

2016 Air Quality Management Plan



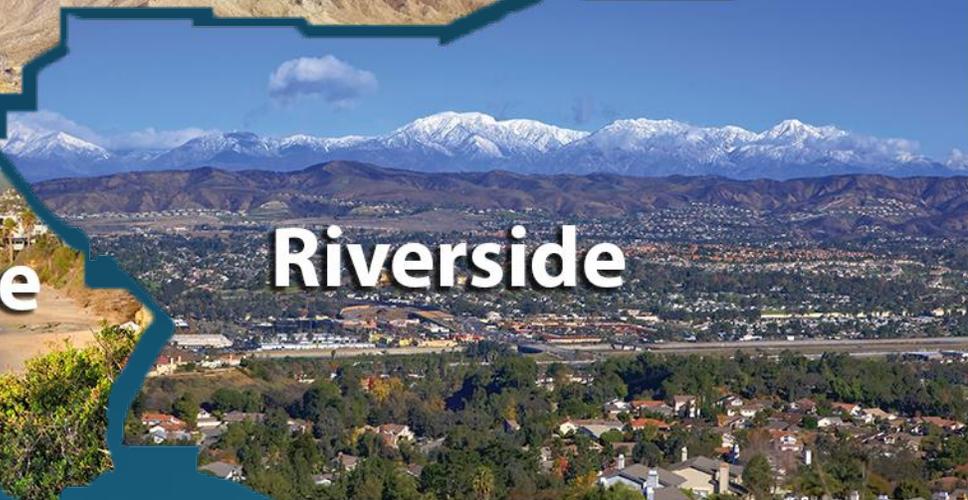
Los Angeles



San Bernardino



Orange



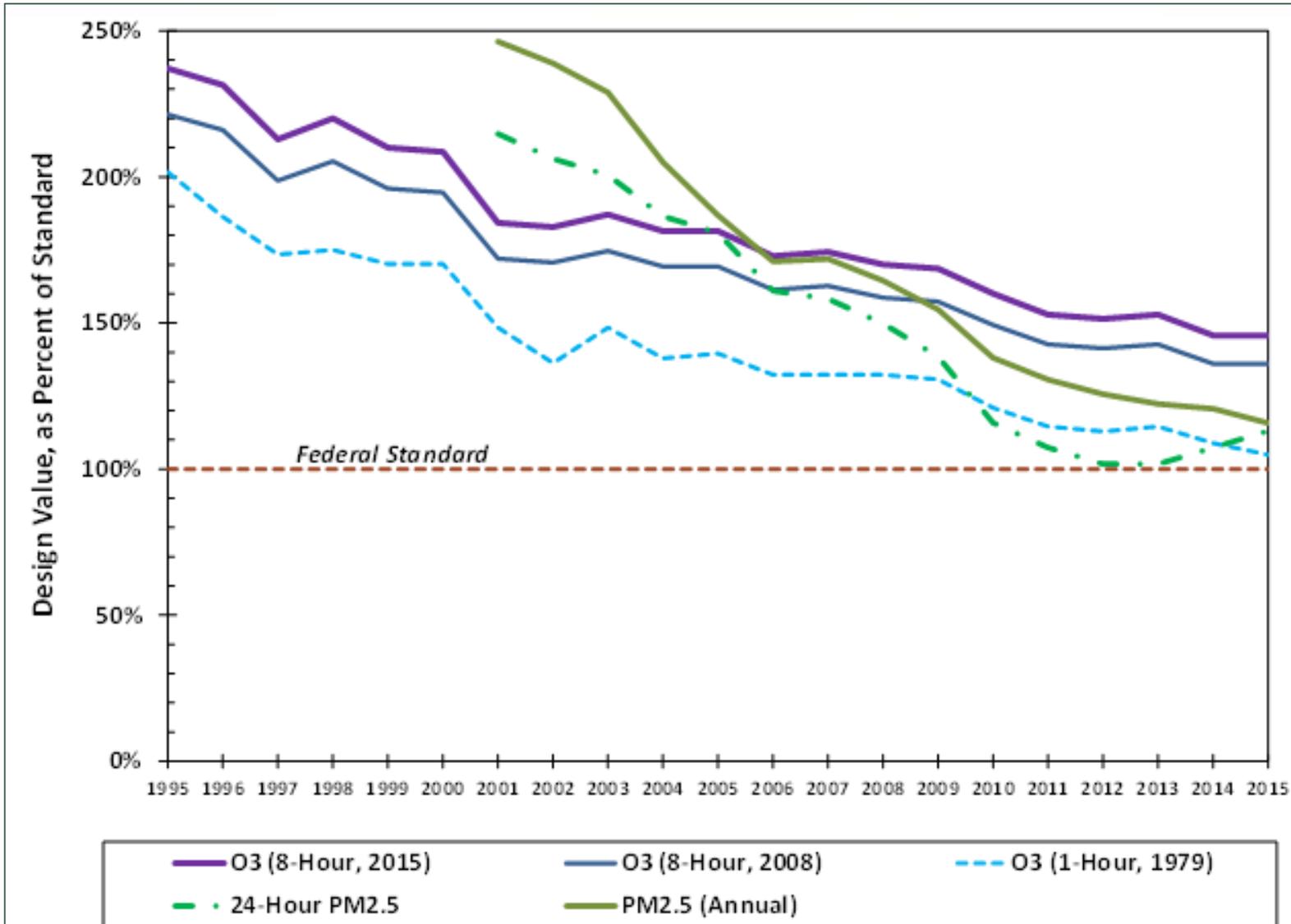
Riverside

2016 AQMP
Public Hearings

November 15-17, 2016



Ozone & PM_{2.5} Design Value Trends



Background

U.S. EPA sets National Ambient Air Quality Standards (NAAQS) for criteria pollutants

Areas designated attainment or nonattainment

If nonattainment, state submits State Implementation Plan (SIP) to demonstrate how and when NAAQS will be achieved, maintained and enforced

