

Clean Air Healthy World

Building Tomorrow's Achievement
on Our Successes of the Last 50 Years

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*Los Angeles skyline,
January, 1967.*

*The year the
California Air
Resources Board was
created.*

*Millions of
Californians suffer
from smog-induced
illness.*



*Fifty years of progress
results in longer, healthier lives.*

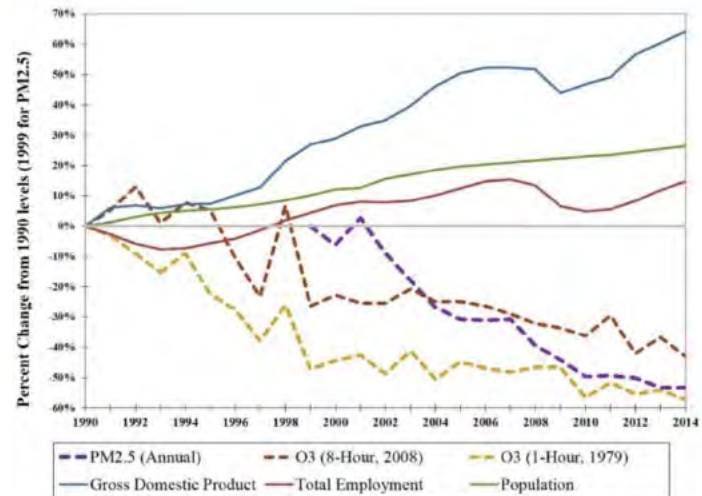
Indicators of Success

Multiple Air Quality Indicators Since 1967

- 239 Stage 1 & 2 Smog Alerts Eliminated
- Black Carbon Reduced 90%
- Ozone, PM, CO, Air Toxics ALL Greatly Reduced



Air Quality Progress, Economic & Population Growth Since 1999



Real World Health Benefits

Southern California

Children's Health Study 1998 to 2011

POLLUTION DOWN, LUNG HEALTH UP

Air quality in the Los Angeles basin, as measured in five cities by USC researchers, improved over two decades. That provided a more healthful environment for children's growing lungs.

AIR POLLUTION

Nitrogen dioxide



33%

Fine particles



47%

CHILDREN'S LUNGS

In 1998, nearly eight of 100 15-year-olds had significant lung deficits.



By 2011, only about 3 1/2 of 100 15-year-olds had significant lung deficits.



Source: USC Children's Health Study

USC Graphic by Molly Zisk

Are We There Yet?

For many Southern Californians:

- **“I can see the mountains now.”**
- **“My eyes and lungs don’t hurt anymore.”**
- **“The air doesn’t stink.”**
- **“Isn’t this good enough?”**

Our Challenge for the 21st Century



Refocusing Our Efforts

Scoping Plan & SIP

Regional Plans

Community Air
Protection



How Do We:

Maintain Leadership & Better Control California's Destiny while Contributing to Humanity?

Personalize Effort for Thought Leaders & Public?

Support Economy, Clean Air, Public Health & Address Climate Change Concurrently?

Ensure Environmental Justice?

Promote Clean Technology and Other Strategies?

Deploy Our Resources?

Improve Science Fluency & Communication?

Provide a Model(s) for Others to Follow?

Choose From Competing Priorities?



Core Principles to Move the Needle

- Credibility.
- Fact-Based Decisions & Science-Based Actions.
- Environmental Justice & Social Equity.
- Sound Economics.
- Build Political Will & Public Support.
- Consistent and Connected Policies & Actions.
- Integrate Environmental Media & Sectors.
- Bottom-Up AND Top-Down.
- Communication, Transparency, Participation & Responsiveness.
- Personalize the Impacts.



