

Ventura County Air Pollution Control Program

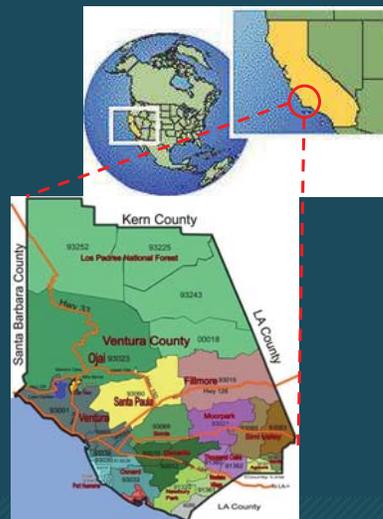
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Air Pollution Control Officer

Southern California Association of Governments
Energy and Environment Committee
July 1, 2021



Ventura County Air Pollution Control District

- Special/independent district
 - Founded in 1968
- Improve air quality in Ventura County
 - 2,200 square miles
 - 850,000 residents
 - 1,300+ stationary sources
 - 820,000 vehicles
- Regulatory authority over stationary sources
- 48 highly-skilled FTEs



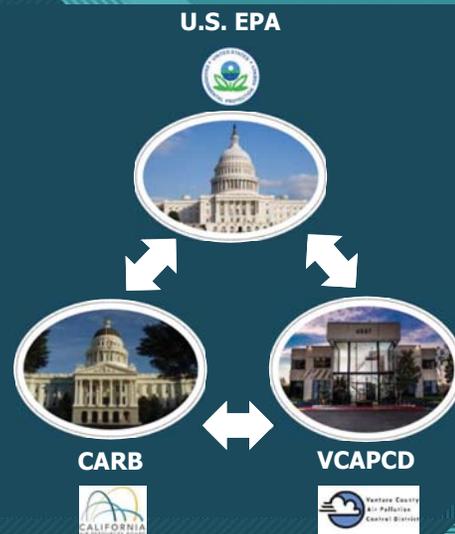


APCD Mission

- Protect public health and agriculture from the adverse effects of air pollution
 - Develop a long-range comprehensive program
 - Achieve and maintain state and federal air quality standards

Air Quality Regulatory Framework

- Federal - U.S. Environmental Protection Agency
 - Sets national ambient air quality standards
 - Oversees State Air Programs
 - Sets standards for mobile (on-road & off-road) and stationary sources
- State - California Air Resources Board
 - Sets state ambient air quality standards
 - Regulates most mobile sources/consumer products
 - Sets toxics standards
- Local - Ventura County APCD
 - Regulates stationary sources
 - Monitors and forecasts air quality
 - Adopts local rules and regulations
 - Implements state and federal requirements



APCD Board and Committees

- APCD Board
 - 10 members (5 County Supervisors, 5 City Council Members)
 - Adopt/amend/update:
 - * Air Quality Rules and Regulations
 - * Air Quality Management Plan
 - * Annual budgets
 - * General policy directions
- Board committees
 - Standing Committee
 - Advisory Committee
 - Clean Air Fund Advisory Committee
- APCD Hearing Board
 - Quasi-judicial independent body
 - Resolve permitting disputes and grant variances



Regulated Facilities by APCD



- Gas Stations
- Dry Cleaners
- Auto Body Shops
- Metal & Wood Coating Operations
- Oil & Gas Production
- Aerospace
- Chemical Plants
- Power Plants
- Sewage Treatment
- Landfills
- Other
- Manufacturing Operations



“Major Sources”
(25 Facilities)

“Non-Major Sources”
(1,300 Facilities)

Pollutants of Concern

- Federal/State Standards Established for:
 - Ozone Smog
 - ✓ PM2.5
 - * Annual Average
 - * 24-hour Average
- Also of Concern
 - Air Toxics (carcinogens)
 - Greenhouse Gases

