



Annual Update on California State Implementation Plans

October 23, 2025

Today's Presentation

Health Effects from Exposure to Criteria Pollutants



Federal Clean Air Act and State Implementation Plan (SIP) Overview



California Air Quality and SIP Progress



2022 State SIP Strategy and Recent Attainment Plans



Federal Attacks on California Programs and Impacts on SIPs

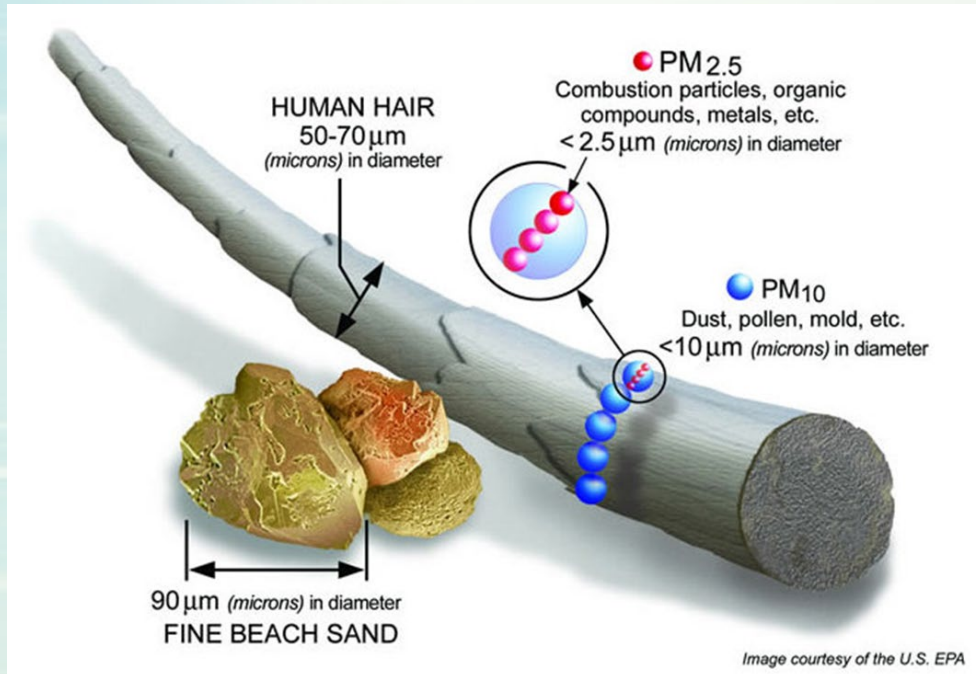


Moving Forward

Criteria Pollutants Directly Harm Human Health

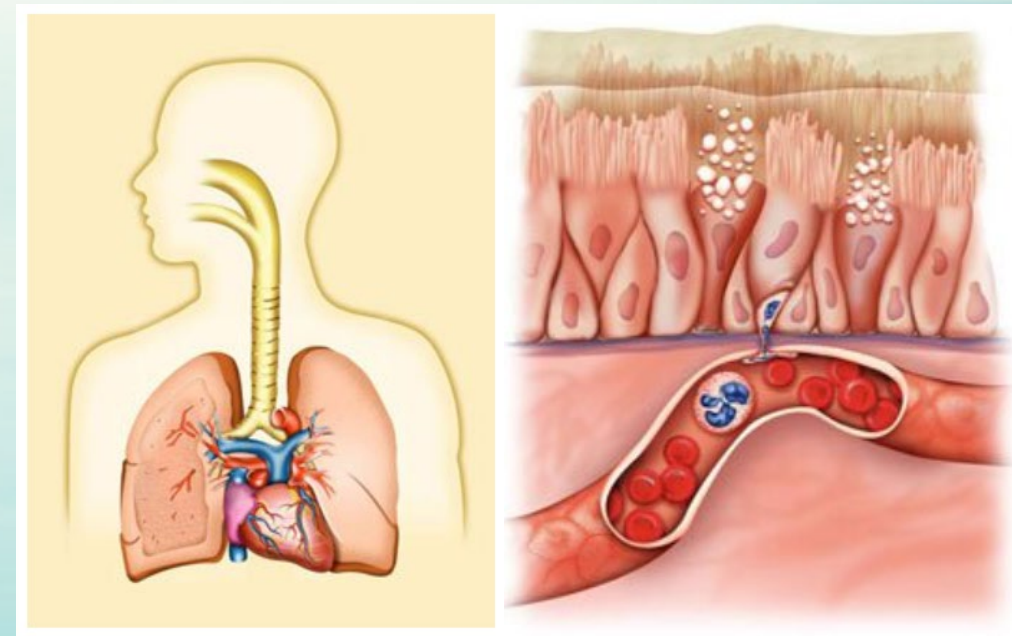
PM_{2.5} is directly emitted and formed in the air from NO_x, Ammonia, SO_x, & VOC

Effects: premature death, hospitalizations (cardiovascular & respiratory) & asthma



