



# 2022 DRAFT AIR QUALITY MANAGEMENT PLAN

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## Regional Workshop and CEQA Scoping Meeting

South Coast Air Quality  
Management District

May 26, 2022

Coachella Valley



# Regional Workshop and CEQA Scoping Meetings

Meeting Information	Meeting 1: Entire South Coast AQMD Jurisdiction	Meeting 2: Entire South Coast AQMD Jurisdiction	Meeting 3: Coachella Valley Meeting*
Date	Wednesday, May 25, 2022	Wednesday, May 25, 2022	Thursday, May 26, 2022
Time	1:00 p.m.	6:00 p.m.	6:00 p.m.
Virtual	<a href="https://scaqmd.zoom.us/j/91200605609">https://scaqmd.zoom.us/j/91200605609</a> Zoom Webinar ID: 912 0060 5609 Teleconference Dial In: +1 669 900 6833	<a href="https://scaqmd.zoom.us/j/91200605609">https://scaqmd.zoom.us/j/91200605609</a> Zoom Webinar ID: 912 0060 5609 Teleconference Dial In: +1 669 900 6833	<a href="https://scaqmd.zoom.us/j/95634334998">https://scaqmd.zoom.us/j/95634334998</a> Zoom Webinar ID: 956 3433 4998 Teleconference Dial In: +1 669 900 6833

\* Will cover entire South Coast AQMD jurisdiction and additionally highlight Coachella Valley

# South Coast AQMD

- Local air pollution control agency

- Largest of the 35 local air agencies in CA and in the U.S.
- 10,743 square miles
- 17 million residents

- Key Responsibilities

- Regulate emissions from stationary sources
- Develop and implement plans to meet air quality standards
- Permit and inspect 28,400 affected businesses
- Administer over \$200 million of incentive funding annually



# World Health Organization

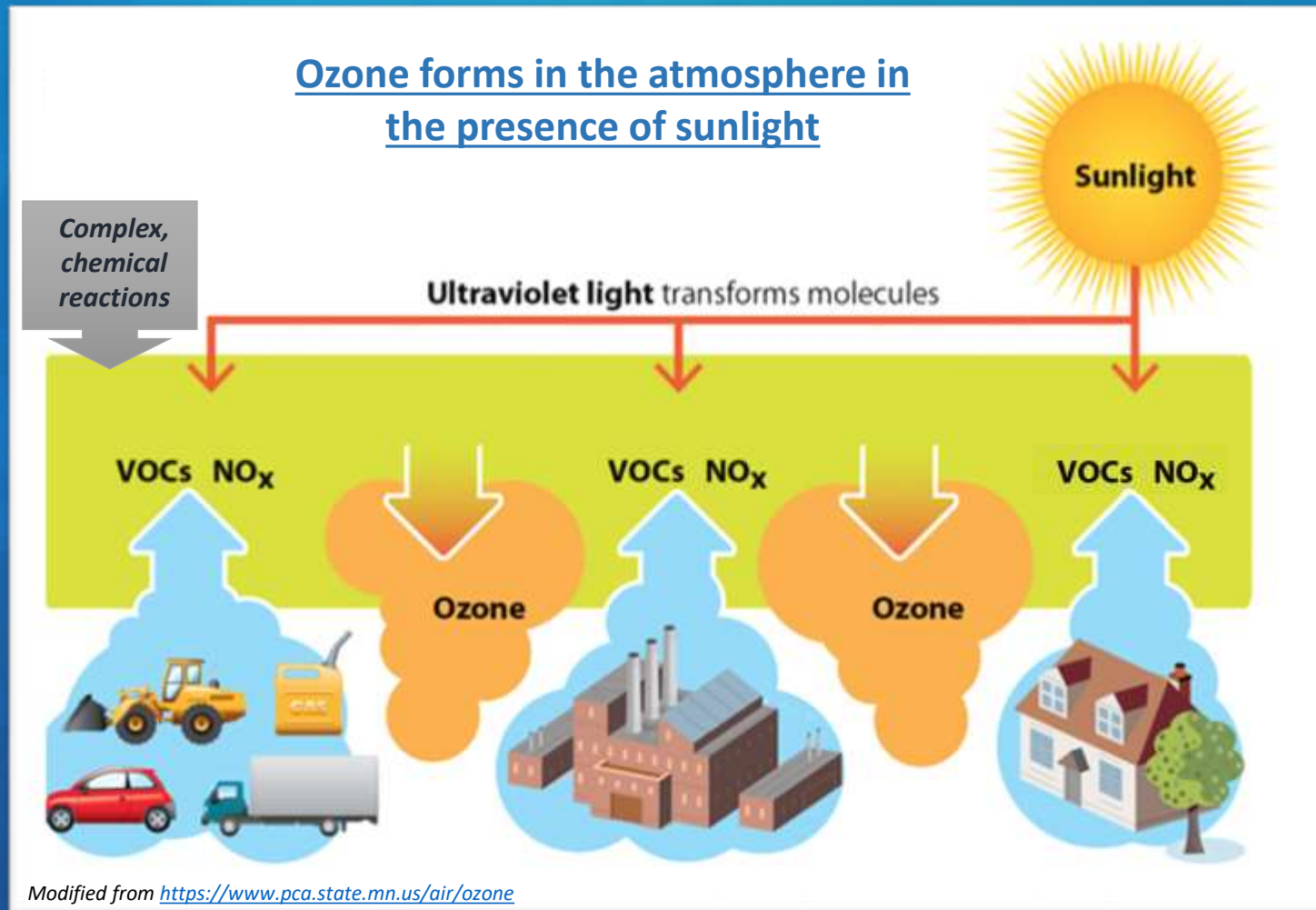
## 2020 Top 10 Causes of Death

Cause	World Deaths
Ischaemic Heart Disease	6,755,954
Stroke	5,463,915
Lower Respiratory Infections	3,050,943
Chronic Obstructive Pulmonary (Lung) Disease	2,986,236
Diarrhoeal Diseases	2,647,915
Tuberculosis	1,737,922
HIV/AIDS	1,378,852
Preterm Birth Complications	1,358,066
Trachea, Bronchus, Lung Cancers	1,205,688
Road Injury	1,167,008

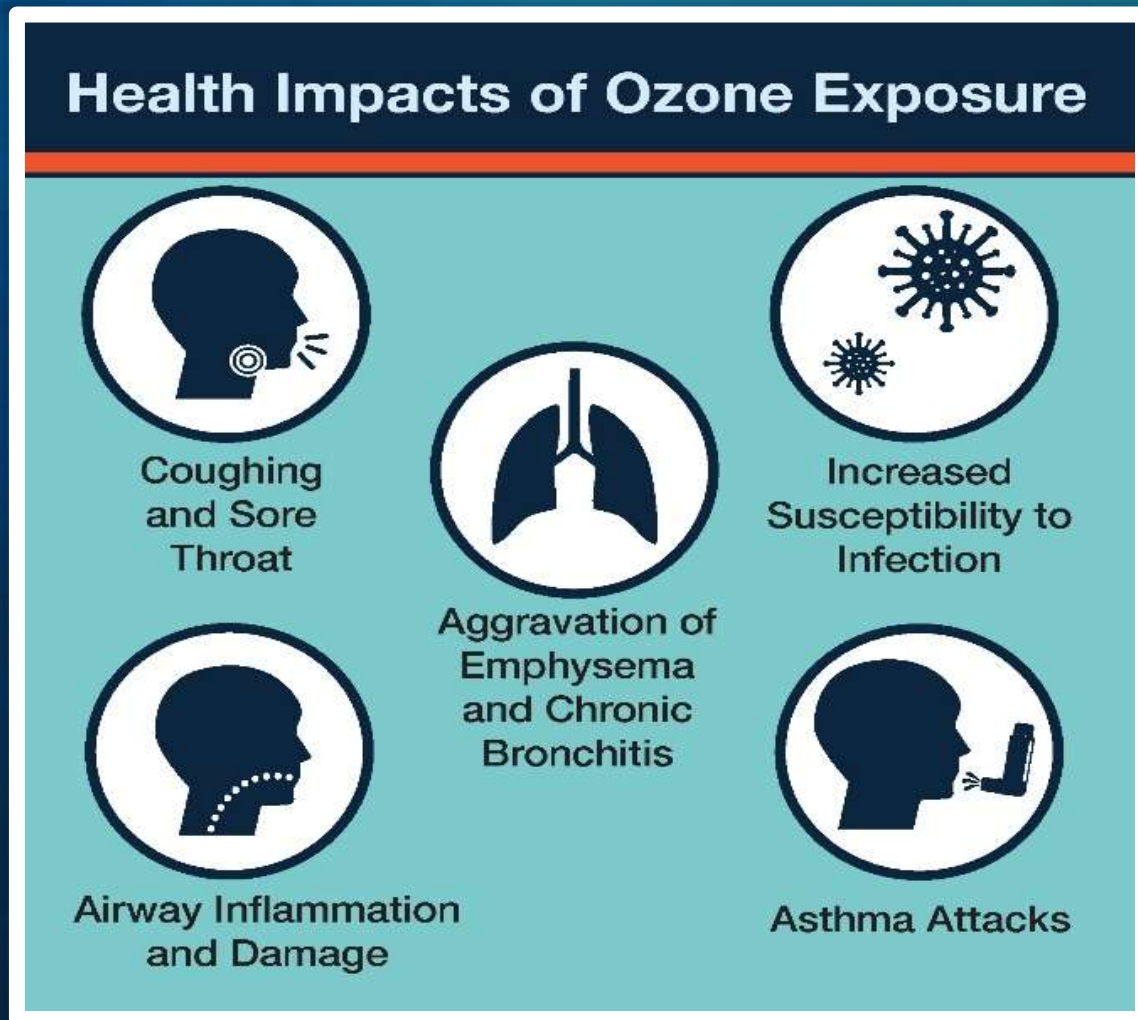
Air pollution is the largest cause of unavoidable premature death