Primary Focus

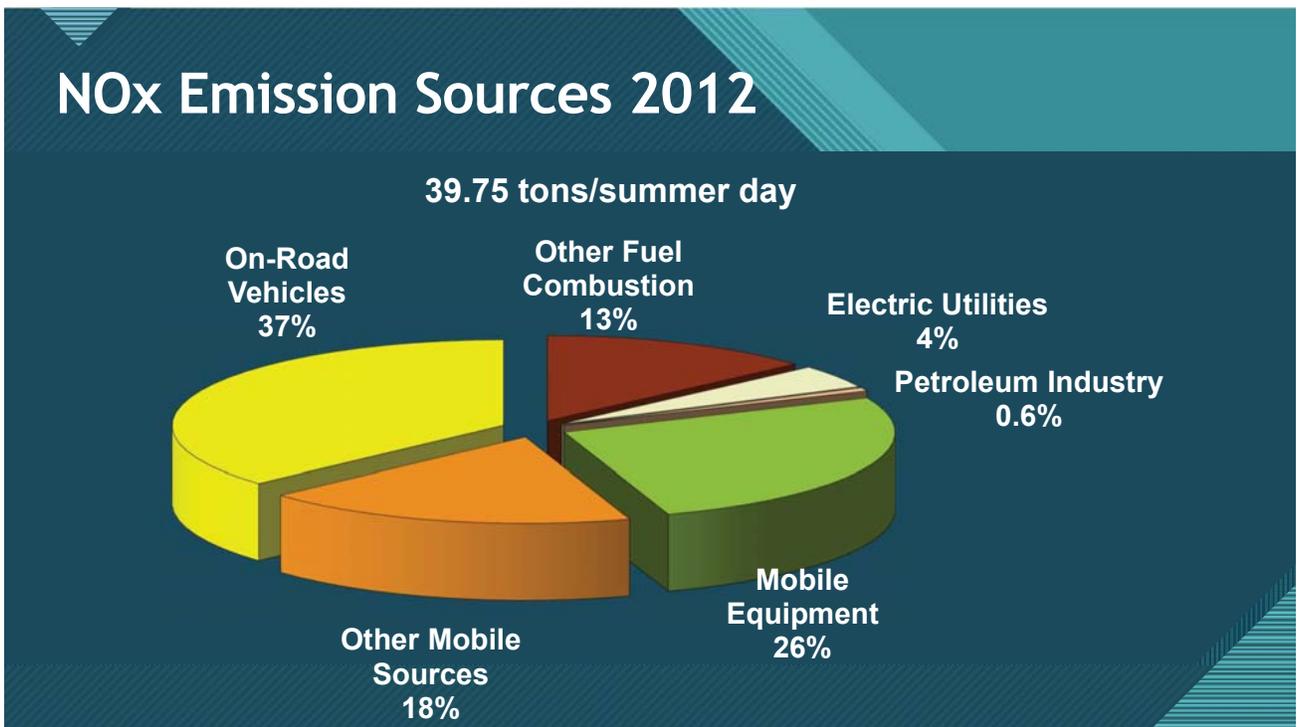
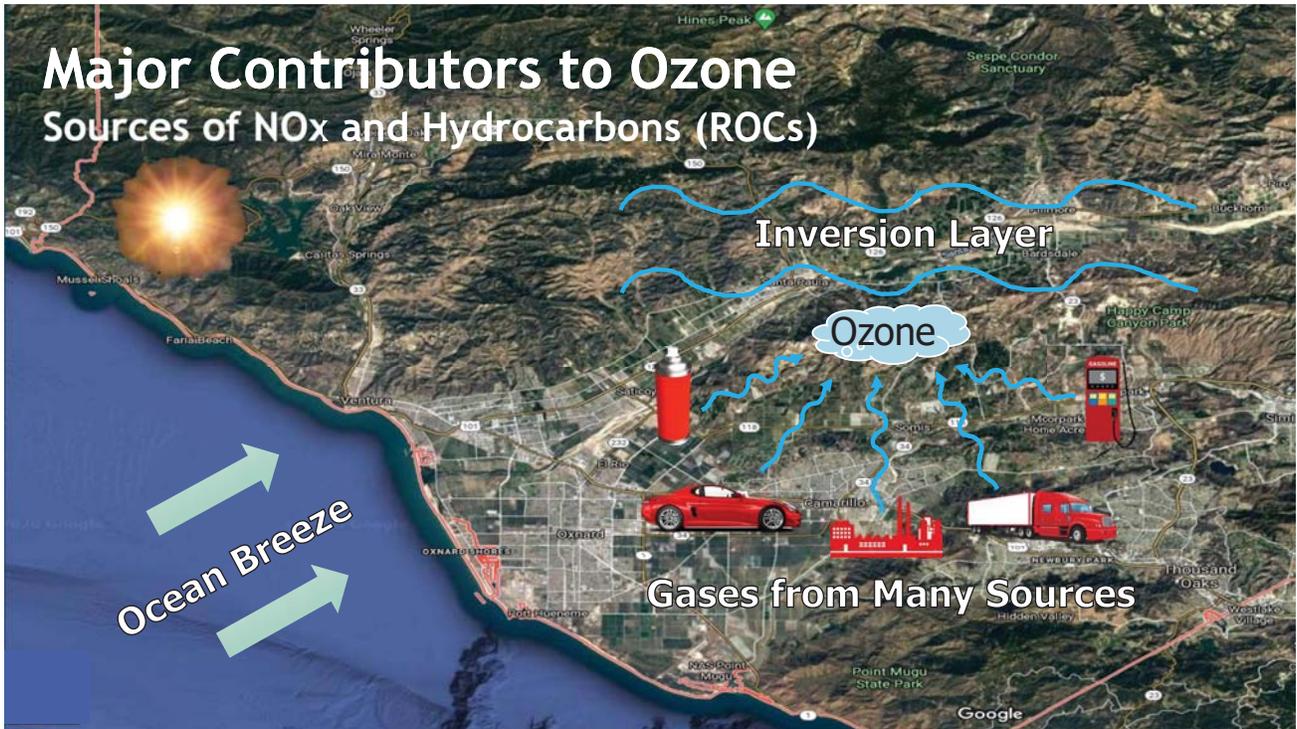
- ✓ CO
- ✓ NO₂
- ✓ PM₁₀
- ✓ SO₂
- ✓ Lead