Ozone is formed in the air from VOC and NO_x in the presence of sunlight

Effects: respiratory symptoms, worsened lung disease, lung tissue damage



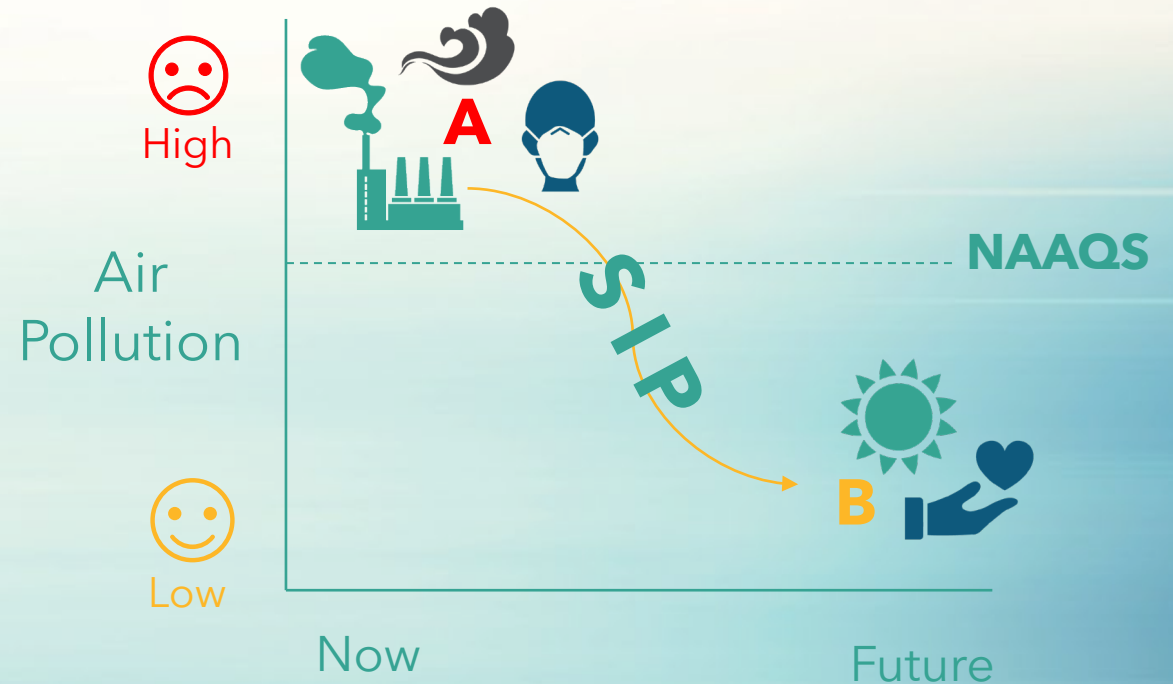
Federal Clean Air Act: the Driving Force for Air Quality Improvement

- Congress established the Clean Air Act so that all Americans can breathe clean air
- U.S. EPA must set health-protective National Ambient Air Quality Standards (NAAQS) for criteria pollutants, to be reviewed every 5 years
- States exceeding a NAAQS must develop attainment plans and submit them to U.S. EPA as a revision to their State Implementation Plan (SIP)

