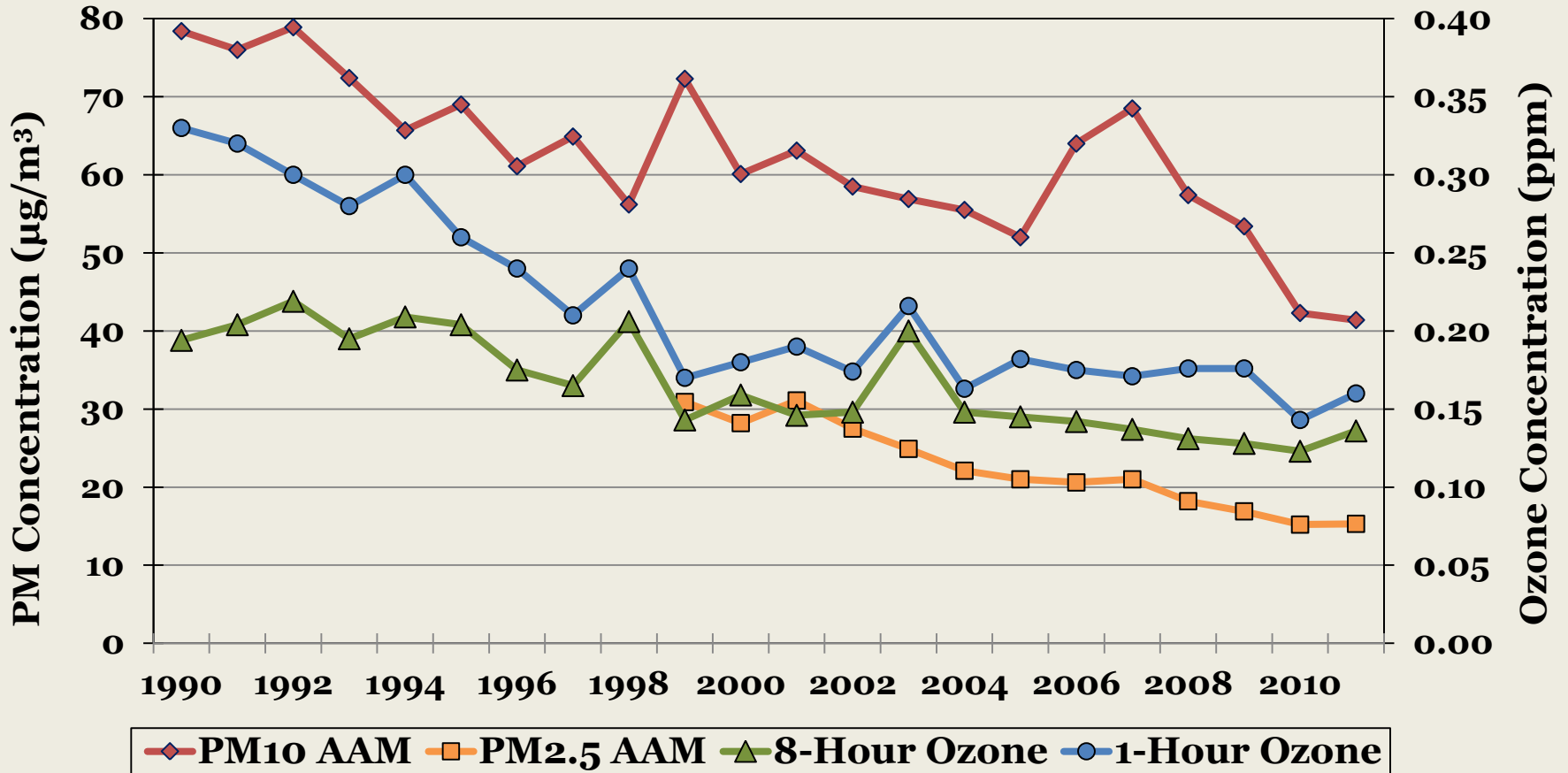
Integrated AQMP



Integrated AQMP



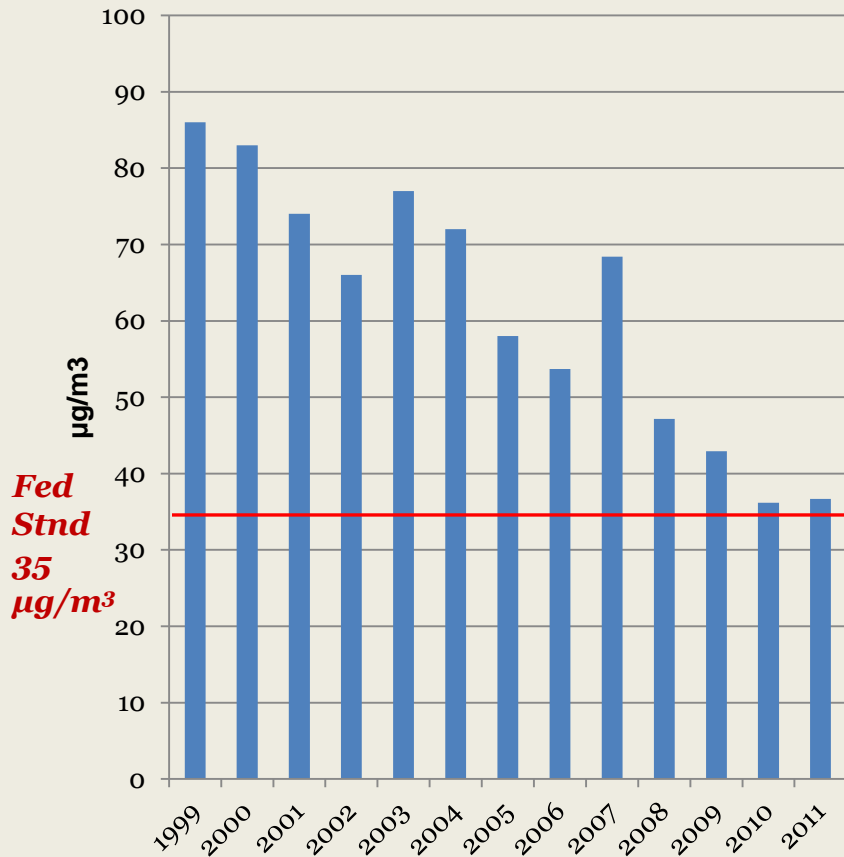
Basin Air Quality Trends



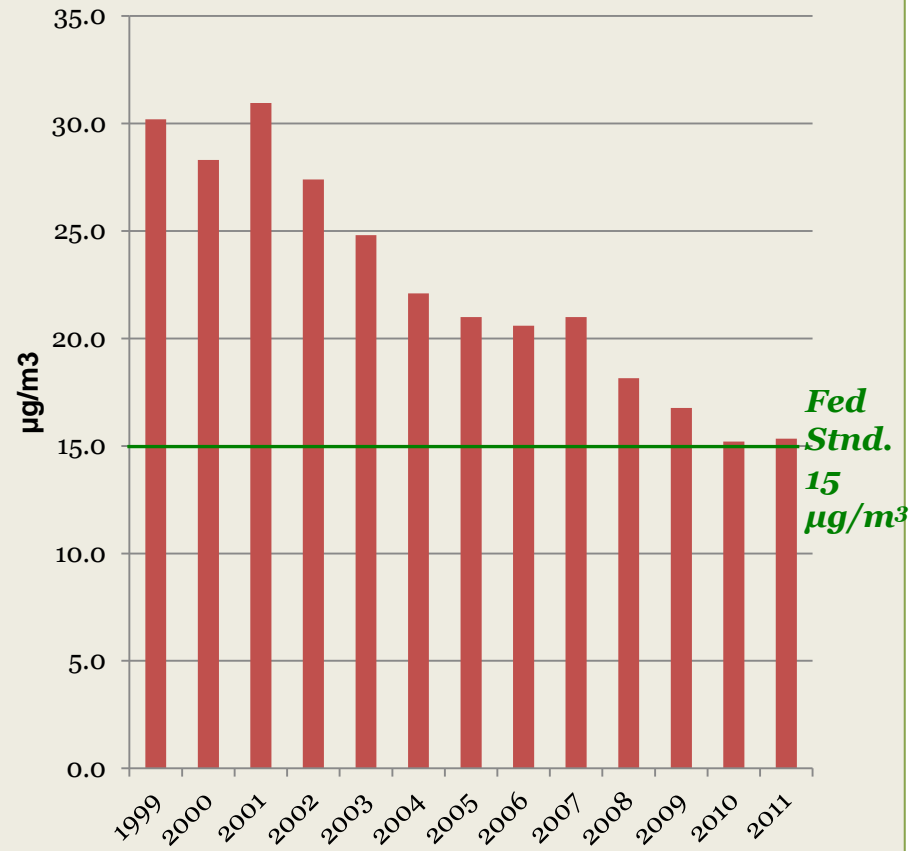
