

Meeting Air Quality Goals in California

The Tender Land
November 6, 2004

Nancy L. C. Steele, D.Env.



California Environmental Protection Agency

Air Resources Board







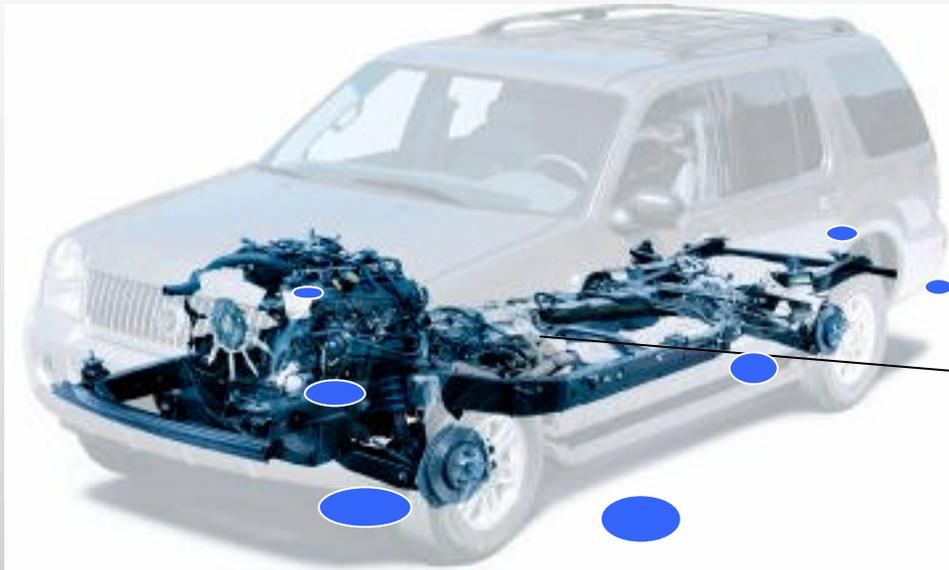
CERTIFICATE OF DEATH

STATE OF CALIFORNIA - DEPARTMENT OF PUBLIC HEALTH

DECEASED PERSONAL DATA	1. NAME OF DECEASED—LAST FIRST & MIDDLE NAME RATHAN LOUIS GORDON		2. SEX MALE		3. RACE CAUC.		4. DATE OF BIRTH AUGUST 5, 1905		5. AGE AT DEATH 23		6. DATE OF DEATH NOVEMBER 6, 1928		7. TIME OF DEATH 1:00 P.M.	
	8. NAME AND BIRTHPLACE OF FATHER UNKNOWN GORDON - RUSSIA				9. MOTHER NAME AND BIRTHPLACE OF MOTHER UNKNOWN - RUSSIA				10. PLACE OF BIRTH U.S.A.		11. SOCIAL SECURITY NUMBER 55-27-5562			
	12. LAST OCCUPATION SALES CLERK		13. GRADE 3		14. NAME OF LAST EMPLOYER (GIVE FULL ADDRESS) WESTLAK OUTLET STORE				15. NATURE OF BUSINESS OR SERVICE RETAIL GENERAL MERCHANDISE					
	16. MARITAL STATUS NO		17. PRESENT MARRIAGE MARRIED		18. NAME OF PRESENT SPOUSE RUBY M. GORDON				19. PRESENT STATUS OF SPOUSE HOUSEWIFE					
PLACE OF DEATH	20. PLACE OF DEATH—NAME OF PLACE (NONE)						21. STREET NUMBER 193 SOUTH ALVARADO APT. 8							
	22. CITY OR TOWN LOS ANGELES						23. COUNTY LOS ANGELES							
LAST KNOWN RESIDENCE	24. LAST KNOWN RESIDENCE—STREET NUMBER AND NAME 193 SOUTH ALVARADO APT. 8						25. CITY OR TOWN LOS ANGELES							
	26. COUNTY LOS ANGELES						27. STATE CALIFORNIA							
PHYSICIAN OR CORONER'S CERTIFICATION	28. PHYSICIAN W. J. P. [Signature]						29. PHYSICIAN OR CORONER'S SIGNATURE Peter E. Vogel M.D.							
	30. ADDRESS 3123 Beverly Rd						31. DATE 11/6/1928							
FUNERAL DIRECTION AND LOCAL REGISTRATION	32. METHOD BURIAL		33. DATE NOV. 10, 1928		34. NAME OF CEMETERY OR CREMATORIUM INGLEWOOD PARK CEMETERY				35. NAME OF FUNERAL HOME Sam L. Covinger 2427					
	36. NAME OF FUNERAL HOME OR CREMATORIUM 642 SOUTH VERNON STREET DIXON ST. LIGHT VILLAGE						37. LOCAL RELATIONSHIP [Signature]							
CAUSE OF DEATH	38. CAUSE OF DEATH IMMEDIATE CAUSE Myocardial Infarction										1 hour		INTERNAL	
	39. UNDERLYING CAUSE Arteriosclerotic Heart Disease													5 years
Los Angeles 5mg														
OPERATION AND ANESTHETIC	40. OPERATIONAL <input type="checkbox"/> General <input type="checkbox"/> Local <input type="checkbox"/> None						41. DATE OF OPERATION <input type="checkbox"/> Yes <input type="checkbox"/> No							
	42. DEPT ACCOUNT NUMBER OR NUMBER						43. ALERT NUMBER							
PLATE INFORMATION														