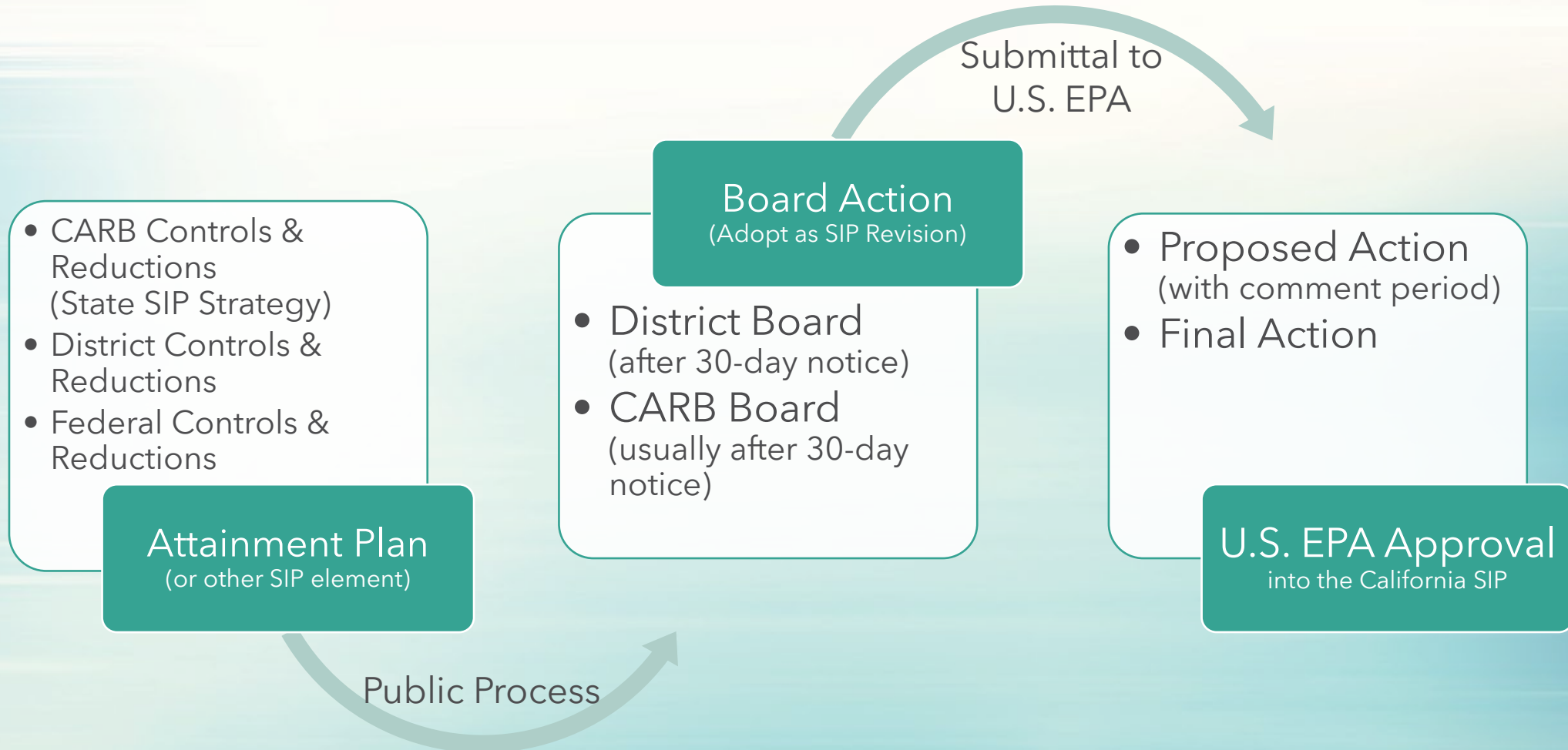


State Implementation Plan (SIP)