California Health & Safety Code requires AQMP since 1979

Blueprint for how to meet and maintain state and federal air quality standards

AQMP serves as the SIP for South Coast and Coachella Valley

The 2016 AQMP will be SCAQMD's 11th Plan



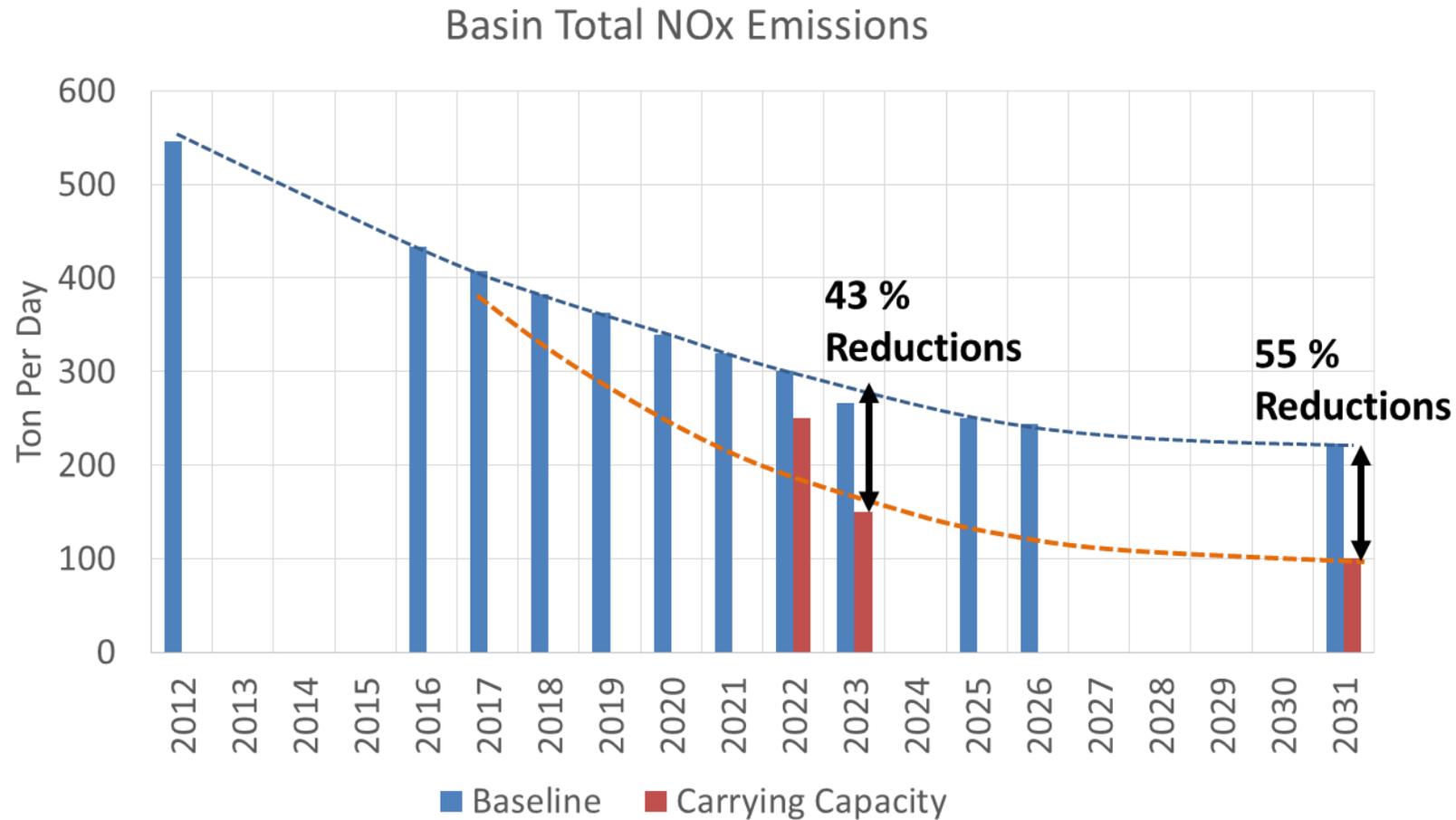
Standards to be Addressed in Plan

- Clean Air Act requires attainment of standard to be achieved as “expeditiously as practicable” but no later than attainment year listed.
- Integrated Plan to address all standards in 2016 AQMP