Ozone Health Effects

- Changes in lung function
- Throat irritation
- Chest discomfort
- Increases in respiratory symptoms
 - Trouble breathing
- Exacerbation of asthma

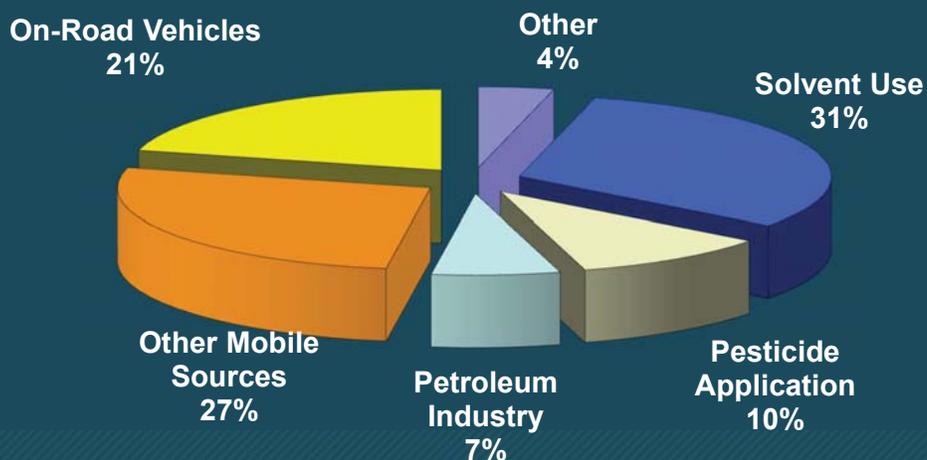
Higher risk of asthma for children living in communities with higher ozone levels
(USC Children's Health Study)