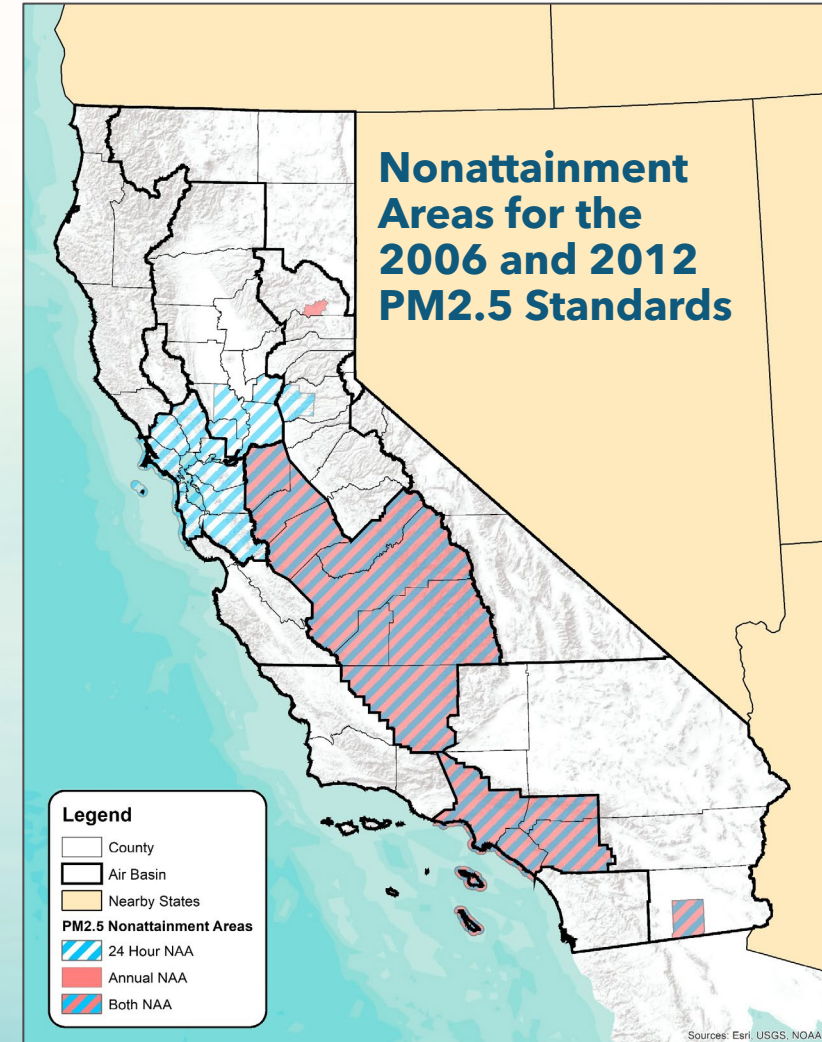
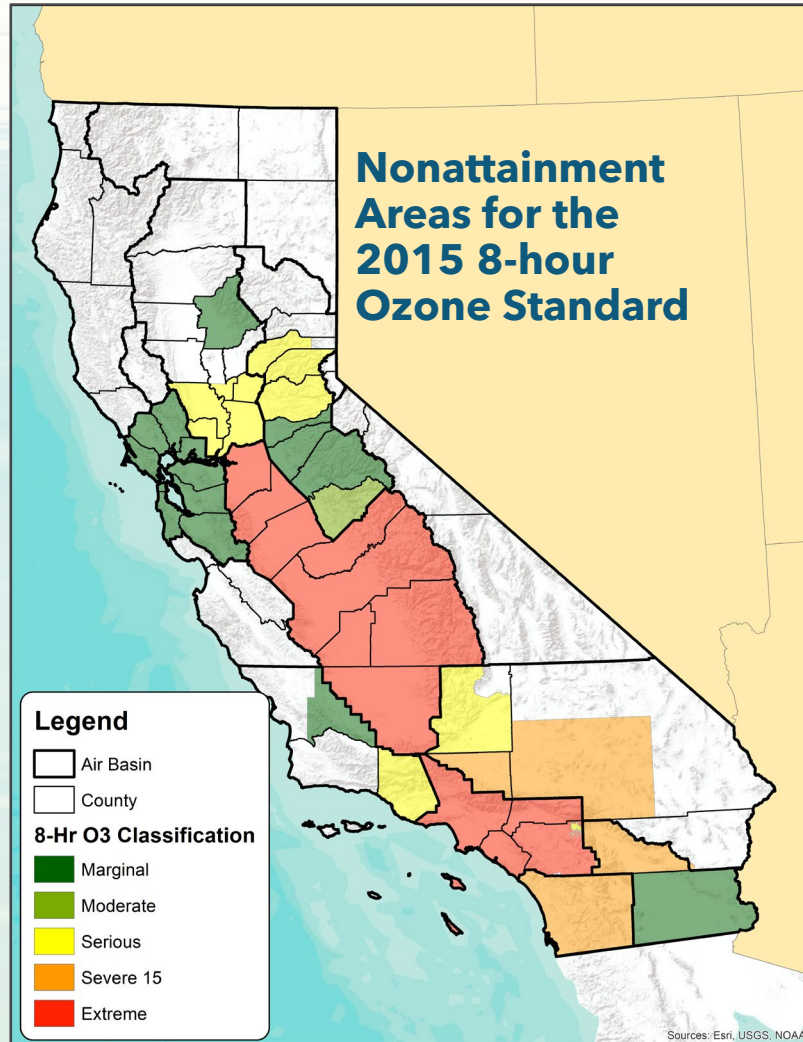
- Attainment Plans are comprehensive plans to demonstrate how areas will attain the NAAQS and meet other requirements
- Rules and regulations needed to meet requirements must also be submitted/approved into the SIP
- Any submittal approved by U.S. EPA into the SIP is enforceable in federal courts, including through lawsuits by citizens



