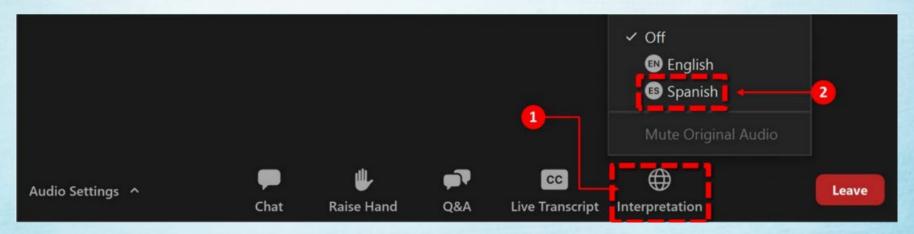


# **2025 Mobile Source Strategy**

Public Webinar
January 23, 2024
4 pm PST

#### Language Access: Audio

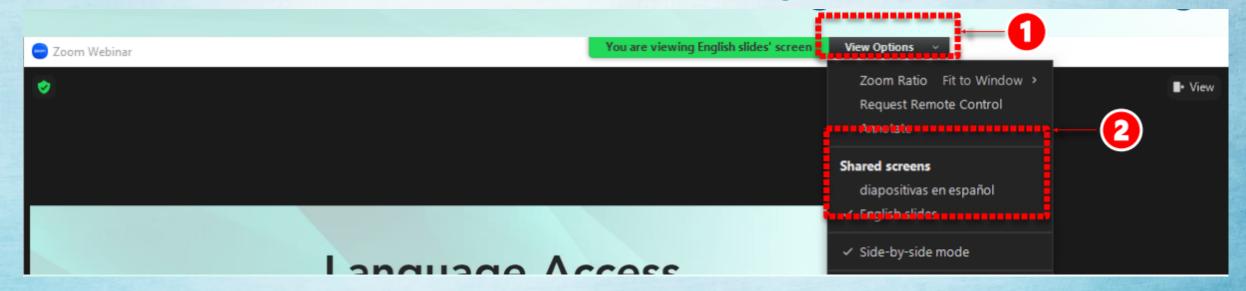
- In your Zoom webinar controls, click Interpretation
- Select your preferred language: English or Spanish
- To only hear the interpreted language, selected Mute Original Audio
- For technical difficulties: email mss@arb.ca.gov





#### Language Access: Visual

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- Select "dispositivas en espanol" or "English slides"
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#### **Purpose of Today's Webinar**

- Inform the public about the development of the 2025 Mobile Source Strategy
- Provide a summary of staff's initial thoughts on potential focuses
- Discuss the proposed public engagement process
- Solicit feedback on potential focuses, and additional ideas or concepts to be considered





# Today's Agenda

- Background
- Public Engagement and Outreach
- Baseline Mobile Emissions
- Potential Focuses & Opportunities
- Timing
- Questions & Feedback
- Next Steps



# Background



### What is the Mobile Source Strategy?



- Identifies the pathways for mobile source reductions needed to meet CARB's air quality, climate, and community risk reduction goals via a conceptual planning document
- Uses scenario planning tools to model levels of clean technologies needed
- Identifies regulatory and programmatic concepts to achieve cleaner technologies
- Updates every 5 years due to SB 44 (2019)



### **New Policy Drivers since the 2020 MSS**

#### **Criteria Pollutant**

- Attainment for 70 ppb 8-hour ozone (2037)
- Updated attainment year for 12 ug/m3 annual PM2.5 standard (2030)
- Attainment for new annual PM2.5 standard (likely 2032)

#### **Community Focus**

- 6 new communities selected under Community Air Protection Program
- New Community Emission Reduction Programs with future target years
- Blueprint 2.0 and focus on consistently nominated communities



# California's Air Quality, Climate, and Community Air Protection Goals

2024 - 2029: CERP targets (18 communities)