MEDICAL AND HEALTH DATA

Vehicle Smog-forming Emission - Sources -

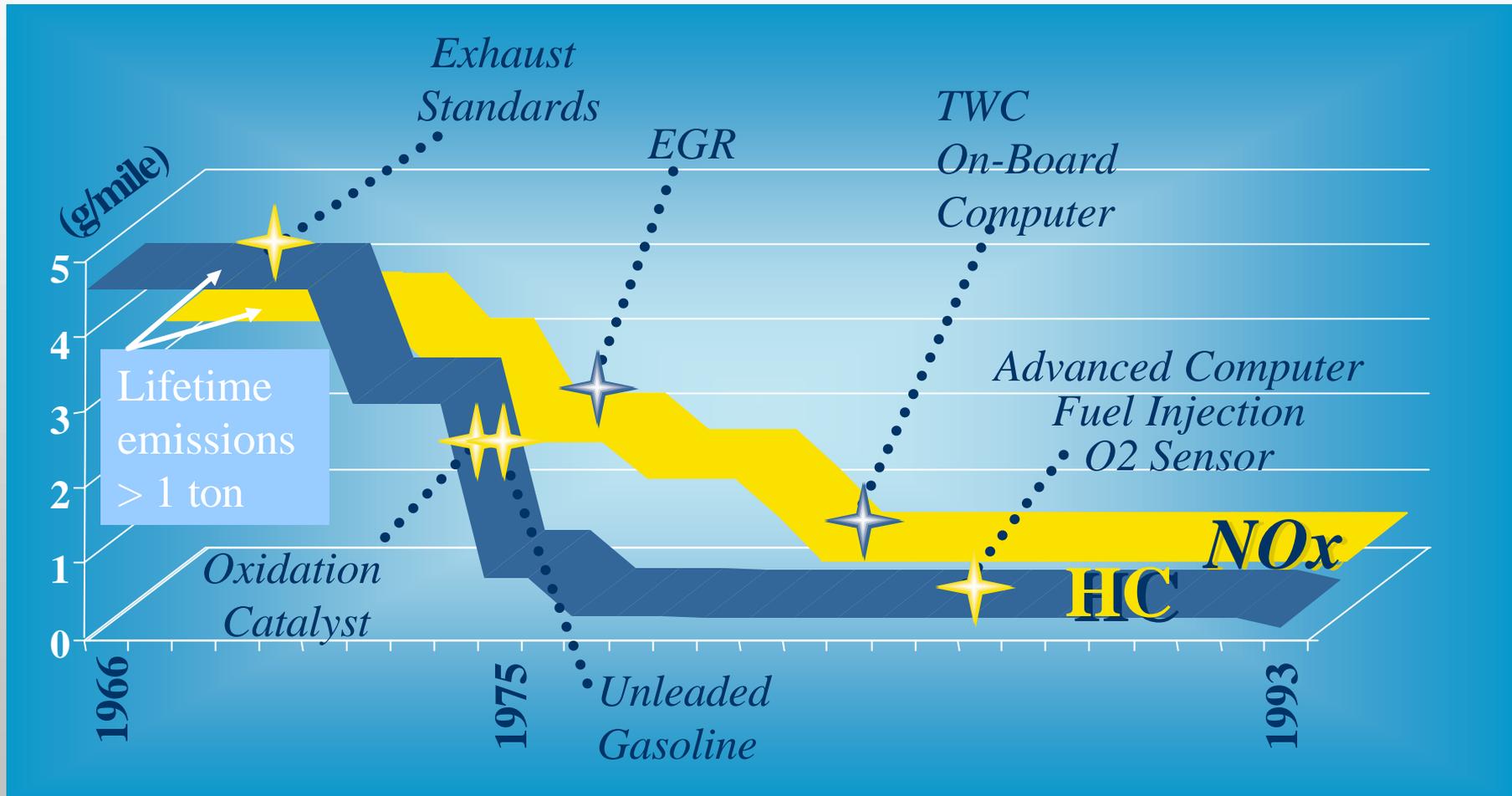


HC,
NOx,
PM



Evapora-
tive HC

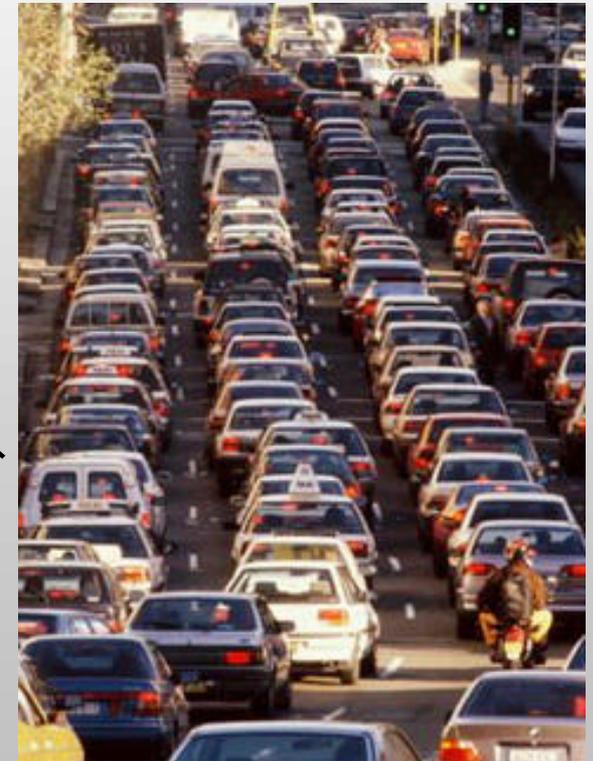
Emission Control Strategies of the Early Years Mean Much Cleaner Cars Today



The Challenges

Southern California by 2010

- Increasing Population = More Cars & Trucks
 - Population 15% ↑
 - 17 mil.
 - Number of Vehicles 34% ↑
 - 11 mil.
 - Vehicle Miles Traveled 31% ↑
 - 387 mil. Miles