Many Proven Tools



Thoughts on Using the Tools

- ❖ Begin with Engagement
- ❖ Understand and Respect Local Values and Stakeholder Impacts
- ❖ Provide Customizable Elements/Building Blocks
- ❖ Establish Deadlines & Consequences

The Next Chapter

❖ Community Air Protection Program

- Advanced Monitoring & Sensor Technology from A to Z
- GIS, Computing Power and Integrating “Big Data”
- Rapid Implementation Community-Based AQ Measures

❖ Investments and Incentives

- Technology & Workforce Transition Plans & Training
- Additional Funding & Creative Financing

❖ 3 Revolutions Transportation Technology

- Vehicle Automation
- Shared Mobility
- Electrification

The Next Chapter Cont'd

❖ Local Government General Plans

- Environmental Justice Elements
- Air Quality Elements
- Zoning Restrictions

❖ Technology Advancement

- Tech Incubators & Venture Capital Firms
- Further Emphasize Scalability
- Broadening California's Purchasing-Power

❖ Communication and Science Fluency

- Community Citizen Scientists & K-12 Education
- Personalize Impact Information
- Social Media, Including Video & PSA Platforms

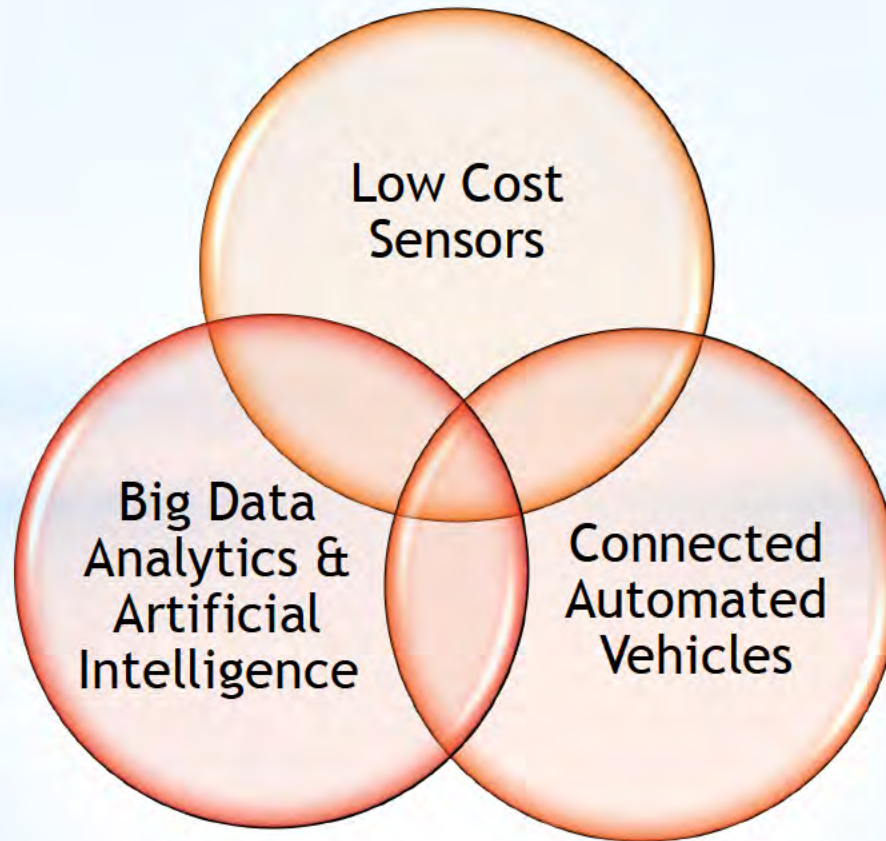
Final Thoughts On Priorities

- ❖ Speak Truth to Power
- ❖ Protect State Authority to Adopt GHG, Mobile Source & Community-Based Policies & Regulations
- ❖ Gov. Newsom's Goal of Zero Diesel Pollution By 2030
- ❖ Promote Equity & Ensure EJ Communities:
 - (1) No Backsliding
 - (2) Further to Go -- Faster Progress

Final Thoughts On Priorities

- ❖ Near-Zero & Zero Emission NOx HD Trucks ASAP!
- ❖ Rapid Integration of New Data, Computing Power, Artificial Intelligence/Analytical Tools

Dynamic Mobility Management Systems (DyMMS)



**“There are risks and costs
to a program of action.
But they are far less than the
long-range risks and costs
of comfortable inaction.”**



John F. Kennedy