SIP Process



California Nonattainment Areas

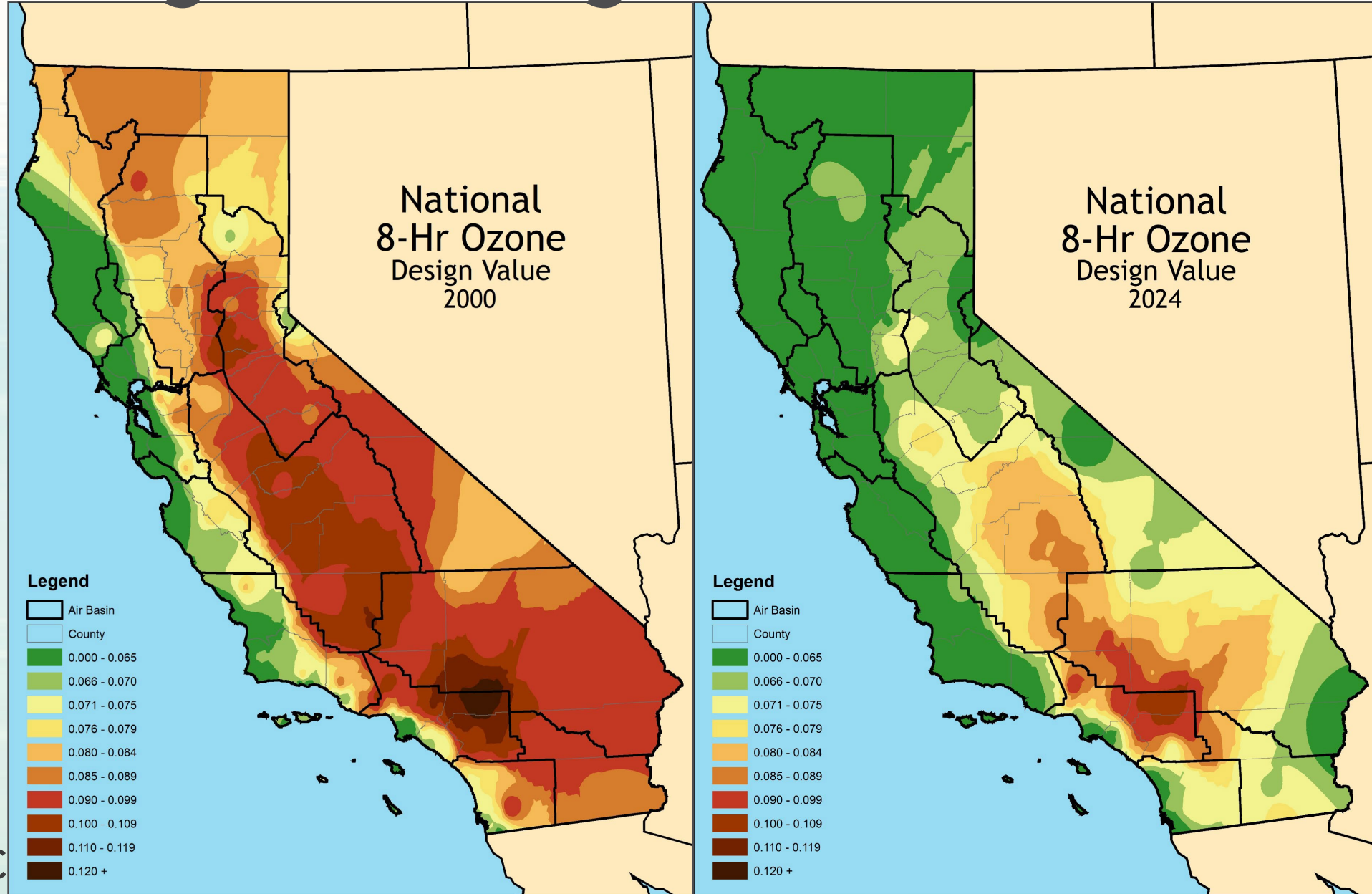


Many Factors Drive Air Quality Challenges



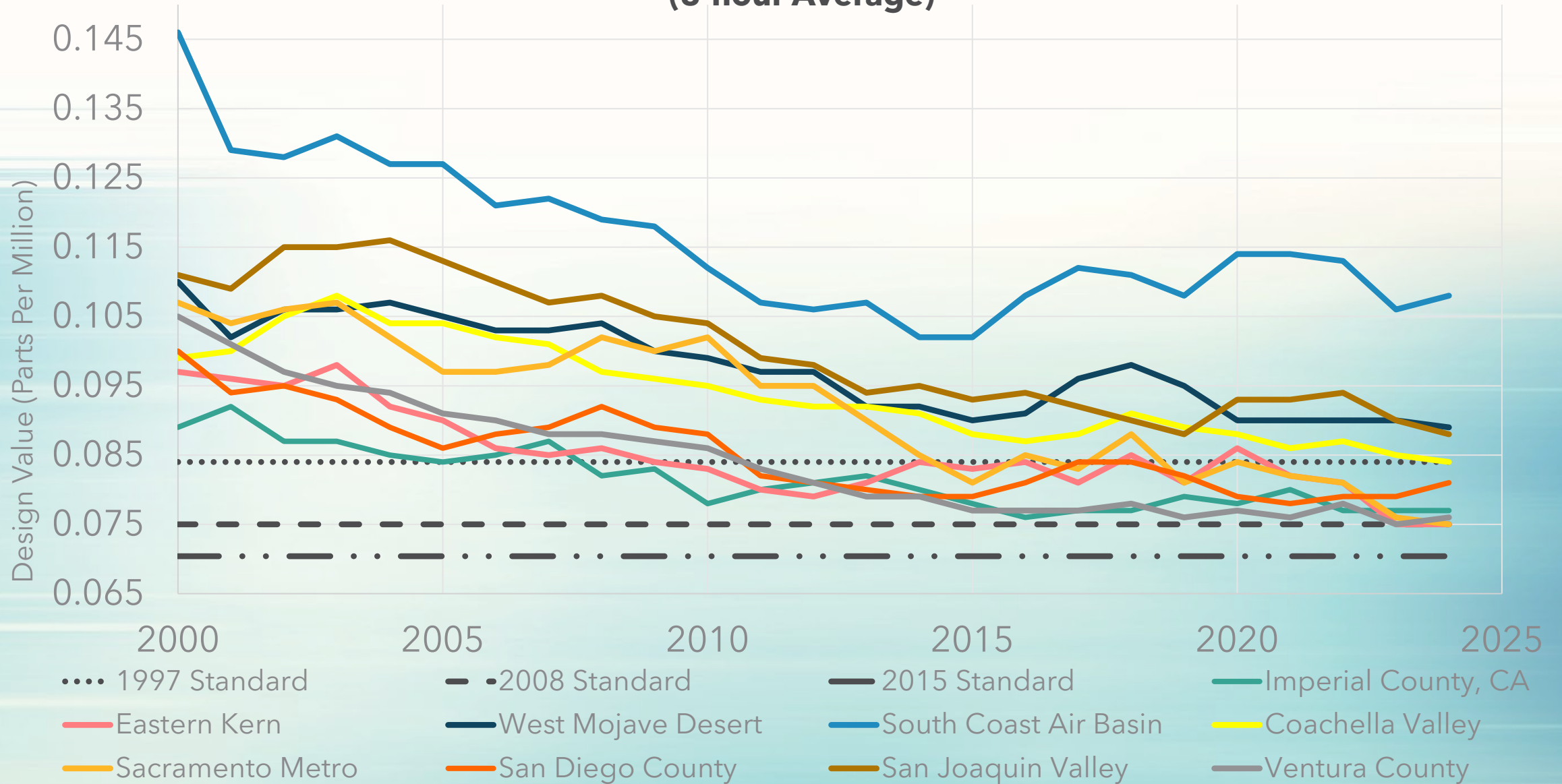
- Topography
- Meteorology
- Large populations & emission sources
- Air pollution chemistry
- Fires

