

Air Quality

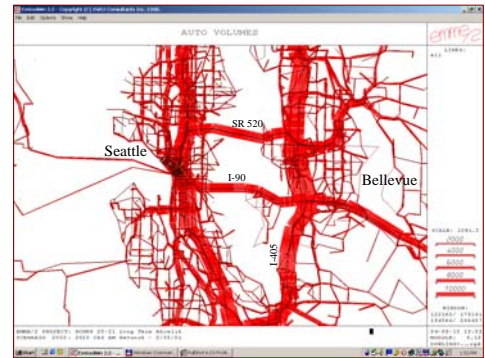
Predicting Air Quality Effects of Traffic-Flow Improvement Projects (NCHRP 25-21)

Dowling Associates led a multidisciplinary team that developed a methodology to predict the short-term and long-term effects of corridor-level transportation projects on mobile source emissions for air quality analysis.

The analysis focused on four areas of impacts: operational movements, travel time savings on traveler behavior, travel time savings on total travel demand, and travel time savings on economic growth and new development.

The methodology is designed to evaluate the magnitude, scale (such as region-wide, corridor, or local), and duration of the effects for a variety of representative urbanized areas and is implementable in a range of travel demand modeling software. It was applied and tested in a dozen case studies.

It employs macroscopic approximations of microscopic behavior with the intent to obtain a practical methodology that can be used by a wide range of agencies while retaining as much as possible the behavioral accuracy of a microscopic analytical approach. .



San Joaquin Valley-Wide Air Quality Planning and Coordination Services

As a subconsultant, Dowling Associates has provided on-call assistance to counties in the Central Valley on transportation modeling and air quality issues. Dowling Associates prepared a working paper on induced travel demand, researched historical traffic growth rates at county boundaries, and provided technical assistance on data interfaces between TP+ modeling software and air quality analysis programs. Subsequent tasks include forecasting vehicle miles traveled, congested speeds, centerline miles, and lane miles by facility types and ADTs.



Source: Caltrans

Dowling Associates, Inc.

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180 Grand Avenue, Suite 250
Oakland, CA 94612
Phone: (510) 839-1742; Fax: (510) 839-0871
www.dowlinginc.com

Southern California Ozone Study (SCOS97)



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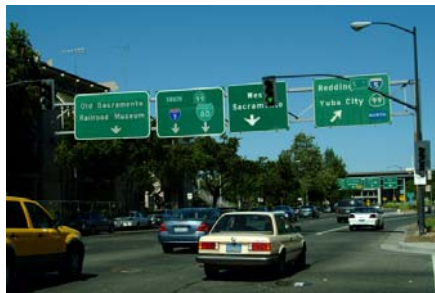
San Luis Obispo and Statewide Model and developed DTIM4 and EMFAC air quality modeling inputs. The MPOs used many different travel modeling software, including MINUTP, UTPS, TRANPLAN, EMME/2 and SYSTEM2.

Dowling Associates was on a team to prepare ozone emission estimates for the California Air Resources Board. Dowling Associates requested and compiled travel demand modeling data from the California Statewide Model and all Southern California MPO's, including SCAG, KERN, SANDAG, Santa Barbara,



Source: PD Photo

Analysis of Transportation Control Measures for Sacramento Metropolitan Air Quality Management District



Source: FreeFoto.com

reduction program. The analysis included identification of targeted travel markets, estimated reductions in emissions, and analysis of barriers and opportunities for implementation, and estimated time frames for implementation.

Dowling Associates carried out analyses of the air quality effects of two transportation control measures (TCMs) for the Sacramento Metropolitan Air Quality Management District. The measures evaluated were an enhanced regional ridesharing program and a work-related trip



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