



NY State GIS Conference 2008

*Pre-Conference Workshop:*  
**Geospatial Data Quality Review**  
Sunday October 6, 2008

**Instructor:** Michael F. Goodchild, Professor of Geography  
University of California, Santa Barbara

**Aim:** To provide a review of the data quality issues commonly encountered by users of GIS.

**Learning objectives:** By the end of the workshop, participants should be able to:

- Identify the issues likely to be encountered in the use of geospatial data and technologies
- Understand the fundamental components of data quality and their documentation in metadata
- Identify the fundamental concepts associated with geospatial data quality, including Tobler's First Law
- Be familiar with commonly employed strategies for dealing with error and uncertainty
- Understand the legal context of geospatial data quality

**Course outline:**

Use and analysis of geospatial data require careful attention to accuracy, since any digital representation is at best an approximation of ground truth. This workshop will begin with an overview of the accuracy issue for various classes of geospatial data. Error models will be introduced, with associated measures and parameters of accuracy. Currently implemented capabilities in GIS and related software will be reviewed, along with methods for propagating uncertainty from database to analysis products. The presentation will review existing and proposed standards for geospatial data quality, methods for visualizing data quality, and research on the implications of geospatial data quality for decision making.

**Teaching time:** \* hours based on detailed notes, examples, illustrations, and demonstrations.