Air pollution affects the diseases causing death

# What is Ozone

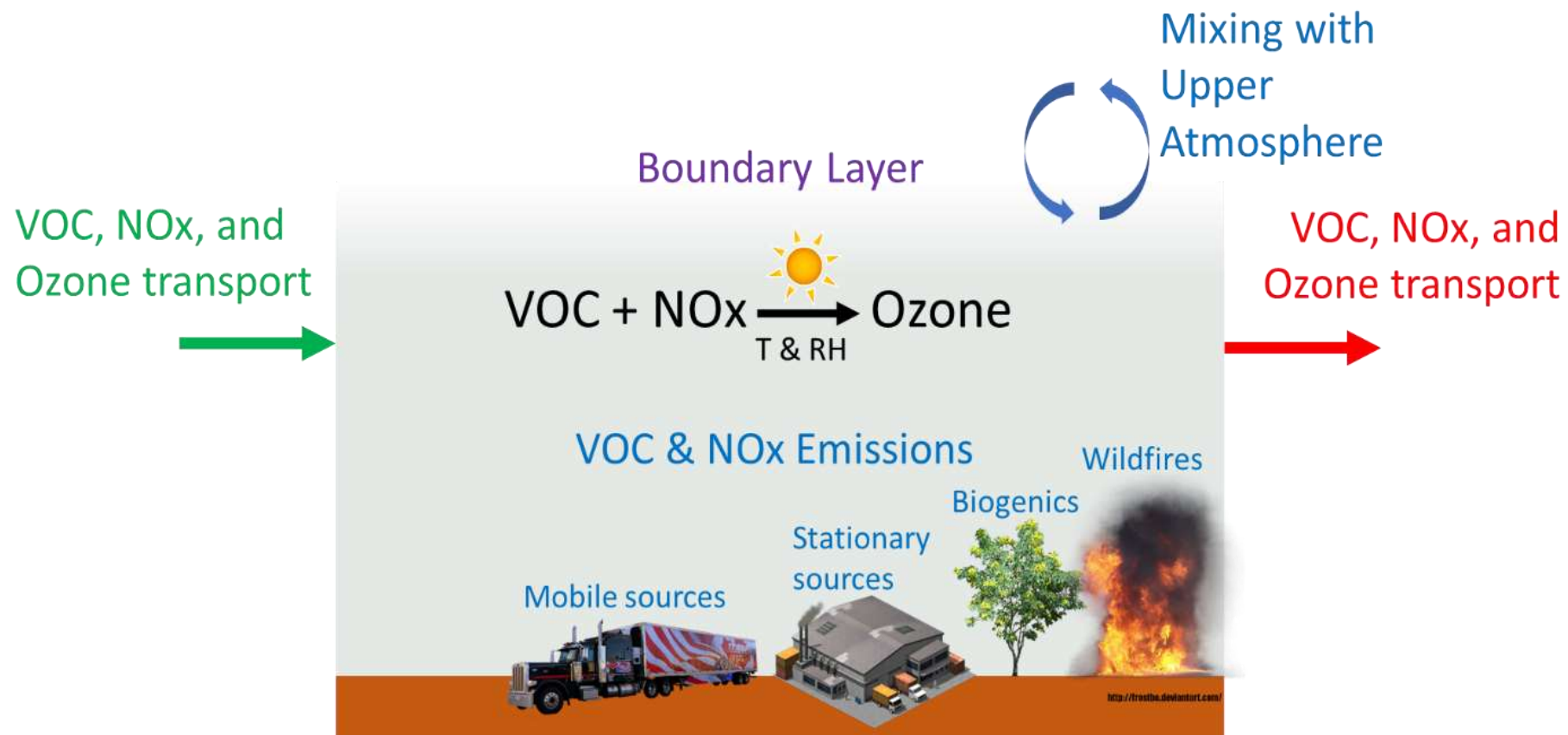


# Health Impacts of Ozone



- Ozone precursor pollutants also increase PM2.5 pollution
- PM2.5 can cause **premature death** in addition to other serious health effects

# Ozone Formation



# Our Challenge

Our region has historically suffered from some of the worst air quality in the United States



Los Angeles 2017



Los Angeles c. 1950

We have made significant progress, but still suffer from poor air quality

- Worst ozone (smog) in the country
- Among the worst fine particulate matter (PM<sub>2.5</sub>)



# National Ambient Air Quality Standards\*



U.S. EPA sets air quality standards for pollutants considered harmful to public health and the environment

The standards are reviewed approximately every 5 years

The latest standard was for 8-hour ozone standard set in 2015

Areas do not meet the standard must develop a plan to meet the standard by specific timeline

If the standard is not met by the due date, federal sanctions and draconian federal regulations kick in

\* NAAQS cover ozone, particulate matter, lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide

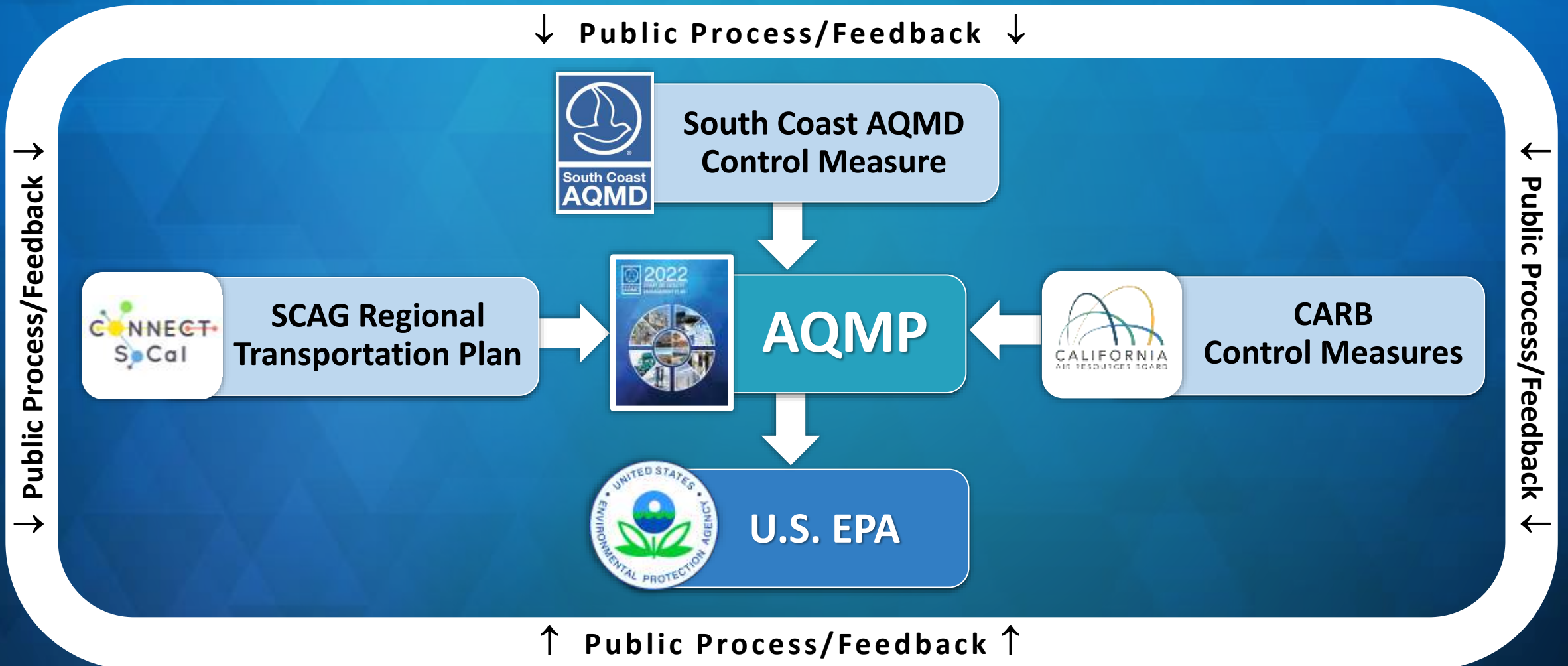
# Air Quality Management Plans (AQMPs)

- AQMP is a blueprint for how the region will meet national ambient air quality standards
- AQMP is also required under California Health & Safety Code since 1979
- South Coast Air Basin is classified as “extreme” nonattainment area for the 2015 8-hour ozone standard
- 2022 AQMP addresses control strategy to meet the ozone standard by 2037\*

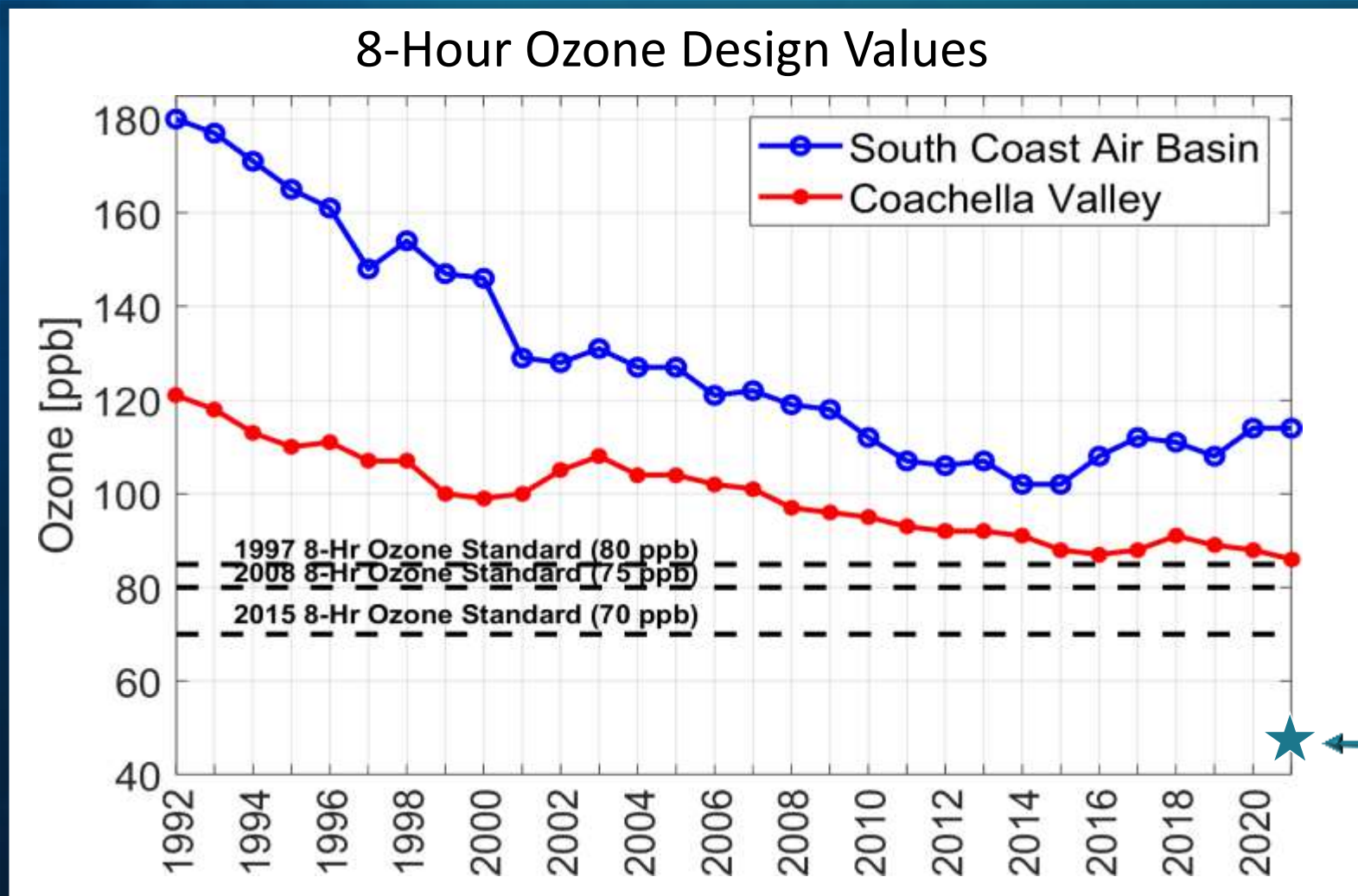
\* Other air quality standards are not part of this plan