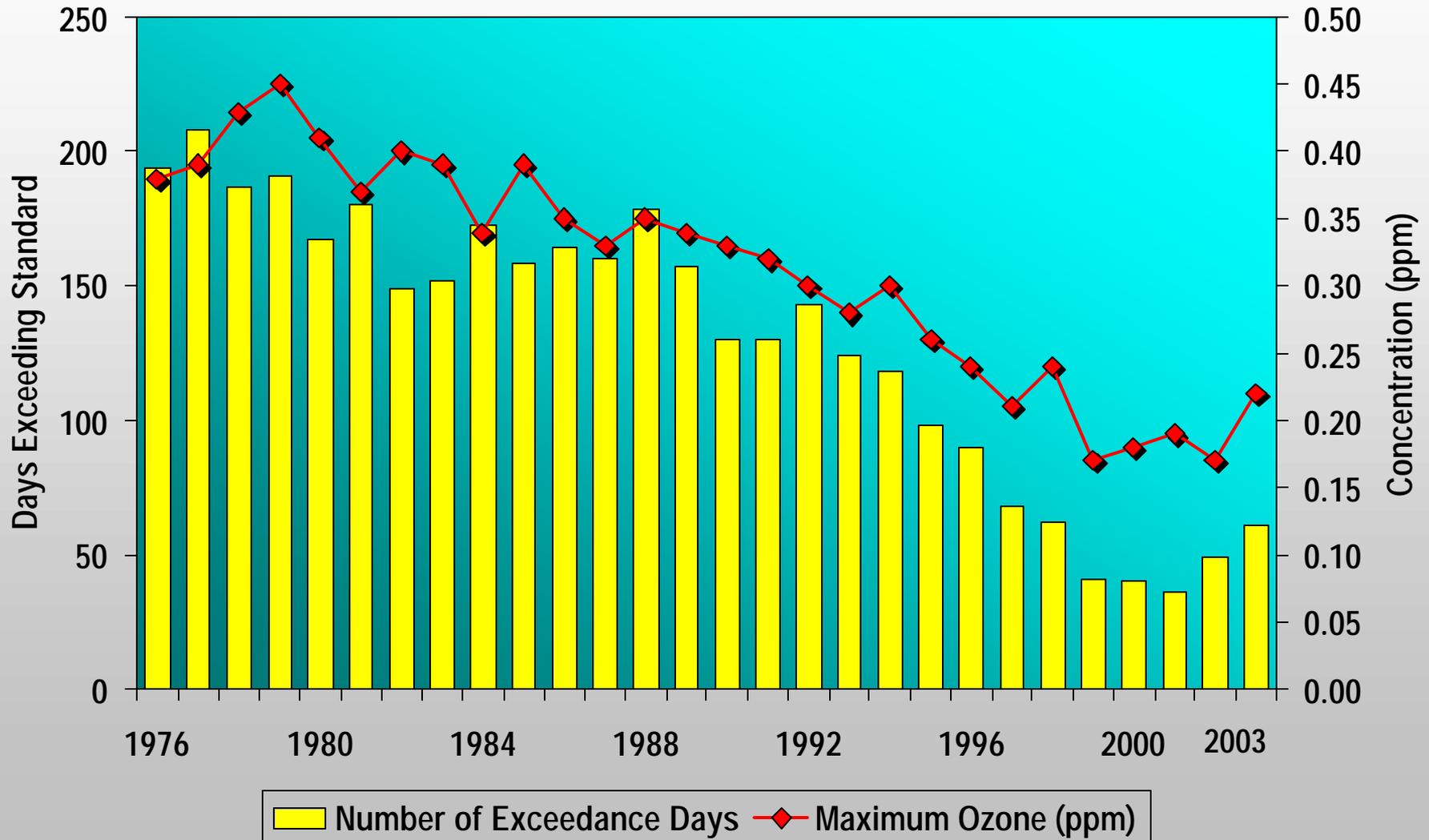
More Challenges

Southern California by 2010

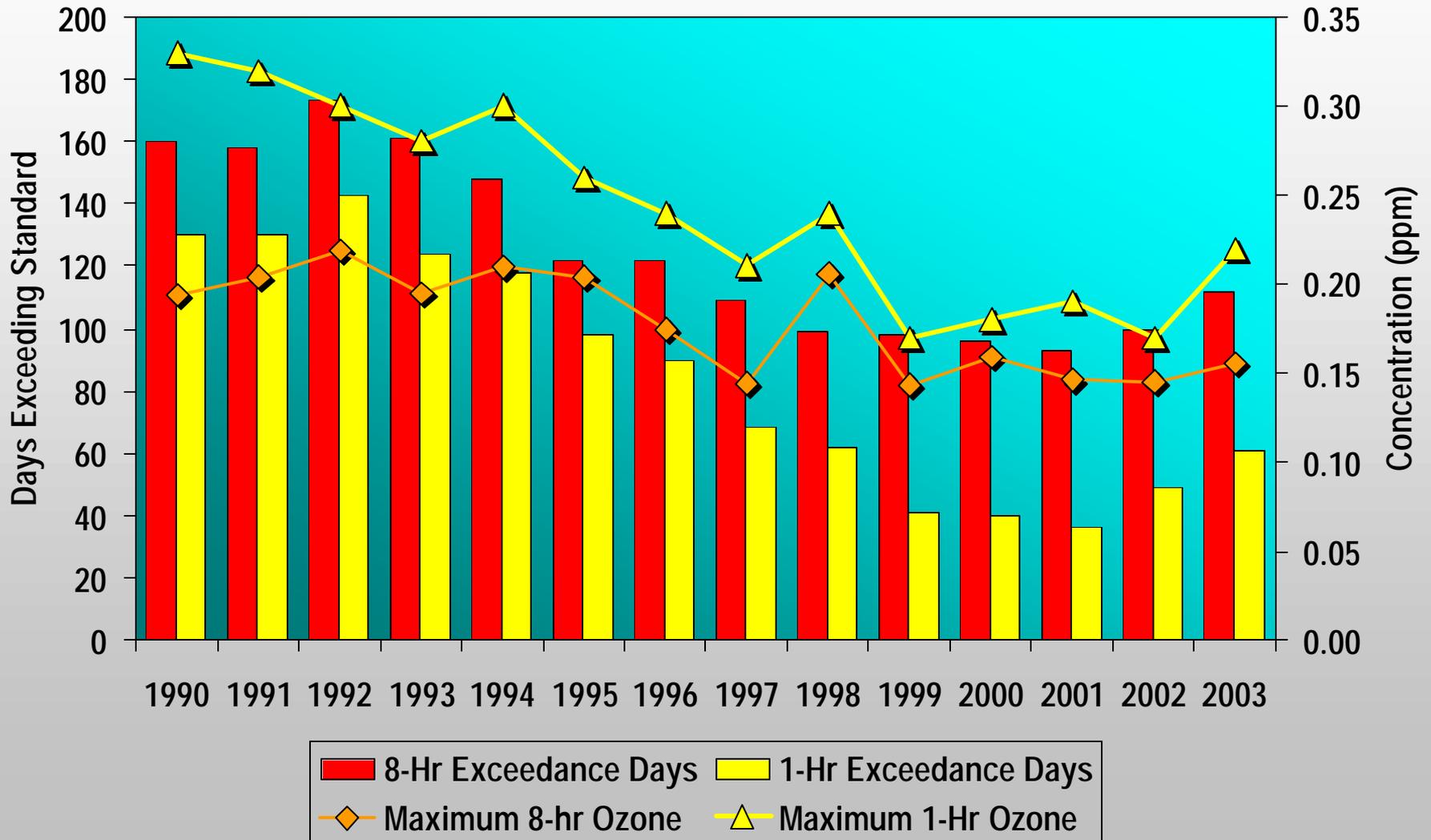
- Expanding Economy = More Consumption
 - Consumer Products
 - Ports / Airports / Trains
 - Industrial Sources



