



South Coast AQMD In-Use Diesel Engine Emissions Forum & Technical Discussion



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Science & Technology Advancement

Goals for the Forum and Roundtable

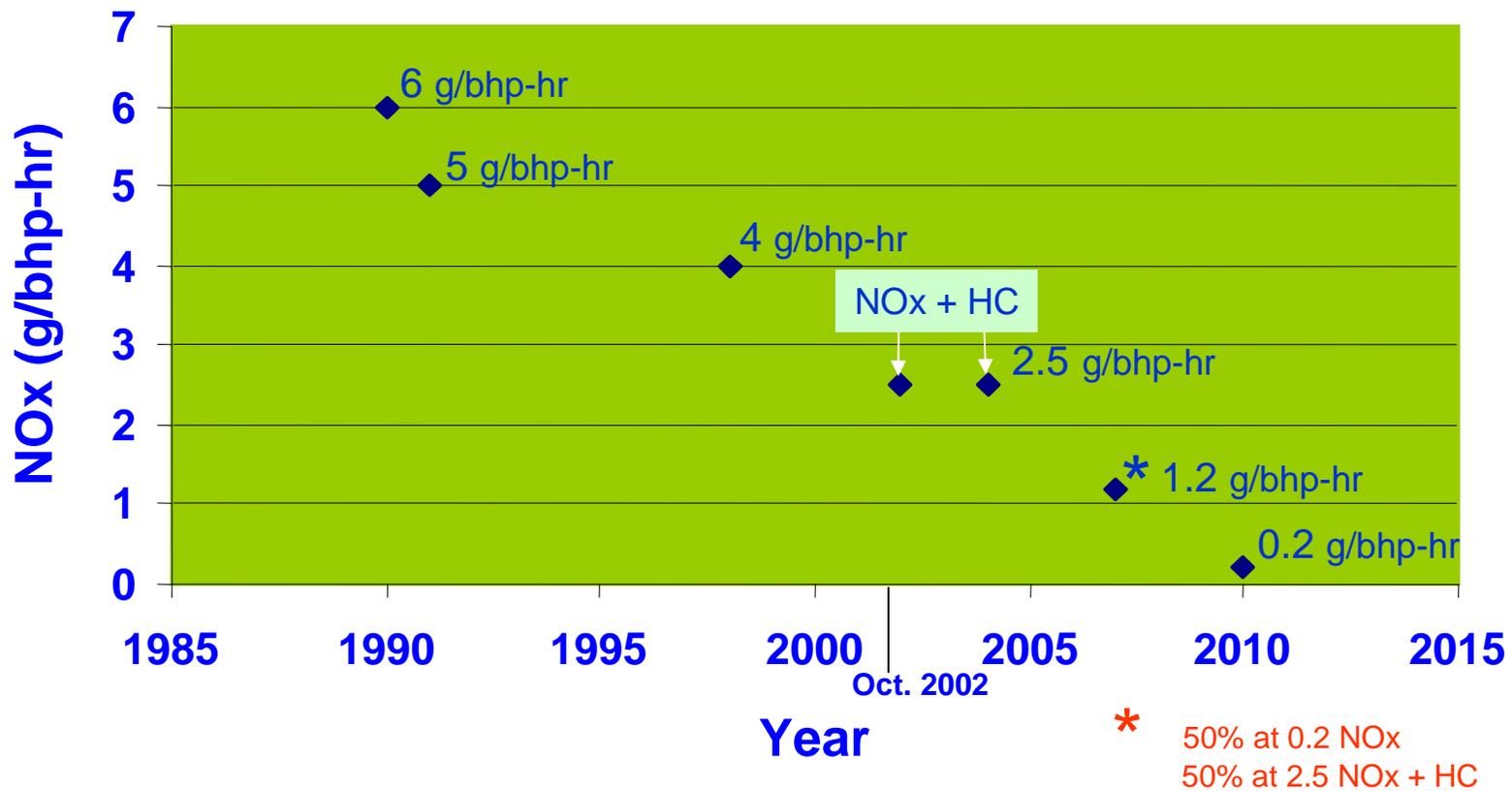
Identify Approaches in Dealing w/ Uncertainties of In-Use Emissions From HDD Vehicles