PM2.5 Air Quality



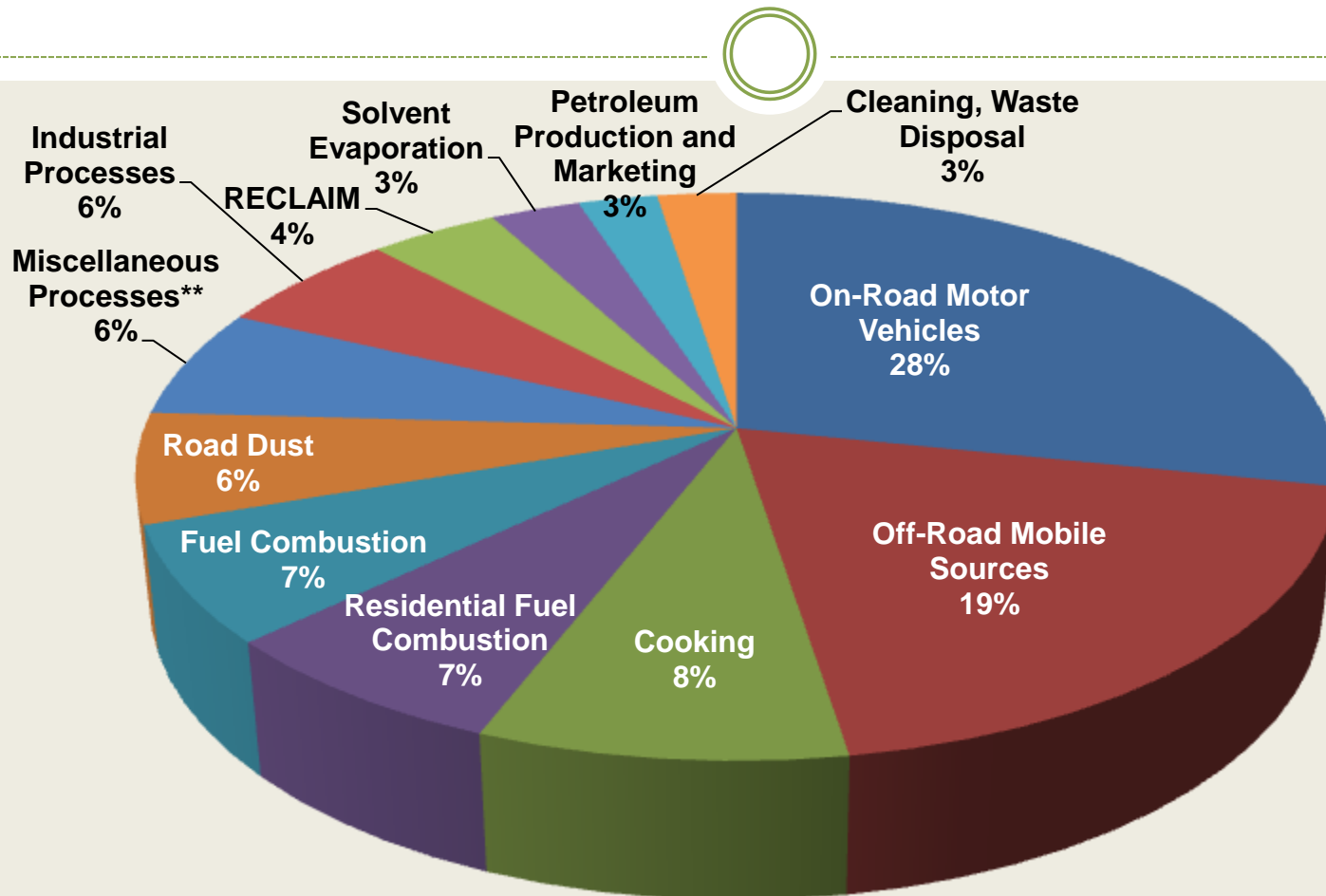
PM2.5 24-hour 98th Percentile



PM2.5 Annual Average



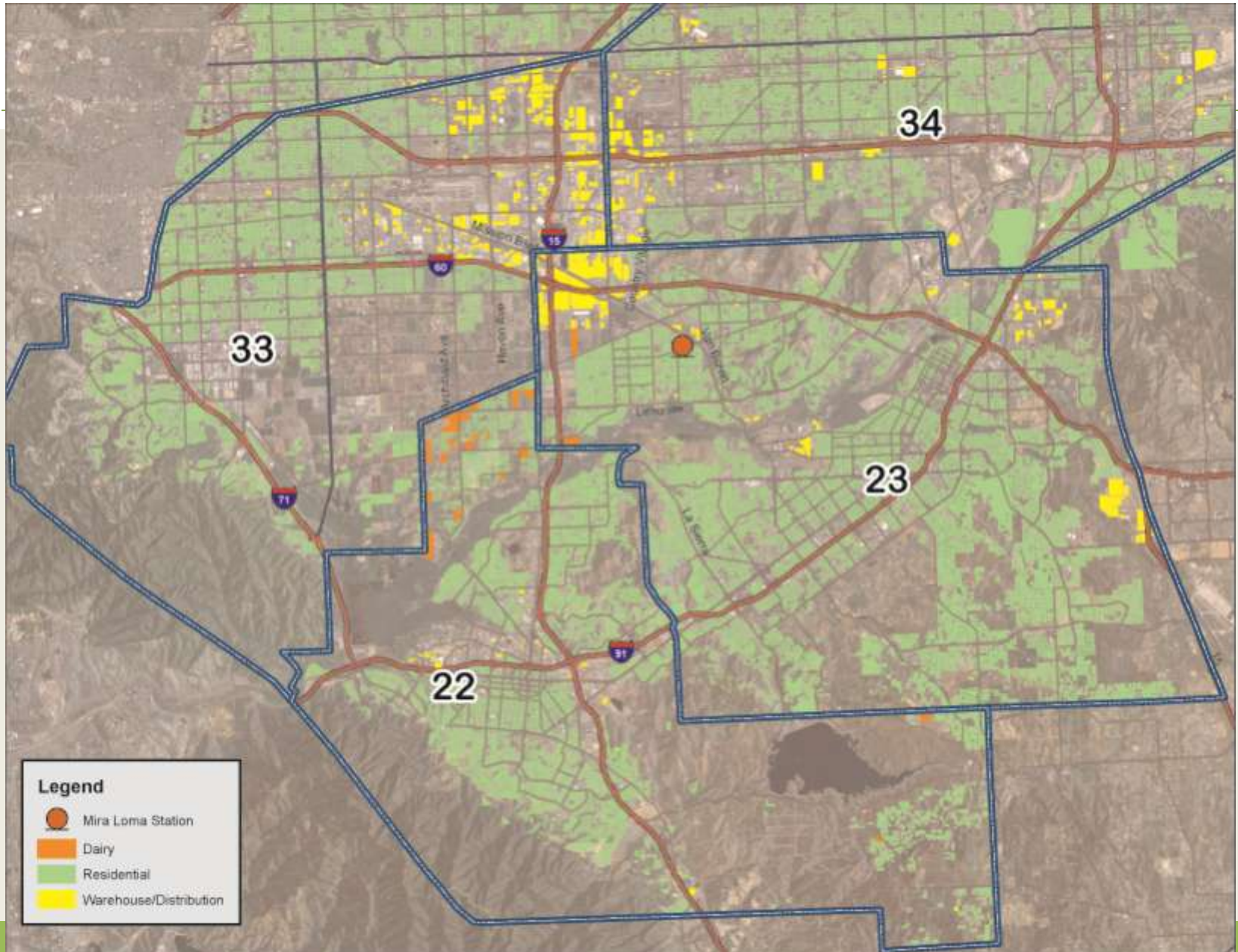
Sources of PM2.5*



