



# **Clean Fuels Program Advisory Group**

## **September 3, 2009**

### **Session 1:**

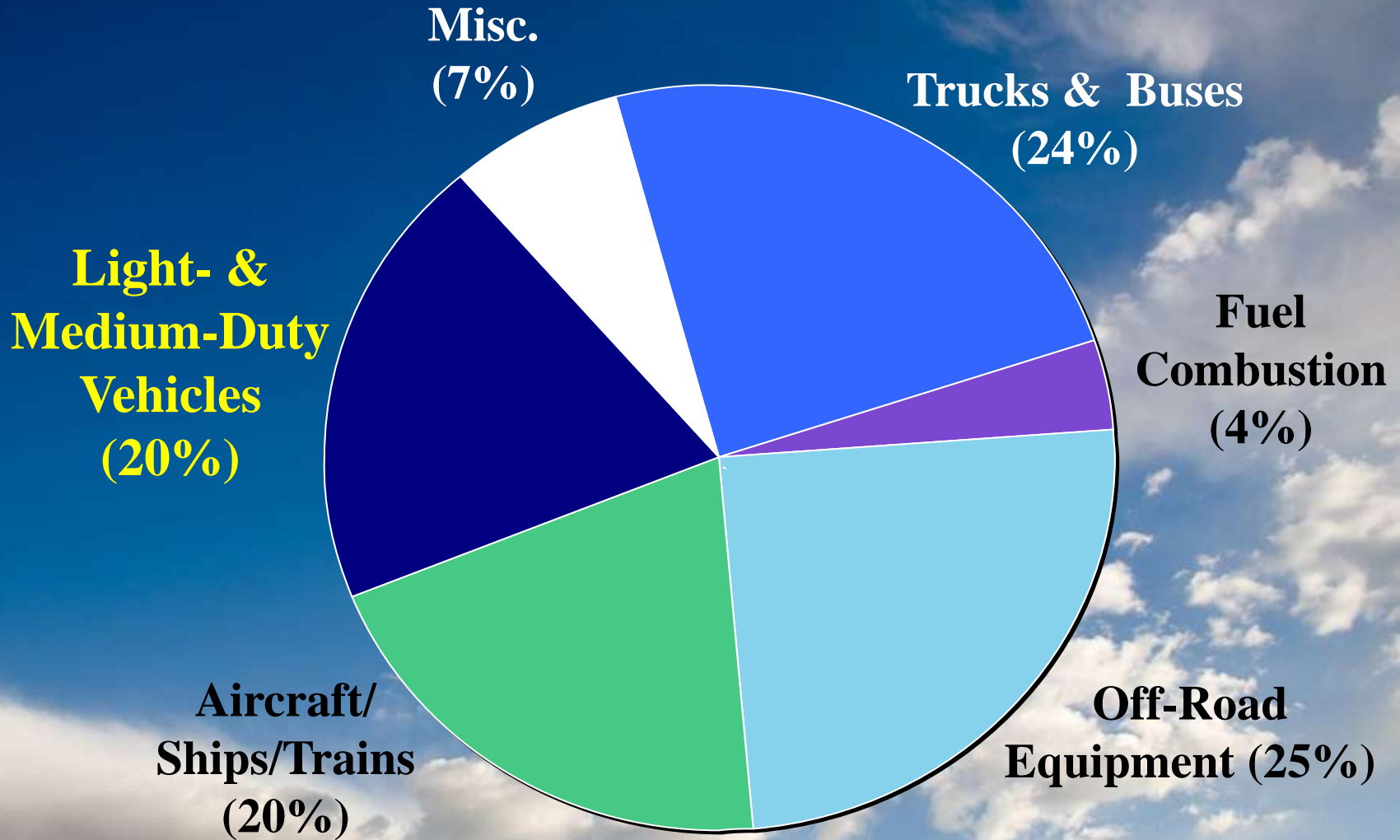
### **Light- and Medium-Duty Vehicles**

**Dean Saito, Manager**  
**On-Road Mobile Source**

# Definitions

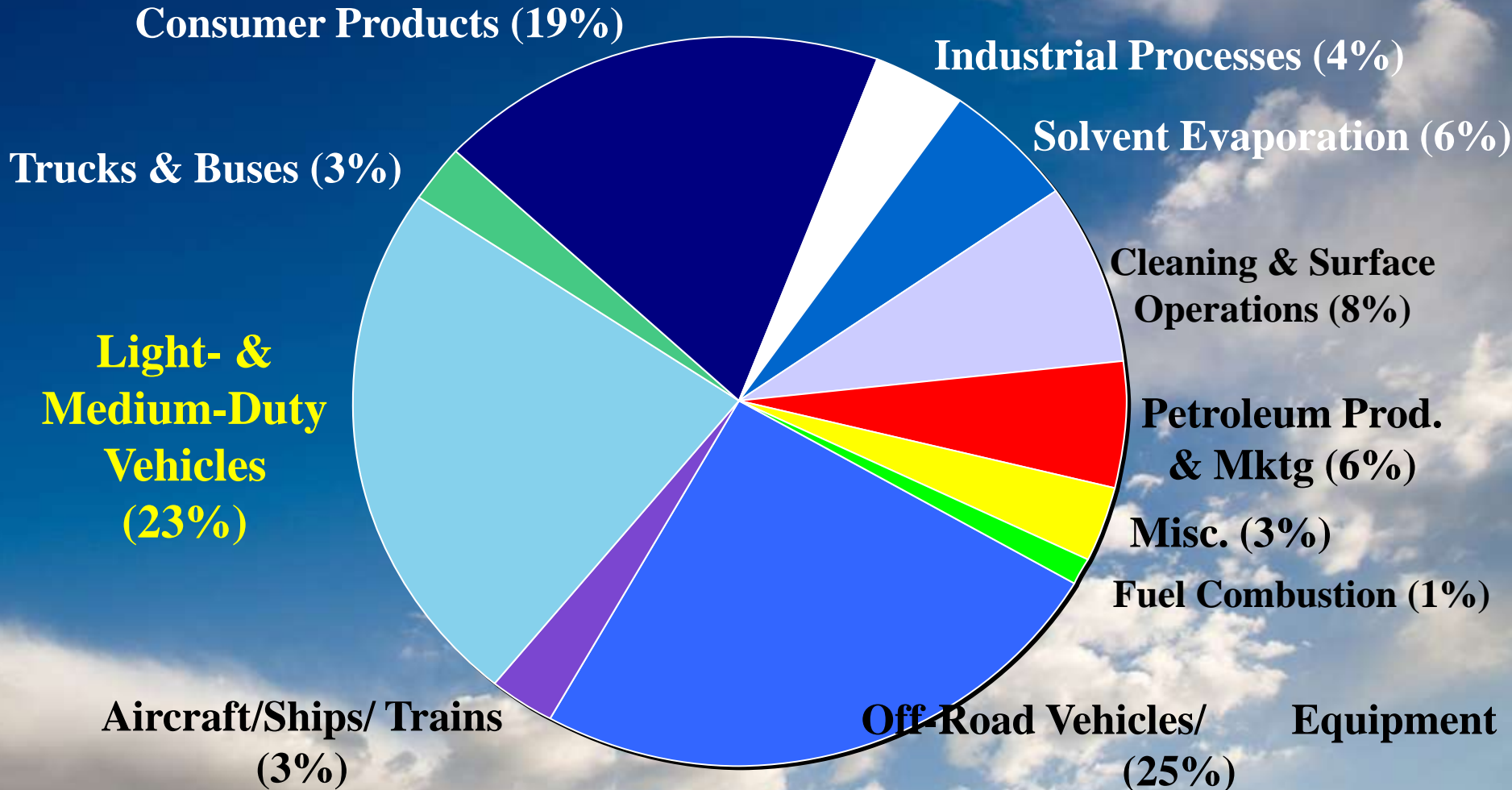
- **Light-Duty < 6,000 lbs. GVWR**
  - Passenger Vehicles, Light-Duty Trucks, SUVs, Motorcycles
  - Natural Gas, E85, Gasoline, Diesel
  - Hybrid, Electric, PHEV, Fuel Cell
- **Medium-Duty 6,000 lbs. < GVWR < 14,000 lbs.**
  - MD Trucks
  - LHD Trucks
  - Natural Gas, E85, Gasoline, Diesel