Significant Progress has been Made

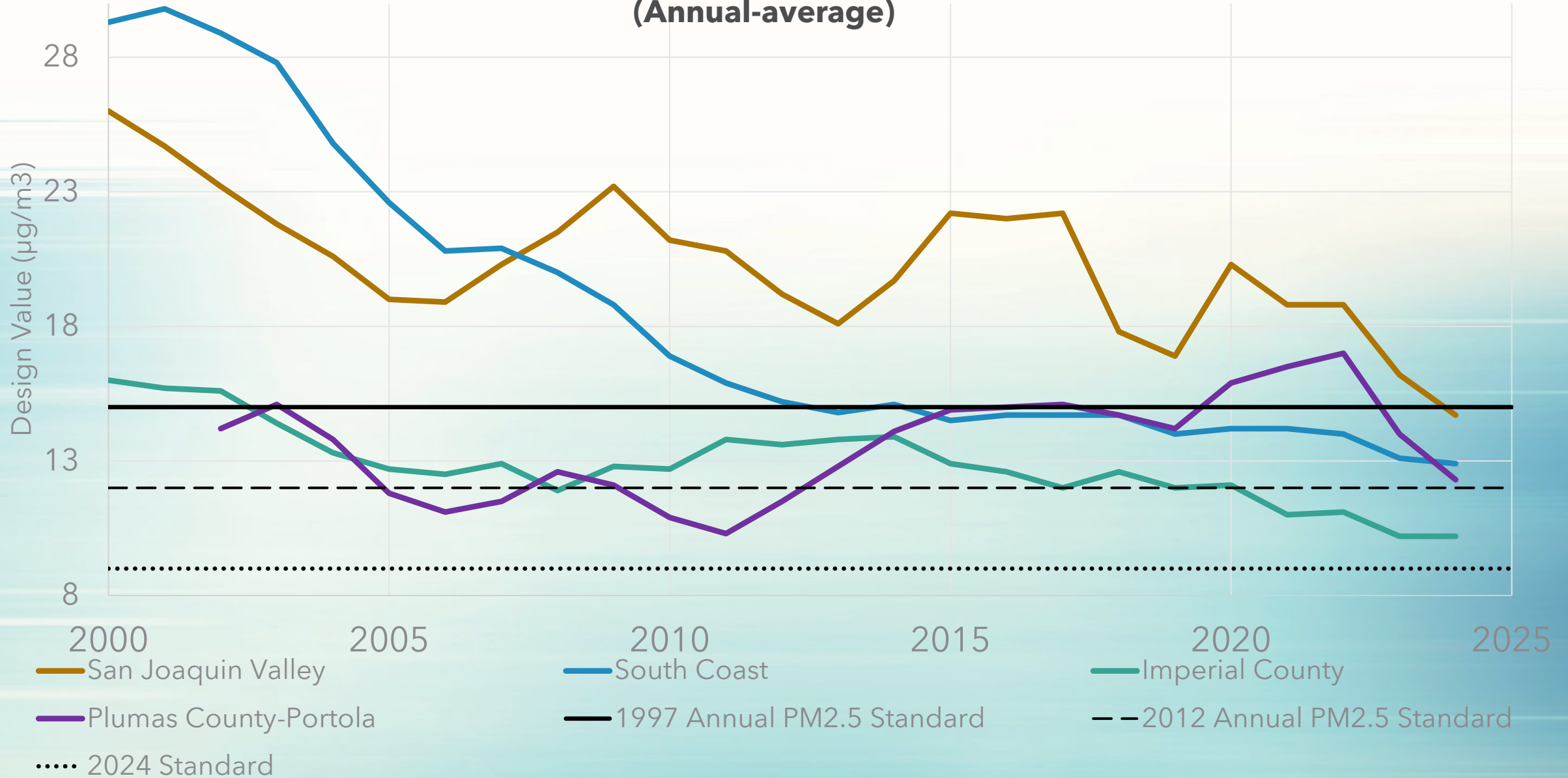


Ozone Progress

(8-hour Average)