# 2022 AQMP Process



# Ozone Trends in the South Coast Air Basin

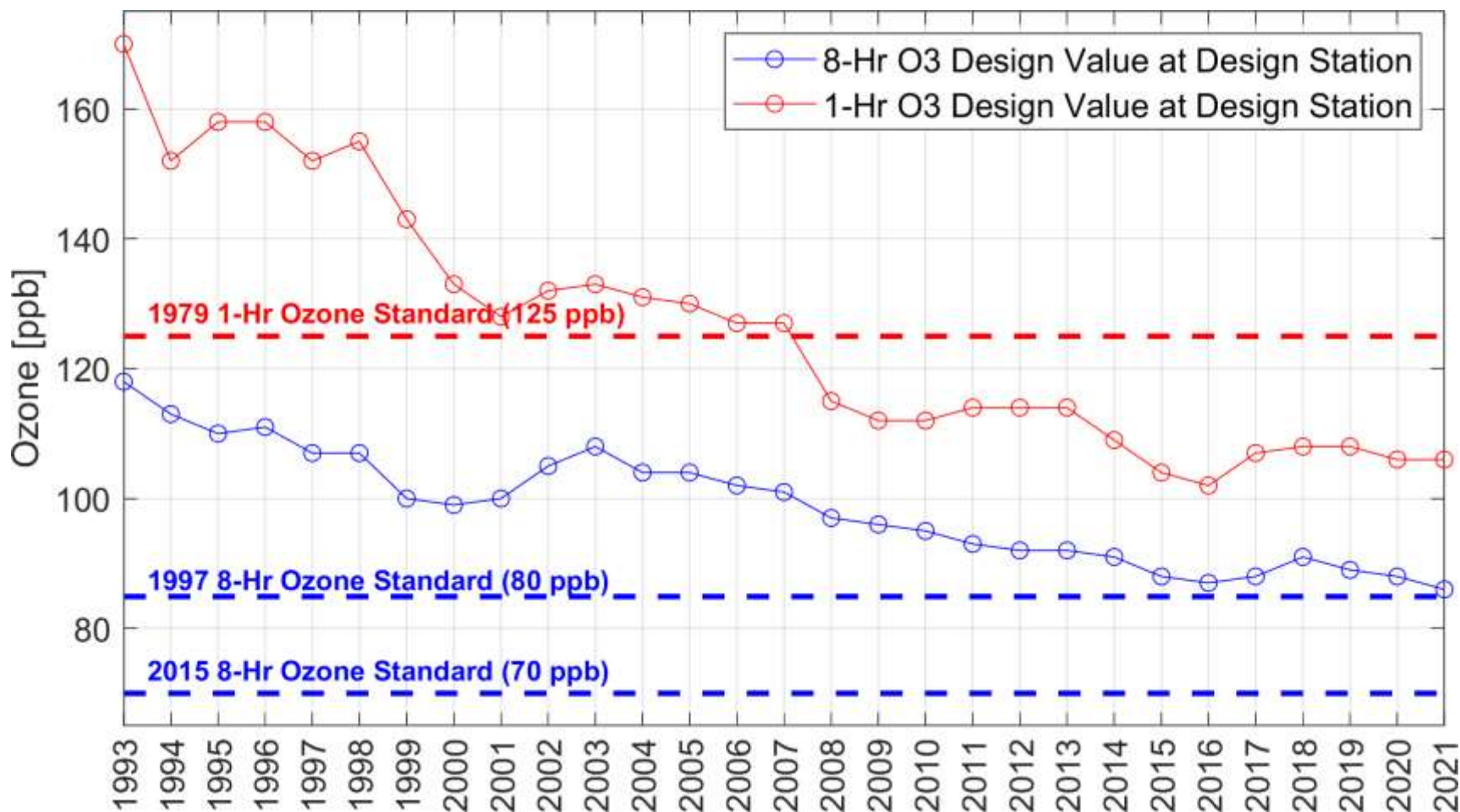


Overall air quality has dramatically improved

High ozone in recent years were due to adverse meteorology. Continued emission reductions will improve ozone

Approximate Ozone Background Level

# Ozone Trends in the Coachella Valley



Ozone levels in the Coachella Valley are well below the 1979 1-Hour Standard

Ozone levels are approaching the 1997 8-Hour Standard

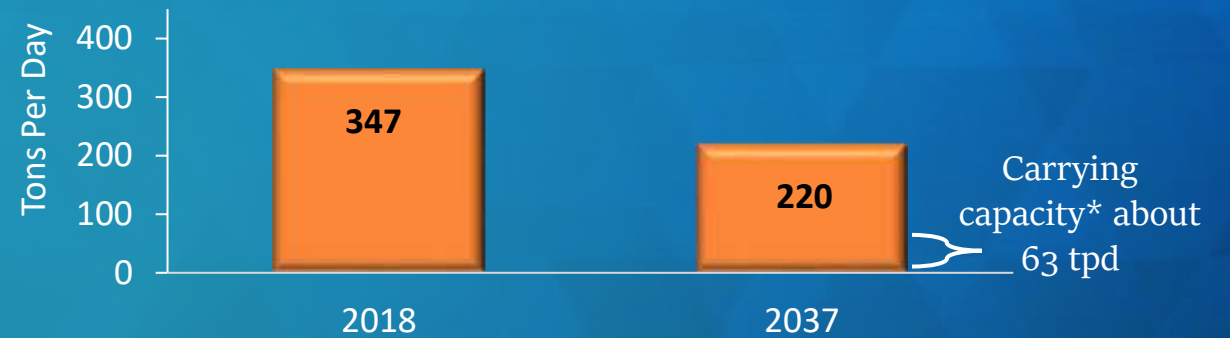
# Coachella Valley Attainment Status

Criteria Pollutant	Averaging Time	Designation	Attainment Date
Ozone (O <sub>3</sub> )	(1979) 1-Hour (0.12 ppm)	Attainment	11/15/2007 (attained 12/31/2013)
	(1997) 8-Hour (0.08 ppm)	“Extreme” Nonattainment	6/15/2024
	(2008) 8-Hour (0.075 ppm)	“Severe” Nonattainment	7/20/2027
	(2015) 8-Hour (0.070 ppm)	“Severe” Nonattainment	8/3/2033

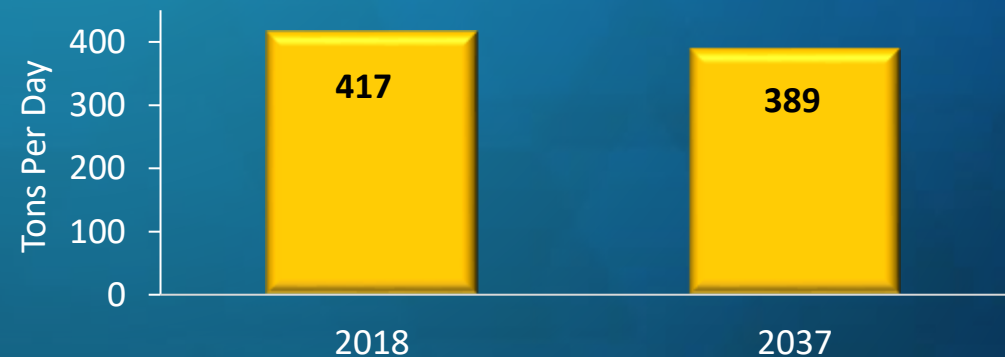
# Key Pollutants for Ozone Attainment

- NOx reduction is key to attain ozone standards
- No path to meet ozone standards through VOC reductions without substantial NOx reductions
- VOC reductions
  - Can reduce PM and can also reduce ozone at high NOx levels
  - Much less effective for reducing ozone at the low NOx levels needed

