

**ACOUSTICS2008/1592**  
**Challenges and opportunities for noise mapping in the United States**

Kenneth Kaliski

Resource Systems Group (RSG), 55 Railroad Row, White River Junction, VT 05001, USA

Primarily through the impetus of European Union Directive 2002/49/EC, EU cities have been on the forefront of noise mapping and the community planning that results from it. The United States has no similar legislation at federal or state levels. As a result, noise mapping for towns and cities in the U.S., and indeed, awareness of noise issues by planners, appears to lag behind their European counterparts. However, metropolitan areas in the U.S. have invested a great deal in transportation modeling. As a result, the data foundation for noise mapping, that is, road and rail geometry and traffic volumes, is in place in many metropolitan areas. In addition, digital terrain elevation data, aerial photography, and GIS data are generally available on a state or national basis at no charge over the internet. The Chittenden County, Vermont noise map is one example of how publically available data can be used to create a useful community noise map over a large area. Other examples will be discussed.