- Discuss and assess relationship between certification testing and in-use emission testing
- Identify strategies and approaches of better quantification and verification of in-use emissions from HDDT
- Initiate dialogue and establish roles

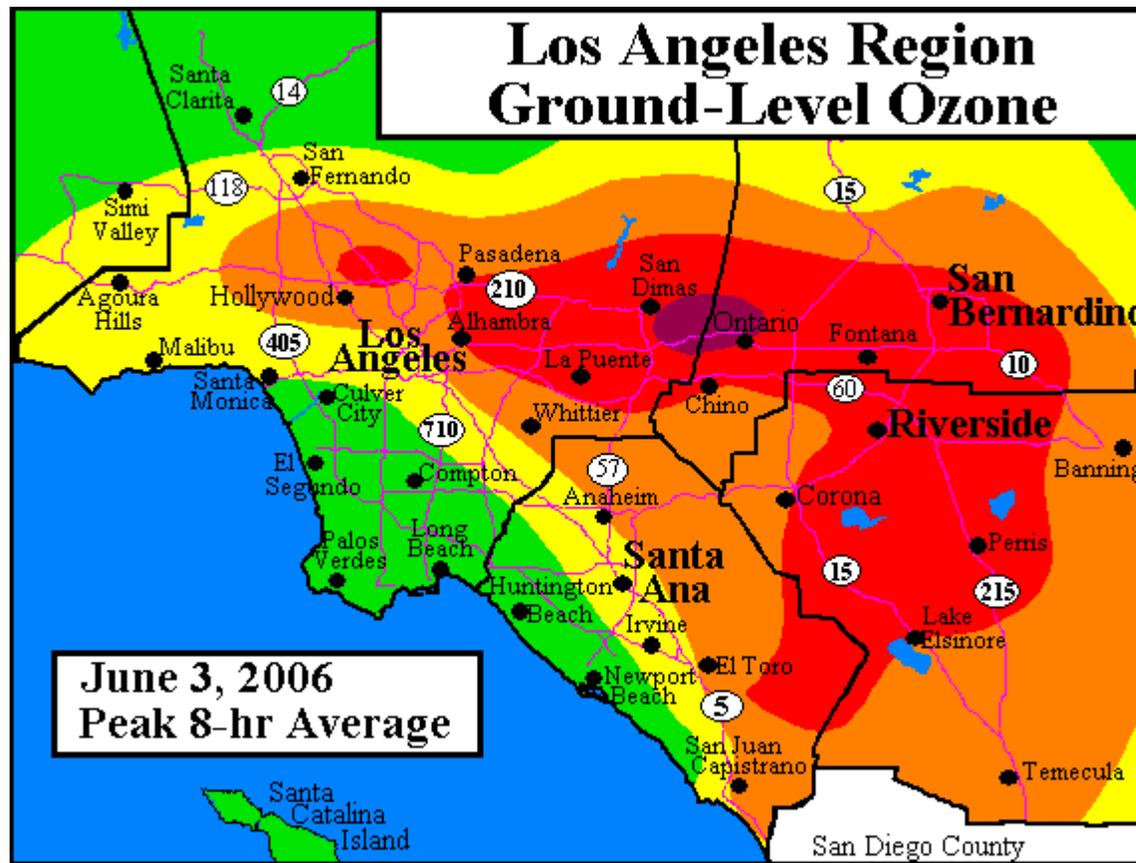
Impacted Programs

- Fleet Modernization
- NOx Fleet Average Regulations
- Carl Moyer Program
- Emissions Inventory

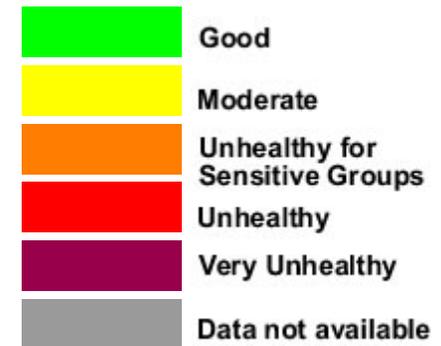
Heavy-Duty Engine Emission NOx Standards



