

Smog Check Improvements

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Air Resources Board

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Smog Check Forum and Technology Roundtable

**We will
discuss....**

- **Sources and Emissions**
- **Existing Program**
- **Anticipated Reductions**
- **Concepts**
 - **Smog Check**
 - **Vehicle Retirement**



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Sources and Emissions



- **Passenger Vehicles account for about 33 percent of ROG and 22 percent of NOx emissions statewide in 2006**
- **Passenger Vehicles include: cars, light trucks, SUVs, minivans, motorcycles**



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Existing Passenger Vehicle Programs

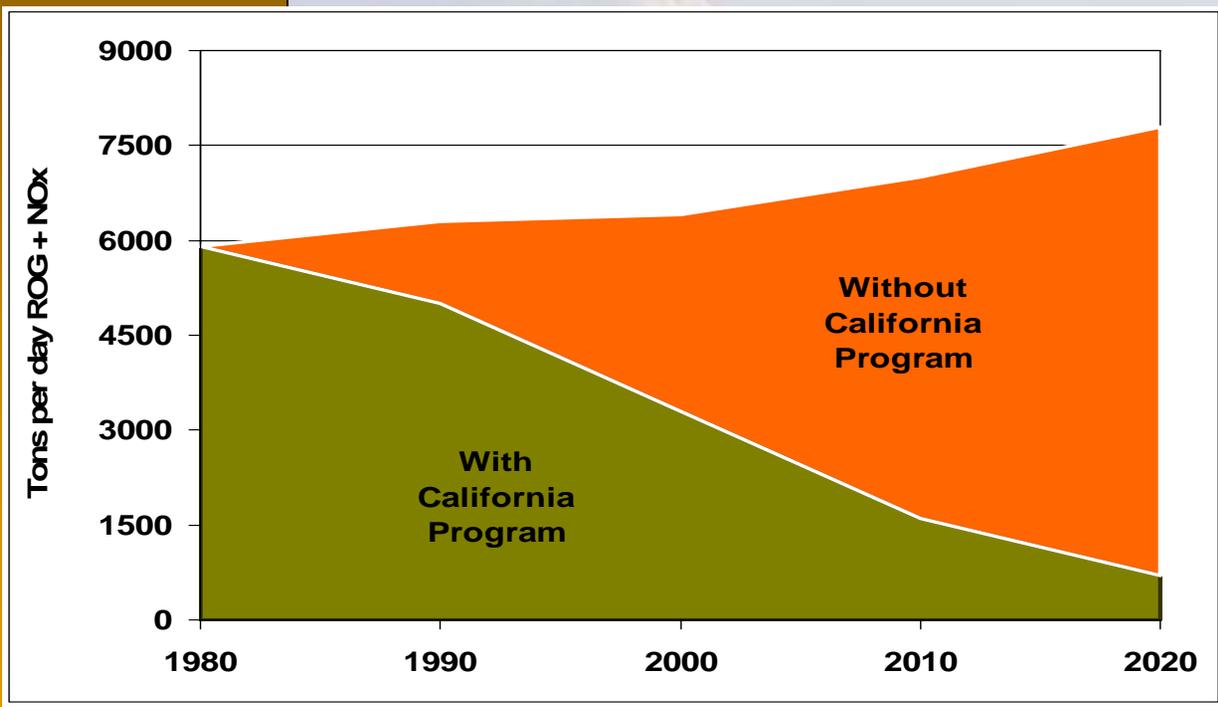
- **New vehicle emissions standards**
- **Cleaner Fuel**
- **On-board diagnostics**
- **Smog Check**



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Existing Programs are Successful

On-Road Motor Vehicles



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Passenger Vehicle Baseline Emissions

South Coast Air Basin

	Tons Per Day		
	1990	2006	2014
NOx	689	243	128
ROG	839	245	137
PM 2.5	6.7	9.3	10.9

- PM2.5 includes tire and brake wear and reflects increased VMT



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Passenger Vehicle Baseline Emissions

San Joaquin Valley Air Basin

	Tons Per Day		
	1990	2006	2014
NOx	152	69	40
ROG	197	77	47
PM 2.5	1.3	2.2	2.6

PM2.5 includes tire and brake wear and reflects increased VMT



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Smog Check Program

- **Required by federal law**
- **Key component of the SIP**
- **Assume current program kept intact**
- **Current program achieves significant ROG+NOx benefits in 2014: 137 tpd South Coast and 43 tpd San Joaquin**
- **These concepts provide substantial new opportunities for additional emission reductions**



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Smog Check Concepts

- **Low pressure evaporative test**
- **More stringent cut-points**
- **Annual inspections for older vehicles**
- **Annual inspections for high annual mileage vehicles**
- **Visible smoke test**
- **Inspection of light and medium duty diesels**
- **Inspection of motorcycles**



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Smog Check Concepts



- **Combined these concepts reduce ROG by 11 tpd and NOX by 12 tpd in South Coast in 2014**
- **Concepts can be implemented by 2010**
- **Implementation will require regulatory action by BAR and some new legislation**



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Expanded Voluntary Vehicle Retirement

- **BAR program goal is to scrap about 18,000 cars per year**
- **Proposed program**
 - **Failing and passing vehicles are eligible**
 - **Higher per vehicle incentive**
- **Potential reductions of 2.8 tpd ROG and 2.4 tpd NOx in South Coast in 2014**



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Impact of Passenger Vehicle Strategy

- **South Coast ozone season reductions in 2014**
 - 14 tpd ROG
 - 14 tpd NOX
- **San Joaquin Valley ozone season reductions in 2014**
 - 4 tpd ROG
 - 4 tpd NOX



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