# Major Contributors to NO<sub>x</sub> (2014)



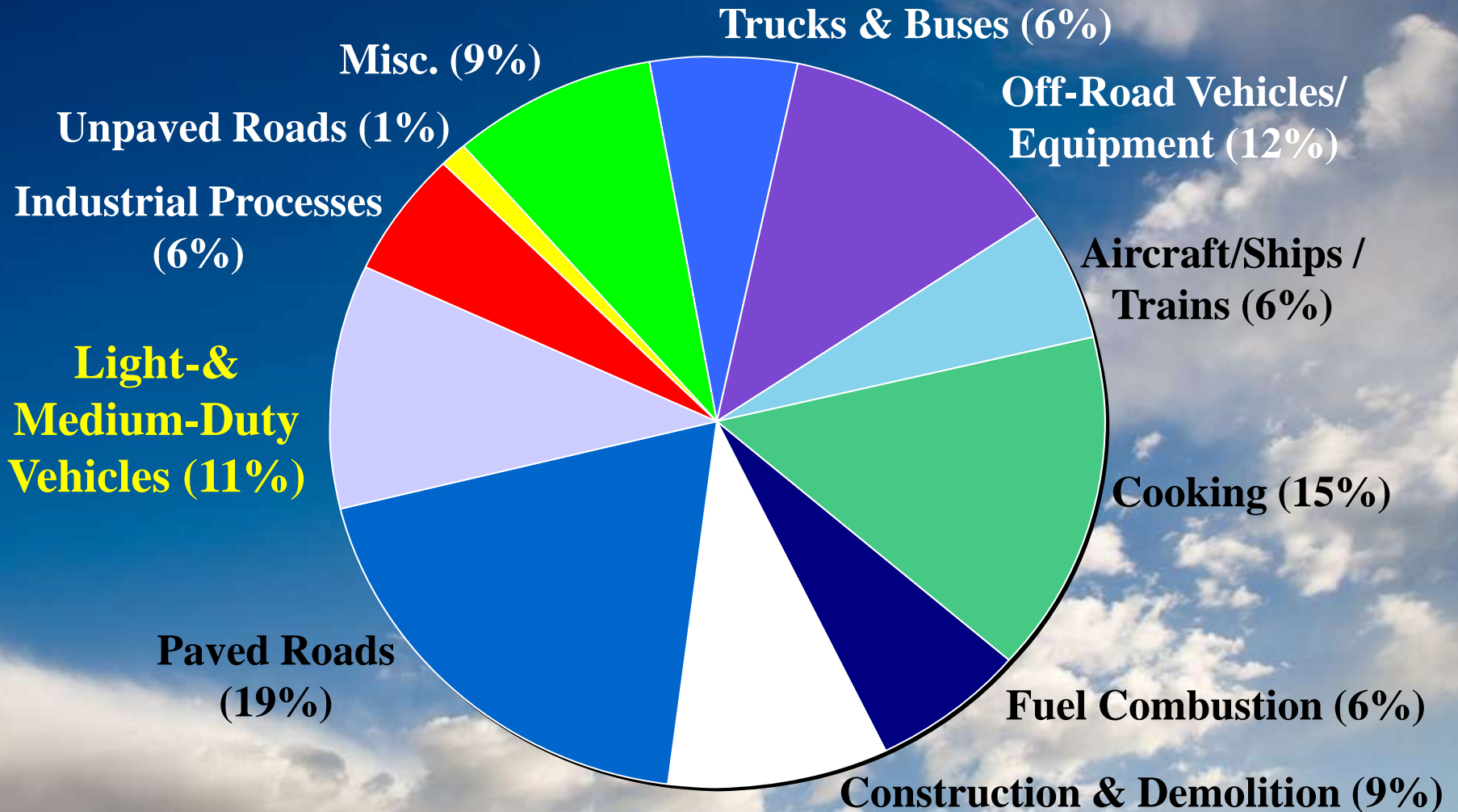
2014 NO<sub>x</sub> – 650 tpd

# Major Contributors to VOC (2014)



2014 VOC – 569 tpd

# Major Contributors to PM 2.5 (2014)



2014 PM 2.5 – 100 tpd

# Existing Programs

- **Aggressive Emission Standards for New Light- & Medium-Duty Vehicles**
- **Cleaner Fuels**
- **On-Board Diagnostics**
- **Smog Check for Light- and Medium-Duty Vehicles**