SCAQMD has the Worst Air Quality in the Nation



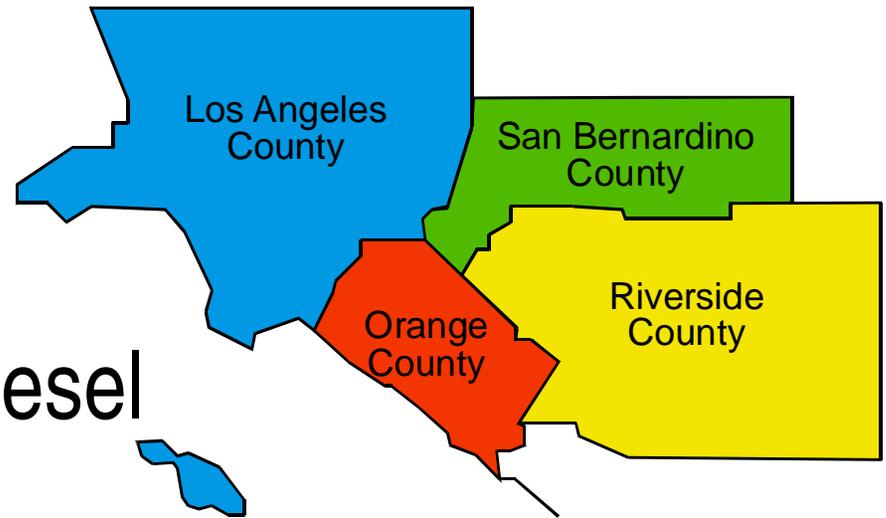
Los Angeles Region
June 3, 2006



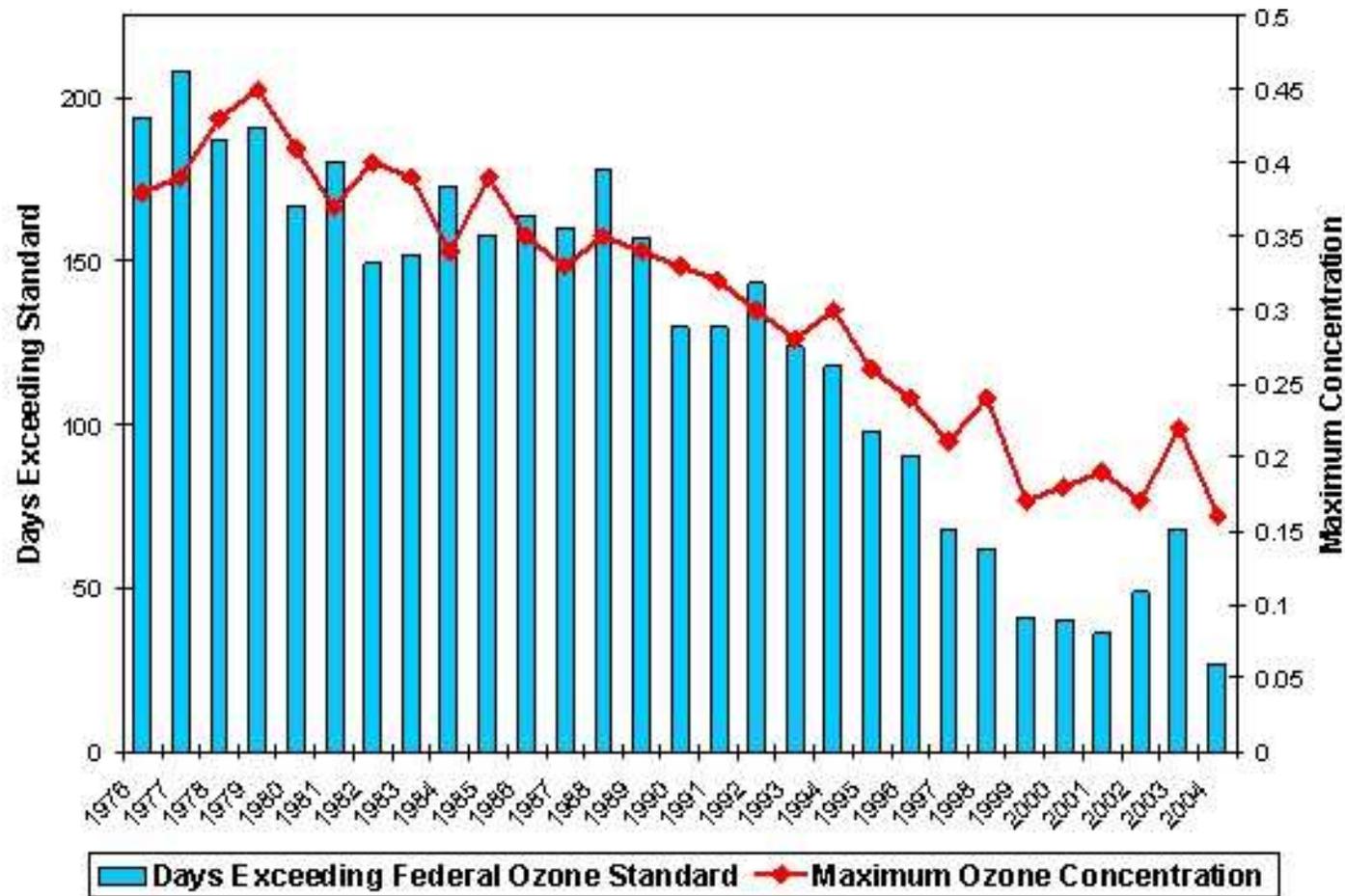
AQMD Background Setting

South Coast Basin:

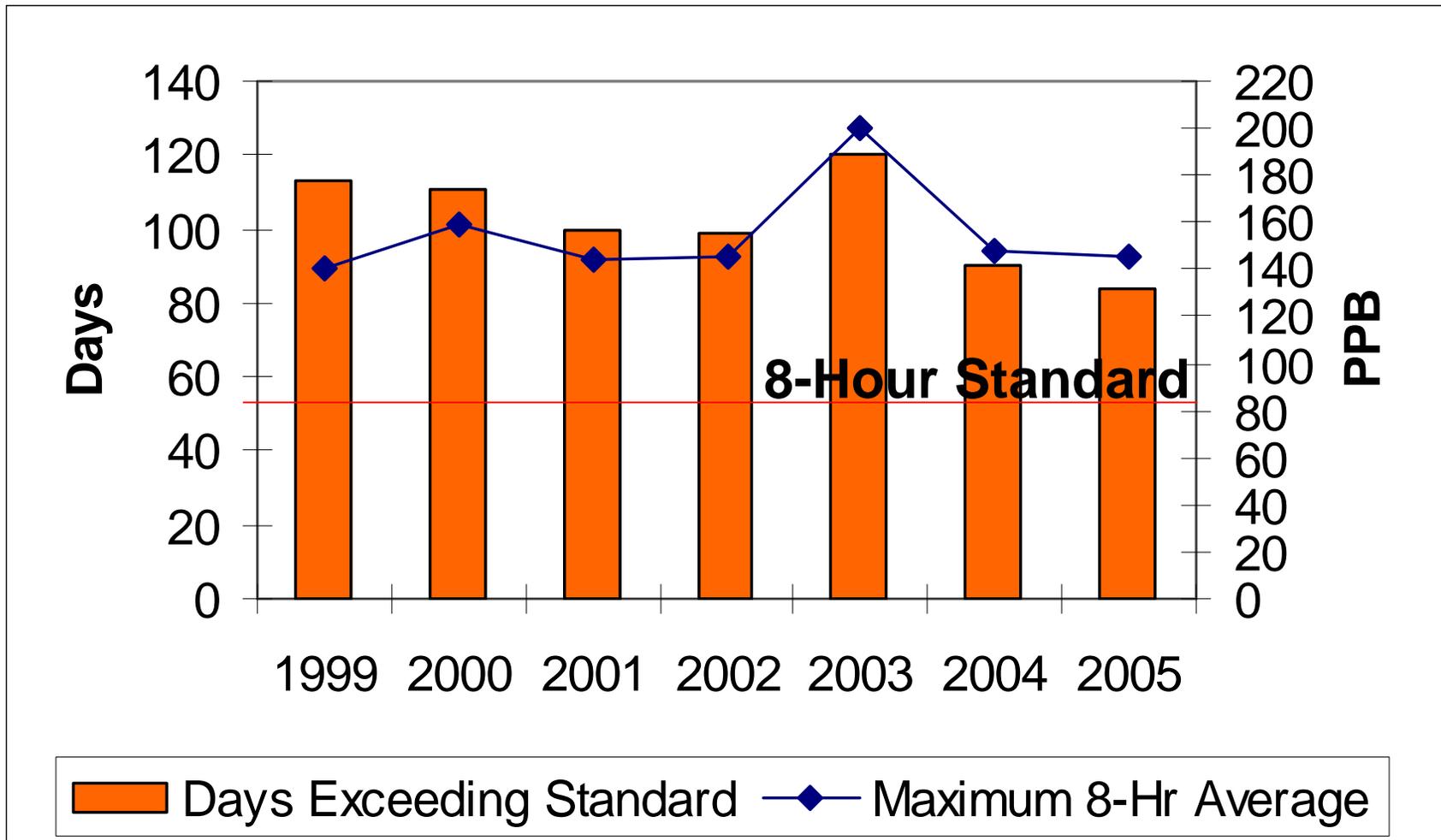
- 4-county region
- 11,000 sq. miles
- 16+ million residents
- Hundreds of thousands diesel vehicles
- Millions of gasoline vehicles
- Combined Ports of Long Beach and Los Angeles are nation's largest cargo gateway



