

Technology Advancement Office Advisory Group Meeting

Overview and Goals for the day



Matt Miyasato, Ph.D.

**Assistant Deputy Executive Officer
Technology Advancement Office**

Technology Advancement Advisory Group



- Review of Past Projects
- Provide input and directional guidance

Process

- Solicit input for Plan Update
- Draft Plan Update – October 2010
("looking ahead")
- Annual Report – March 2011
("looking back")
- Submit both documents to State
Legislature by March 31



Structure for Today

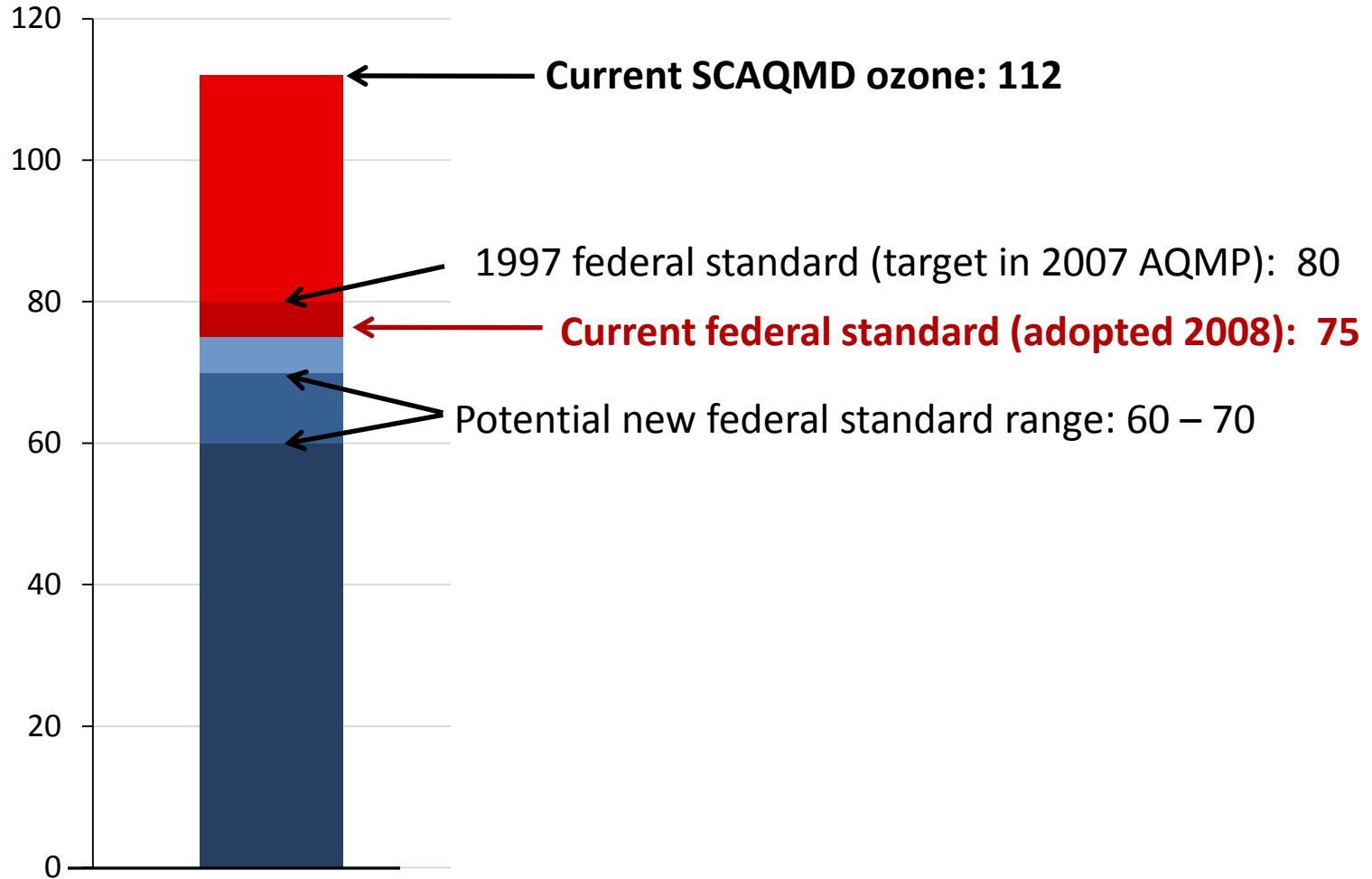
- Overview for context
 - Broad snapshot of AQMD activities
 - Agency-wide updates
- Specific discussion on technology sectors and past projects
- Solicit input on direction of program

