

## **Acentech Completes Research Grant from The National Academy of Sciences**

*Consulting Firm Studies Human Sensitivity to Ground-Borne Vibration and Noise from Rail Transit*

**CAMBRIDGE, Mass. – February 18, 2010** – Acentech Inc., a nationally recognized multi-disciplinary acoustics, audiovisual systems design, and vibration consulting firm, announced today that it has completed a research contract from the Transit Cooperative Research Program (Project D-12) to develop a dose-response relationship between exposure to ground-borne noise and vibration generated by rail transit systems, and human annoyance. The Transit Cooperative Research Program is managed by the Transportation Research Board of The National Academies.

Many communities located near rail transit rights of way are exposed to ground vibration produced by passing trains. Train induced vibrations can disrupt sleep, interfere with conversation, create rattling noises, and affect vibration sensitive equipment. Until now, community response to rail induced ground vibration has not been extensively researched.

“Acentech and the research team produced a valuable piece of research that explored the relationship between rail transit vibration in buildings and human annoyance,” said James B. Webb, P.E., senior project manager of the Utah Transit Authority and chairperson of the program panel. “I am confident the results of this study will help shape rail transit noise and vibration policy in the coming years.”

Acentech’s approach to the study included telephone interviews with 1,306 individuals in five North American cities: New York, Sacramento, Dallas, Toronto and Boston. The study also included field measurements in each city to estimate vibration and noise exposure at each interview location. The work produced several dosage-response relationships between vibration/noise exposure and annoyance.

The resulting dose-response curves will help regulating authorities review and revise existing policies and criteria pertaining to ground-borne vibration and noise.

### **About Acentech**

Acentech Inc. is a multi-disciplinary acoustics, audiovisual systems design, and vibration consulting firm providing a wide range of services to a diverse group of clients. With offices in Cambridge, Massachusetts; Trevose, Pennsylvania; and Westlake Village, California, the company’s professional staff of more than 50 consultants has broad and deep expertise in all areas of acoustics and audiovisual systems design consulting. Having celebrated its 60th anniversary in 2008, Acentech is one of the oldest and largest organizations of its type: an unequalled resource to engineers, architects, and designers worldwide. For more information, please visit [www.acentech.com](http://www.acentech.com).