



SOUTH COAST 8-HOUR OZONE SIP UPDATE

Hearing Date: December 12, 2019

Background

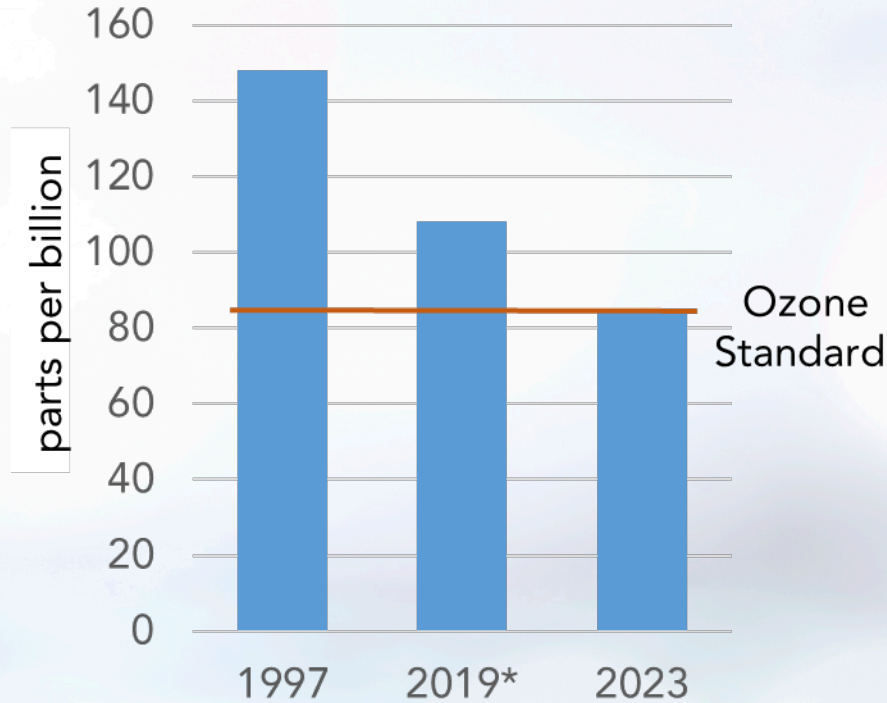
March 23, 2017: Board adopted the South Coast 2016 AQMP

- Included SIP revision for the 80 ppb 8-hour Ozone Standard
- SIP revision primarily relied on NO_x reductions from mobile and stationary source measures but also utilized advanced technology measures allowed by Clean Air Act section 182(e)(5)

The Clean Air Act also requires California to submit contingency measures by December 31, 2019 for any reductions not achieved from the advanced technology measures in the SIP.