Agenda

Welcome and Overview

- Welcome Chung Liu, DEO
- Goals & Context Matt Miyasato, Asst. DEO
- Mobile Source Update Henry Hogo, Asst. DEO
- Ultrafine Particle Update Prof. Sioutas, USC
- Air Monitoring Andrea Polidori, AQ Specialist
- Incentives Update Fred Minassian, Imp. Manager

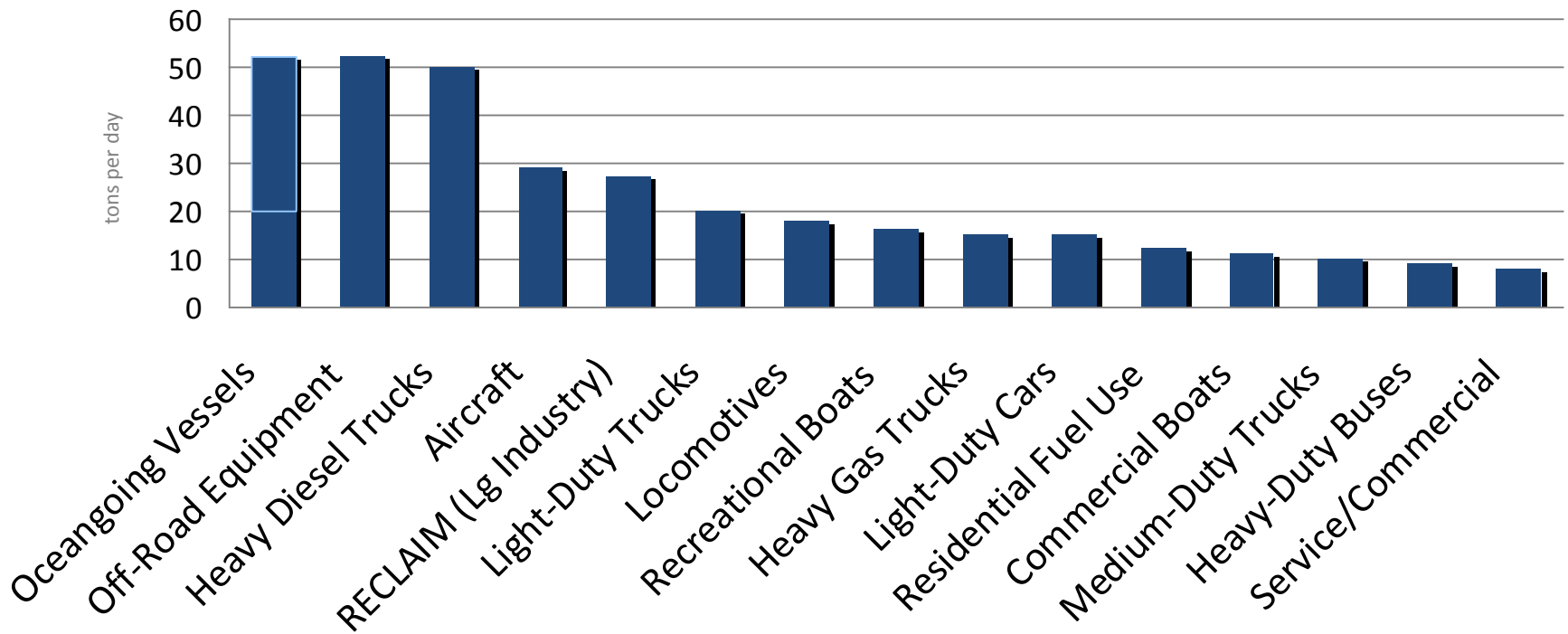
South Coast Air Basin Ambient Ozone and National Ambient Air Quality Standard (ppb)