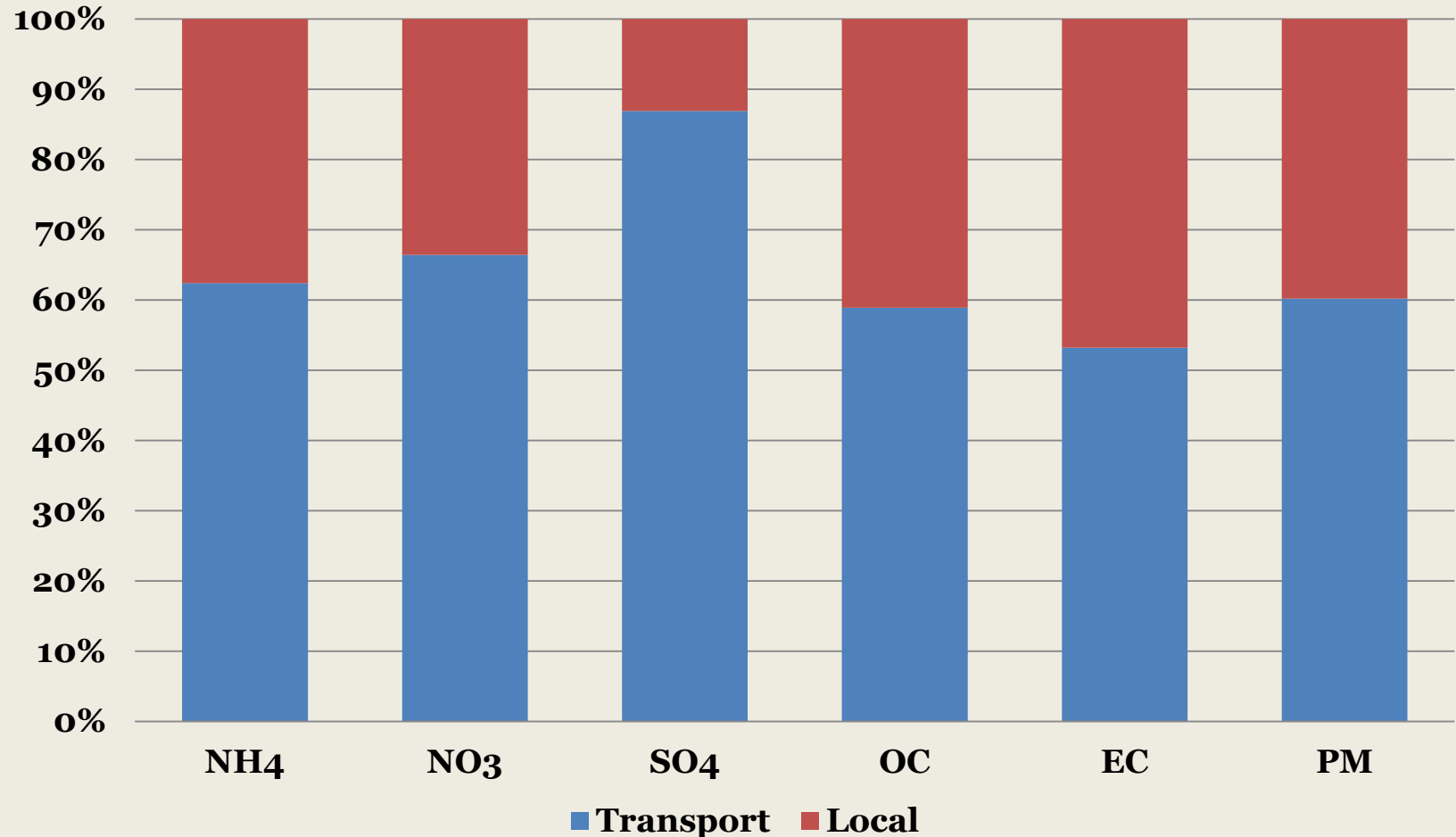
*2014 emission inventory based on PM2.5 formation potential (incl. precursors)

** Includes construction/demolition, farming operations, fires, waste burning/disposal

Mira Loma Region



Contribution of Local Vs. Transported Emissions to Mira Loma PM_{2.5}



Proposed PM2.5 Control Measures

- **Measures to Achieve Attainment by 2014:**
 - Reductions from NOx RECLAIM (Phase I)
 - Episodic residential wood burning curtailment
 - Episodic open burning curtailment
 - **Reductions: 2 tpd NOx; 12 tpd PM2.5**