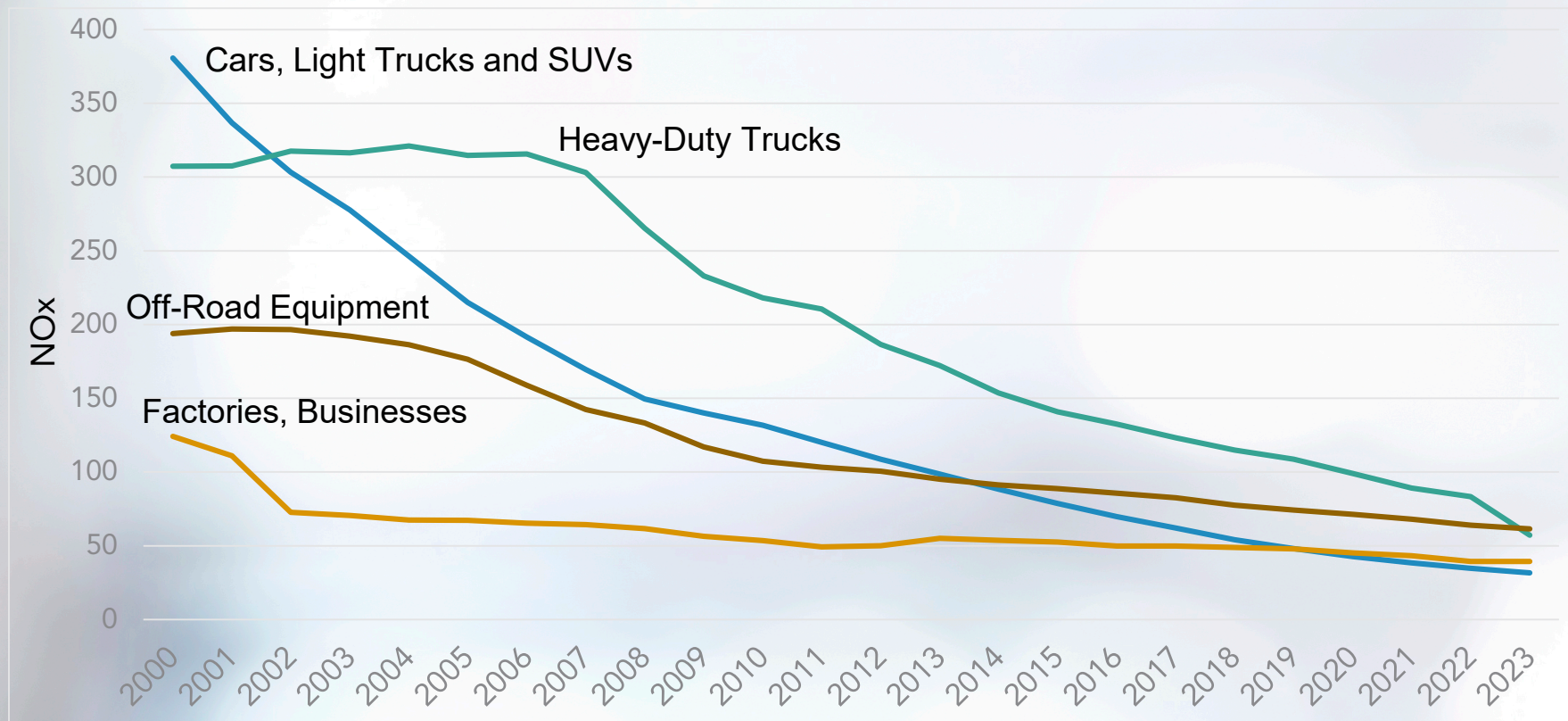


8-hour Ozone Levels in South Coast

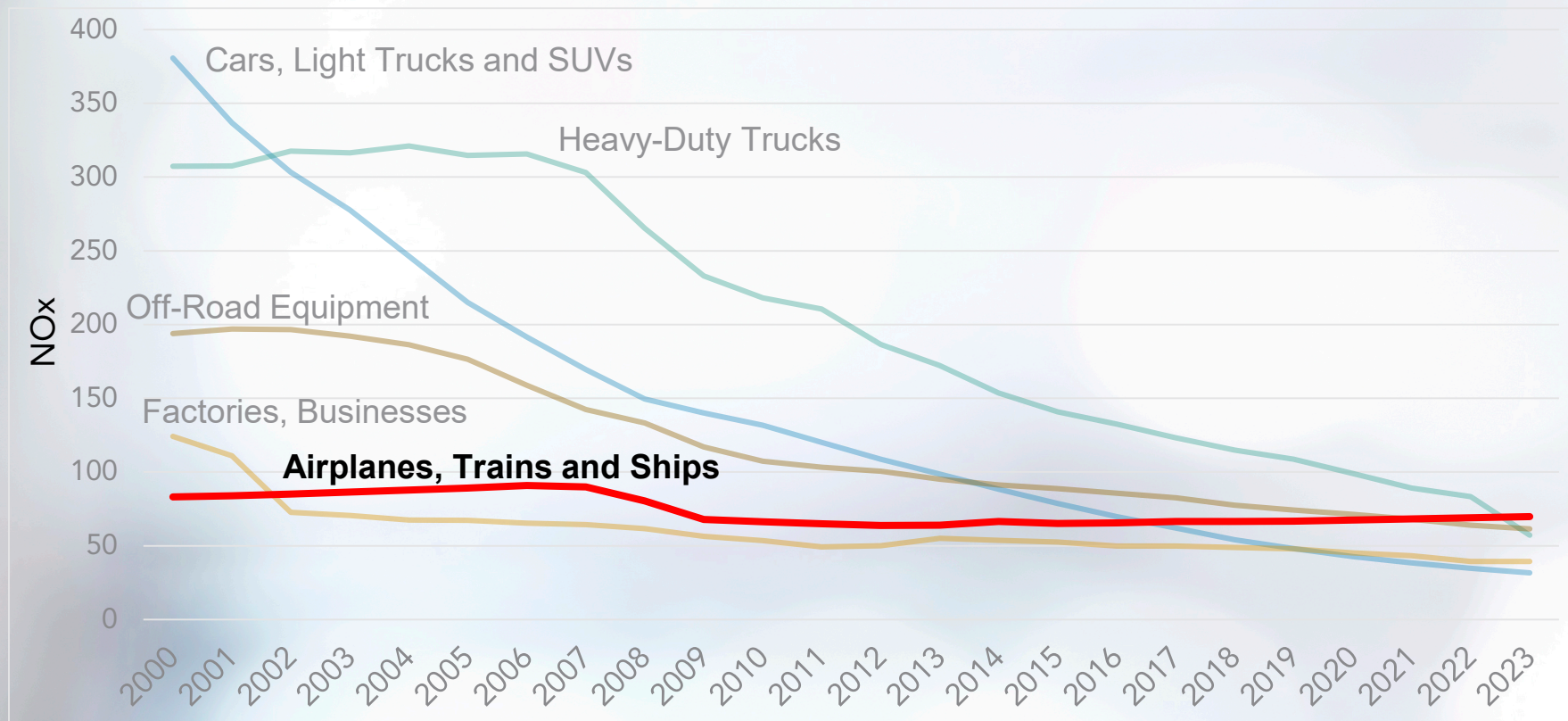


*preliminary ozone levels

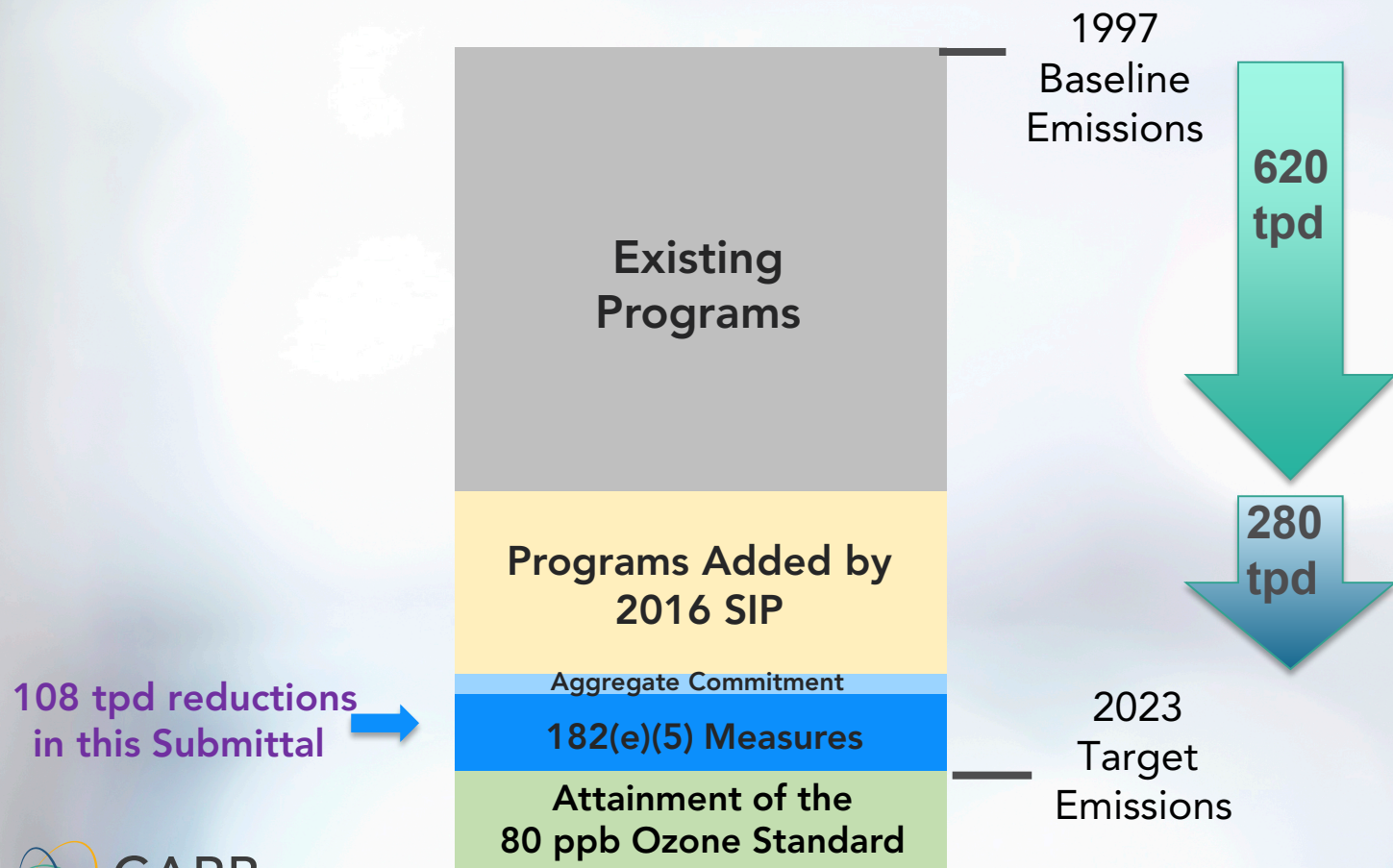
South Coast NOx Emissions



South Coast NOx Emissions



Emission Reductions to Meet the Ozone Standard



CARB Actions Since 2016 AQMP

Measure Title	Board Adoption
South Coast On-Road Heavy Duty Vehicle Incentive Measure	March 22, 2018
Heavy-Duty Diesel Vehicle Emission Control System Warranty Regulation Amendments	June 28, 2018
Innovative Clean Transit Regulation	December 14, 2018
Zero-Emission Airport Shuttle Regulation	June 27, 2019
Zero-Emission Powertrain Certification Regulation	June 27, 2019
Electric Vehicle Supply Equipment Standards	June 27, 2019
Ocean-Going Vessel At Berth And At Anchor Regulation	December 5, 2019 (first hearing)
Advanced Clean Trucks	December 12, 2019 (first hearing)

Contingency Strategy to Meet 80 ppb Standard

- Joint effort by CARB and District
- Includes new measures beyond 2016 SIP
- Identifies potential areas for further reductions
- Quantifies needed incentive funding
- Assumes needed federal actions

Identified Reductions

Contingency Measure	2023 Reductions (tpd)
New CARB/District Emissions Reduction Strategies	25
Additional Incentive Funding	15
New Federal Measures and/or Funding	68
Total	108

Identified Emissions Reduction Strategies beyond 2016 SIP*

CARB

Adopted:

LCFS

Portable Engines Registration
Program

Upcoming Rules: Heavy Duty I/M,
CARB New Measures

South Coast AQMD

Adopted:

RECLAIM BARCT Rules

Airports MOU

MetroLink Locomotives Incentives

Upcoming Rules: Ports MOU

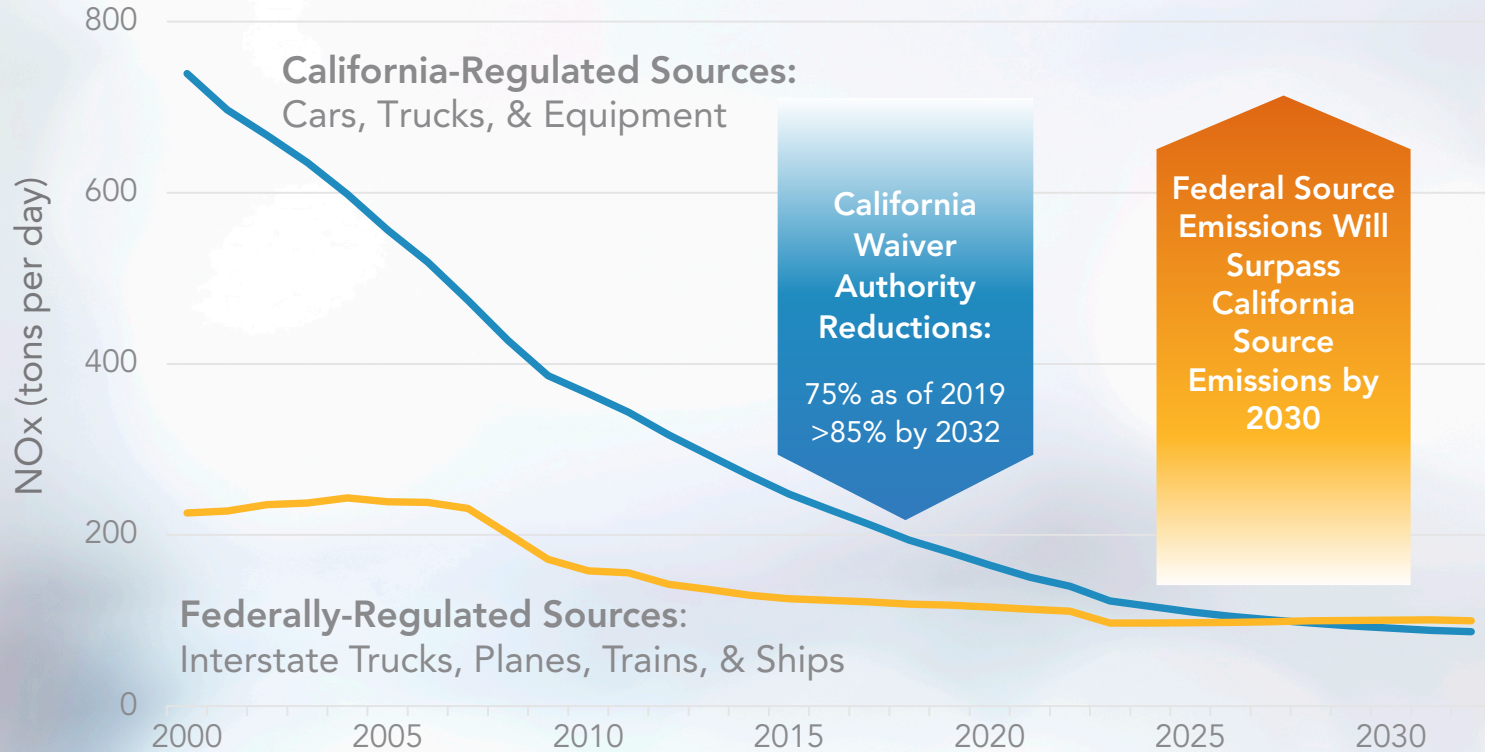
CARB New Measures

Locomotive Emission Reduction Measure	Develop regulation to reduce criteria, toxics and GHG emissions
Tier 5 Off-Road Diesel Engine Standard	Establish more-stringent engine standards
State Green Contracting	Require State contractors to use the cleanest equipment available
Co-Benefits from the 2017 Scoping Plan	Lower combustion emissions in residential water and home heating
Reduction in Single-Occupancy Vehicle Travel	Fund clean transportation through transportation system pricing
VMT and Land Conservation	Investigate integrated land and transportation strategies
Regional VMT Reductions	Seek opportunities to improve transportation mobility options including greater support for public transportation

Approaches to Secure Incentive Funding

- AB 1274 (2018) Smog check exemption: \$25-30M annually
- Future opportunities (with legislative action)
 - Local ballot measure
 - Greenhouse Gas Reduction Funds
 - Statewide Bond Measures Legislation

Federal Action Needed



Assumed Federal Measures or Funding (68 tpd NOx Reductions)

Action
Require Tier 4 Engine Standards for California-bound Locomotives
Require Low-NOx Engine Standards for all Heavy-duty Vehicles in California
Require OGV Tier 3 Engine Standards for California Visits
Address Increasing NOx Emissions in Aircraft

History of Requests for Federal Action

- In 2017, CARB petitioned EPA to adopt more stringent emission standards for locomotives.
- In 2016, the District petitioned EPA to lower NOx emission standards for the on-road heavy-duty diesel trucks.
- In 2016, the San Joaquin Valley Air District petitioned EPA to establish new national standards for heavy duty trucks and locomotives.
- In 2007, CARB requested EPA set lower emission standards for Ship Main Engines, Line-Haul Locomotives, and Commercial Harbor Craft.

Call to Action to Meet the Ozone Standard

- All levels of government must take aggressive action to achieve clean air in the South Coast
- Assumed federal actions are reasonable, but timely action is problematic
- SIP is approvable, but EPA could object to assumptions for federal actions to reduce emissions
- Need to identify additional CARB/District strategies to reduce reliance on federal action

Next Steps

- Begin the development of identified new measures
- Continue public process to identify additional emissions reduction measures
- Continue to work with EPA and partner with other states to realize federal actions for reductions

Staff Recommendation

- Adopt the Ozone SIP Update with commitment for reductions from new measures
- Direct staff to submit the Ozone SIP Update to EPA for inclusion in the California SIP
- Direct staff to bring for Board consideration additional emissions reduction measures for inclusion in the SIP by mid-2020

Thank You