**Basin Total NOx Emissions**  
(Draft 2022 AQMP Summer Planning)



**Basin Total VOC Emissions**  
(Draft 2022 AQMP Summer Planning)

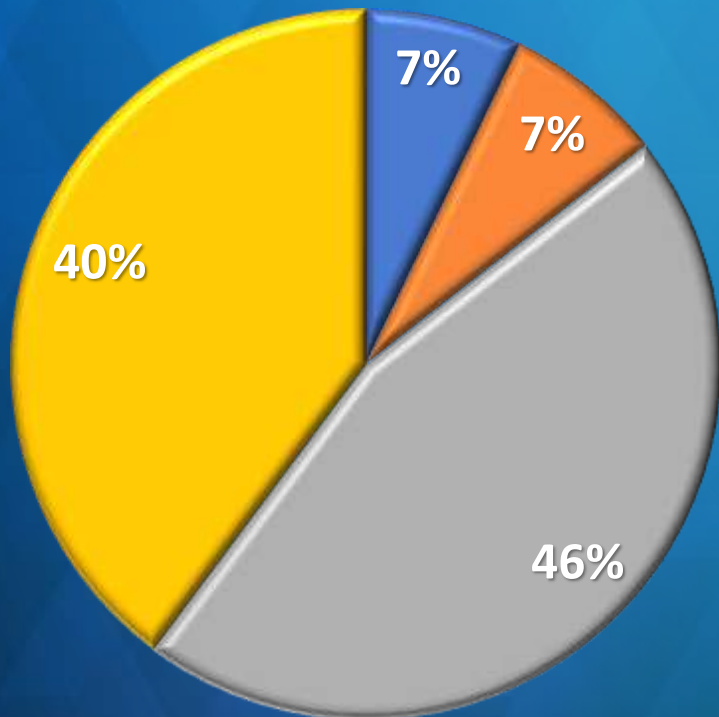


\*Carrying Capacity is maximum allowable NOx emissions to attain a standard

# Sources of NOx Emissions in 2018 vs. 2037

## 2018 NOx

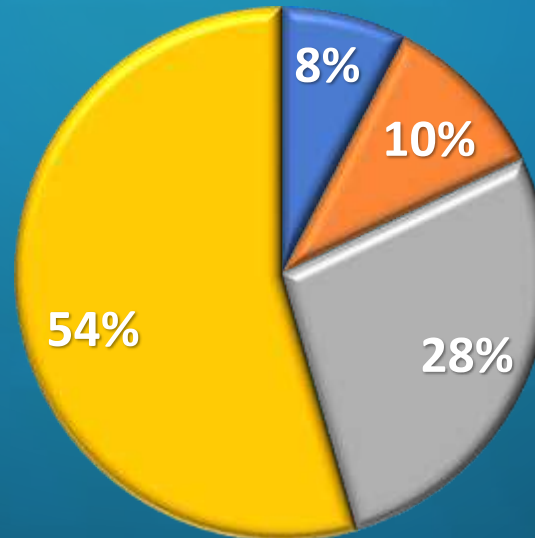
■ Point ■ Area ■ On-Road ■ Off-Road



347 tons per day

## 2037 NOx

■ Point ■ Area ■ On-Road ■ Off-Road



220 tons per day

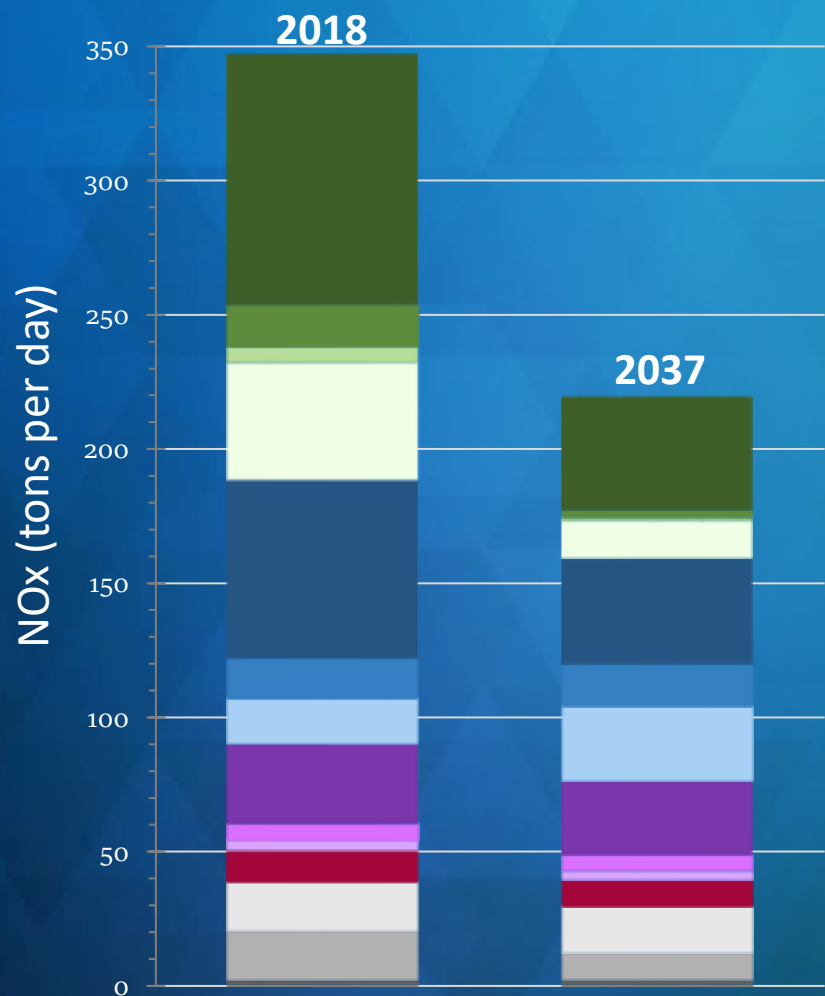
These are Business-As-Usual (baseline) inventory, which reflects implementation of adopted regulations and programs

**This ozone standard requires shifting focus beyond on-road and more to off-road sources**



# NOx Reductions Needed for Attainment

Basin Total NOx Emissions in Tons Per Day

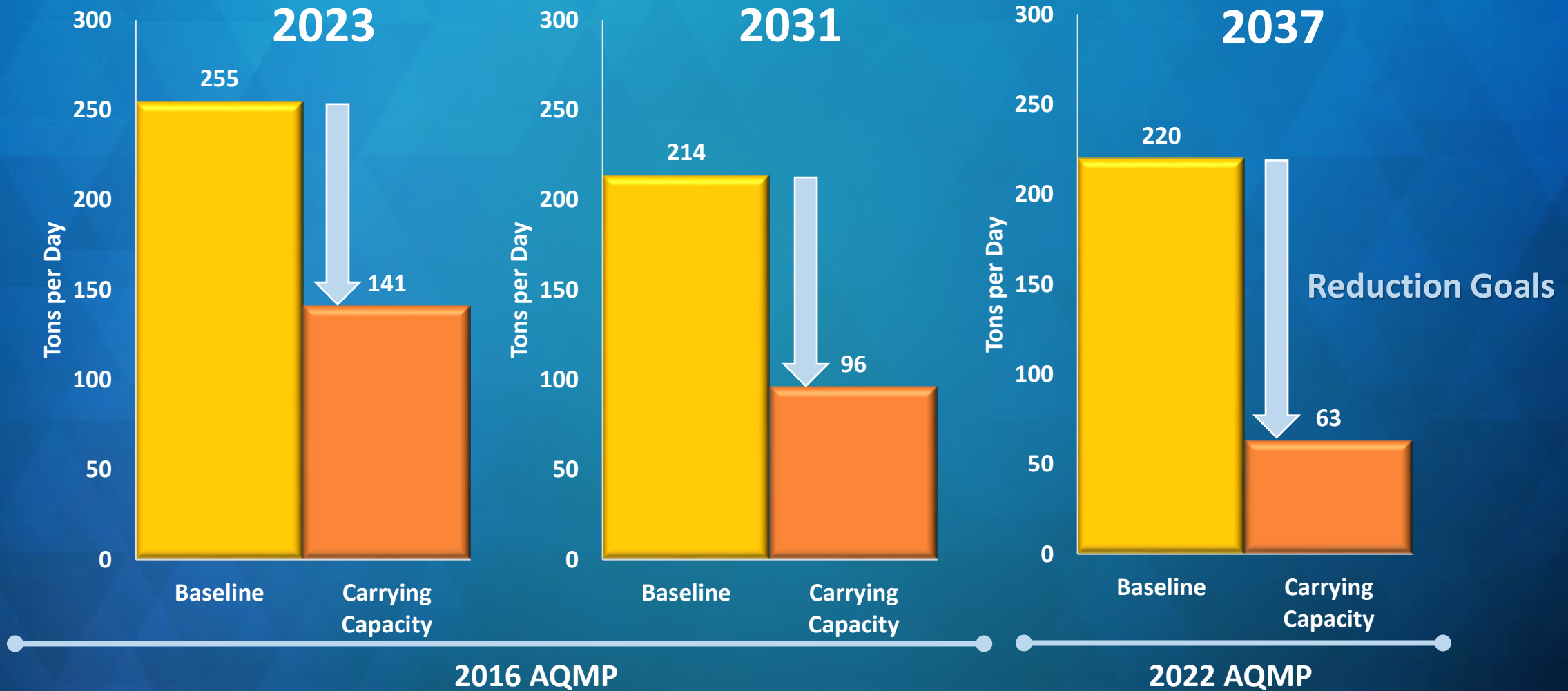


Total Reductions from 2018 to Attainment

Carrying Capacity is approximately 63 tons per day

- Heavy-Duty Diesel Trucks
- Medium-Duty & Heavy-Duty Gas Trucks
- Buses
- Cars/Light-Duty Trucks/SUVs/Motorcycles
- Off-Road Equipment and Vehicles
- Locomotives
- Aircraft
- Ocean Going Vessels
- Commerical Harbor Craft
- Recreational Boats
- Residential Fuel Combustion
- Industrial/Commercial Fuel Combustion
- Larger Industrial Facilities
- Other Stationary

# NOx Emissions and Reduction Goals



2016 AQMP emissions inventory for 2012 to 2031, and Draft 2022 AQMP emissions inventory for 2037

# Is Attaining the Ozone Standard in 15 Years Possible?



Attaining the standard is possible

- We have already made incredible progress
- Will be difficult
- Cannot be achieved alone
- Will be expensive with existing technologies
- Will require reliance on emerging advanced technologies

# Innovative Approaches Needed

Traditional approach relies on additional tailpipe/exhaust stack controls, new engines technology, or fuel improvements tailored to individual use cases

These traditional approaches on already highly controlled sources cannot achieve additional  $\approx 71\%$  reduction and must be bypassed wherever possible



# Key Considerations on a Zero Emissions Approach

○ What does the pathway look like through time?



○ Which fuels for which applications?

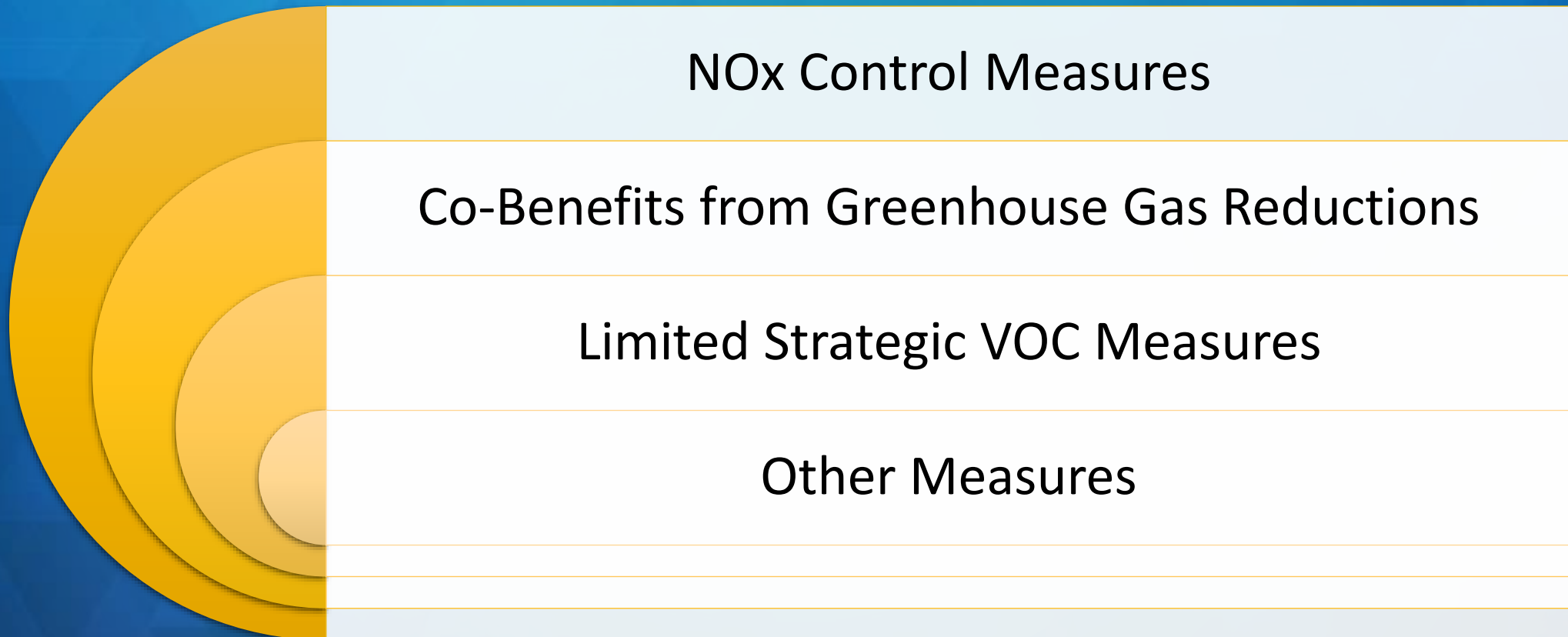


○ How can this be made most affordable?