2031: South Coast & SJV Ozone 2037: South Coast & SJV Ozone











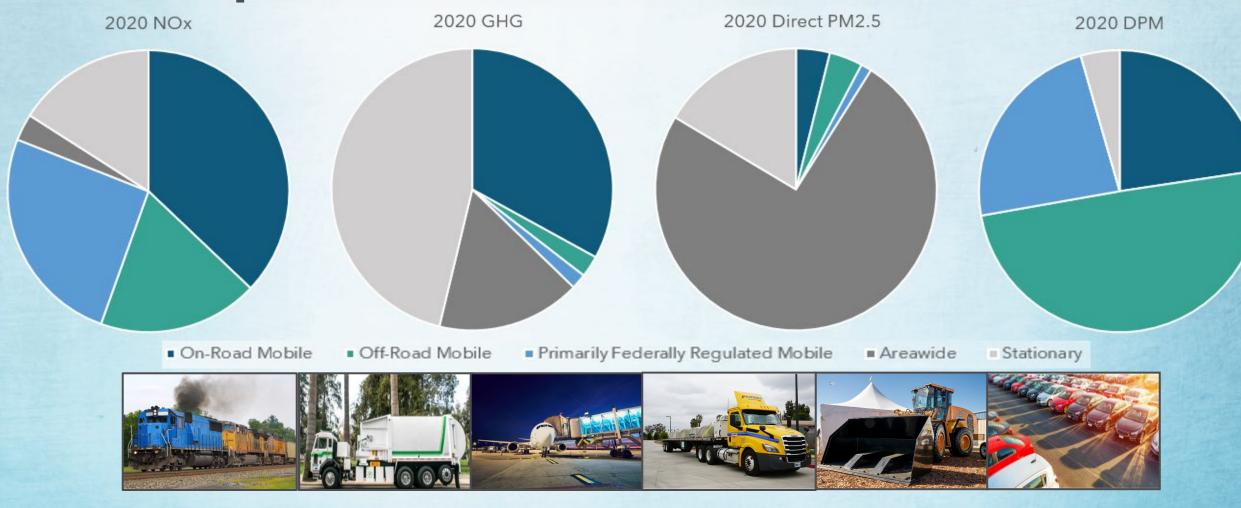


2030: GHG 40 percent below 1990, 12 ug/m3 PM2.5 South Coast & SJV 2032: New PM2.5 standard attainment year 2045:
Carbon
Neutrality,
85% reduction
GHG
anthropogenic
emissions





## Importance of Mobile Source Emissions





# 100% ZEV sales by 2035

Governor's Executive Order N-79-20

Full transition to ZEV short-haul/drayage trucks by 2035





Full transition to ZEV buses & heavy-duty long-haul trucks by 2045\*





ZE off-road equipment
by 2035\*

\*where feasible



## **2025 Mobile Source Strategy**

- Builds on 2020 MSS
  - 2037 and 2045 still the furthest target years
- Updates scenario modeling and potential future technology mixes
- Will reflect ZEV goals and requirements under SB 44
- Will inform future policy development





# Racial Equity and Environmental Justice

- CARB is continuing efforts to advance racial equity
- Staff will be considering equity and EJ throughout development of the scenarios and concepts in the 2025 MSS
- Utilize Racial Equity Lens (REL)



