

**STEPHEN B. REID**  
Manager, Emissions Assessment



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## **Educational Background**

B.S., Aerospace Engineering, University of Tennessee

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## **Professional Experience**

Mr. Reid joined STI in 2003; his primary responsibilities include management of the Emissions Assessment group, project management, emission inventory development, emissions data analysis, and the preparation of emission inventories for use in air quality models. Mr. Reid has managed, or provided key technical direction for, a number of studies related to the improvement of existing emission inventories, including efforts to reconcile emission inventory data with ambient monitoring data in the Houston-Galveston area, Central California, and the Upper Midwest; development of improved forecasting techniques for emissions sources in the San Joaquin Valley; and assessment of spatial and temporal variations in emissions data used as inputs for ozone modeling efforts in Central California.

In addition, Mr. Reid's contributions have included the development of numerous emission inventories and emissions-related tools. Currently, Mr. Reid is providing key technical direction for a field study designed to estimate construction equipment emissions and air quality impacts at a roadway widening project in southern Arizona and a Federal Highway Administration (FHWA)-funded effort to develop tools that small-to-medium metropolitan areas can use to evaluate the greenhouse gas (GHG) implications of land use and transportation infrastructure changes. Previously, Mr. Reid managed the development of an air toxics emission inventory for the San Francisco Bay Area and the collection of manual and automated truck count data for emission inventory development efforts in West Oakland, California. Mr. Reid also managed the development of criteria pollutant and CO<sub>2</sub> emission estimates for lawn and garden equipment in the Baltimore, Maryland, metropolitan area—work that required the use of surveys to collect activity data from residential and commercial users of lawn and garden equipment in a nine-county region.

For other projects, Mr. Reid has used emissions modeling software to prepare emission input files for air dispersion and photochemical grid models, including ozone modeling studies in the Kansas City metropolitan area and in the nation of Qatar, and an evaluation of sulfur dioxide concentrations in the U.S. Gulf Coast region. Mr. Reid also implemented emissions modeling processes in the U.S. Forest Service's BlueSky Framework, which enables real-time forecasts of smoke impacts on a national scale. Mr. Reid has extensive experience using emission inventory development and processing tools, including the Sparse Matrix Operator Kernel Emissions Modeling System (SMOKE), EPA's MOBILE6 and NONROAD mobile source models, and the Biogenic Emissions Inventory System (BEIS). Mr. Reid has also completed training on the use of EPA's new MOVES mobile source model.

Before joining STI, Mr. Reid was an Environmental Engineer at Systems Applications, International (SAI). Working in the Industrial Emissions Services Group, he was primarily responsible for preparing emission inventories and processing emissions data for use in the urban airshed model. For example, Mr. Reid participated in the development of a regional emission inventory for the southwestern United States as part of SAI's Salt River Project. In addition, he aided in the evaluation of existing emission inventories, including a study of nonmobile sources in the South Coast Air Basin and the analysis of emission factors used to quantify particulate emissions in the Denver area.

## **Memberships**

Air and Waste Management Association

See STI's website, <http://www.sonomatech.com/resumes.htm>, for a list of publications.