ROC Emission Sources 2012

48.65 tons/summer day

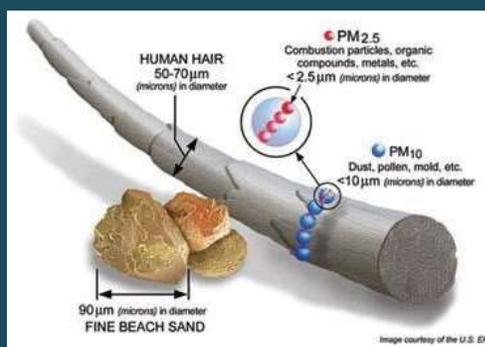


Particulate Matter (PM)

The sum of all solid and liquid particles suspended in the air.

Classified by size:

- PM_{10}
 - Coarse particles
- $PM_{2.5}$
 - Fine particles
- $PM_{0.1}$
 - Ultrafine particles



PM Health Effects



Respiratory:

- Asthma
- Bronchitis
- Lung function
- Irritation
- Premature death



Cardiovascular:

- Worsened heart disease
- Premature death



Cancers:

- Lung cancer



Reproductive:

- Low birth weight

Key APCD Programs



MONITORING



PLANNING



RULE
DEVELOPMENT



PERMIT
PROCESSING



COMPLIANCE



INCENTIVE/GRANT
PROGRAMS

Monitoring

- Operates monitoring network comprised of:
 - 5 monitoring stations
 - Ambient ozone and particulate measurements
- Forecasts air quality for public/schools & agricultural burning
- Issues air quality/smoke alerts
- County is in non-attainment for state and federal ozone standards
- County is in attainment for federal particulate standards and in non-attainment for state PM10 standard



Planning & Rule Development

- Develop/update Air Quality Management Plan
 - Road map to clean air
 - Multi-agency collaborative effort (VCAPCD, CARB, EPA, SCAG, VCTC)
 - Set framework for future rules
- Develop rules & regulations



Permit Processing

- All equipment emitting/controlling air emissions must obtain an APCD permit to operate
- 1,300 permitted facilities
- Requires best available control/retrofit technology
- Sets permit conditions to limit emissions



Compliance & Enforcement

- Team of inspectors enforcing rules/permits
- 2,500 – 3,000 inspections annually
- Respond to nuisance complaints
- Issue Notices to Comply/Notices of Violations when warranted



APCD Incentive/Grant Programs

- Provide businesses financial incentives/grants to modernize their fleet/equipment and reduce emissions
 - Focus on replacing old heavy-duty diesel equipment
 - \$5 million - \$10 million annually
- Key examples
 - Trucks
 - Ag equipment: tractors, pumps
 - Construction equipment
 - Off-road equipment
 - Marine vessels
 - Lower-emission/electric school buses
 - EV charging infrastructure
 - Ocean-going Vessel Speed Reduction Program



Incentive Programs

Ag Equipment

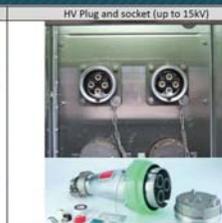


Incentive Programs

Marine Vessels



Port Cranes



Incentive Programs

VAVR or “Old Car Buyback”

- \$1,000 incentive to retire a vehicle older than 1997
- 85 vehicles retired in 2019



EV Charging Stations



Incentive Programs

Protecting Blue Whales and Blue Skies (Vessel Speed Reduction Program)