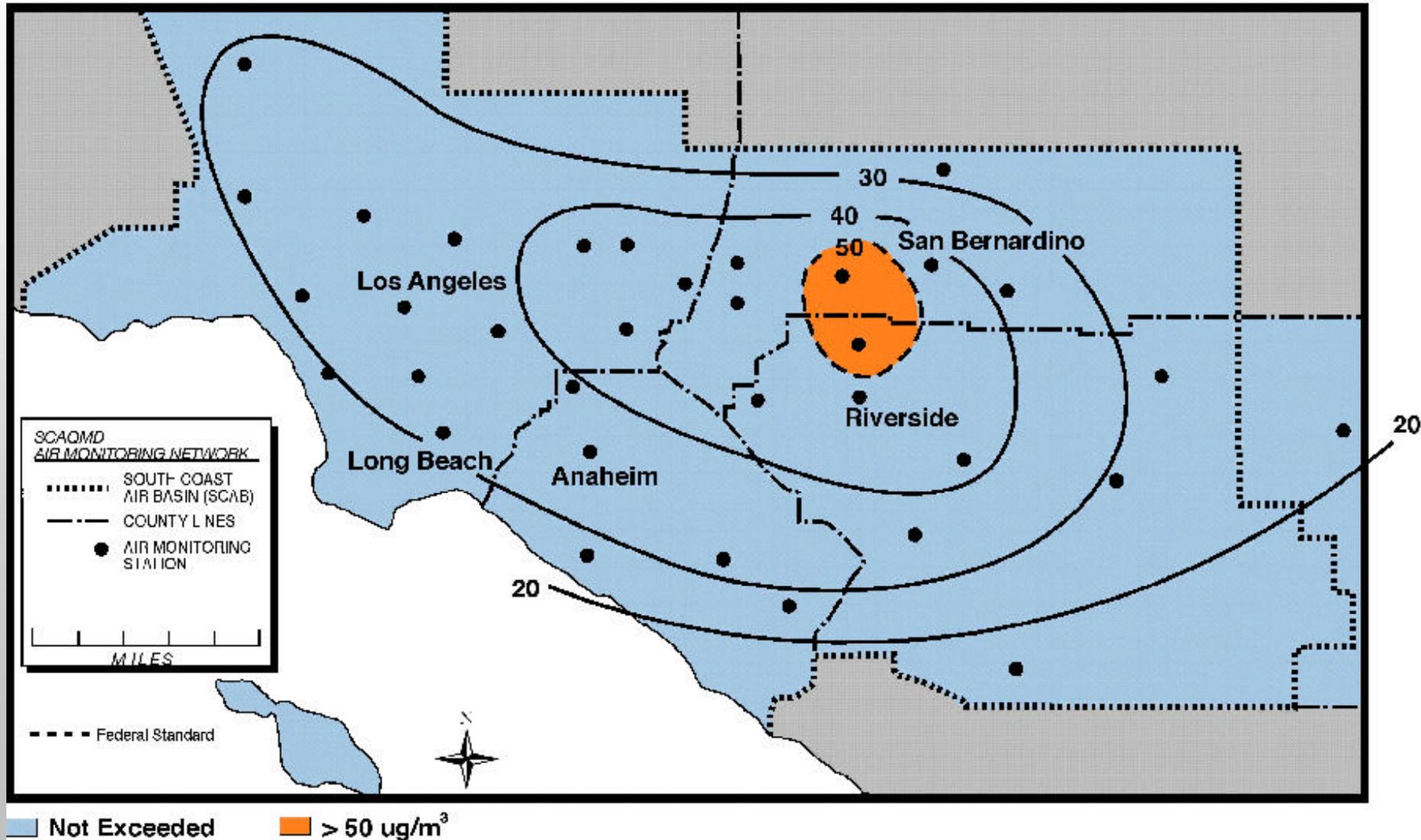
Ozone Air Quality Trends



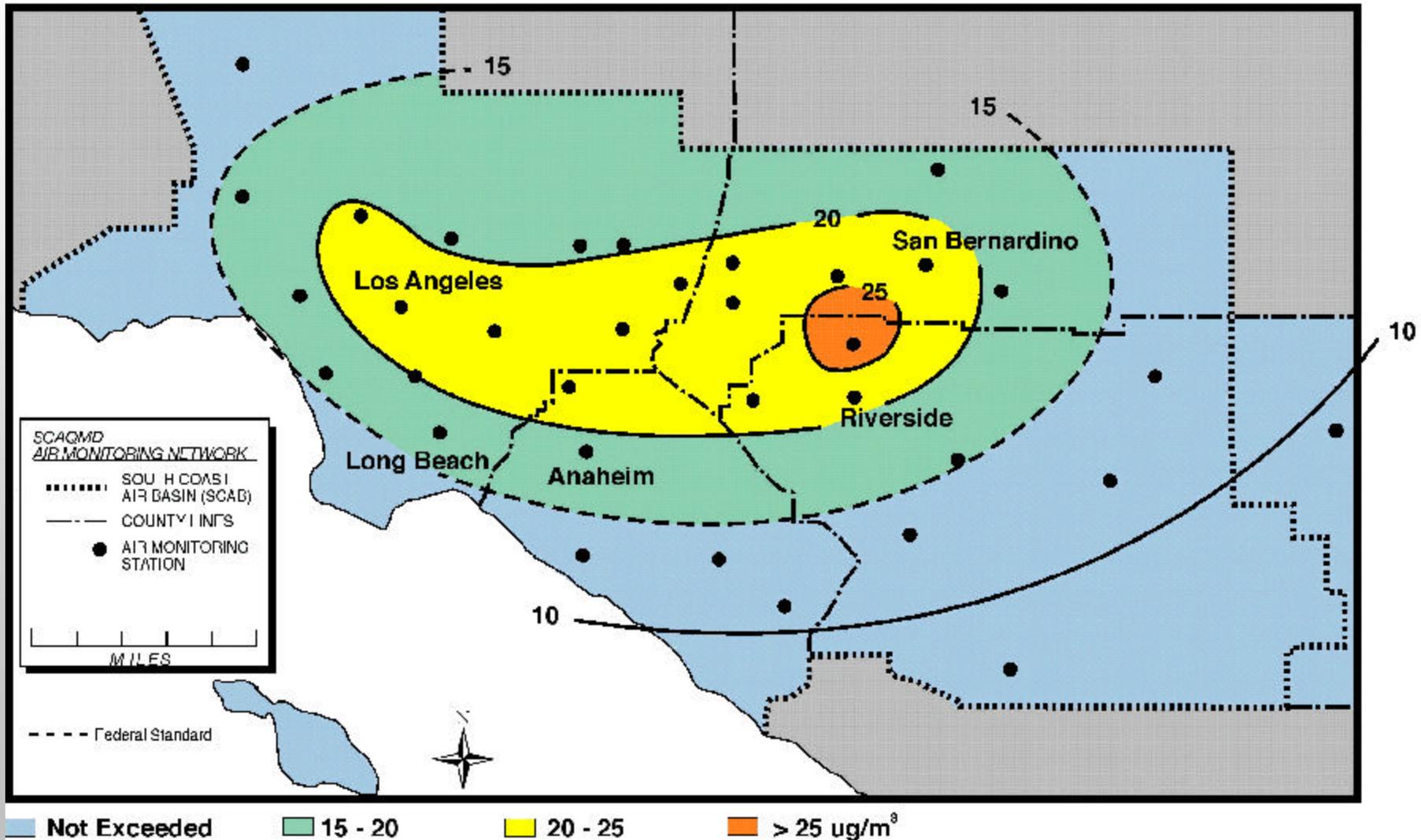
Ozone Air Quality Trends