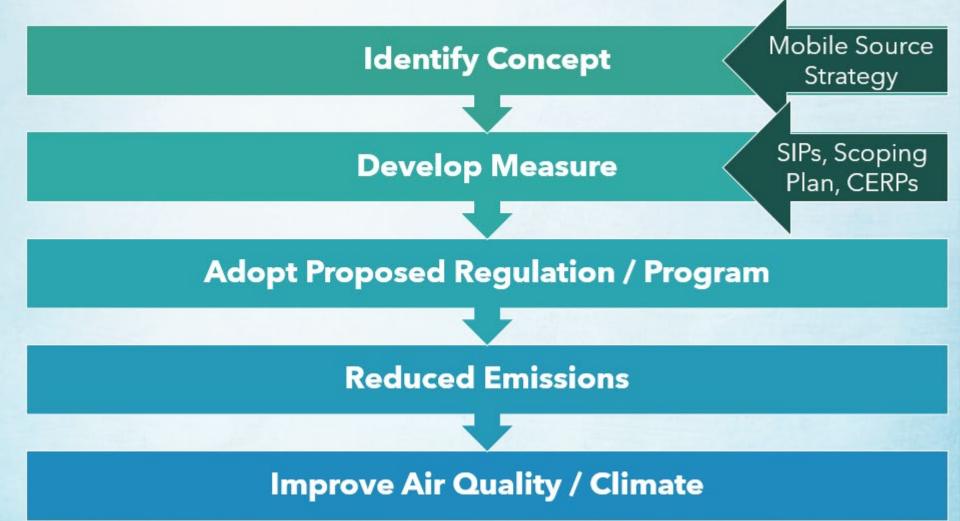


# Importance of Integrated Planning





#### **Evolution of a Concept**





5-10 years

# **Public Engagement and Outreach**



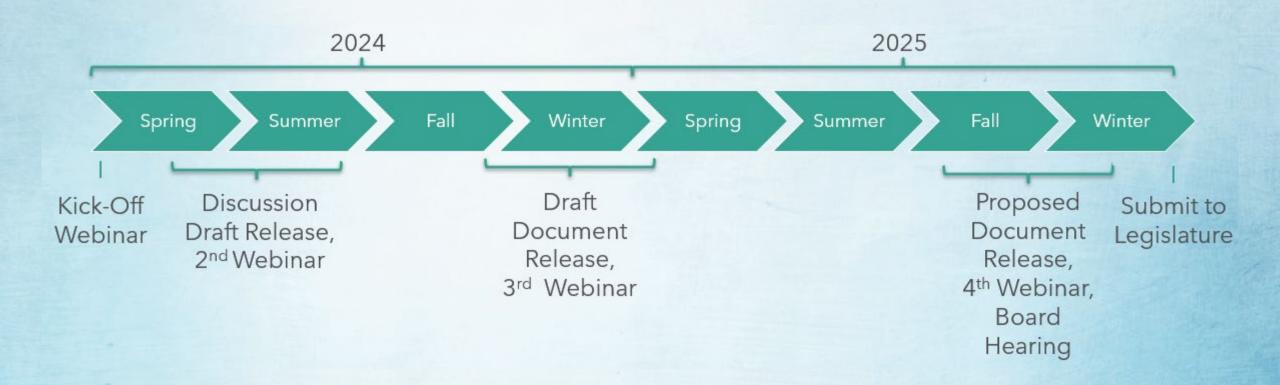
## **Public Engagement and Outreach**

- Efforts to date
  - Factsheet and webpage
  - U.S. EPA Region 9 Tribal Conference
  - Participating in existing stakeholder meetings
- Staff is looking to engage with all interested parties about the 2025 MSS
  - Existing meetings
  - New recurring small group, or 1:1 meetings