- Partnership with Santa Barbara County APCD, Bay Area AQMD, National Marine Sanctuaries (Channel Islands, Cordell Bank, Greater Farallones, and Monterey Bay), California Marine Sanctuary Foundation, Volgenau Foundation, Environmental Defense Center and National Marine Sanctuary Foundation
- Voluntary speed reduction by shipping lines

PROTECTING BLUE WHALES AND BLUE SKIES



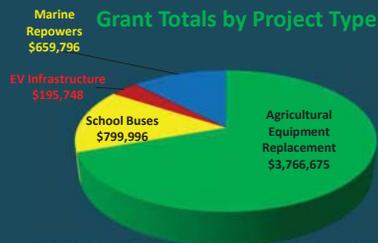
A partnership for cleaner air, safer whales, and quieter oceans

Incentive Programs Funding (2020)

Carl Moyer, FARMER & Community Air Protection Programs

\$5.4 million provided from APCD (local, state, and federal grants)

\$8.8 million invested in eligible projects, including grantee cost-share amount

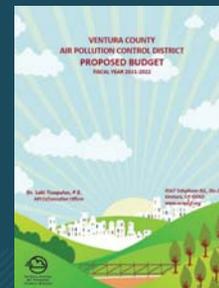


% Invested in EJ Communities†



Other APCD Programs

- Air Toxics program
- Community Air Protection program (AB617)
- Public Information
- Rideshare program
- CEQA Review
- Agricultural Burning
- Budgeting/Admin Support/HR



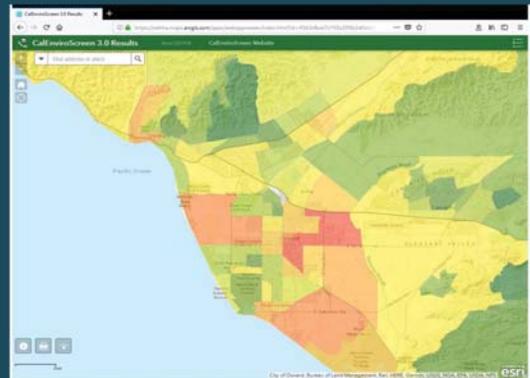
AB 2588 - Air Toxics Program

- Reduce exposure to toxics
- Establish Toxics Emissions Inventory
- Prioritize facilities based on risk impact
- Require high priority facilities to perform Health Risk Assessment (HRA)
- All facilities must reduce risk to below significant thresholds