PM2.5 Progress (Annual-average)



South Coast AQMD

Recent SIP Progress

Adoption of key control rules:

- Wood-Burning Devices
- NO_x Emissions from Large Water Heaters and Small Boilers
- Oil and Gas Production Wells

SIP Accomplishments:

- South Coast Basin attaining the 2006 35 $\mu\text{g}/\text{m}^3$ 24-Hour PM_{2.5} NAAQS
- Under development: South Coast Basin Redesignation Request and Maintenance Plan for the 1997 65 $\mu\text{g}/\text{m}^3$ and 15 $\mu\text{g}/\text{m}^3$ PM_{2.5}, 2006 35 $\mu\text{g}/\text{m}^3$ PM_{2.5} NAAQS, and Second Maintenance Plan for PM₁₀ NAAQS
- Coachella Valley attaining the 1997 0.08 ppm 8-hour ozone NAAQS

San Joaquin Valley APCD

Recent SIP Progress

Key control rules

- Steam-Enhanced Crude Oil Production Wells
- Crude Oil Production Sumps
- Agricultural burning phase out – final implementation milestone
- Under development: Wood Burning Fireplaces/Heaters, Conservation Management

SIP Accomplishments

- Attainment of the 1997 15 $\mu\text{g}/\text{m}^3$ annual PM2.5 NAAQS
- Under development: Redesignation Request and Maintenance Plan for the 1997 65 $\mu\text{g}/\text{m}^3$ and 15 $\mu\text{g}/\text{m}^3$ PM2.5
- Redesignation to attainment for 1-hour ozone NAAQS

Additional Regional Accomplishments

Attainment

- Sac Metro region - 75 ppb 8-hour ozone attainment (2024)
- Mariposa County - 70 ppb 8-hour ozone attainment (2023)

Plan development

- Chico/Butte County 2006 35 $\mu\text{g}/\text{m}^3$ PM2.5 Second Maintenance Plan
- Yuba City-Marysville/Feather River 2006 35 $\mu\text{g}/\text{m}^3$ PM2.5 Second Maintenance Plan

Rule adoption

- San Diego County APCD - Commercial Charbroiling Operations Rule
- Sacramento Metropolitan AQMD - Greenwaste Composting Operations, Liquefied Petroleum Gas Transfer and Dispensing

CARB's Roadmap: 2022 State SIP Strategy

- Adopted on September 22, 2022
- Builds on the 2020 Mobile Source Strategy to include a variety of new State measures to reduce emissions using all mechanisms available
- Identifies the level of action needed to meet air quality standards and protect public health
- Drives pace and scale of CARB rulemakings

2022 State Strategy for the State Implementation
Plan

Adopted
September 22, 2022



Attainment Plans Submitted and Awaiting U.S. EPA Action Rely on CARB Mobile Measures to Attain

70 ppb
8-hour ozone:

- South Coast Air Basin
- San Joaquin Valley
- Coachella Valley
- Mojave Desert
- Sacramento Metro Area
- Eastern Kern County
- Ventura County

12 $\mu\text{g}/\text{m}^3$
annual PM2.5:

- South Coast Air Basin
- San Joaquin Valley

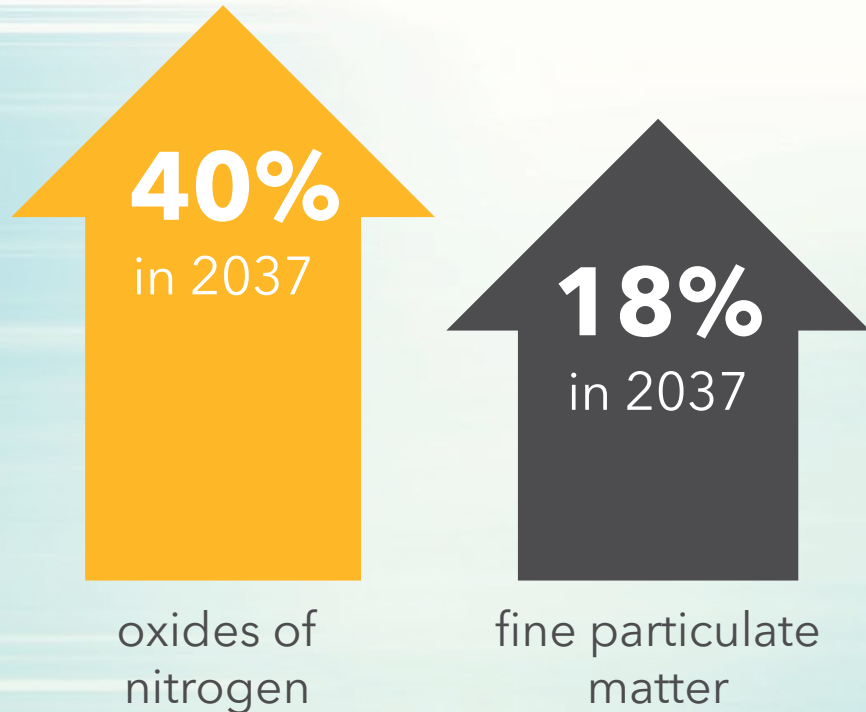
Recent Federal Attacks on CARB Programs



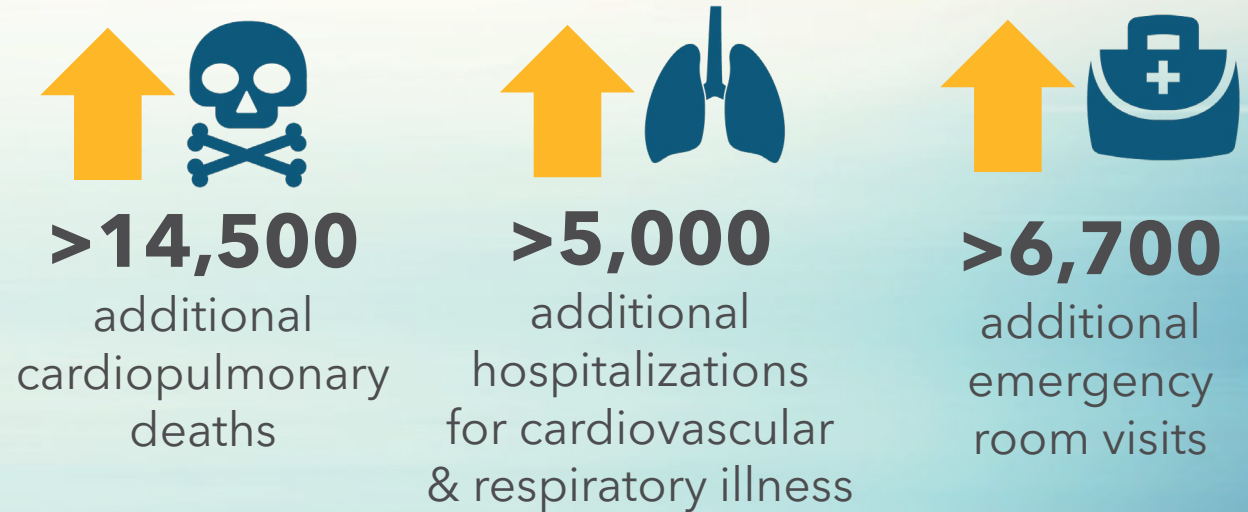
Federal Attacks Will Significantly Increase NOx Emissions in California



Federal Actions Will Increase Ozone and PM2.5 and Lead to Direct Health Impacts



Mobile Source Emissions



Health Impacts

Over the lifetime of the impacted regulations

Increased Diesel Particulate Emissions Will Cause Additional Cancers in Communities



On-Road Truck
Regulations

+58/million - West
Oakland

+49/million - South
Central Fresno

+85/million - E. Los
Angeles / Boyle Heights

For every 1 million people living in a community, this is the number of additional residents that could get cancer due to the federal actions

Increased Cancer Risk

Potential SIP Consequences Resulting from Federal Actions

Transportation Conformity Lapses / Freezes

- Metropolitan Planning Organizations may be unable to perform transportation conformity demonstrations until impacted regulations are removed
- Metropolitan Planning Organizations may be unable to meet SIP-approved emissions budgets
- SIP disapprovals would trigger immediate freezes

Sanctions for Failing to Meet SIP Requirements:

- 18 months: Increased stationary source offsets
- 24 months: Federal highway funding withheld except for exempt projects
- 24 months: Federal Implementation Plan

Moving Forward

CARB staff assessing impacts from these actions

- State Implementation Plan
- Transportation conformity
- Emissions inventory
- Future regulatory development

Governor's EO N-27-25 advances California's clean vehicle targets

CARB staff planning SIP revision for Board consideration early 2026



EXECUTIVE DEPARTMENT STATE OF CALIFORNIA

EXECUTIVE ORDER N-27-25

WHEREAS in 1967, Governor Ronald Reagan established the California Air Resources Board, committing California to aggressively address the serious issue of air pollution in the state, including from vehicle tailpipe emissions; and

WHEREAS for more than 50 years, California has worked closely with the auto industry and other stakeholders to adopt new vehicle standards that are feasible, cost-effective and significantly reduce harmful air pollution; and

WHEREAS reducing air pollution from transportation, including toxic air pollutants, helps protect the health of Californians, reducing premature death, illness, hospital visits, health care costs, and school and work absenteeism, in addition to addressing a changing climate that is threatening the health and safety of Californians in unprecedented ways, and costing the State more than \$16 billion a year from disasters like drought and wildfire; and

WHEREAS zero-emission vehicle technologies and equipment needed to reduce transportation pollution are experiencing significant global demand, making American manufacturers' investments in these technologies critical to the nation's global market competitiveness; and

Thank you