# Constraints in Achieving Standards

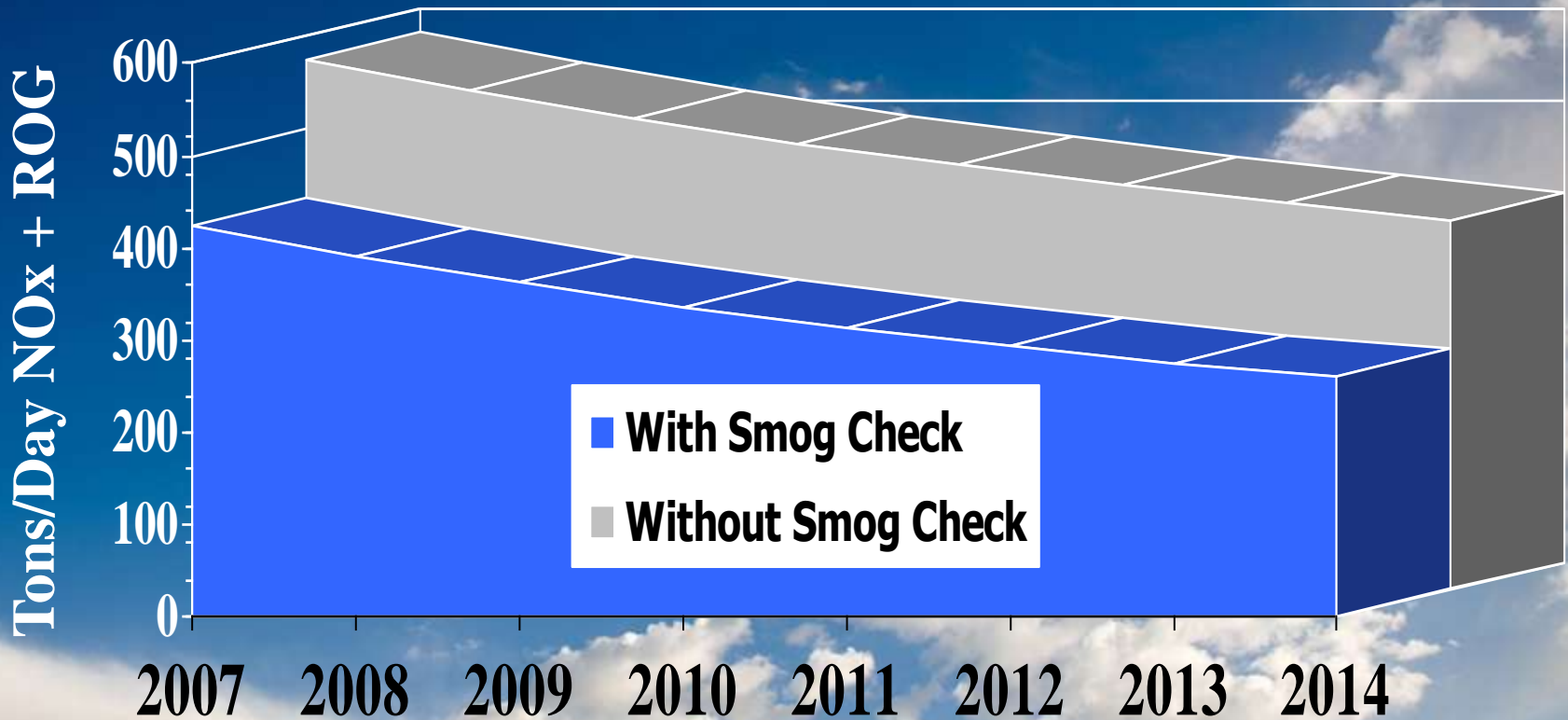
## South Coast Air Basin

- **Projected Increases:**

- **15% ↑ Population (17 mil. in 2014)**
- **18% ↑ Number of Vehicles (11 mil. in 2014)**
- **12% ↑ VMT (392 mil. in 2014)**



# Benefits of Smog Check





# **MSRC Program**

## **Remote On-Board Diagnostics (OBD)**

- **OBD Continuously Monitored Via Wireless System**
- **Participating Vehicles:**
  - **Exempt from Biennial Smog Check**
  - **If Repairs Made Within 45 Days of Malfunction Indicator Light Illumination**
- **~ 150 Entities Participating in South Coast**

# **MSRC Program Remote OBD (Continued)**

- **Potential Creditable SIP Emission Reductions**
  - Due to early repair of vehicles
  - With smog check, repairs delayed up to 2 years
- **Examples of Emission Benefits:**
  - **1 Participating UCLA Fleet**
    - ❖ 17 Vehicles Participating, Mostly Full-Size Vans
  - **2 Potential Reductions from Entire UCLA Fleet**
    - ❖ 1,100 Vehicles, Largely Full-Size Vans