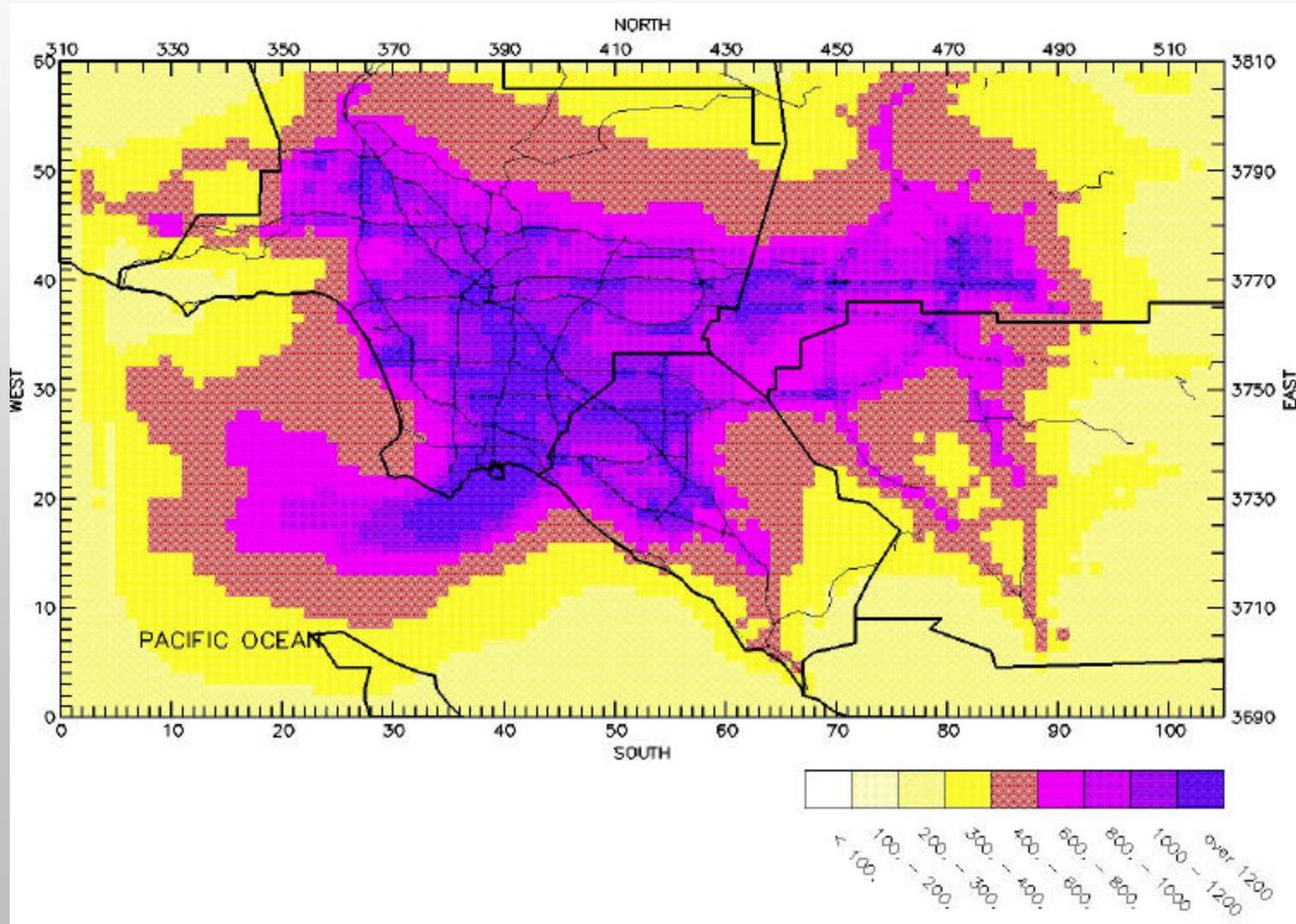
Annual PM10 Air Quality in 2003



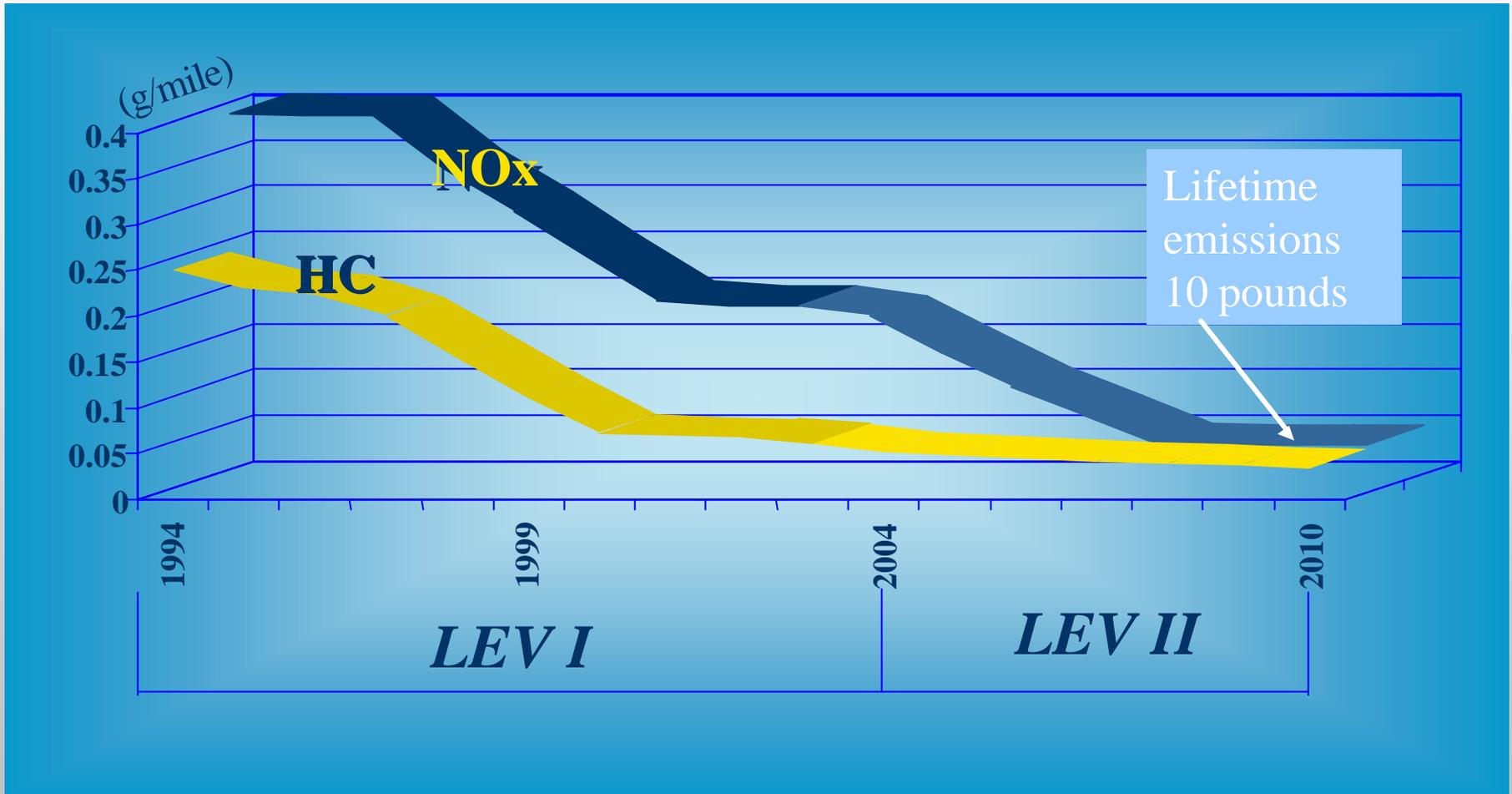