Proposed PM2.5 Control Measures – *continued*

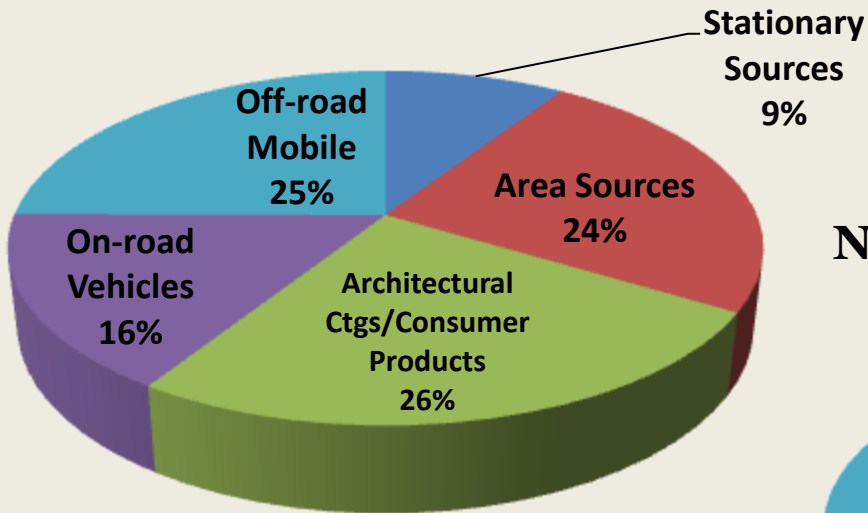


- **Measures to Ensure Attainment:**
 - ❑ Backstop measure for Indirect Sources from Ports and Port-related Sources
 - ❑ Under-fired Charbroilers (2 phases)
 - ❑ Livestock Waste (2 phases)
 - ❑ Education, Outreach and Incentives
 - ❑ All Feasible Measures (state/federal requirement)

