2022 State Strategy for the State Implementation Plan
Public Workshop
July 27, 2021
Zoom Language Selection

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Zoom Webinar Details

• Telephone Call-in: (877) 336-1831
  Access Code: 7673700

• Questions will be taken in the middle and at the end of the presentation
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  • On phone:
    • #2 to “Raise Hand”
    • *6 to Unmute/Mute
Today’s Agenda

• Background and Purpose
• Progress since the 2016 State SIP Strategy
• Potential 2022 State SIP Strategy Measures
• Economic Analysis
• CEQA Environmental Analysis
• Moving Forward
Background and Purpose
Ground-level Ozone and Health

Health effects of ozone exposure:

• Respiratory symptoms
• Worsening of lung disease leading to premature death
• Damage to lung tissue

https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution
70 ppb 8-hour Ozone Standard

- U.S. EPA revised the 8-hour ozone standard to 70 ppb in 2015
- 19 areas in California are designated nonattainment
- State Implementation Plan (SIP) revisions required are dependent on classification
# Nine Areas Need an Attainment Plan

<table>
<thead>
<tr>
<th>Nonattainment Area</th>
<th>Classification</th>
<th>Attainment Year</th>
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</thead>
<tbody>
<tr>
<td>South Coast Air Basin</td>
<td>Extreme</td>
<td>2037</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>Extreme</td>
<td>2037</td>
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<tr>
<td>Western Mojave Desert</td>
<td>Severe</td>
<td>2032</td>
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<td>Coachella Valley</td>
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<td>2032</td>
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<tr>
<td>San Diego County</td>
<td>Severe</td>
<td>2032</td>
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<td>Ventura County</td>
<td>Serious</td>
<td>2026</td>
</tr>
<tr>
<td>Sacramento Metro</td>
<td>Serious*</td>
<td>2026</td>
</tr>
<tr>
<td>Eastern Kern County</td>
<td>Serious*</td>
<td>2026</td>
</tr>
<tr>
<td>Western Nevada County</td>
<td>Serious*</td>
<td>2026</td>
</tr>
</tbody>
</table>

*Pending U.S. EPA approval
Attainment Plans and 2022 State SIP Strategy

CARB Controls/Emissions Reductions (2022 SSS) + District Controls/Emissions Reductions = Attainment Plan (SIP)
SIP Process has Significantly Improved California Air Quality
### Additional Progress is Needed

<table>
<thead>
<tr>
<th>Nonattainment Area</th>
<th>Classification</th>
<th>2019 Design Value ppb</th>
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<tbody>
<tr>
<td>South Coast Air Basin</td>
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<tr>
<td>San Joaquin Valley</td>
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<td>Western Mojave Desert</td>
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<td>Coachella Valley</td>
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<td>89</td>
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<td>San Diego County</td>
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<tr>
<td>Ventura County</td>
<td>Serious</td>
<td>76</td>
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<tr>
<td>Sacramento Metro</td>
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<tr>
<td>Eastern Kern County</td>
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<tr>
<td>Western Nevada County</td>
<td>Serious*</td>
<td>85</td>
</tr>
</tbody>
</table>

*Pending U.S. EPA approval
Looking towards Attainment

2019 8-hour Ozone Design Value (ppb)

- West Nevada
- Sacramento Metro
- Ventura
- San Diego
- Coachella
- West Mojave
- San Joaquin Valley
- South Coast

2026 Attainment
2032 Attainment
2037 Attainment

70 ppb Standard
Shared Responsibilities

**FEDERAL**

**US EPA**
Sets & enforces national air quality standards. Regulates interstate transportation.

**STATE**

**CALIFORNIA AIR RESOURCES BOARD**
Regulates mobile sources of air pollution, greenhouse gases & consumer products.

**LOCAL**

**Local Air Districts**
Regulates stationary & local sources of air pollution.

- **TRAINS**
- **PLANES**
- **SHIPS**
- **CARS**
- **TRUCKS**
- **BUSES**
- **FIREPLACES**
- **FACTORIES**
- **REFINERIES**
- **POWER PLANTS**
South Coast Air Basin
Extreme Nonattainment Area

Baseline emissions inventory including adopted control programs
San Joaquin Valley
Extreme Nonattainment Area

Baseline emissions inventory including adopted control programs
Supporting Emissions Reductions in Communities

- Potential 2022 State SIP Strategy measures could reduce emissions in priority communities

- SIP will support AB 617 strategies & provide opportunities to accelerate benefits in priority communities
Coordinated Planning

- Air Quality Targets
- GHG Reduction Goals
- Community Risk Reduction

2020 Mobile Source Strategy

- 2022 State SIP Strategy
- 2022 Scoping Plan
- AB 617 CERPs
Evolution of a Concept

Concept

Measure

Regulation / Program

Reduced Emissions

Air Quality Improvement

5-10 years

2020 Mobile Source Strategy

State SIP Strategy & Regional SIPs
Incentives Key to Regulation Development

- Pre-commercial demonstration project incentives
- Early Pilot Demonstration Project Incentives
- Broad Purchase Incentive
- Regulation
Progress since the 2016 State SIP Strategy
2016 State SIP Strategy

• 2016 State SIP Strategy was developed to support attainment of the 75 ppb 8-hour ozone standard