Criteria Pollutant	Standard	Classification	Latest Attainment Year	SIP Submittal Due Date
2008 8-hour Ozone	75 ppb	Extreme	2031	July 20, 2016
2012 Annual PM _{2.5}	12 µg/m ³	Serious*	2025	October 15, 2016
2006 24-hour PM _{2.5}	35 µg/m ³	Serious	2019	August 12, 2017
1997 8-hour Ozone	80 ppb	Extreme	2023	Update
1979 1-hour Ozone	120 ppb	Extreme	2022	Update

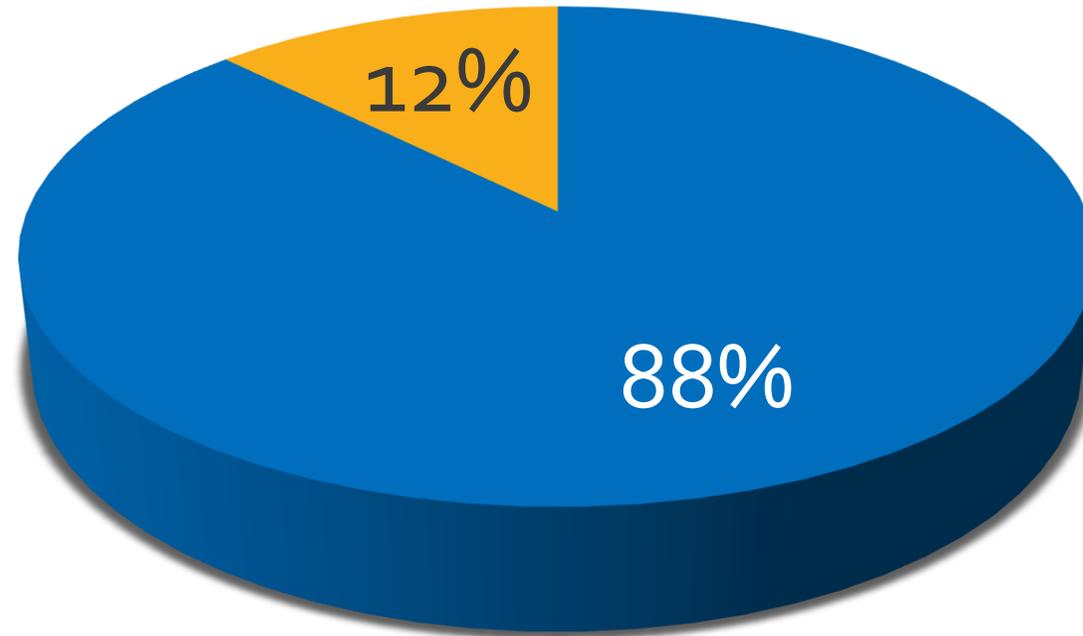
*Draft 2016 AQMP requests re-classification to 'serious' from 'moderate'