Annual PM2.5 Air Quality in 2003



Model Estimated Potential Risk from All Emission Sources



Our Goal is Zero Emissions



Current Certification Data for Heavy-Duty Diesel Engines

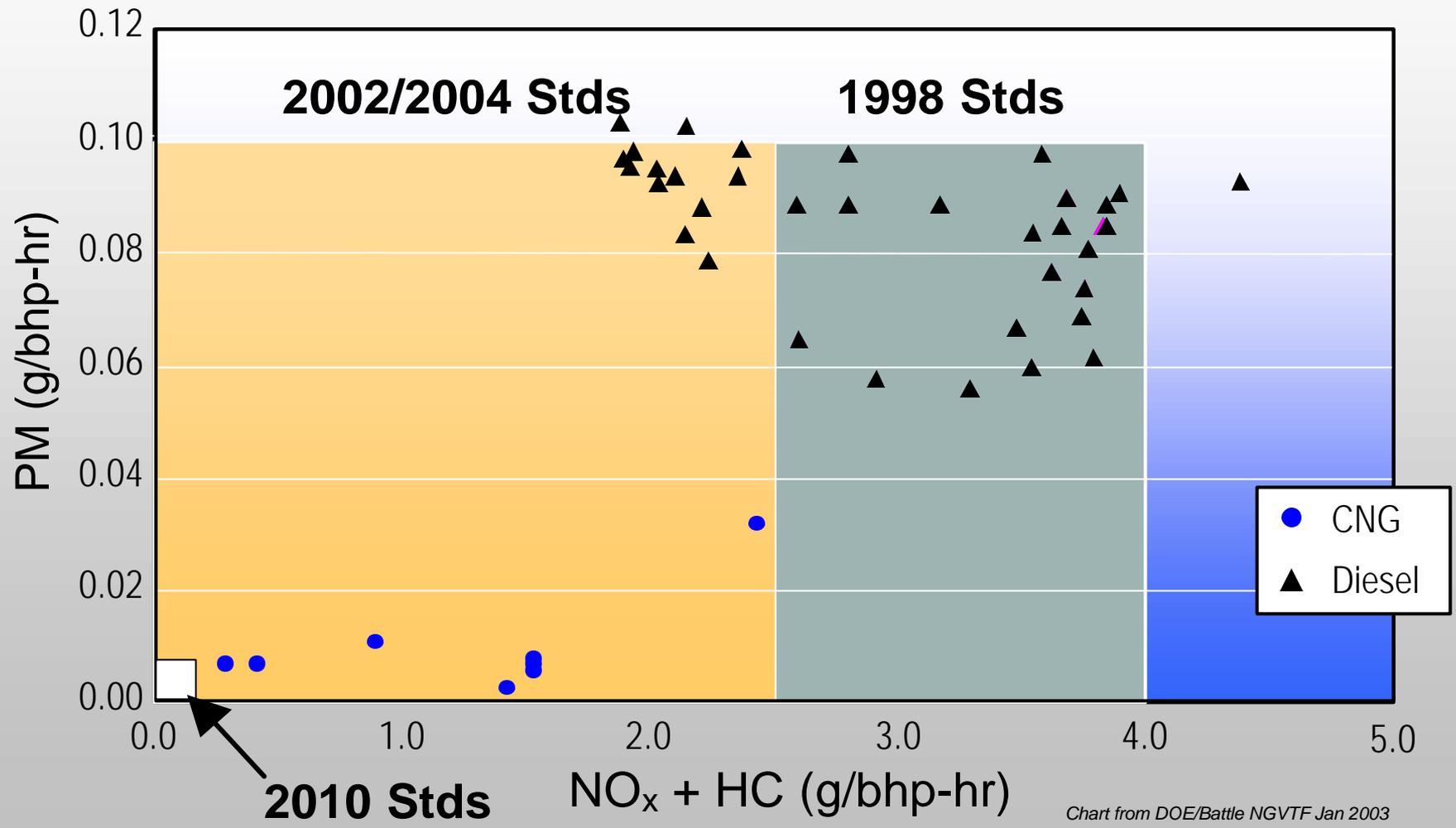
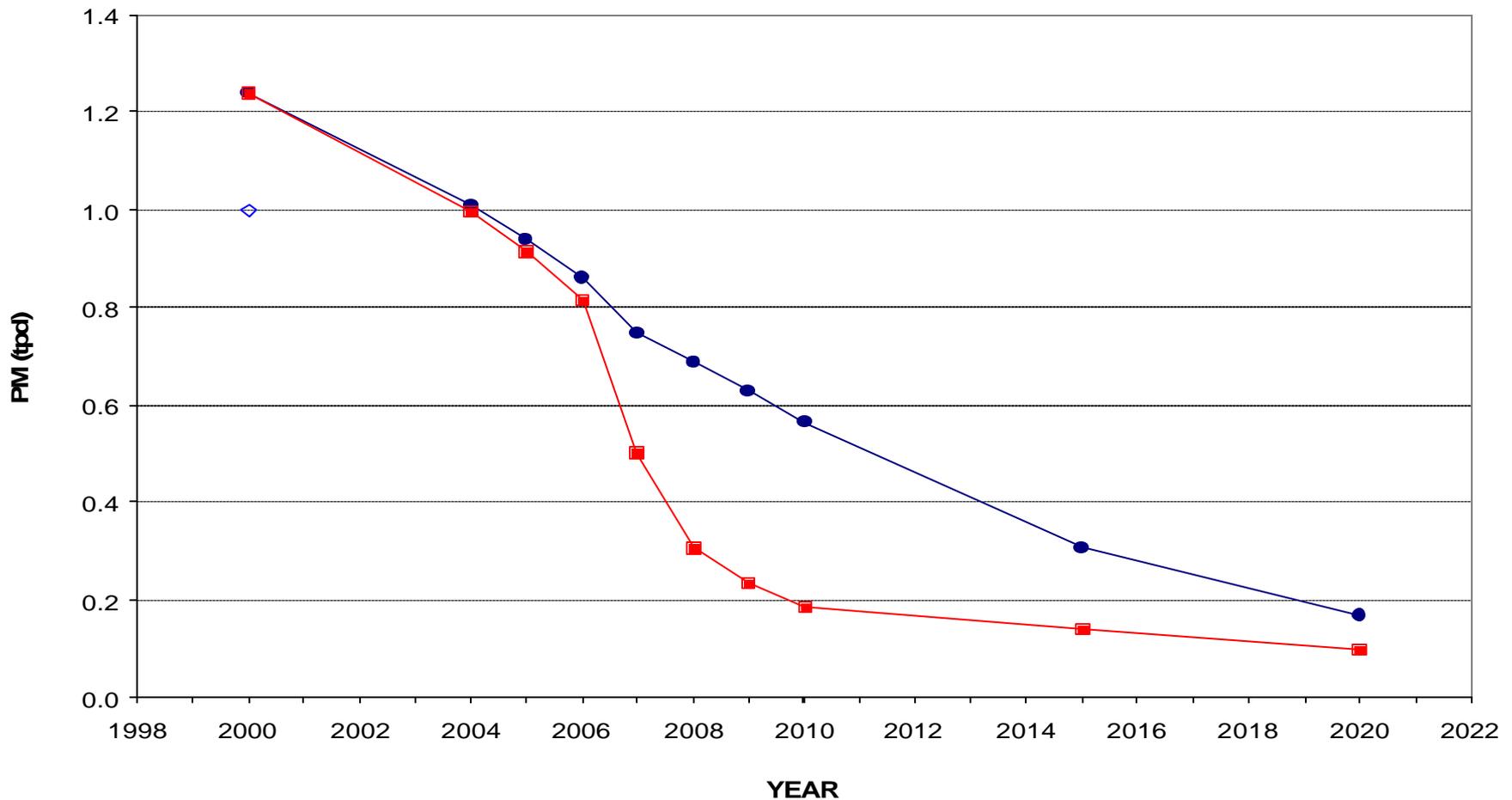