#### **Planned Public Releases and Webinars**





### **Baseline Mobile Emissions**



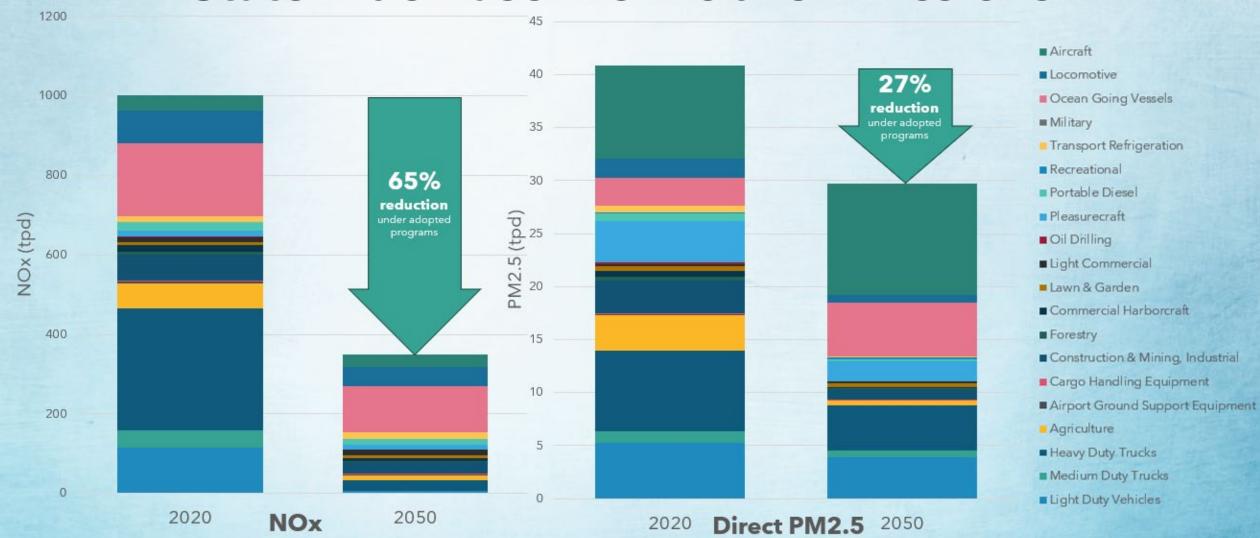
#### **Baseline Mobile Emissions**

- 2025 MSS baseline emissions inventory will include CARB regulations adopted through December 2023
- Builds on many regulations originally identified as concepts in the 2020 MSS:
  - Advanced Clean Trucks
  - Clean Truck Check (Heavy-Duty Inspection & Maintenance)
  - Heavy-Duty Omnibus
  - Advanced Clean Fleets
  - Small Off-Road Engines
  - In-Use Locomotive
  - Advanced Clean Cars II
  - Commercial Harbor Craft
  - Transport Refrigeration Unit Part I
  - In-Use Off-Road Diesel-Fueled Fleets



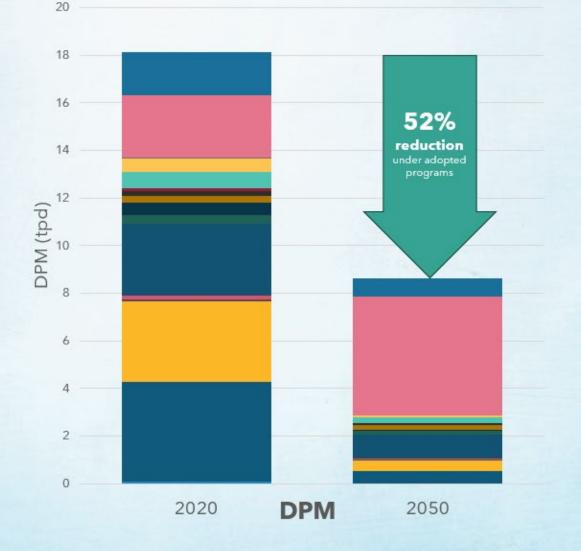


#### **Statewide Baseline Mobile Emissions**





#### **Statewide Baseline Mobile Emissions**



- Aircraft
- Locomotive
- Ocean Going Vessels
- Military
- Transport Refrigeration
- Recreational
- Portable Diesel
- Pleasurecraft
- Oil Drilling
- Light Commercial
- Lawn & Garden
- Commercial Harborcraft
- Forestry
- Construction & Mining, Industrial
- Cargo Handling Equipment
- Airport Ground Support Equipment
- Agriculture
- Heavy Duty Trucks
- Medium Duty Trucks
- Light Duty Vehicles



# **Federal Action Increasingly Critical**

(Statewide NOx Emissions)





Source: CARB, CEPAM 2022 SIP - Standard Emission Tool (v1.01)

# **Potential Focuses & Opportunities**



### **On-Road Opportunities**

- Zero-Emission Truck Measure ZEV requirements for the fleets not covered by Advanced Clean Fleets via:
  - Differentiated registration fees
  - Zero-emission zones
  - Indirect source rules
  - Replace at end of useful life
- Advanced Clean Cars II Amendments
  - Lower GHG standards for light-duty vehicles
  - Harmonize emission standards with U.S. EPA and Clean Truck Partnership Agreement
- Clean Fuels