- Ensures adoption at scale, and available equitably



# Overview of Draft South Coast AQMD Stationary and Area Source Control Strategy



# Draft Stationary and Area Sources NOx Control Measures

## Residential Combustion

- R-CMB-01: Residential Water Heating
- R-CMB-02: Residential Space Heating
- R-CMB-03: Residential Cooking
- R-CMB-04: Residential Other Combustion Sources

## Commercial Combustion

- C-CMB-01: Commercial Water Heating
- C-CMB-02: Commercial Space Heating
- C-CMB-03: Commercial Cooking
- C-CMB-04: Small Internal Combustion Engines (Non-permitted)
- C-CMB-05: Small Commercial Miscellaneous Combustion Equipment (Non-permitted)

## Large Combustion (e.g., Industrial)

- L-CMB-01: NOx RECLAIM (formerly CMB-05)
- L-CMB-02: Large Boilers and Process Heaters
- L-CMB-03: Large Internal Combustion Engines (Prime Engines)
- L-CMB-04: Large Internal Combustion Engines (Emergency Standby Engines)
- L-CMB-05: Large Turbines
- L-CMB-06: Electric Generating Facilities
- L-CMB-07: Petroleum Refineries
- L-CMB-08: Landfills and POTWs
- L-CMB-09: Incinerators
- L-CMB-10: Miscellaneous Combustion



**Residential and Commercial Building Measures**

# State and Local Policies for Residential and Commercial Buildings



## California Energy Commission (CEC) Title 24 (2022 Code)

- Electric ready measures from 2023 onward for single family, multi-family, and commercial new buildings



## California Air Resource Board (CARB) Draft 2022 SIP Strategy

- Proposed Zero-Emission Standard for Space and Water Heaters at the point of sale in 2030



## Bay Area AQMD

- Rulemaking for zero NOx emissions standard for space and water heating units with a proposed compliance date of 2027 to 2031



## City of Berkeley

- All electric new buildings of all types, effective January 1, 2020
- A plan adopted to electrify existing buildings with a phased approach in 2021 -2045



## Over 50 cities/counties in California

- Adopted building codes supporting all-electric new constructions (mostly Northern CA)



# South Coast AQMD Approach for Residential and Commercial Building Measures

1

Coordinating with local and state agencies to build upon existing programs

2

Phasing in requirements for zero emission water/space heating and cooking through a regulatory approach

3

Allowing near-zero and other lower NO<sub>x</sub> technologies as a transitional alternative if installing a zero emission unit is determined to be infeasible

4

Utilizing incentives to accelerate the adoption of zero emission units and address inequities

# Proposed Method of Control and Implementation

## Regulatory Approach

- Require zero NOx emissions; allow lower NOx technology when not be feasible
- Amend or develop rules reflecting updated Best Available Retrofit Control Technology

## Incentive Approach

- Focus on disadvantaged communities
- Encourage early deployment of zero emission requirement

# Strategic VOC Control

- While NO<sub>x</sub> is primary pollutant of concern for attainment, some VOC reductions can still improve air quality
  - Early reductions in VOCs can reduce ozone
  - VOC reductions contribute to reduction in fine PM
  - Many VOCs are also toxics

# Overview of Draft South Coast AQMD Mobile Source Control Strategy



# Key Considerations for a Zero Emissions Approach

- **Indirect Source Rules**
  - **Ports** – New ISR in development
  - **Railyards** – New ISR in development for new railyards, followed immediately by existing railyards
  - **Warehouses** – Enforcement and quantification of existing rule, and periodic re-evaluation to determine if amendments are necessary
- **Voluntary Agreements (MOUs)**
  - **Airports** – Extension/expansion of existing MOUs with major airports
- **Unique consideration for facility-based measures**
  - Quantified SIP credit likely not possible at time of AQMP and rule adoption. Credit obtainable as measure is implemented.
  - Potential scope of measures are limited as many sources that visit these facilities are primarily regulated federally or internationally



# Emissions Growth Management

- **New and re-development projects**
  - Potential for regulatory (e.g., ISR) or non-regulatory approach
- **General Conformity (federal projects)**
  - Proposing to move away from current 'set-aside' / first come-first served approach through future rulemaking
  - Example approach: High Speed Rail (Burbank-LA)
    - Project mitigates own emissions first, then contributes to mitigation fund to address remaining emissions in community
- **Clean Construction Policy**
  - Develop uniform model program that local agencies can use to require cleanest construction equipment available
  - Could include uniform air quality mitigation fund for CEQA projects if all feasible mitigation already implemented



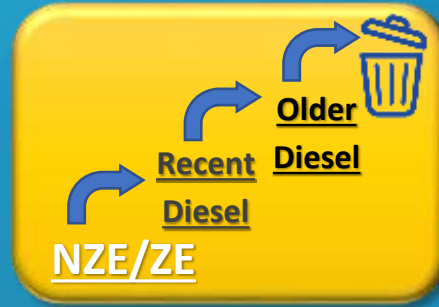
# Incentive Programs



*Replace Your Ride*



*Small Off-Road Equipment Exchange*



*Truck Trade Up*



*Passenger Locomotives*

*Focus:  
Take credit for,  
and seek to  
expand, existing  
successful  
programs*



*Existing Incentive Programs*



*Pacific Rim Initiative for Maritime Emission Reductions*

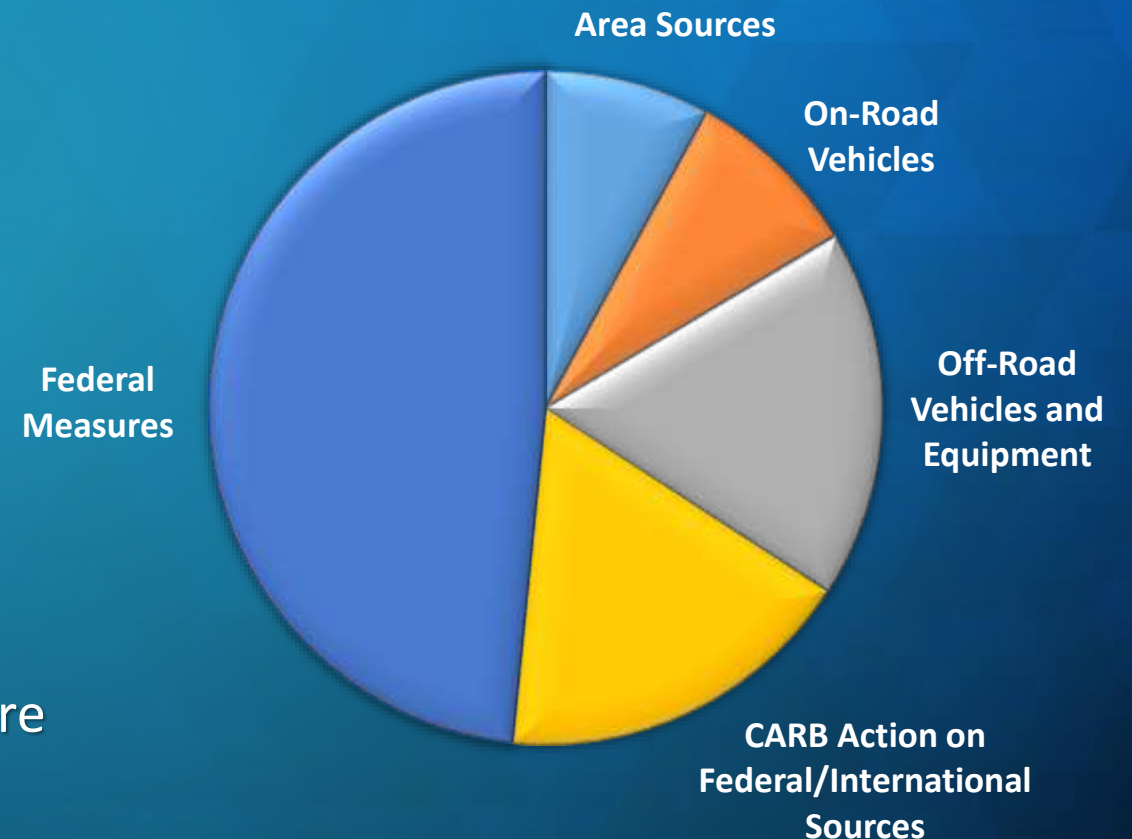


*Mobile Source Emission Reduction Credits*

# CARB Measures – Draft 2022 State SIP Strategy

- Draft 2022 AQMP will include CARB measures\* for the following categories
  - Area sources (2 Measures)
  - On-Road Vehicles (3 Measures)
  - Off-Road Vehicles and Equipment (7 Measures)
  - CARB’s measures for federally and internationally regulated sources (1 Measure)
  - Federally and internationally regulated sources that required federal action (5 Measures)
- Limited reductions from the 2016 SIP Strategy are included in the attainment demonstration