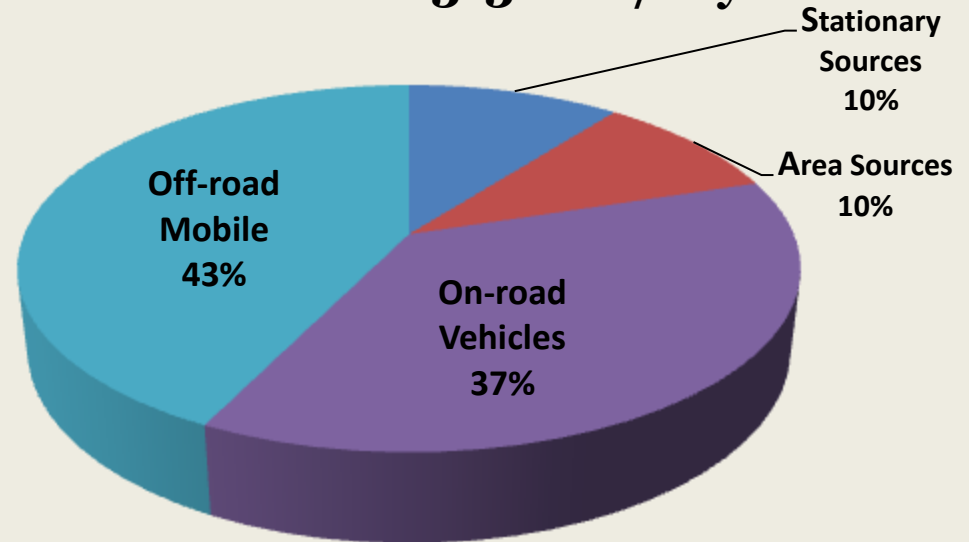
Sources of Ozone*



VOC Emissions: 433 tons/day



NOx Emissions: 313 tons/day



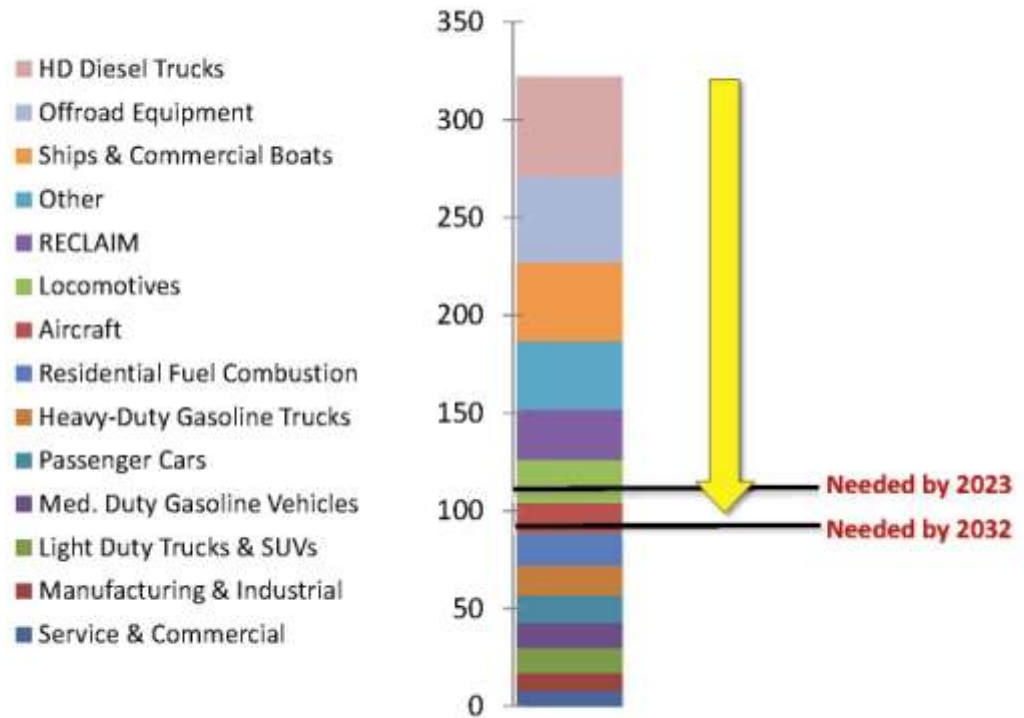
* Year 2023 emissions – Summer Planning Inventory