Emission Reductions Needed (NOx)



8-hour Ozone strategy targeting 2023 will ensure 1-hour attainment in 2022 as well as 24-hour and annual attainment in 2019 and 2025, respectively.

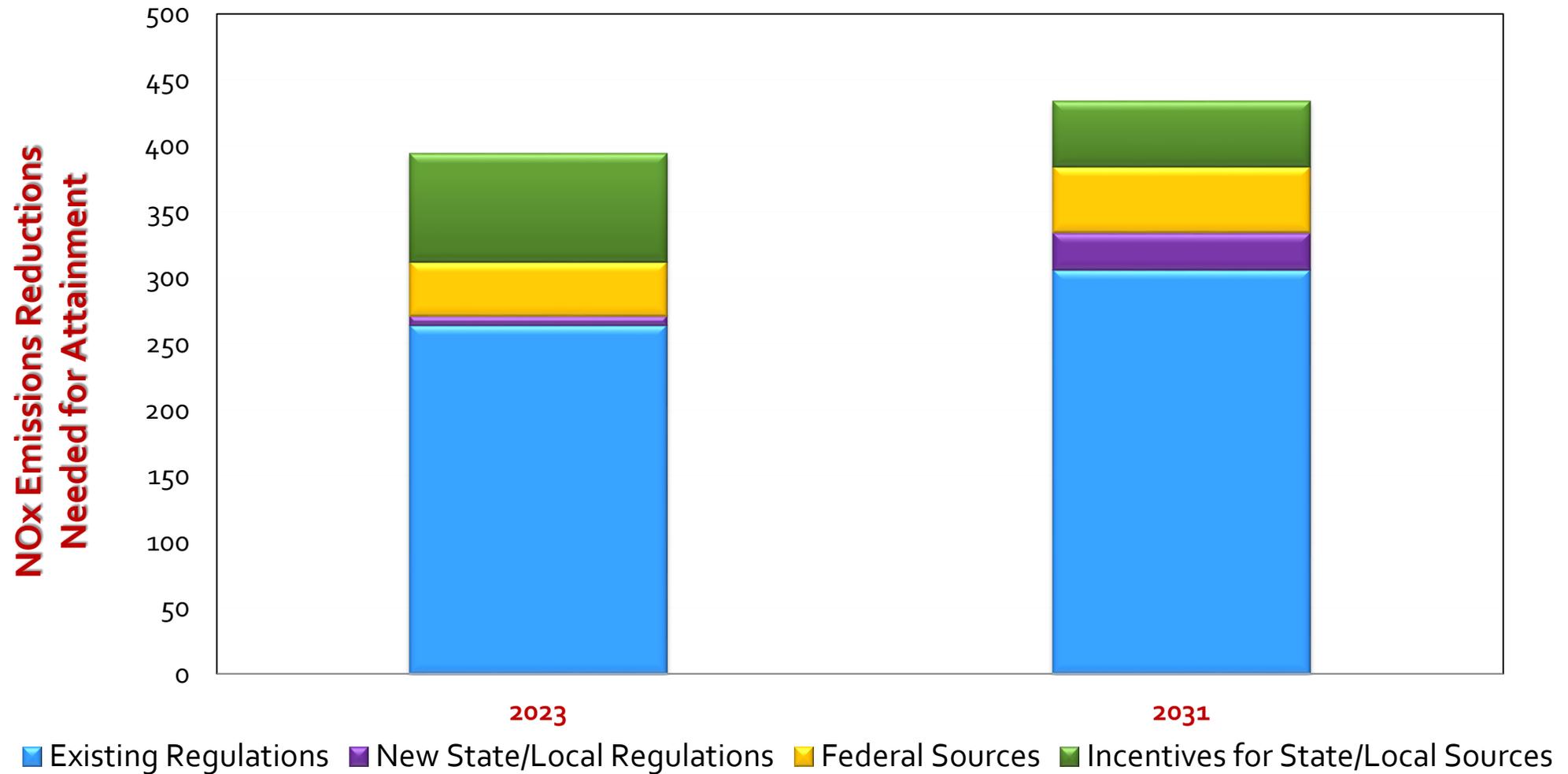
Sources of NO_x: Mobile vs. Stationary (2012)