Top 15 NO_x Categories: 2023 NO_x Emissions

With Rules Adopted Through December 2010

Preliminary SCAQMD Estimates*



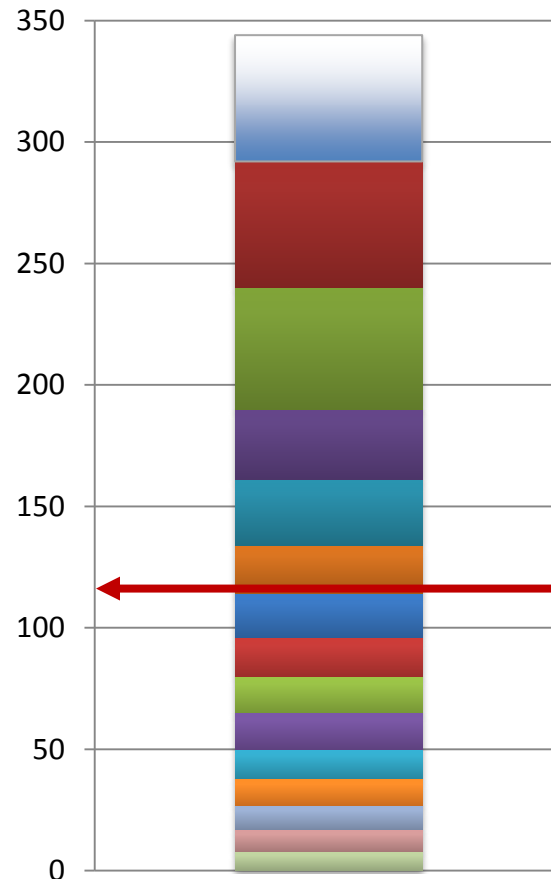
* Preliminary emissions estimates based on data updated from 2007 AQMP where available: CARB 2010 emissions projections for trucks and off-road equipment; IMO Tier 1 – 3 for ocean vessels; EPA 2008 rule for locomotives; 2007 AQMP short-term measures for other categories. Range for oceangoing vessels based on varying deployment assumptions for IMO Tier 2 and 3 vessels and range of ports' cargo forecasts.

Top 15 NO_x Categories: 2023 NO_x Emissions

With Rules Adopted Through December 2010

Preliminary SCAQMD Estimates¹

- Oceangoing Vessels
- Off-Road Eq^t
- Heavy Duty Diesel Trucks
- Aircraft
- Large Stationary
- Light Duty Trucks
- Locomotives
- Recreational Boats
- Heavy Duty Gasoline Trucks
- Light Duty Cars
- Residential Fuel Combustion
- Commercial Boats
- Medium Duty Trucks
- Heavy Duty Buses
- Service/Commercial



Region's 2023
NO_x carrying
capacity for federal
ozone standard²

1. Preliminary emissions estimates (tons per day) based on data updated from 2007 AQMP where available: CARB 2010 emissions projections for trucks and off-road equipment; IMO Tier 1 – 3 for ocean vessels; EPA 2008 rule for locomotives; 2007 AQMP short-term measures for other categories. Range for oceangoing vessels (20 -52) based on varying deployment assumptions for IMO Tier 2 and 3 vessels and range of ports' cargo forecasts.

2. 1997 80 ppb federal ambient ozone standard. Source: 2007 AQMP. Current standard is 75 ppb.

