



Douglas S. Eisinger

Vice President

Chief Scientist, Transportation Policy & Planning



Dr. Eisinger joined STI in 1995. He oversees STI's research for the Near-Road Air Quality Transportation Pooled Fund (TPF), which is supported by eight federal and state agencies. He also leads STI's efforts to support community-based air quality projects under California's landmark 2017 legislation, Assembly Bill 617, and through Supplemental Environmental Projects (SEPs) funded by industry and government settlement agreements. Resources for the Future (RFF) Press published his book, *Smog Check: Science, Federalism,*

and the Politics of Clean Air, with a Foreword by Mary Nichols of the California Air Resources Board, following his appointment as an RFF *Fellow in Environmental Regulatory Implementation*. For over 12 years, Dr. Eisinger served as Program Manager for the UC Davis (UCD)-Caltrans Air Quality Project. For four years, he served as the Mobile Sources Section Chief for U.S. EPA, Region 9. In 2017, he began a three-year appointment as Chair of the U.S. Transportation Research Board (TRB) Air Quality Committee, under the U.S. National Academies. He was also selected by the American Association of State Highway and Transportation Officials (AASHTO) as a national air quality expert. Dr. Eisinger has published over 100 scientific reports, peer-reviewed journal articles on a range of air quality topics, and has delivered or co-authored over 60 presentations at conferences and public meetings. He served on STI's Board of Directors for three years.

Community-Based Air Quality. Dr. Eisinger is overseeing STI's work with Tree Fresno (a non-profit organization) to plant trees and assess vegetative barrier air quality benefits for disadvantaged communities near major roads. In 2016, he co-authored a peer-reviewed article on emissions related to particulate matter (PM) hot-spot analyses (trrjournalonline.trb.org/doi/abs/10.3141/2570-02). In 2015, he managed the development of U.S. EPA national guidance on *Best Practices for Reducing Near-Road Pollution Exposure at Schools* (epa.gov/schools/best-practices-reducing-near-road-air-pollution-exposure-schools), which was coauthored with the EPA and Arup. Since 2014, he has overseen TPF-funded assessments of U.S. near-road air quality. In 2011 and 2012, he developed a near-road nitrogen dioxide (NO₂) analysis protocol. Dr. Eisinger's synthesis of worldwide near-road air quality, published with UCD (pubs.acs.org/doi/abs/10.1021/es100008x), has become a resource used around the world. Dr. Eisinger led FHWA-sponsored publication of a strategic research plan for transportation-related PM (pubs.acs.org/doi/pdf/10.1021/es062767i). With UCD, he developed near-road analysis protocols and tools addressing air toxics, PM, NO₂, and carbon monoxide (CO).

Litigation and Legal Support to Assess Community, State, and National-Level Air Quality. Since 2016, Dr. Eisinger has helped government and industry-sponsored legal teams with air quality analyses to support affordable housing, evaluate historic community-level industry impacts, and assess motor vehicle emissions control at state and national scales. Dr. Eisinger has also served as an expert witness for the State of California on near-road air quality.

Climate Change. From 2008 to 2016, Dr. Eisinger taught an air quality and climate change course that identified greenhouse gas (GHG) control lessons from Beijing's air pollution control experiences. From 2010 to 2013, Dr. Eisinger led the 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 managed the creation of a web-based tool to evaluate land use impacts on travel and carbon dioxide (CO₂) emissions. Also, with UCD, he evaluated EMFAC and MOVES model GHG emissions, and led UCD and STI researchers in developing and updating the CT-EMFAC emissions tool for criteria pollutants, air toxics, and CO₂.

Training, Education, and Outreach. Dr. Eisinger is an Adjunct Associate Professor at the University of Hawaii, where he has taught *Air Quality Management: Policy and Practice* since 1998. He also taught *Transportation Policy* at UCD. Dr. Eisinger has taught numerous air quality courses for Caltrans, and implemented 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 (Chair, Transportation Air Quality Committee)

For a list of publications, see sonomatech.com/ResPub/DSEpub.pdf.