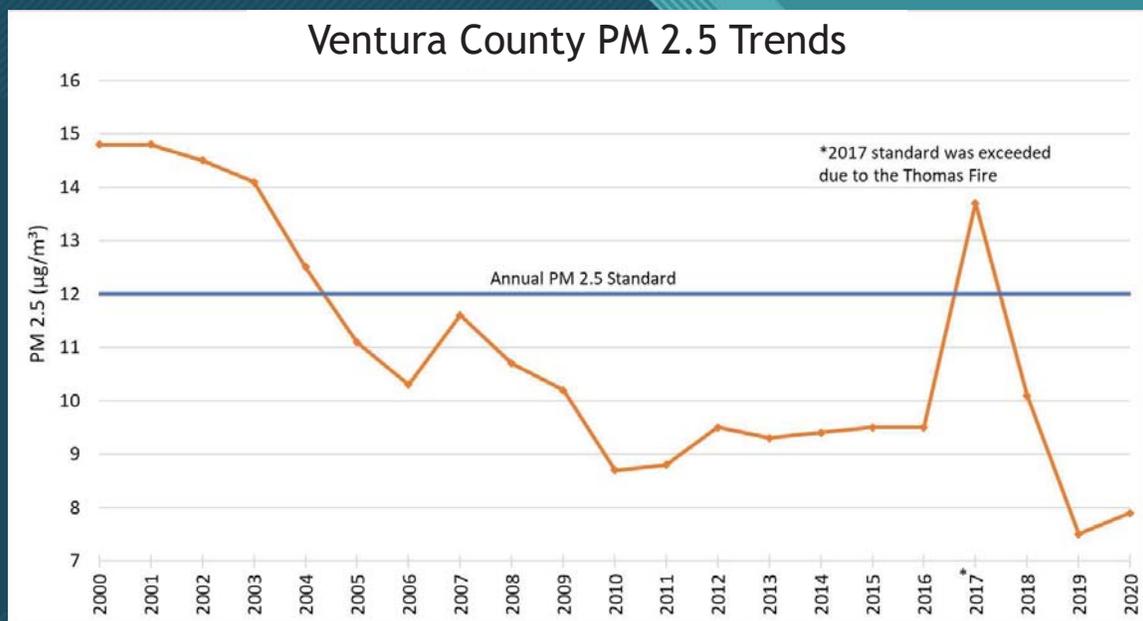


Community Air Protection Program (AB 617)

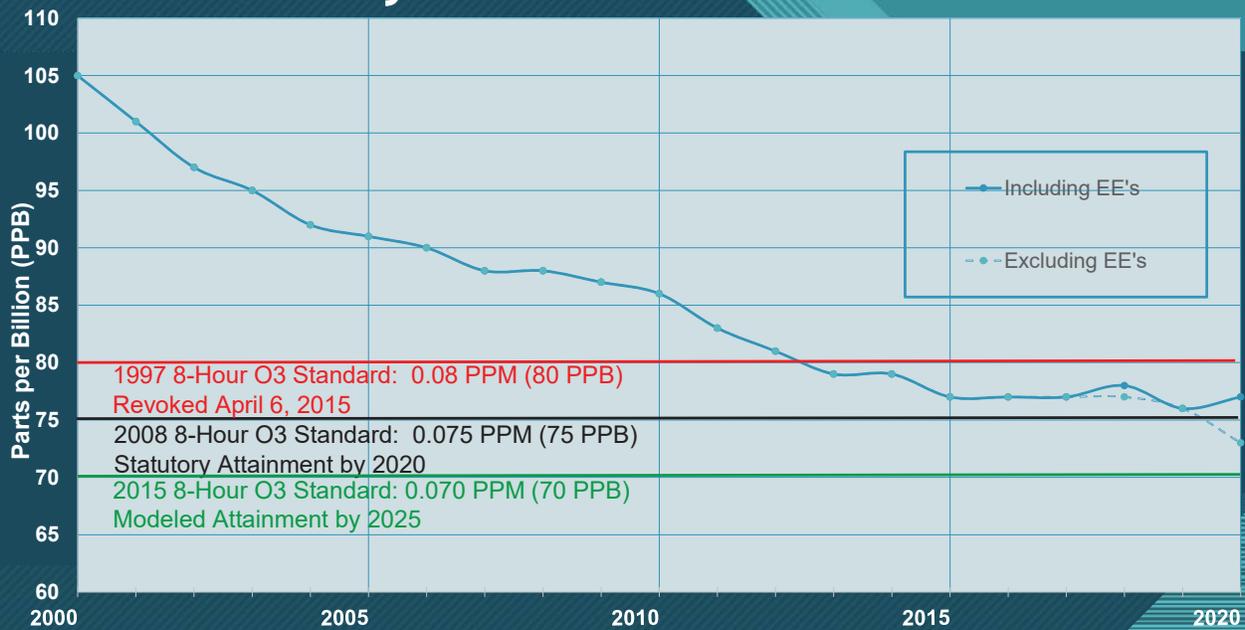
- Help disadvantaged/EJ communities
- Improve air quality by:
 - Updating rules to BARCT
 - Updating/improving criteria pollutant/toxics emission inventories
 - Investing incentive grants within communities



Progress Toward Clean Air



Ventura County Ozone Trends



Key Challenges

- Growth
- Climate Change
 - Higher temperatures
 - Wildfires
- Pollution Transport from Neighboring Districts
- Ensuring Mobile Source Emissions Continue to Reduce (State & Federal jurisdiction)
 - Mobile source emissions/tail-pipe standards
 - Fleet turnover



Moving Forward...