Days Exceeding 1-Hr Ozone Standard



Trends of Basin 8-Hour Ozone



10 Most Particulate Polluted Counties in US

(annual average PM_{2.5})

1. **Riverside, CA**
2. **San Bernardino, CA**
3. **Los Angeles, CA**
4. Kern, CA
5. Tulare, CA
6. Allegheny, PA
7. Fresno, CA
8. Wayne, MI
9. **Orange, CA**
10. Kings, CA

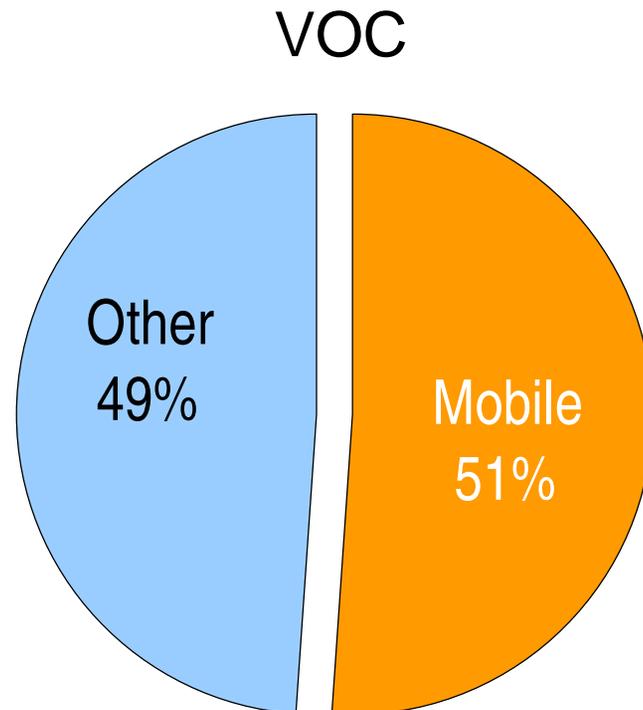
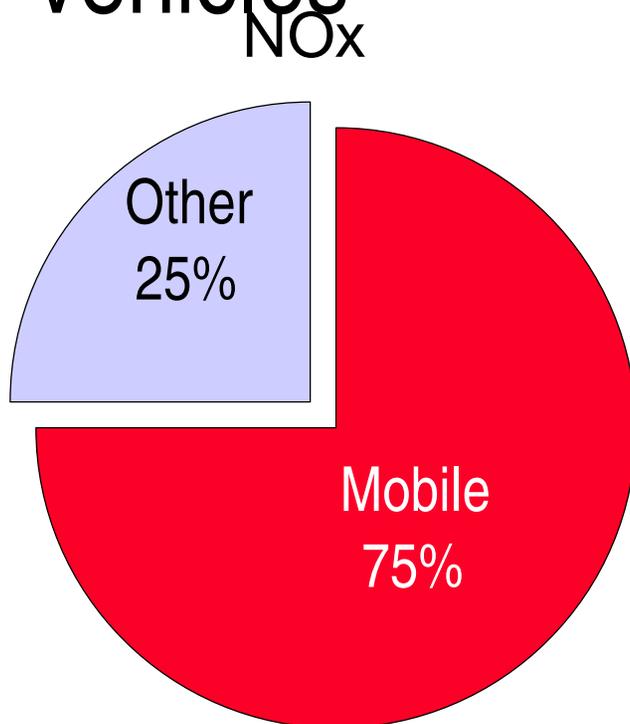
Public Health Issues