Chart from DOE/Battle NGVTF Jan 2003

Near Term PM Emission Reductions Achieve Health Benefits



Diesel Trucks

Retrofits for
Low Emissions



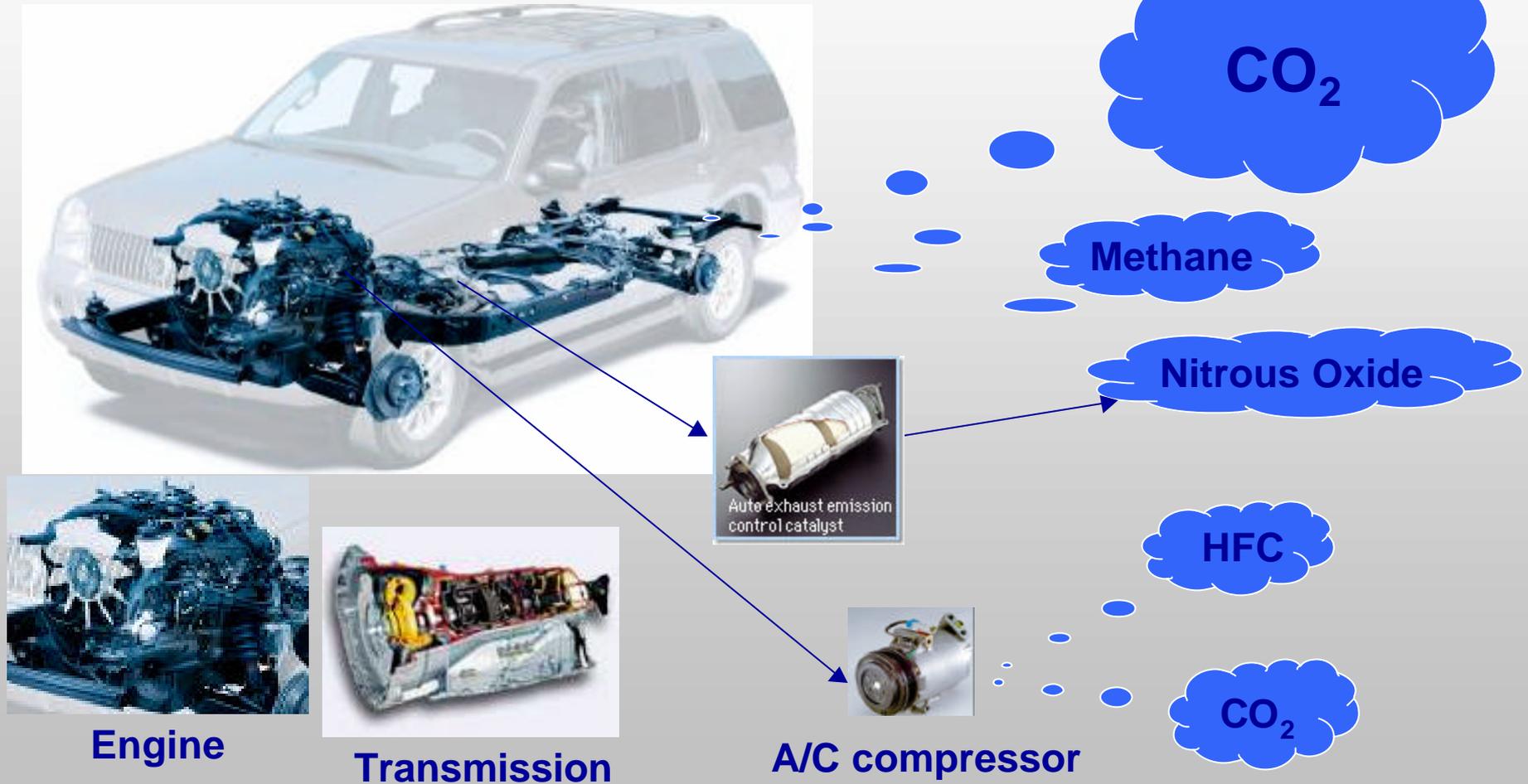
Our Goals: Clean Air



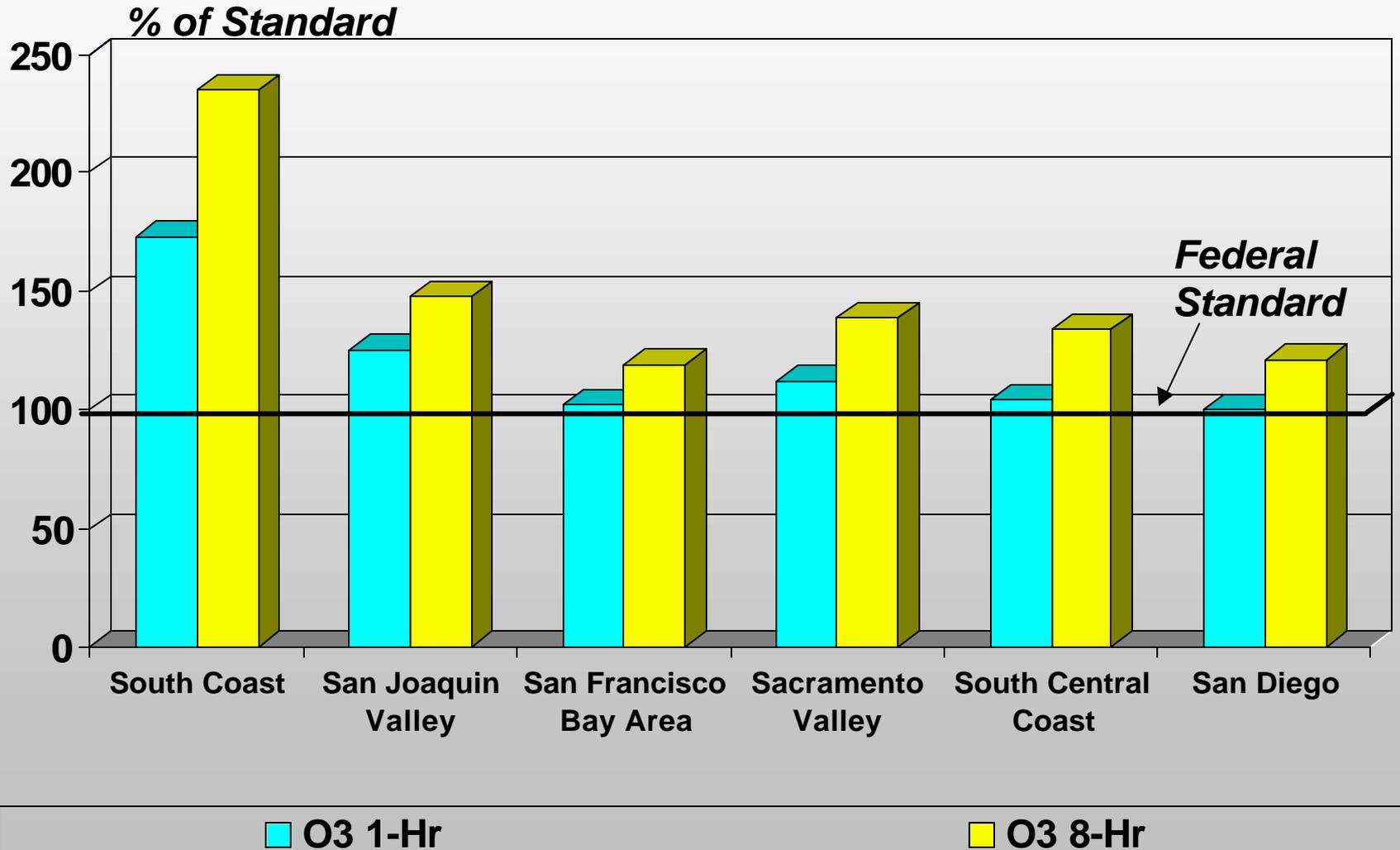
And Healthy Citizens

Vehicle Climate Change Emissions

- Sources -



Ozone Air Quality in California



Challenges to Attainment / Reducing Air Toxics Levels

- Slow Turnover of Existing Gasoline Vehicles
- Long Life of Existing Diesel Engines
- Funding to Implement New Technologies
- Development of Future Control Measures to Meet New Federal/State Clean Air Goals
- International/National versus Local needs

Mobile Source Emissions and Air Quality

- New Cleaner Engines – One Part of Solution
- Need to Clean Up Existing Engines - Second Part of Solution
- Public Policy – Deploy the Cleanest Commercially Available Technologies As Early As Possible

Road to Success

- Working Together
(Public/Private Partnerships)
- Public Outreach/Education
- Sustained Funding Assistance for Cleaner Technologies
 - Governor's Funding
 - AB 923 - Firebaugh



Attainment Dates

- Federal:
 - PM10 - 2006
 - 1-Hr Ozone - 2010
 - PM2.5 - 2014 (*Requires Action Today*)
 - 8-Hr Ozone - 2021
- California:
 - As Early As Practicable
 - PM2.5 Standards – More Stringent