Vision & Priorities

Key Priorities

- ✓ Completed Building Renovation and Move
- ✓ AQMP Development
- ✓ Fulfill AB 617 Commitments
- ✓ Pursue Grants for Air Pollution Reduction Projects/VSR Program
- ✓ Pursue Operational Modernization
- ✓ Seek Criteria Pollutant/GHG Reductions Through Improved Compliance
- ✓ Enhance Outreach



Building Renovation

- APCD's new headquarters
- Completed and relocated
- Will help APCD's financial bottom line /cost savings



AQMP Development

- Project already commenced
- Adoption by 2022
- Multi-agency effort
 - CARB, US EPA, SCAG, SCAQMD, VCTC
- Blueprint/Road Map to attain 2016 federal ozone 70 ppb standard
- Develop Control Measures



Modernization Efforts

Improve Operational Efficiency and Customer Service

- Multi-year effort

Improve Computer Infrastructure

- Servers, laptops



Improve Software Capability

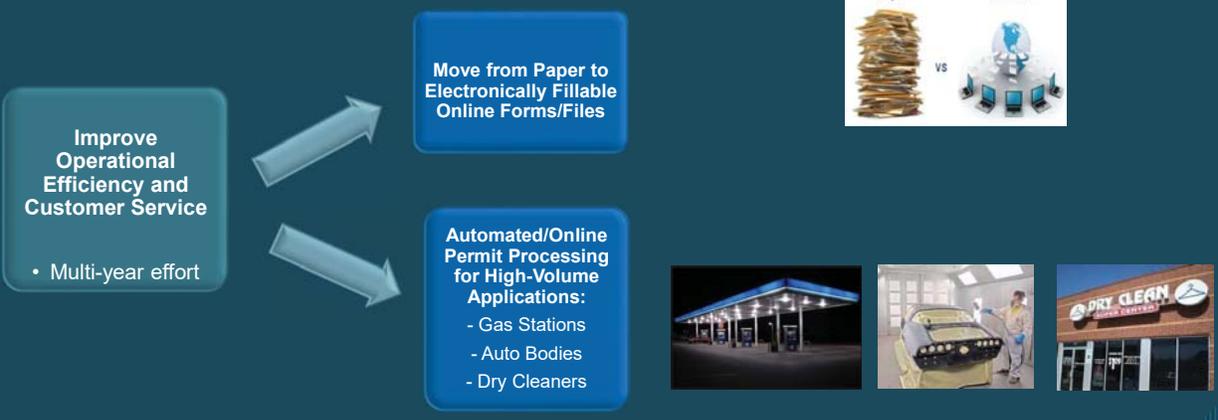
- Completed migration to new database
- Pursuing efforts to further improve functionality



Upgrade Monitoring Network



Modernization Efforts (continued)

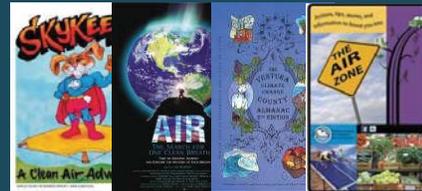


Improved GHG/Criteria Pollutant Reductions



Enhance Outreach

- Upgrade Website
- More frequent Press Releases showcasing APCD programs
- Stakeholder/Community meetings
- Publications



Conclusions

- Air pollution control efforts in Ventura County
 - Improved air quality dramatically
 - Can co-exist with expanding economy
- Much more needs to be done to meet latest and more stringent ozone standards
- Investing in emerging zero/near-zero emission technologies - critical to our success
- Priorities set will help us cross the finish line



Our Decisions Today Will Shape Their Future



Thank You - Any Questions?

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