- Air pollution linked to asthma, increased cancer risk, and children's health
 - Children's Health Study showed chronic low lung function due to air pollution
 - Mobile sources contribute to 89% of average cancer risk from air toxics in South Coast Air Basin
- Recent findings indicate State has second highest toxic air concentration

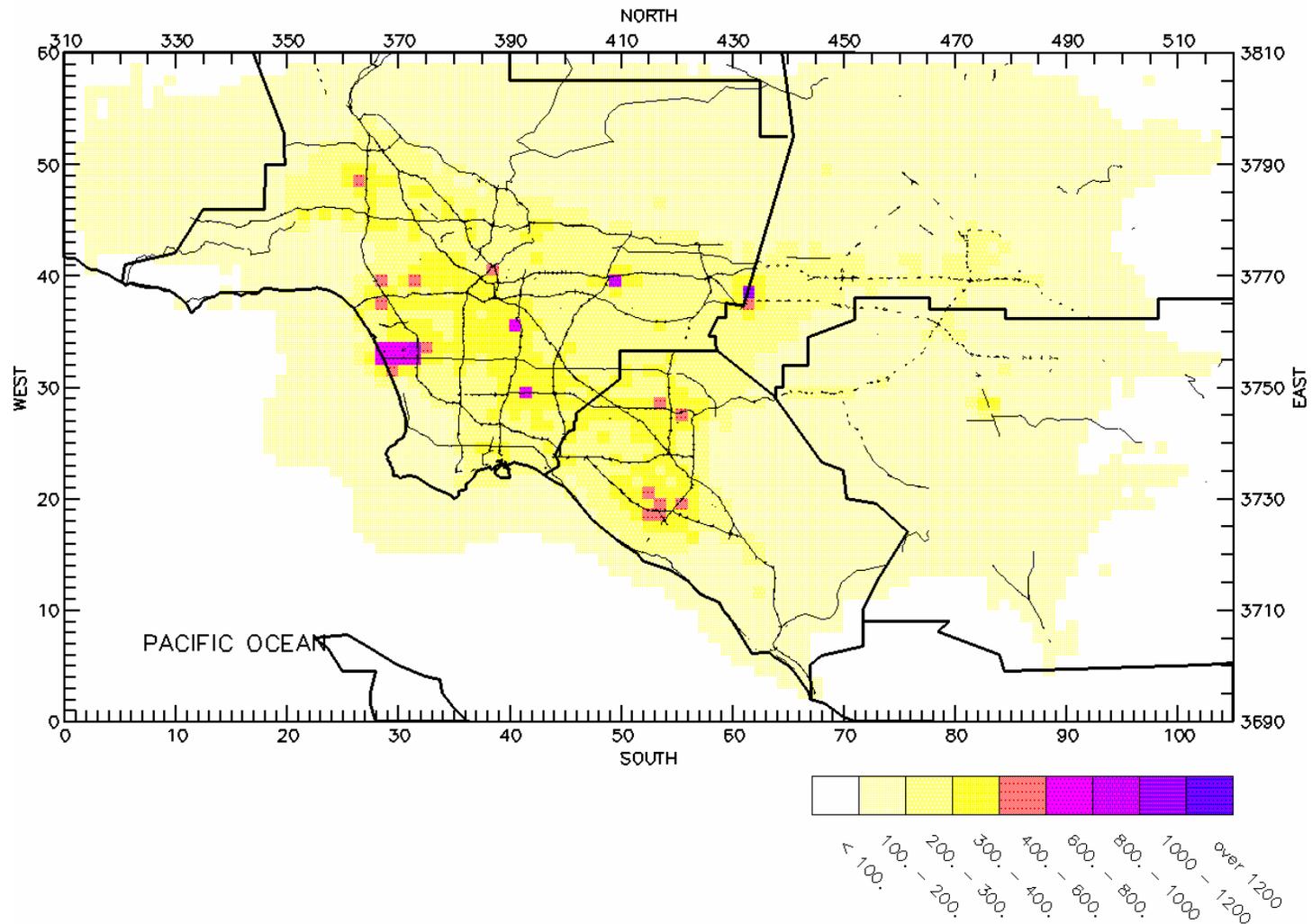


Emission Sources

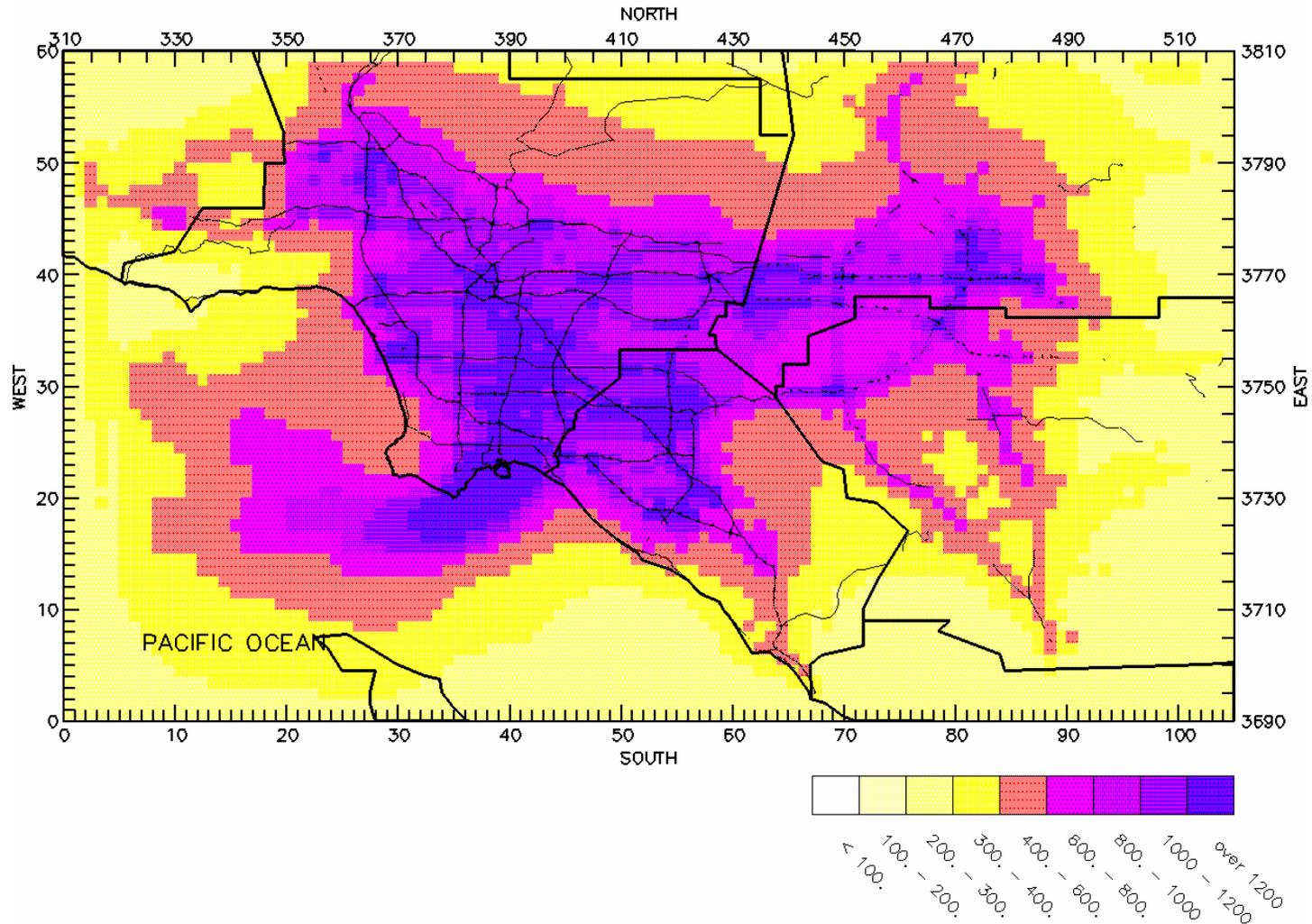
- Majority of emissions are from the mobile sector, specifically heavy-duty vehicles



