



## Douglas S. Eisinger

Vice President /  
Chief Scientist, Transportation Policy & Planning



Dr. Eisinger joined STI in 1995 and serves on the Board of Directors. He oversees multi-year research programs including the Washington State Department of Transportation's Near-Road Air Quality pooled fund and a Caltrans-funded air quality/climate change program. He also recently managed development of U.S. Environmental Protection Agency (EPA) materials to help school administrators and local planners minimize air pollutant exposure. From 1997 to 2010, he served as Program Manager for the UC Davis-Caltrans Air Quality

Project. In 2010, Resources for the Future (RFF) Press published his book, *Smog Check: Science, Federalism, and the Politics of Clean Air*, and in 2006 to 2007, he was an RFF Fellow in *Environmental Regulatory Implementation*. In 2006, the American Association of State Highway and Transportation Officials selected Dr. Eisinger as a national air quality expert. From 1991 to 1995, he was Mobile Sources Section Chief for EPA Region 9. He chairs the Transportation Research Board (TRB) Regional Air Quality Subcommittee and will chair TRB's Air Quality Committee beginning in 2017. Dr. Eisinger has published 17 peer-reviewed journal articles and over 100 scientific reports, and has been involved in over 60 presentations at conferences and public meetings.

**Climate change.** From 2008 to 2015, Dr. Eisinger taught an air quality and climate change course that identified greenhouse gas (GHG) control lessons from Beijing air pollution control experiences. From 2010 to 2013, Dr. Eisinger led preparation of a transportation project-level GHG analysis protocol. In 2011, he peer-reviewed the transportation portion of the U.S. Southwest Climate Assessment. From 2008 to 2010, he led the creation of a web-based tool used to evaluate land use impacts on travel and carbon dioxide (CO<sub>2</sub>) emissions. Also, with UC Davis (UCD), he has evaluated EMFAC and MOVES model GHG emissions.

**Particulate matter (PM), air toxics, and nitrogen dioxide (NO<sub>2</sub>).** In 2016, he co-authored a peer-review article on emissions related to PM hot-spot analyses, and from 2014 to 2016, he oversaw development of methods, tools, and case studies to support PM analyses. In 2014 and 2015 he oversaw an assessment of U.S. near-road air quality data. In 2011 and 2012, he led an assessment of near-road NO<sub>2</sub> concentrations, and prepared a near-road NO<sub>2</sub> analysis protocol. In 2010 and 2013, Dr. Eisinger co-authored peer-review publications on near-roadway air pollution. In 2009, with researchers from UCD and the U.S. Federal Highway Administration (FHWA), Dr. Eisinger published a PM hot-spot dispersion modeling assessment. In 2006, Dr. Eisinger led an STI and university faculty team that published a strategic research plan for transportation-related PM. Together with UCD, he developed a project-level air toxics analysis protocol. In 2005, Dr. Eisinger, UCD, Caltrans, and FHWA authored a protocol to evaluate transportation projects and PM<sub>10</sub>.

**Inspection and maintenance (I/M).** In addition to his 2010 book on I/M (*Smog Check*), he has published I/M policy analyses, managed California Bureau of Automotive Repair studies, and helped EPA implement I/M requirements.

**Construction, transportation control measures (TCMs), and on-road emissions modeling.** From 2007 to 2010, Dr. Eisinger led UCD and STI researchers in developing and updating the CT-EMFAC emissions tool for criteria pollutants, air toxics, and CO<sub>2</sub>, and oversaw CT-EMFAC rebuilds from 2012 to 2015. In 2013, he co-authored a peer-review article on construction emissions. From 2008 to 2010, he led an Arizona Department of Transportation study on construction activity, emissions, and air quality impacts. With UCD, he developed a workshop on TCM planning and he has published national TCM guidance.

**Training, education, and outreach.** Dr. Eisinger is an Adjunct Associate Professor at the University of Hawaii, where he has taught *Atmospheric Pollution* since 1998. He also taught *Transportation Policy* at UCD. Dr. Eisinger has taught numerous air quality courses for Caltrans, and implemented public and media outreach while at EPA.

### Education

- PhD, Environmental Policy Analysis, University of Wales, United Kingdom
- MPP, Energy and Environmental Policy, Harvard University
- BA, Government, Cornell University

### Memberships

- Air & Waste Management Association
- Association for Environmental Studies and Sciences
- TRB (member, Transportation Air Quality Committee)

For a list of publications, see [sonomatech.com/ResPub/DSEpub.pdf](http://sonomatech.com/ResPub/DSEpub.pdf).