■ Mobile Sources ■ Stationary Sources

Based on Summer Planning NO_x Emissions Inventory (Appendix III, Draft 2016 AQMP)

Overall Plan Strategy



Legal Authority and Responsibility

- In 2012, 88% of NO_x comes from mobile sources
- Limited local authority over mobile sources



Stationary Source Strategy

Thoroughly evaluated all source categories and control options

- Detailed look at emission inventory
- Analysis of measures implemented through-out the country (RACT)
- Symposium, working groups, and advisory group

Limited feasible regulatory options remaining for NO_x reductions

- Reductions in NO_x from non-refinery flares
- NO_x controls for cooking appliances
- Further NO_x reductions from RECLAIM reassessment
- Commercial/Residential equipment
- Alternatives to Diesel Back-up Generators

If all stationary sources brought to zero emissions, would still not meet goals



Facility-based Measures

- *SCAQMD does not have primary regulatory authority*
- *Set targets, work collaboratively to achieve creditable NOx reductions*
- *Approach:*

TRUST

VERIFY

**PIVOT to Regulation
if Needed**

- ✓ **New Development and Redevelopment Projects (EGM-01)**

- ✓ **Commercial Marine Ports (MOB-01)**

- ✓ **Commercial Airports (MOB-04)**

- ✓ **Rail Yards/Intermodal Facilities (MOB-02)**

- ✓ **Warehouse Distribution Centers (MOB-03)**



Major Revisions Included in Revised Draft AQMP

Based on Comments Received on the Draft Plan:

- Priority on maximizing emission reductions utilizing zero-emission technology whenever cost effective and feasible; near-zero emission technology for remaining applications
- Additional regulatory measures
 - ✓ CMB-01 (ICEs, diesel backup generators)
 - ✓ CMB-02 (residential, commercial appliances)
- Incentives advance deployment of the cleaner technologies to meet near-term attainment goals and enhance public acceptability of new technologies
- Seriously consider long-term transition of RECLAIM program to command-and-control regulatory structure
- Added clarity, certainty, and specific timelines for facility-based measures
- More discussion, clarity, and potential for new or expanded fleet rules
- Clarified the purpose of the TBD measures
- Updated air quality data, emission inventory, and attainment modeling



Funding Needed

- Accelerated early deployment of zero and near-zero technologies for mobile and stationary sources
- Significant expansion of financial incentive programs needed
- **Mobile Source** Emission Reduction Estimated Total Funding Range - 10 to \$12 Billion over next 15 Years
- **Stationary Source** Emission Reduction (*residential, commercial, small business*) Estimated Total Funding Range - \$1 to \$2 Billion over next 15 Years



~ \$1 billion/year

Related Documents

- Draft Program **Environmental Impact Report** (CEQA)
 - ✓ Released September 16, 2016 for 60-day public comment and review period
- **Socioeconomic Assessment** – chapters provided when available:
 - ✓ Costs and Benefits released August 31, 2016
 - ✓ Environmental Justice Impacts released September 23, 2016
 - ✓ Job impacts, Sub-regional modeling results, and impacts from CEQA Alternatives released on November 2, 2016
 - ✓ Complete updated Assessment with appendices to be released this month
- **Incentive Funding Action Plan**



Socioeconomic - *Cost of Revised Draft AQMP*

Measures	Present Worth Value (Billions of 2015 dollars)				Average Annual Amortized Cost (2017-2031) 2015\$B
	Remaining Incremental Cost		Incentives	Total Incremental Cost	
SCAQMD Stationary Source	\$4.3	+	\$1.4	= \$5.7	\$0.3
SCAQMD Mobile Source	<\$0.1	+	\$0.6	= \$0.6	<\$0.1
CARB Mobile Source	-\$3.3	+	\$12.4	= \$9.1	\$1.1
Total	\$1.1	+	\$14.4	= \$15.5	\$1.4

Note: Numbers may not add up due to rounding.

