

Executive Highlights: Evaluation of the 2012 Sacramento Region Spare The Air Campaign

METHODOLOGY:

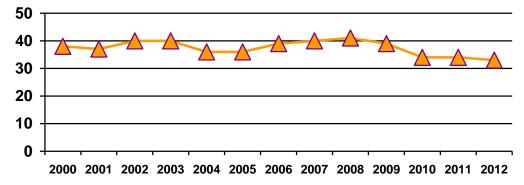
Spare The Air advisories are issued whenever the Air Quality Index (AQI) is forecast to reach or exceed 127 anywhere in the Sacramento region. Drivers are asked to voluntarily reduce the amount of driving they do on such days. Random samples of residents with landline telephones from four air quality management districts in the Sacramento Nonattainment Area were interviewed. In Sacramento County an augmented random sample of cell phone users was also included in this evaluation. A total of 976 (514 when weighted proportionately) interviews were conducted following the **six** Spare The Air days in 2012. On non-Spare The Air (or Control) days 1056 (587 weighted) interviews were conducted on matched days of the week.

SUMMARY RESULTS:

Summertime Seasonal Trip Reductions:

• One third (33%) of all respondents in the Sacramento Nonattainment Area are seasonal reducers – that is, they say they usually reduce the amount of driving they do during the summer to avoid adding to air pollution. This translates into nearly half a million (481,068) drivers in the area who are seasonal reducers. The level is not significantly different from the 13-year average of 37%.

Year-To-Year Comparison of Percent of Respondents Who Seasonally Reduce Driving to Avoid Adding to Air Pollution: Sacramento Core Region



- Summertime driving reducers made fewer trips than those who did not change their driving habits during the summer: on average, they made <u>.85 fewer trips per day.</u>
- These avoided trips represent a reduction of <u>1.67 tons per day</u> of ozone precursors. Although not considered part of the official measurement, this group nevertheless continues to contribute to voluntary emission reductions during the summer months.

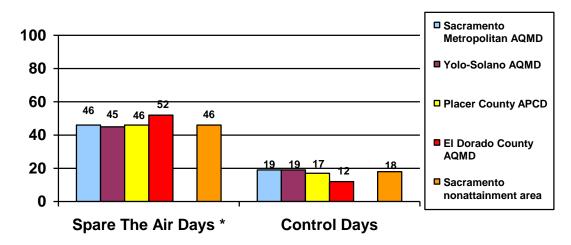




Awareness:

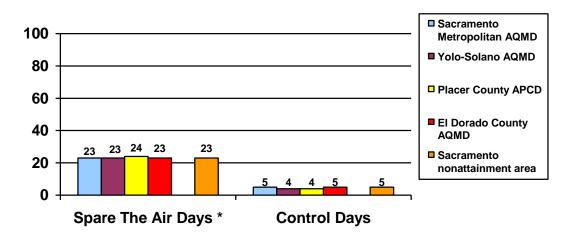
- General awareness of Spare The Air in 2012 increased from the previous two years to an average of 46% in the entire Sacramento region who had heard, read, or seen the Spare The Air advertisements.
- In terms of general awareness and adjusting for Control day responses, results indicate that 408,179 drivers in the entire nonattainment area were aware of Spare The Air.
- Significantly more respondents interviewed following Spare The Air days were aware of the program than were their Control day counterparts, once again indicating that the message is still getting through and being heard by residents.





• 23% of respondents in the entire Sacramento Nonattainment Area were aware of the <u>specific</u> episodic request not to drive on Spare The Air days. Adjusting for Control day responses, this means that over a quarter of a million (262,400) <u>drivers</u> in the region remembered the request not to drive.

Spare The Air vs. Control Days: 2012 Specific Awareness

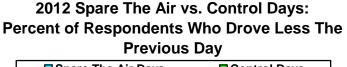


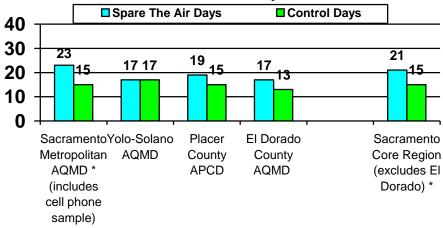




Driving Reduction:

- Slightly over one in five (21%) of respondents in the Sacramento Nonattainment Area as a whole said they drove less on Spare The Air days. The percentage was highest among Sacramento Metropolitan residents (23%), and lowest among Yolo-Solano AQMD residents (17%) and El Dorado County AQMD residents (17%).
- Significantly more respondents drove less on Spare The Air days than on Control days; another indication of the continuing effectiveness of the program.





^{*} Indicates a statistically significant difference between Spare The Air day and Control day responses.

- Using the strict ARB methodology, no respondent drivers in the Sacramento Nonattainment Area were classified "purposeful reducers" -- they drove less on Spare The Air days because they heard the Spare The Air advisories and wanted to improve air quality in the region. Because this is the first time evaluation results have yielded no purposeful reducers, possible explanations are provided below for the purpose of contextualizing the results in this brief executive summary. These are elaborated on in the full report. We recommend readers view, at a minimum, that portion of the full report.
 - o There has been steady improvement in air quality during the previous five years.
 - o Improving air quality may be reducing the perceived immediacy of driving less for air quality reasons, particularly if survey respondents are not experiencing visible and measurable repercussions to the environment or their health, as has happened in years of poor air quality such as 2002.
 - Considering the consistent effectiveness exhibited by Spare The Air in all years prior, this year's
 evaluation may have reached a disproportionate number of respondents who cannot be classified as
 purposeful reducers, though purposeful reducers are still present in the total population.
 - In contrast, assuming Purposeful Reducer data from 2012 is as accurate as previous years, this year's
 data may be indicative of the changing media and economic environment we now live in, along with the
 Sacramento region's improving air quality.





Estimated Emission Reductions:

- The methodology used to estimate emission reductions due specifically to the Spare The Air program is conservative. Using those criteria alone, the 2012 program did not demonstrate emission reductions in the Sacramento Nonattainment Area.
 - o Because emission reductions are a direct function of the number of purposeful reducers, and no purposeful reducers were recorded, no emission reductions can be expected
 - It is recommended that this be viewed as an indication of a changing environment and media landscape, in contrast to an unsuccessful program, as Spare The Air has consistently seen success for over 13 years.
 - o Additionally, other indications of success are present in the 2012 evaluation, such as the emission reductions attributable to seasonal reducers.

Sacramento Nonattainment Area	Percent of Respondent Drivers Who Drove Less for Air Quality Reasons	X Number of Licensed Drivers in Sacramento Nonattain- ment Area (1,457,782 Total)	X Mean Number of Single Trips Reduced Per Day	X 3.71 Grams of Ozone Precursors Per Trip (EMFAC 2011 V2.3) 2012 summer	= Estimated Tons per Day of Ozone Precursors Reduced
Spare The Air Days	0.0% (0 / 513)	0	0	0 grams	0 tons
Control Days	0.0% (0 /587)	0	0	0 grams	0 tons
Estimated Tons of Ozone Precursors Reduced Per Day: (STA Day Reductions – Control Day Reductions) 0.00 tons					