Emissions Reductions to Meet the Ozone Standards

Nitrogen Oxides Emissions in 2023 with Adopted Standards

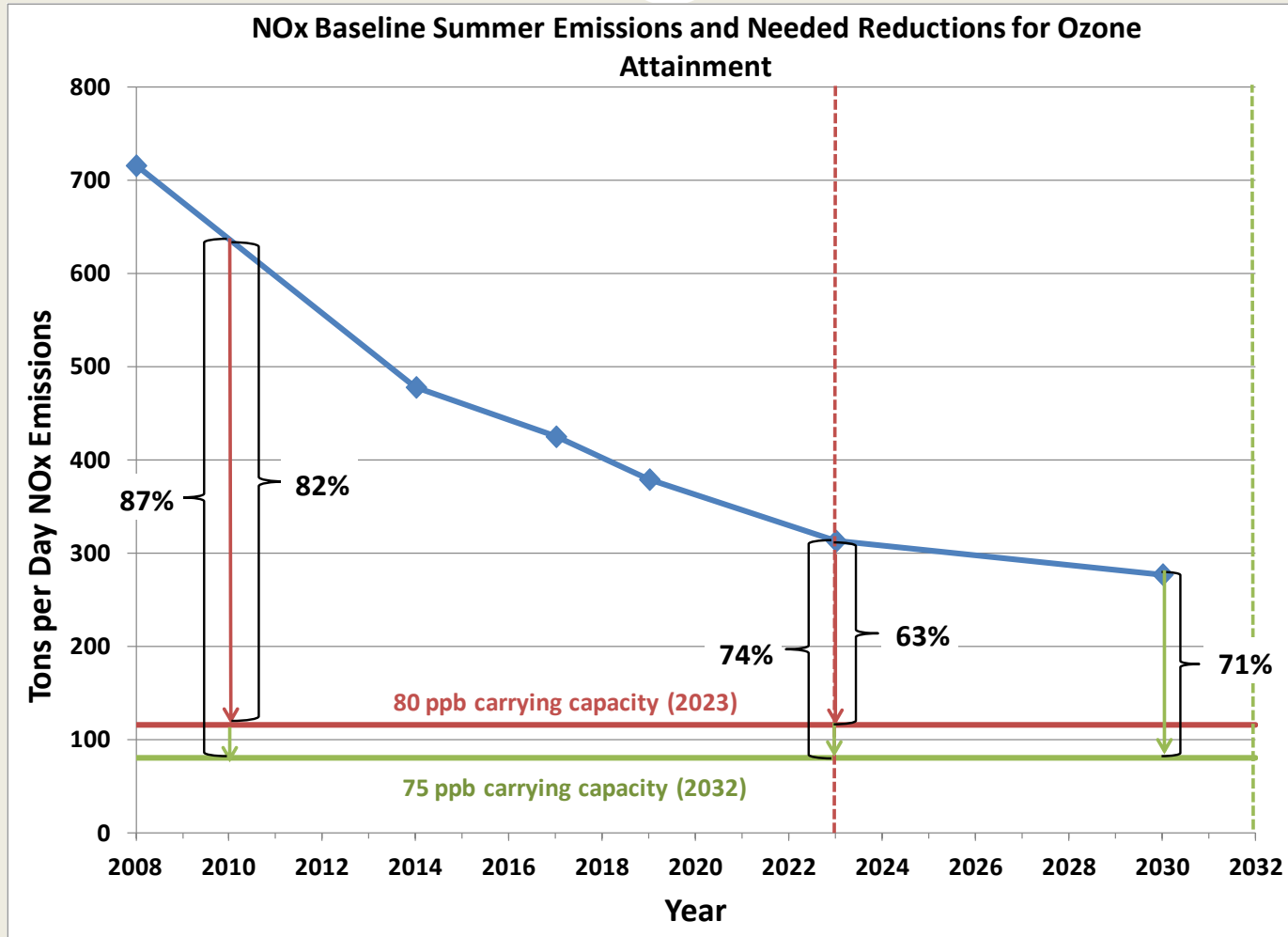
Additional Needed Emission Reductions



* Source: Ambient ozone modeling conducted by SCAQMD, 2012; draft data

SCAB Ozone Attainment

Preliminary Basin NOx Reductions Needed



Ozone Strategy Approach



- **8-hr ozone standards (*80 ppb by 2023; 75 ppb by 2032*)**
 - NOx heavy strategy needed to meet standard
 - Provide actions to be taken in next 2-3 years
 - Mostly mobile source measures
- **“Vision” document to maximize co-benefits**



Joint Vision Document



- **Follow-up to “Powering the Future”**
- **SCAQMD, CARB and SJVAPCD**
- **Objectives:**
 - ❑ Integrated planning
 - ❑ Consistency in strategy development
 - ❑ Identify opportunities for synergy and co-benefits
 - ❑ Multi-agency consensus on vision



Section 182(e)(5) Ozone Measures

- **Stationary Source Measures:**

- ❑ NOx RECLAIM (Phase II)
- ❑ Coatings, solvents, lubricants, adhesives
- ❑ Mold release products
- ❑ Landfill flares, commercial space heating
- ❑ Truck venting, propane gas refueling
- ❑ Leak detection and repair programs
- ❑ Greenwaste processing (chipping and grinding)
- ❑ Improve start-up, shutdown procedures
- ❑ Incentives, educational programs

- **Reductions: ~6 tpd VOC; ~1 tpd NOx**



Section 182(e)(5) Ozone Measures



- **Mobile On-Road:**

- ❑ Accelerated penetration of zero and near-zero emission vehicles
- ❑ Early retirement of older vehicles
- ❑ Reduce emissions from near-dock railyards



- **Mobile Off-Road:**

- ❑ Extension of SOON provision
- ❑ Incentives to further reduce emissions from marine vessels
- ❑ Regulation to further reduce emissions from locomotives

- **Action for Advanced Control Technologies:**

- ❑ Research & development, demonstrations, incentives

- **Reductions: ~21 tpd NOx**

Funding



- **Minimum Funding Needed to Implement Proposed Mobile Source Measures**
 - ❑ On-Road - \$85 M/yr
 - ❑ Off-Road Construction/Industrial Equipment - \$30M/yr
 - ❑ Locomotives, Marine Vessels – Not Estimated
- **Existing Funding Programs**
 - ❑ SB1107 & AB923 - ~\$57 M/yr (AB 923 Sunset – Dec. 2014)
 - ❑ Prop 1B – up to \$125M/yr (Sunset – Dec. 2013)
 - ❑ AB118 AQIP – up to \$16M/yr (Sunset – Dec. 2015)
 - ❑ MSRC - ~\$14M/yr
- **Need to Seek Additional Funding**

Next Steps

- **Document Release**
 - ❑ Draft AQMP (July 18)
<http://www.aqmd.gov/aqmp/2012aqmp/index.htm>
 - ❑ Socioeconomic Report (Aug/Sept)
 - ❑ Draft Program EIR (Sept)
- **Continue outreach efforts**
- **Regional hearings:** Sept. 11-13
- **Adoption Hearing:** November
- **Submit to CARB** for approval
- **SIP Submittal to EPA** – December 2012 deadline