Socioeconomic - *Public Health Benefits*

- Based on lowering mortality (*death rates*) and morbidity (*illness and other health effects*) risks as a result of implementing the Revised Draft 2016 AQMP
 - ✓ Overall public health benefit \$256 billion from 2017-2031 in 4-county region
 - ✓ \$24 billion public health benefit per year
 - ✓ 99 percent estimated public health benefits associated with avoided premature deaths from reduced long-term exposure to PM_{2.5}



Financial Incentives Action Plan Development

- Action Plan to identify and develop process to secure additional incentive funds
- Draft Funding Plan Outline
 - ✓ Background
 - ✓ Existing funding programs (past and current)
 - ✓ Potential new funding opportunities
 - ✓ Activities to pursue funding
 - ✓ Schedule/Reporting
- Draft 2016 AQMP - Discussion of level of funding incentives needed to help achieve NO_x emission reductions associated with the State SIP Strategy “Further Deployment of Cleaner Technologies” measures
 - ✓ Funding Incentives - \$10 to \$12 billion for mobile sources; \$1 to \$2 billion for stationary sources over next 7 to 15 years (~\$1 billion/year)
 - ✓ Proposed actions at local/regional, state, and national levels



Example Funding Sources – *All options*

being evaluated

Expanding
Existing
Sources

- Diesel Emissions Reduction Act (DERA), Air Shed Grants
- U.S. Department of Energy (Clean Cities Program)
- Carl Moyer Program
- Proposition 1B
- Low Carbon Transportation Funding (CARB)
- AB 118 – AQ Improvement Program/Fuel & Vehicle Technology Program
- AB 2766 – Local Governments
- SCAQMD Clean Fuels Fund

New
Potential
Sources

- VW Settlement
- Future DERA Funding
- Cargo Container Fee
- Mileage-Based (VMT) User Fee
- Gas Sales Tax
- Public/Private Partnerships
- Expand DMV Registration Fees and Low Carbon Transportation Funding

Activities to Pursue Funding

- Analysis of Authority
- Formation of Stakeholders Working Group
- Creation of National Collaborative
 - ✓ NACAA for state/local air agencies
 - ✓ Private Sector Members (Engine Manufacturers, MECA, Trade Associations, Labor Unions, etc.)
 - ✓ Non-government Organizations (Local, State, National)
- State Collaboration
 - ✓ Work with CAPCOA
 - ✓ Public/Private Partnerships



Development Activity Status



- Draft Plan released June 30th
- Revised Draft Plan released October 7th
 - ✓ Included changes based on 69 comment letters received
 - ✓ Plan and technical appendices posted online
 - ✓ Summary of major revisions posted online
- 30 comment letters received on the Revised Draft
- Seeking to release Draft Final Plan in early December
- Ongoing AQMP Advisory Group and regional stakeholder meetings
 - 163 Advisory/stakeholder meetings during the development the 2016 AQMP

Schedule



Public Hearings Schedule



November 15, 2016 – 9:00 a.m.
Buena Park Community Center
6688 Beach Boulevard, Buena Park, CA 90621



November 15, 2016 – 2:00 p.m.
Double Tree by Hilton Hotel, Carson
2 Civic Plaza, Carson, CA 90745



November 17, 2016 – 9:00 a.m.
Norton Events Center
1601 E. 3rd Street, San Bernardino, CA 92408



November 17, 2016 – 2:00 p.m.
Hyatt Place Riverside Downtown
3500 Market Street, Riverside, CA 92501

Contact Information

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2016 AQMP Webpage:

<http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>