Douglas S. Eisinger, PhD

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Senior Vice President Chief Scientist, Transportation Policy & Planning

Dr. Eisinger joined Sonoma Technology in 1995. He helps lead efforts to support community-based air quality projects under California's landmark legislation, Assembly Bill 617, and through Supplemental Environmental Projects (SEPs) funded by industry and government. He oversaw research for the Near-Road Air Quality Transportation Pooled Fund, which was supported by eight agencies. He chairs the U.S. Transportation Research Board (TRB) Air Quality and Greenhouse Gas Mitigation Committee under the U.S. National

Academies. In 2019, TRB published *Response to a Rapidly Transforming Field*, documenting the air quality strategic planning process Dr. Eisinger oversaw in 2018-2019. Resources for the Future (RFF) Press published his book, *Smog Check: Science, Federalism, and the Politics of Clean Air*, with a Foreword by California Air Resources Board Chair Mary Nichols, following his RFF appointment as a *Fellow in Environmental Regulatory Implementation*. For over 12 years, he

was Program Manager for the UC Davis (UCD)-Caltrans Air Quality Project. For four years, he served as Mobile Sources Section Chief for U.S. EPA, Region 9. Dr. Eisinger has published over 100 scientific reports and numerous peer-reviewed articles, and co-authored over 60 presentations at conferences and public meetings.

Community-Based Air Quality. Dr. Eisinger oversees work with Tree Fresno (a non-profit) to plant trees and assess vegetative barrier air quality benefits for near-road areas. From 2016 to 2019, he co-authored three peer-reviewed articles on particulate matter (PM) hot-spots (https://journals.sagepub.com/doi/abs/10.1177/0361198119825538, for example). In 2015, he managed the development of U.S. EPA national guidance on *Best Practices for Reducing Near-Road Pollution Exposure at Schools*, coauthored with EPA and Arup. With UCD, Dr. Eisinger coauthored *Near-Roadway Air Quality: Synthesizing the Findings from Real-World Data*, a resource now used around the world. In 2018, *Web of Science* named the synthesis a "Highly Cited Paper" in the top 1% of Environment/Ecology field publications. Dr. Eisinger led the FHWAsponsored publication of *Particulate Matter: A Strategic Vision for Transportation-Related Research*.

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 and Greenhouse Gas Mitigation Committee)

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

Litigation and Legal Support to Assess Community, State, and National-Level Air Quality. Since 2016, Dr. Eisinger has helped government, NGO, 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, he 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 managed creation of a web-based tool to evaluate land use impacts on travel and CO₂ emissions. Also, with UCD, he evaluated EMFAC and MOVES model GHG emissions, and led researchers in updating the CT-EMFAC emissions tool for criteria pollutants, air toxics, and CO₂.

Training, Education, and Outreach. Dr. Eisinger is an Affiliate Associate Professor with the University of Washington's Master of Sustainable Transportation Program. He has also served as an Adjunct Associate Professor at the University of Hawaii, where he taught *Air Quality Management: Policy and Practice* from 1998 to 2016. He also taught transportation policy at UCD. He implemented media outreach while at EPA and co-taught Sonoma Technology's *Kids Making Sense®* air quality curriculum to high school environmental science teachers.