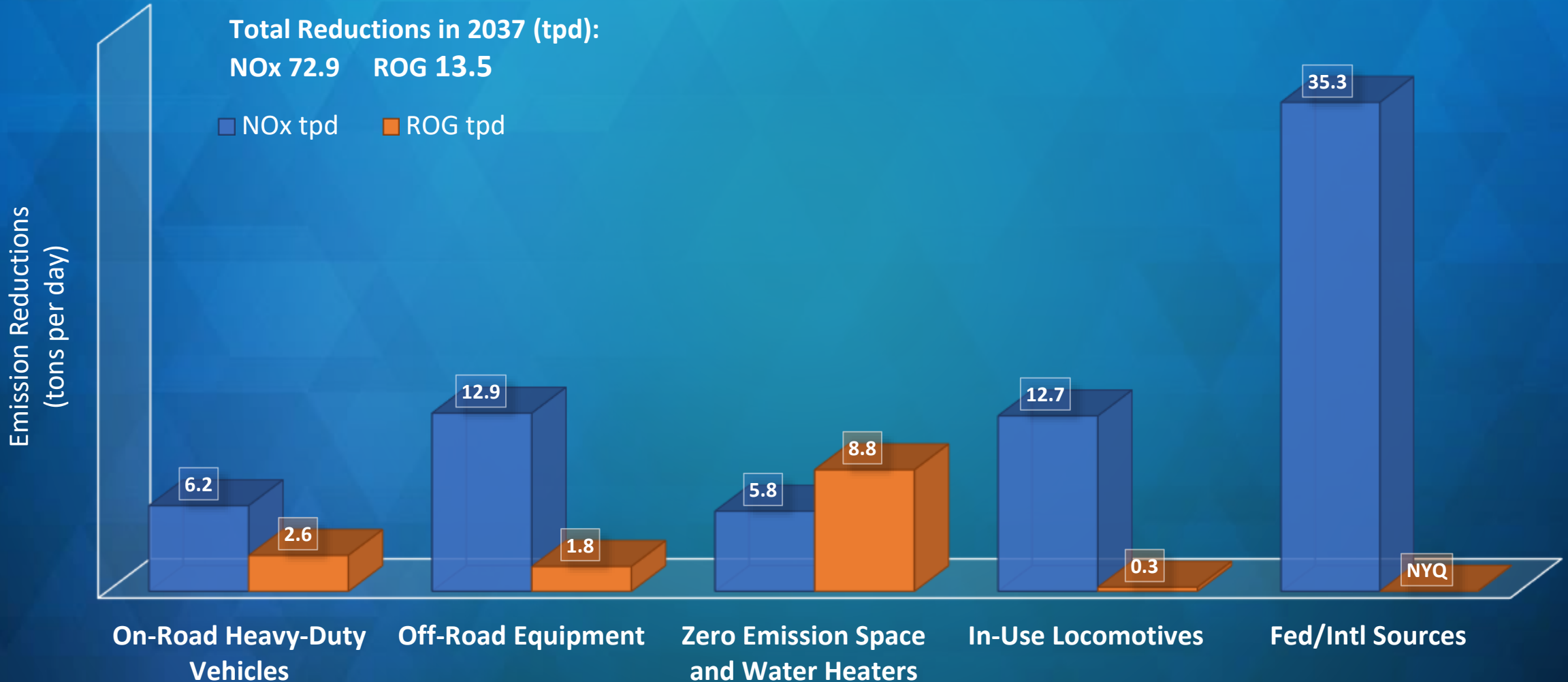
**NOX Reduction  
(73 Tons Per Day)**



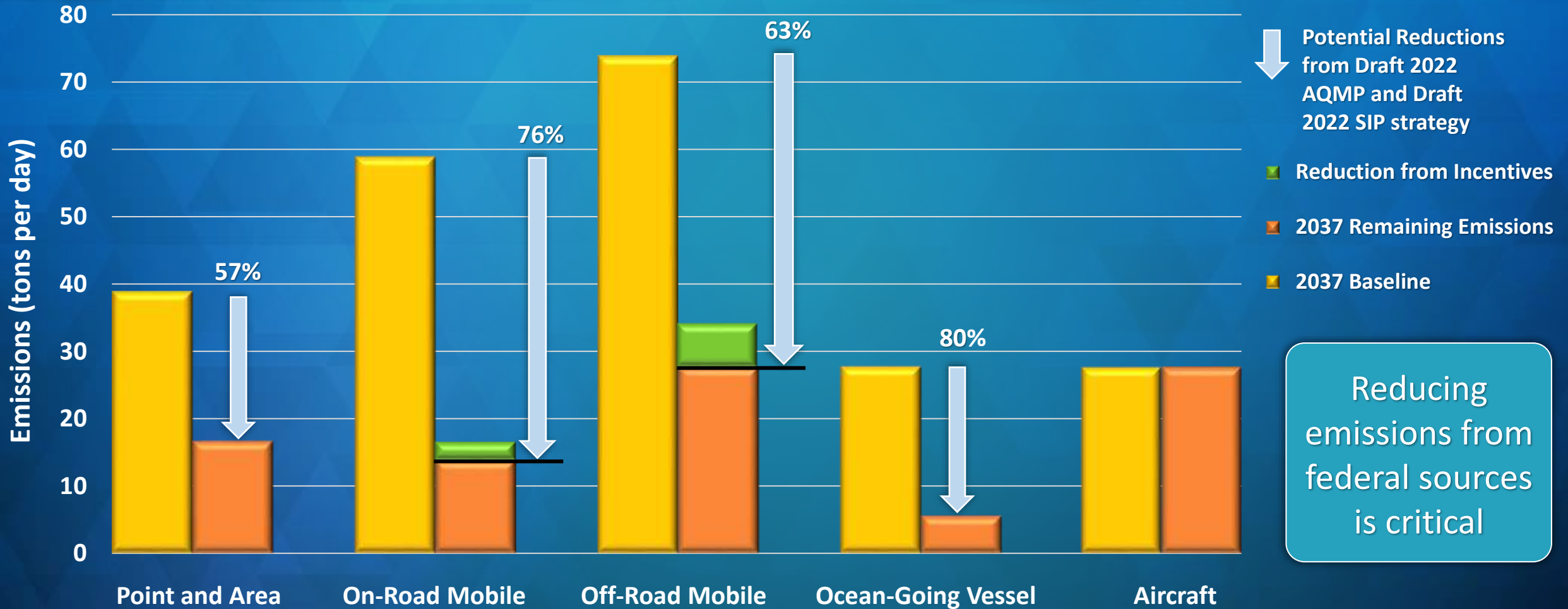
\* Reductions from mobile sources include CARB 2016 and 2022 State Strategy



# 2022 State SIP Strategy Measures – South Coast Reductions



# Summary of Potential Approach to Reducing NOx by Major Source Category



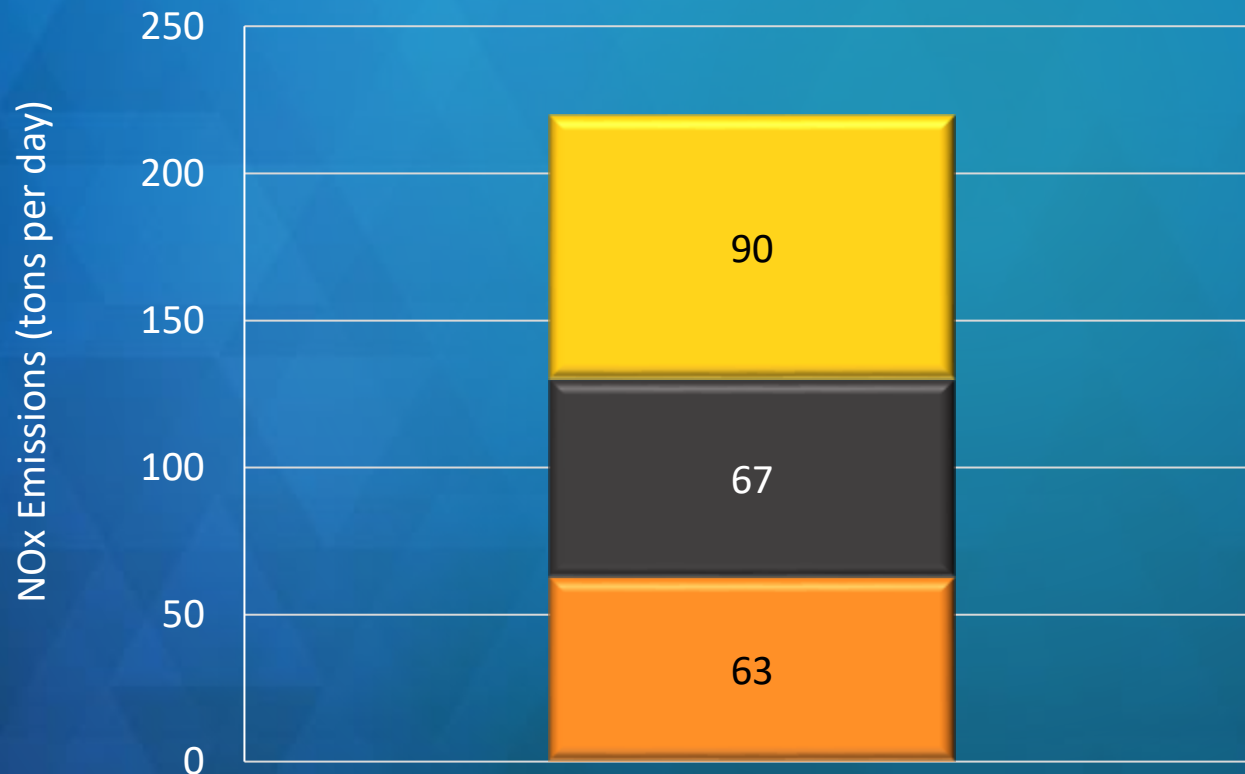
\*Some incentives also anticipated for area sources, but not yet defined

# Federal and International Sources

- Approximately 1/3 of the 2037 baseline emissions inventory is regulated primarily under federal and international jurisdiction, with limited authority for CARB/South Coast AQMD
  - Ships, aircraft, locomotives, preempted off-road equipment, selected heavy duty trucks
- Cannot require federal government to reduce emissions, even from federal sources
- Cannot meet the standard without significant reductions from these sources

# Results of Draft Control Strategy

## 2037 South Coast NOx Emissions with CARB & South Coast AQMD Draft Measures and Federal Actions



**Defined Measures are specific control measures with estimated reductions**

**Black Box measures include varying levels of definition and certainty**

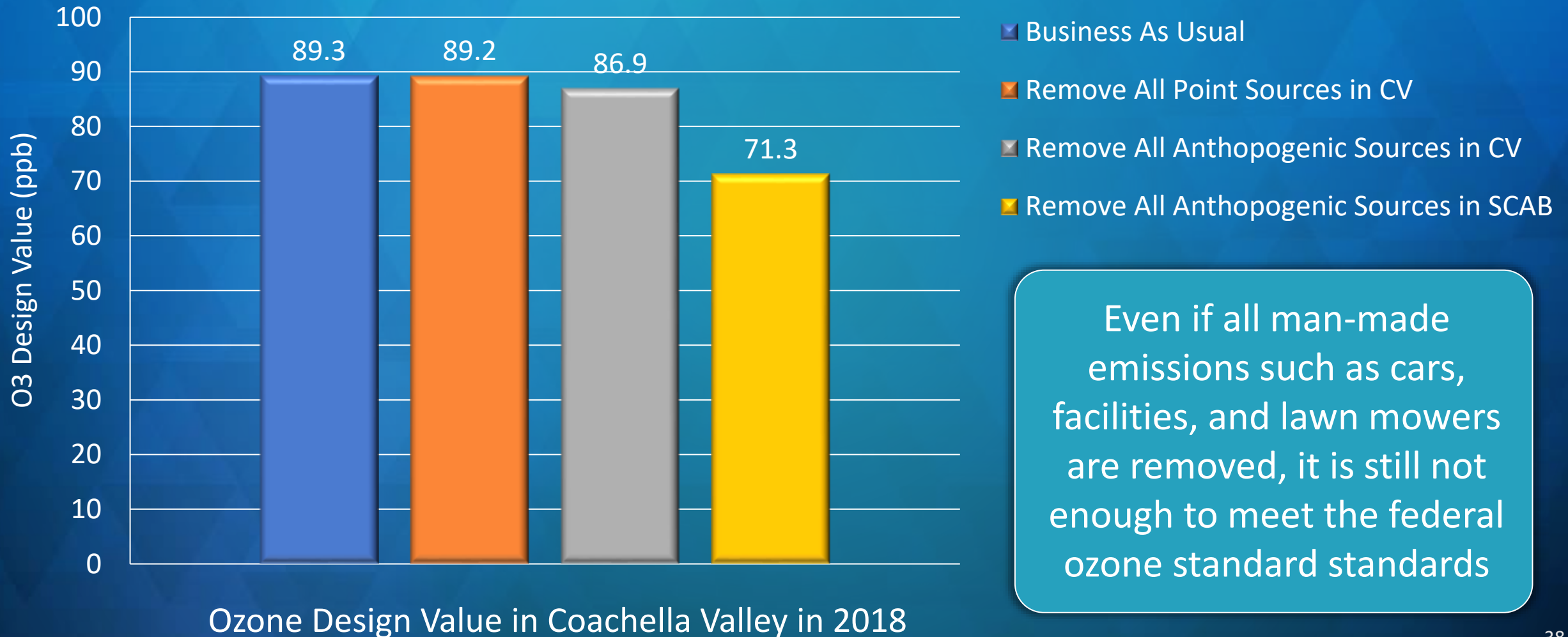
**Federal action cannot be assigned in AQMP, therefore Black Box remains same size**

- Defined Measures
- Black Box Measures
- Remaining

# Ozone in Coachella Valley

- In August 2018, EPA designated the Coachella Valley as “severe-15” nonattainment for the 2015 8-hour ozone standard
  - Current deadline to meet the standard is 2032
- Our models show that we will not be able to meet the standard by that time
- Coachella Valley’s ozone pollution is mostly due to pollution coming from the greater Los Angeles area

# Impact of Emissions from the Coachella Valley



# Ozone Attainment in Coachella Valley

- Coachella Valley will meet the standard in 2037 with the controls proposed in the 2022 AQMP
  - South Coast AQMD is asking that EPA "bump-up" the classification for Coachella Valley to the "extreme" level
    - This gives a new deadline of 2037
    - Same classification as the Greater Los Angeles area (South Coast Air Basin)
    - Coachella Valley is already in "extreme" non-attainment for the 1997 8-hour ozone standard, therefore, no additional impacts are expected

# Public Input and Outreach

## 'Standard' Comprehensive





# Supporting Documents

The Draft AQMP and all supporting documents are available on the 2022 AQMP website:

<http://www.aqmd.gov/2022AQMP>



The screenshot displays the South Coast AQMD website. At the top, a red banner reads: "During this difficult time, South Coast AQMD is committed to protecting air quality and public health. Please visit our COVID-19 page for the operational updates and latest information. [Learn more.](#)" Below this is a navigation bar with the South Coast AQMD logo and a search box. The main navigation menu includes: AIR QUALITY, INCENTIVES & PROGRAMS, RULES & COMPLIANCE, PERMITS, NEWS, WEBCASTS, & CALENDAR, TECHNOLOGY ADVANCEMENT, RESOURCES, and MEETING AGENDAS & MINUTES. A breadcrumb trail shows: Home / Air Quality / Clean Air Plans / 2022 Air Quality Management Plan. The main heading is "Air Quality Management Plan (AQMP)". The introductory text states: "The Air Quality Management Plan (AQMP or Plan) is a regional blueprint for achieving air quality standards and healthful air. The 2022 AQMP will represent a comprehensive analysis of emissions, meteorology, regional air quality modeling, regional growth projections, and the impact of existing and proposed control measures."