Pollution saps state's economy, study says

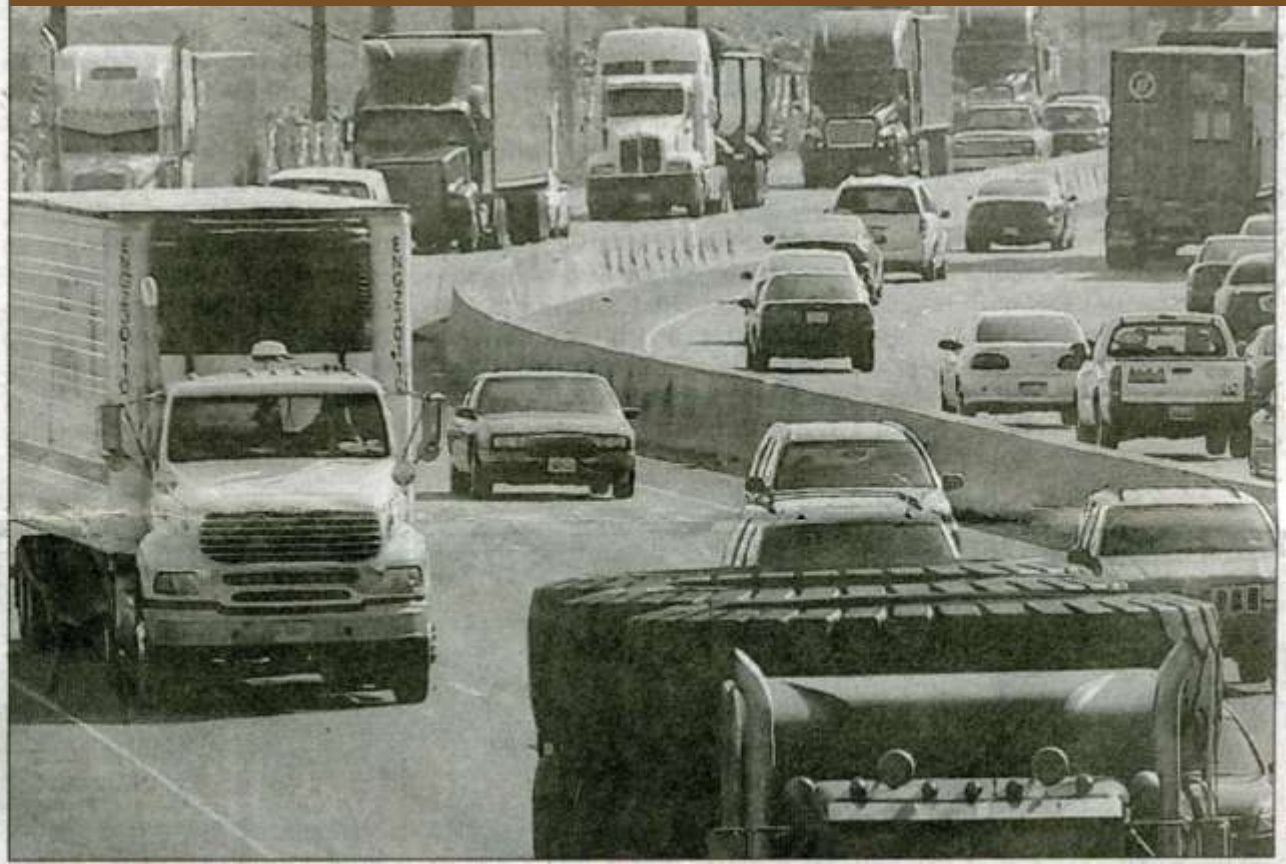
Deaths, illnesses linked to particulates and ozone cost \$28 billion yearly, Cal State Fullerton report shows.

LOUIS SAHAGUN

The California economy loses about \$28 billion annually due to premature deaths and illnesses linked to ozone and particulates spewed from hundreds of locations in the South Coast and San Joaquin air basins, according to findings released Wednesday by a Cal State Fullerton research team.

Most of those costs, about \$25 billion, are connected to roughly 3,000 smog-related deaths each year, but additional factors include work and school absences, emergency room visits, and asthma attacks and other respiratory illnesses, said team leader Jane Hall, a professor of economics

Deaths, illnesses: \$28↓Billion



Balancing Act

- Support technology *development*
- Incentivize technology *deployment*
- Establish near- *and* long-term strategies
- Develop policies *and* regulations to support
- Build *partnerships* to leverage efforts
- Need your input