#### **On-Road Opportunities**

#### Reducing vehicle miles traveled

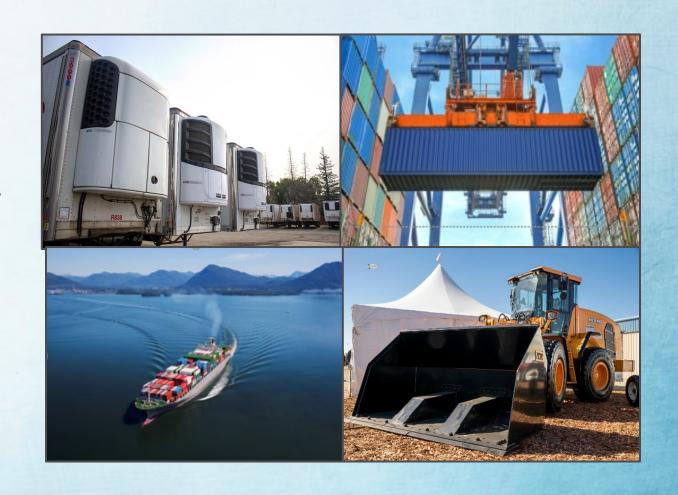
- Even meeting ZEV goals, a significant portion of passenger vehicles will still rely on internal combustion engines in future years
- Brake and tire wear growing
- 2020 MSS, 2022 Scoping Plan, and 2022 State SIP Strategy identify concepts, strategies, and polices to reduce VMT





## **Off-Road Opportunities**

- Measures in progress
  - Transport Refrigeration Units Part 2
  - Tier 5 Off-Road Standards
  - Off-Road Targeted Manufacturer
- Newer areas of focus
  - Ocean Going Vessels in transit
  - Aircraft
  - Cargo Handling Equipment
  - Agricultural equipment
- Clean Fuels





#### **Additional Considerations**

- Infrastructure coordination & challenges
- Racial Equity & Environmental Justice
- Health benefits





# Potential Expanded Analysis of MSS Health Benefits

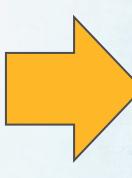
#### **Previous List**

Mortality

**Cardiovascular Hospital Admissions** 

**Respiratory Hospital Admissions** 

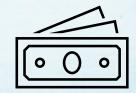
**Respiratory ED Visits** 













Mortality

**Cardiovascular Hospital Admissions** 

Cardiovascular ED Visits

**Acute Myocardial Infarction, Nonfatal** 

**Respiratory Hospital Admissions** 

**Respiratory ED Visits** 

**Asthma Onset** 

**Asthma Symptoms / Exacerbation** 

**Lung Cancer Incidence** 

**Lost Work-Days** 

Alzheimer's Disease

Parkinson's Disease



# **Timing**



# 2025 Mobile Source Strategy Timeline & Related CARB Efforts





#### **Questions & Feedback**



#### **Questions for Consideration**

#### **Engagement Opportunities**

- What ongoing meetings that you participate in should CARB join to discuss the 2025 MSS?
- Would you be interested in regularly-scheduled meetings in a small group or 1:1 with CARB staff to discuss the 2025 MSS?

#### Concepts/Focuses

- Are there concepts/focuses listed that you strongly support, or don't think are necessary?
- What additional ideas or concepts would you like CARB to explore or consider?



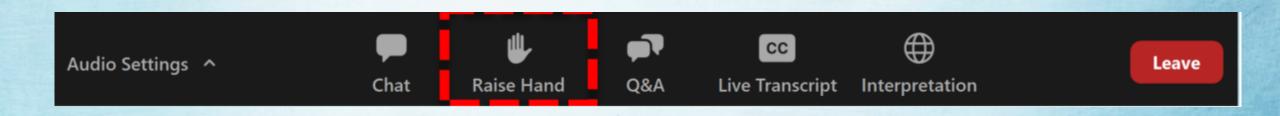
#### **Questions & Feedback**

#### Zoom:

Use "Raised Hand" feature, or type "Q&A" box

#### **Phone:**

#2 to "Raised Hand" & \*6 to Unmute/Mute





# **Next Steps**



### **Next Steps and Staying Connected**

- Next Steps: Release Discussion Draft and Webinar in Spring 2024
- Website: <a href="https://ww2.arb.ca.gov/resources/documents/2025-mobile-source-strategy">https://ww2.arb.ca.gov/resources/documents/2025-mobile-source-strategy</a>
- Listserv: Subscribe to CARB's Mobile Source Strategy GovDelivery topic to stay informed: <a href="https://public.govdelivery.com/accounts/CARB/subscriber/new?topic\_id=mobilesourcestrategy">https://public.govdelivery.com/accounts/CARB/subscriber/new?topic\_id=mobilesourcestrategy</a>
- Questions: email MSS@arb.ca.gov