• CARB has adopted or is pursuing adoption of all control measures
## Adopted Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Adoption</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>Amendments to HDVIP and PSIP (Lower In-Use Emission Performance Level)</td>
<td>2018</td>
<td>2019</td>
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<tr>
<td>Heavy-Duty GHG Phase 2</td>
<td>2018</td>
<td>2020</td>
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<td>Innovative Clean Transit</td>
<td>2018</td>
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<td>South Coast On-Road Heavy-Duty Vehicle Incentive Measure</td>
<td>2018</td>
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<td>San Joaquin Valley Agricultural Equipment Incentive Measure 1</td>
<td>2019</td>
<td>2015</td>
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<td>Zero-Emission Airport Shuttle Bus Regulation</td>
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<td>2027</td>
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<td>Ocean Going Vessels At Berth</td>
<td>2020</td>
<td>2024</td>
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<tr>
<td>Heavy-Duty Omnibus (Low-NOx Engine Standard)</td>
<td>2020</td>
<td>2024</td>
</tr>
<tr>
<td>Advanced Clean Trucks (Last Mile Delivery)</td>
<td>2020</td>
<td>2024</td>
</tr>
<tr>
<td>Measures</td>
<td>Adoption</td>
<td>Implementation</td>
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<td>----------------------------------------</td>
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</tr>
<tr>
<td>Heavy-Duty Inspection &amp; Maintenance Program</td>
<td>2021</td>
<td>2023</td>
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<tr>
<td>Small Off-Road Engines</td>
<td>2021</td>
<td>2024</td>
</tr>
<tr>
<td>Transport Refrigeration Units</td>
<td>2021</td>
<td>2024</td>
</tr>
<tr>
<td>Advanced Clean Cars II</td>
<td>2022</td>
<td>2026</td>
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<tr>
<td>Zero-Emission Forklift</td>
<td>2022</td>
<td>2025</td>
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Questions?

Zoom:

type in “Q&A” box

Potential New Measures for the 2022 State SIP Strategy
On-Road Mobile Sources

- Clean Miles Standard Regulation
- Advanced Clean Fleets Regulation
- Greenhouse Gas Emissions Standards for Medium- and Heavy-Duty Engines and Vehicles (Phase 3)
- On-Road Motorcycles New Emissions Standards
Off-Road Equipment

- Amendments to the In-Use Off-Road Diesel Fuel Fleets Regulation
- Tier 5 Off-Road New Compression-Ignition Engine Standards
- Off-Road Zero-Emission Targeted Manufacturer Rule
- Amendments to the Commercial Harbor Craft Regulation
Off-Road Equipment

• Amendments to the Mobile Cargo Handling Equipment Regulation
• Clean Off-Road Fleet Recognition Program
• Clean Off-Road Equipment Voucher Incentive Program – Construction (CORE-CON)
Other Sources

- Spark-Ignition Marine Engine Standards
- Amendments to the Consumer Products Regulation
Sources Primarily Regulated at the Federal and International Level

- In-Use Locomotive Regulation
- Future Measures for Aviation Emissions Reductions
- Future Measures for Ocean-Going Vessel Emissions Reductions
Federal Action is Critical

California-Regulated Sources: Cars, Trucks, & Equipment

Primarily-Federally Regulated Sources: Interstate Trucks, Planes, Trains, & Ships

Emissions from Primarily Federally Regulated Sources Will Surpass California Source Emissions by 2030

Reductions from California Sources:
75% as of 2019
>85% by 2032

Source: CARB, CEPAM 2016 SIP - Standard Emission Tool (v1.05),
District Action is Also Needed

District sources projected to contribute around the same amount of NOx emissions as State sources in 2037.

This chart reflects reductions from CARB’s Advanced Clean Truck and HD Omnibus regulations.

2037 Statewide NOx Emissions
Potential SIP Measures can Reduce Emissions in Priority Communities

Near-Road Communities
Near-Port Communities
Communities Near Industrial Facilities & Warehouses
Economic Analysis
Economic Analysis

• Staff will develop an economic analysis that includes the statewide costs and cost savings from the 2022 State SIP Strategy measures

• Regional Economic Models, Inc. (REMI) will be used to assess the economic impact to the California Economy through 2037
CEQA Environmental Analysis
Environmental Analysis

• Environmental Analysis (EA) being prepared analyzing potentially significant adverse impacts caused by reasonably foreseeable actions
• Meets requirements of CARB’s certified program under the California Environmental Quality Act (CEQA)
• The CEQA Environmental Checklist (CEQA Guidelines Appendix G) is used to identify and evaluate potential indirect impacts
• The EA will be an appendix to the Staff Report

CARB
Environmental Analysis to be Prepared

The EA will include:

- Description of reasonably foreseeable actions taken in response to the proposal.
- Programmatic level analysis of potential adverse impacts caused by reasonably foreseeable actions.
- Beneficial impacts.
- Feasible mitigation measures to reduce/avoid significant impacts.
- Alternatives analysis.
- Input invited at this early stage on appropriate scope and content of the EA.
- Draft EA will be released for 45 day public comment period.

CARB
Moving Forward
## Timing & Next Steps

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>2nd Workshop/Working Group</td>
<td>Fall 2021</td>
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<tr>
<td>Release Draft 2022 State SIP Strategy &amp; Informational Update to the Board</td>
<td>Late 2021/Early 2022</td>
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<tr>
<td>3rd Workshop/Working Group</td>
<td>Winter/Spring 2022</td>
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<tr>
<td>Release Proposed 2022 State SIP Strategy</td>
<td>Spring 2022</td>
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<tr>
<td>Board Hearing</td>
<td>Summer 2022</td>
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Contact Us!

- Austin Hicks, Air Pollution Specialist  
  Austin.Hicks@arb.ca.gov
- Ariel Fideldy, Manager  
  Ariel.Fideldy@arb.ca.gov
- General SIP Questions: SIPplanning@arb.ca.gov

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