Mineta Transportation Institute Releases Report on Historic Resources
Information Management in Large Transportation Agencies

Research Associate Eric Ingbar has documented the ways to create uniform, enterprise-wide information management for cultural resources.

San Jose, Calif., March 25, 2010 – The Mineta Transportation Institute (MTI) has published A Case Study of Enterprise Historic Resources Information Management in Large Transportation Agencies. The study, conducted by information systems professional Eric E. Ingbar, defines how California Department of Transportation (Caltrans) district office information systems for historic resources can and cannot be used to create an agency-wide information management model for those resources. The results range from findings specific to Caltrans and its district offices to general findings that can apply to any transportation agency considering an enterprise-wide system for managing cultural resources.

Every transportation agency in the nation manages historic resources, including historic and prehistoric archaeological sites, buildings, structures, objects, routes, landscapes, and districts. The goal is to prevent damage and to mitigate unavoidable damage. To track known resources, transportation agencies often keep local files in many forms, rely upon external information sources (e.g., state-level historic preservation agencies), and depend upon local staff expertise.

“Enterprise systems are generally more efficient than individual office systems within the same organization,” said Mr. Ingbar. “First, staff time and effort can be minimized because training, procedures, and workflow follow a single model. Agency staff can move from one office to another without re-training. Second, because information is stored and presented in consistent, appropriate ways, the work is more efficient. Unique pockets of information become more widely available, and redundancy is eliminated. Third, technical support time and costs can be reduced because a single infrastructure is maintained, rather than multiple computer systems.”

Drawbacks also exist. Because the nature of these systems is to make information more uniform, locally valuable data may be lost. Individuals may feel forced to abandon tried-and-true work methods to conform to a computer system. Changing the system may become more difficult as software and procedures become larger and less easy to alter. And enterprise systems can be jeopardized if long-term support for them declines or is removed. This is especially hazardous to enterprise systems that appear to offer little operational benefit.

The free report can be downloaded from www.transweb.sjsu.edu. Click “Research” and then “Publications.” Scroll down to the report.
ABOUT THE AUTHOR:

Eric E. Ingbar is a professional archaeologist and cultural resource specialist. He is a founding principal of Gnomon, Inc., a firm specializing in creating, implementing, and maintaining information systems for managing resources and infrastructure, including cultural resources, other natural resources, and proposed land uses. Mr. Ingbar and Gnomon, Inc. are primary IT consultants to many state historic preservation offices, creators of the successful large-scale pilot use of GPS and GIS within Caltrans, consultant to the Bureau of Land Management (BLM) for multi-agency data sharing and nationwide technical assistance, and recipients of multiple successful agency automation and study projects. He also advises two Federal Highways projects pertaining to cultural resources information automation and environmental streamlining. He earned his BA in social anthropology, with honors, from Swarthmore College in 1979, and his MA in anthropology, with honors, from the University of New Mexico in 1983.

ABOUT THE MINETA TRANSPORTATION INSTITUTE:
The Mineta Transportation Institute (MTI) was established by Congress in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA) and was reauthorized under TEA-21 and again under SAFETEA-LU. The institute is funded by Congress through the US DOT’s Research and Innovative Technology Administration, by the California Legislature through the Department of Transportation (Caltrans), and by other public and private grants and donations, including the U.S. Department of Homeland Security. The US DOT selected MTI as a national “Center of Excellence” following 2002 and 2005 competitions.

The Institute has a Board of Trustees whose internationally-respected members represent all major surface transportation modes. MTI’s focus on policy and management resulted from a broad assessment of the industry’s unmet needs and led directly to choosing the San José State University College of Business as the Institute’s home. MTI conducts research, education, and information and technology transfer focusing on multi-modal surface transportation policy and management issues. Visit [www.transweb.sjsu.edu](http://www.transweb.sjsu.edu)