# Submission of Documents or Comments

Please address questions, comments, documents, or other relevant information to:



Internet Submission: <https://forms.office.com/g/PV2q42uBjy>



Email: [AQMPteam@aqmd.gov](mailto:AQMPteam@aqmd.gov)



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Planning & Rules Manager  
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Diamond Bar, CA 91765



Telephone: (909) 396-3169

Responses to comments received by **June 21, 2022**

# Next Steps



Submission to U.S. EPA

Late Fall (18 months after submission for EPA to act on the Plan)



CARB Public Hearing

Late Fall



South Coast AQMD Public Hearing

October 7, 2022



South Coast AQMD Regional Public Hearings

Summer



Release Revised Draft AQMP

Summer

# Stay Informed

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SCAQMD Advisor

SCAQMD's comprehensive bi-monthly newsletter containing the latest news, including rule

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**2022 AQMP  
Interested Parties**

**Email  
Updates**



# Download our Smartphone Application

You can now get “Connected to Clean Air” with the free South Coast AQMD mobile phone app on your iPhone and Android platform



Detailed Monitor Data

Real-Time Localized Air Quality Information

Connect with South Coast AQMD



Download for iPhone in

App Store



Download for Android in

Google play



Point your iPhone camera here to download!

<https://www.aqmd.gov/nav/online-services/smartphone>

# South Coast AQMD Resources for Reporting Air Quality Concerns

## South Coast AQMD Telephone Hotline

1-800-CUT-SMOG

(1-800-288-7664)

## South Coast AQMD Website

<https://www.aqmd.gov/home/air-quality/complaints>

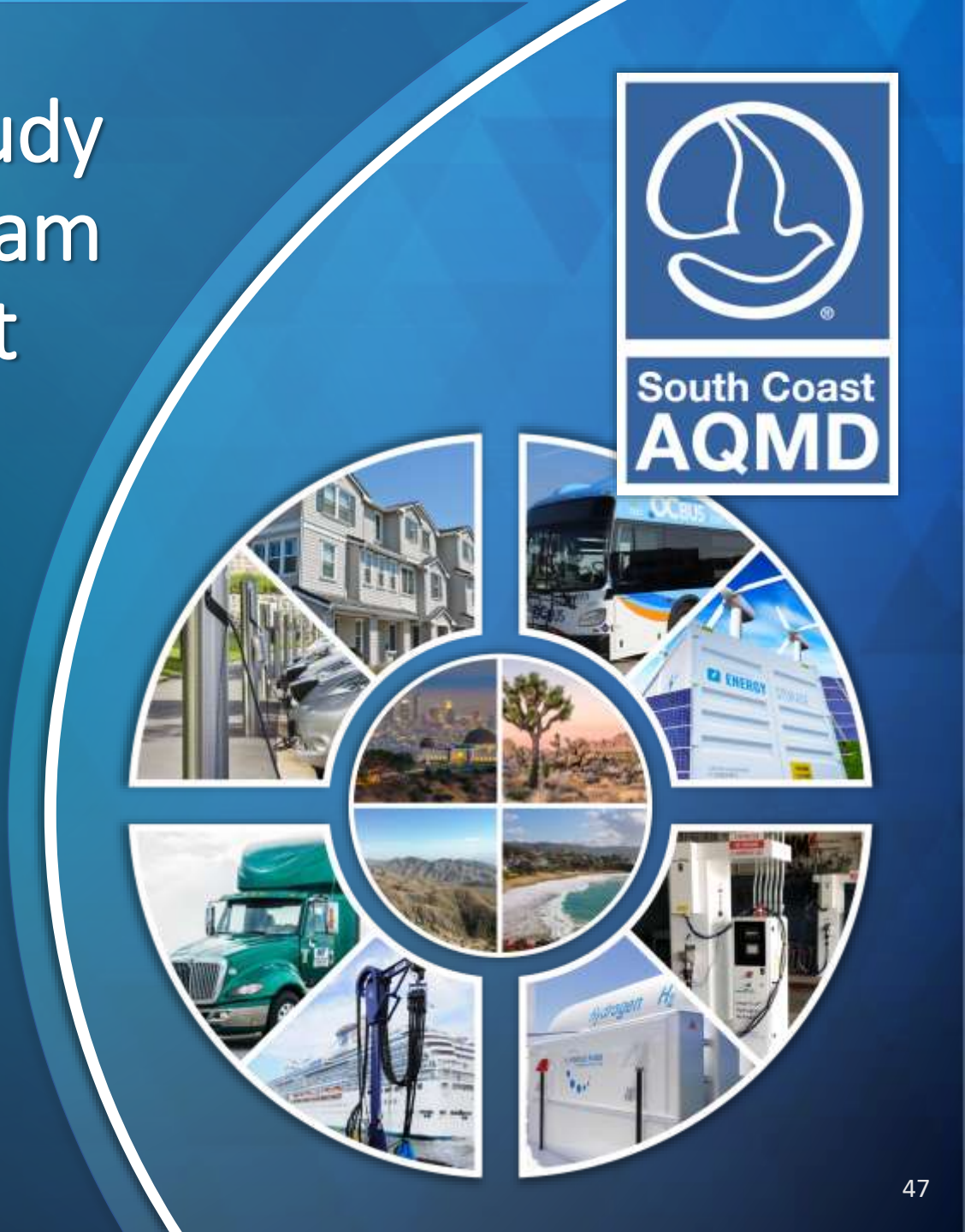
## South Coast AQMD Smartphone Application

Available on Apple and Android app stores

# Notice of Preparation/Initial Study for the 2022 AQMP Draft Program Environmental Impact Report

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## Regional Workshop and CEQA Scoping Meeting



# California Environmental Quality Act (CEQA)

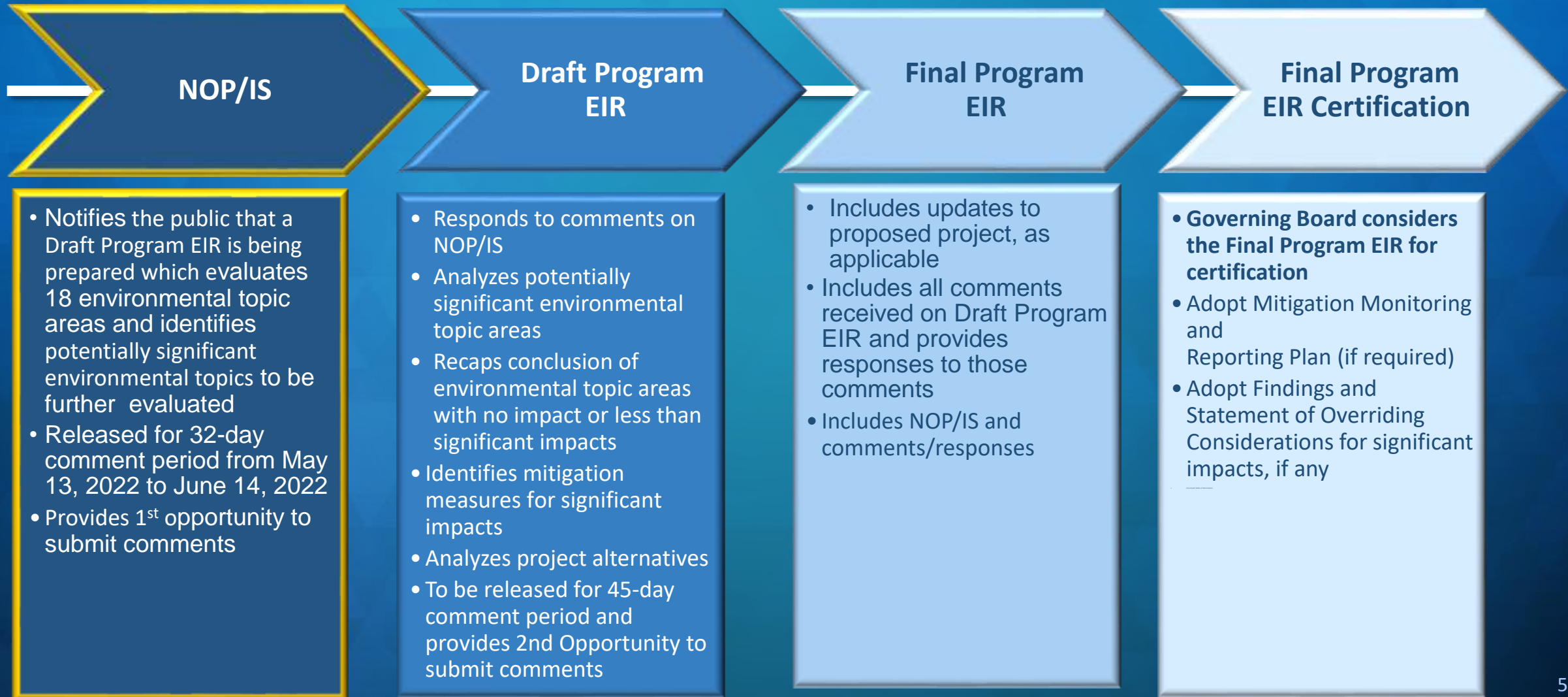
- 2022 AQMP is a project subject to CEQA (State law) which requires evaluation of 18 environmental topic areas
- Decision to prepare a Program Environmental Impact Report (EIR) because 2022 AQMP contains a series of actions that can be characterized as one large project in connection with the issuance of rules, regulations, plans, or other general criteria required to govern the conduct of a continuing program



# CEQA Scoping Meeting

- Public Workshops serve as CEQA Scoping Meetings
  - Held during Notice of Preparation/Initial Study (NOP/IS) comment period
- Required for projects with potentially significant environmental impacts
- Opportunity for the public, other agencies, and interested parties to find out more about proposed project and to provide suggestions on:
  - Scope of the CEQA analysis
  - Additional Topics to Evaluate in Draft Program EIR
  - Mitigation Ideas
  - Project Alternatives
- CEQA Scoping comments will be considered when preparing Draft Program EIR

# Overview of CEQA Process



# NOP/IS Analysis

- Evaluated all control measures and incentive programs identified in the 2022 AQMP for potential environmental impacts
- Chapter 1 provides background information and project description
- Chapter 2 identifies and analyzes environmental topics/impacts
- All 18 environmental topics were evaluated and potentially significant topics will be further analyzed in forthcoming Draft Program EIR:

Topic Areas with Potentially Significant Impacts	Topic Areas with No Impacts or Less than Significant Impacts	
<ul style="list-style-type: none"> <li>• Air Quality and Greenhouse Gases</li> <li>• Energy</li> <li>• Hazards and Hazardous Materials</li> <li>• Hydrology and Water Quality</li> <li>• Noise</li> <li>• Solid and Hazardous Waste</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetics</li> <li>• Agriculture and Forestry Resources</li> <li>• Biological Resources</li> <li>• Cultural and Tribal Cultural Resources</li> <li>• Geology and Soils</li> </ul>	<ul style="list-style-type: none"> <li>• Land Use and Planning</li> <li>• Mineral Resources</li> <li>• Population and Housing</li> <li>• Public Services</li> <li>• Recreation</li> <li>• Transportation</li> <li>• Wildfire</li> </ul>

# Availability of NOP/IS

- Notice of Preparation of a Draft Program EIR and the Initial Study (NOP/IS) was released for 32-day public review and comment period on May 13, 2022
- Comment period closes at 5:00 p.m. on June 14, 2022
- NOP/IS is available online at: <https://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2022/2022-aqmp-nopis.pdf>
- Hardcopies are available at the in-person meeting venue on the workshop date and at South Coast AQMD Headquarters, or by calling (909)396-2039

# Opportunity to Comment on NOP/IS

Please direct questions and comments on the CEQA analysis in the NOP/IS to:

Kevin Ni

Planning, Rule Development, and Implementation / CEQA Section



Email: [kni@aqmd.gov](mailto:kni@aqmd.gov)



Fax: (909) 396-3982



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Comments received relative to the CEQA analysis in the NOP/IS and their responses will be included in the Draft Program EIR, upon its release

# Status of the Draft Program EIR

- Draft Program EIR – anticipated release July 2022 and will include comments and responses received during CEQA Scoping Meetings and on the NOP/IS
- 45-day public review & comment period
- Upon release, it will be available at South Coast AQMD's Public Information Center & CEQA Webpage  
<http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects>

# CEQA Team Contact Information

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**Air Quality Specialist**



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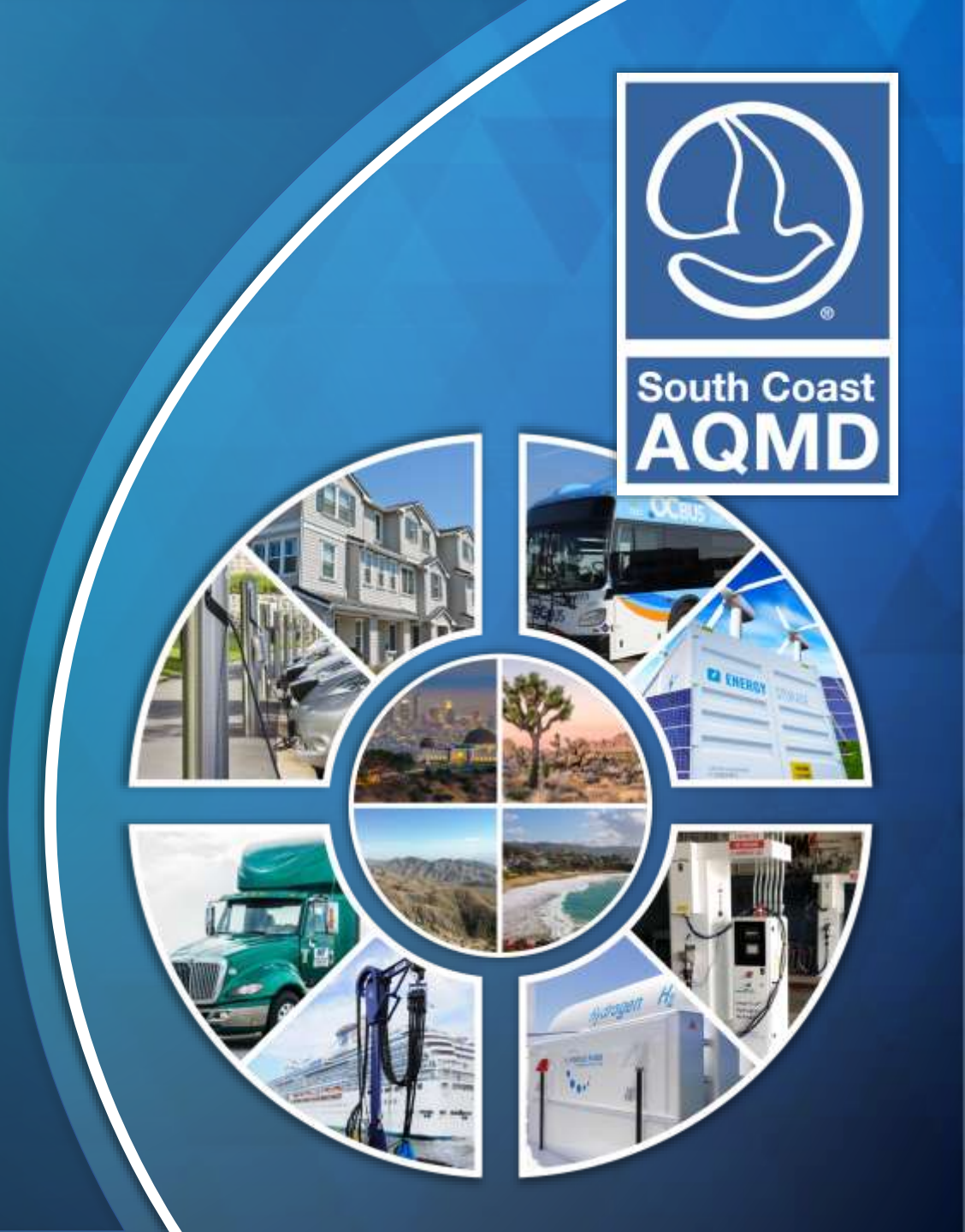


**(909) 396-2462**

# Overview of Socioeconomic Impact Assessment

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## Regional Workshop and CEQA Scoping Meeting





# Purpose of Socioeconomic Scoping

- Transparency:
  - Collect input on key socioeconomic issues and potential alternatives
  - Discuss draft outline and each planned component of the 2022 AQMP Socioeconomic Report
- Continuous stakeholder involvement via public process:
  - Scientific, Technical & Modeling Peer Review (STMPR) Advisory Group
    - 2 meetings covered socioeconomic topics: November 2021 and March 2022
    - Upcoming: preliminary costs and health benefits to be discussed at May 31<sup>st</sup> meeting
  - 3 scoping sessions in regional public workshops
  - More to be announced/scheduled

# Background and Commitments

- AQMP Socioeconomic Report:
  - Socioeconomic impact assessment for AQMP conducted since 1991
    - To better inform the public and policymakers
    - Not legally required (unlike for rules)
  - 2016 Report incorporated more than a dozen key recommendations from the 2014 independent review by Abt Associates
- Commitments for the 2022 Report:
  - Continue to incorporate Abt recommendations
  - Minimum 60-day review period for Draft Report (June release)
  - Minimum 30-day review period for Draft Final Report (September release)

# Draft Outline of AQMP Socioeconomic Report

- Non-technical executive summary
- Report:
  - Introduction
  - Incremental costs and cost-effectiveness
  - Quantified public health benefits and other non-quantified benefits
  - Projected macroeconomic impacts
  - Sub-county distribution of costs, benefits, and job impacts
  - Environmental justice analysis
  - Conclusion and future enhancements
- Technical appendices
- Responses to comments

# What Will be Quantified?

- Plan costs & public health benefits:
  - Measures with quantified emission reductions ready to be committed into State Implementation Plan (SIP)
  - Measures with TBD/NYQ emission reductions: preliminary costs may be discussed separately
  - Infrastructure costs resulting from transition to near-zero and zero-emission will be quantified to the extent possible
- Regional job and other macroeconomic impacts:
  - Impacts associated with quantified costs & public health benefits for measures directly affecting residents and economic sectors in the South Coast AQMD region
  - Any secondary regional impacts from measures anticipated to directly affect out-of-region/state entities will be modeled to the extent possible

# Incremental Costs of the Plan

- Costs by control measure
  - For measures with committed emission reductions
- Costs by affected industry
  - For small businesses, to the extent data is available
  - Identifying costs most likely incurred by out-of-region/state entities
- Costs incurred over time
  - Tied to anticipated implementation period of each measure
- Cost effectiveness by control measure
  - Discounted cash flow (DCF)
  - Levelized cash flow (LCF)

# Cost-Effectiveness Calculation Methods

- **DCF:** 
$$\frac{\text{Upfront Costs} + \text{Present Value of Annual O\&M Costs Incurred over Equipment Life}}{\text{Annual Emission Reductions} \times \text{Years of Equipment Life}}$$
- **LCF:** 
$$\frac{\text{Amortized Upfront Costs} + \text{Annual O\&M Costs}}{\text{Annual Emission Reductions}}$$



**What's in the numerator? A home-buying analogy:**

**DCF:** Today's home price + money set aside today in a fixed interest rate account to pay for annual costs for utilities, maintenance, etc.

**LCF:** Annual fixed-rate mortgage payment with zero down payment + annual costs for utilities, maintenance, etc. at any given future year

# Public Health and Other Benefits

- Modeled changes in PM2.5 and ozone concentrations
- Estimated changes in health incidence due to changes in health risk
  - Mortality risk: changes in number of premature deaths
  - Morbidity risk: changes in hospital admissions, ER visits, missing work/school days, etc.
- Monetized public health benefits
- Sensitivity tests of key inputs and assumptions
- Qualitative discussion of visibility, material, and agriculture benefits

\* Monetized benefits will be converted and expressed in 2021 dollars

# Regional Jobs and Macroeconomic Impacts

- Job impacts due to incremental costs
- Job impacts due to quantified public health benefits
- Net job impacts and its distribution
  - By industry sector
  - By occupational earnings group
- Competitiveness impacts by industry sector
  - Value-added
  - Cost of production (for those who cannot pass through costs)
  - Delivered prices (for those who can pass through costs)
  - Imports and exports



# Varied Policy Impacts within South Coast

- Variations by 21 sub-county regions
  - Sub-regional distribution of costs
  - Sub-regional distribution of public health benefits
  - Sub-regional distribution of projected net job impacts
- Environmental justice (EJ) analysis
  - EJ screening:
    - SB 535 definition
    - Sensitivity tests with alternative EJ definitions
  - EJ impacts of 2022 AQMP
    - Health benefits: EJ vs. non-EJ communities
    - Adapting income inequality indices to assess changes in health risk inequality

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# Open Discussion

- Although it is a different format, staff will take the time to listen to all stakeholder comments
  - Please use the “raise hand” feature to speak:
    -  Click on the  button
    -  Dial \*9
- When it is your turn to speak, your name will be announced and, if participating virtually, the meeting host will unmute you
- Please state your name and who you are representing
- In addition to this workshop, staff is available for individual meetings

# 2022 DRAFT AIR QUALITY MANAGEMENT PLAN

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Regional Workshop and  
CEQA Scoping Meeting

*Thank You For  
Attending*