MATES II – Estimated Risk Excluding Diesel Sources

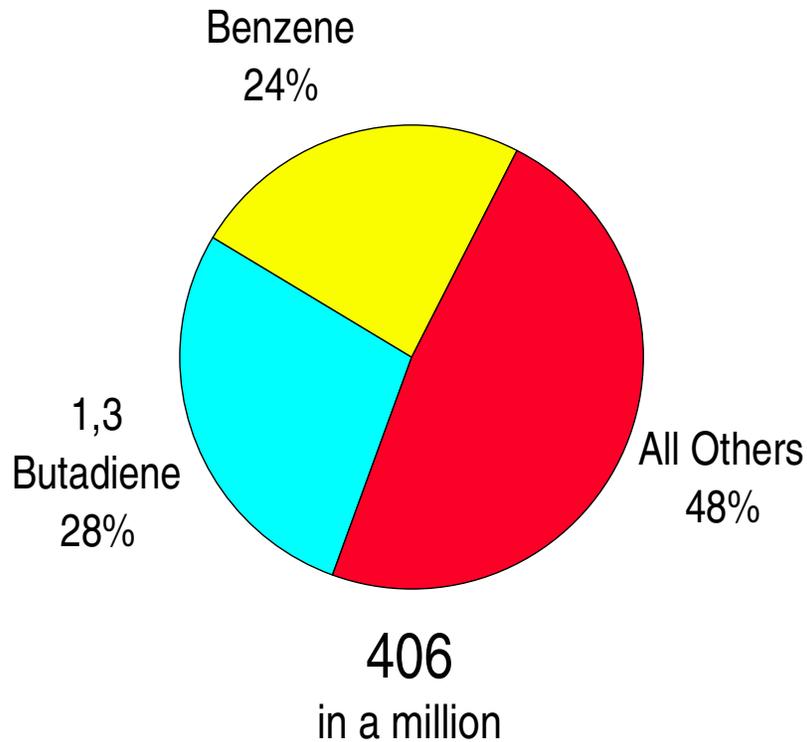


MATES II – Estimated Risk From All Emission Sources

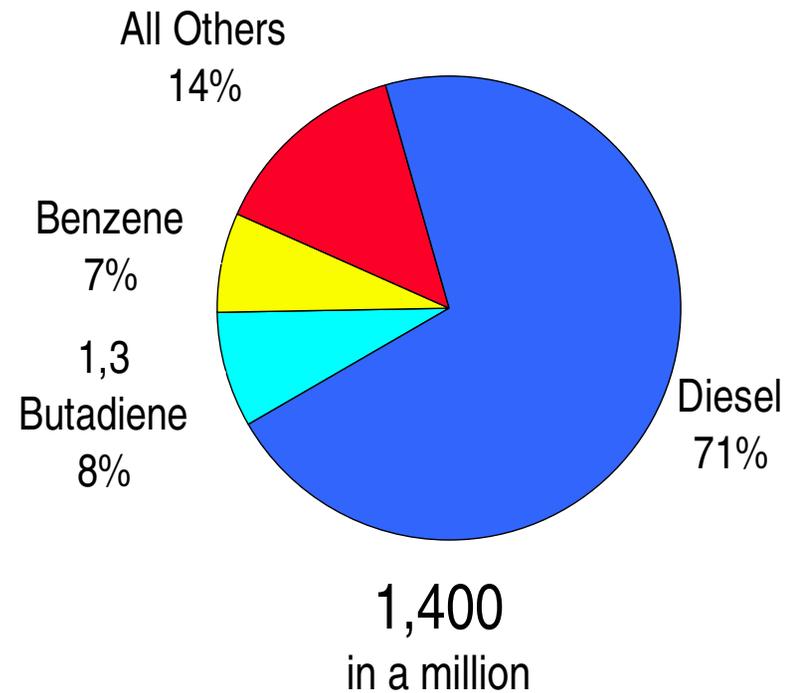


Cumulative Toxic Risk South Coast Air Basin (1998 1999)

Without Diesel



With CA Diesel Toxicity



NOx Emissions In South Coast Air Basin from a Variety of Sources

