

Fall, 2006



01001100 01010100 01000101 01010010  
**LTER DataBits**  
 Information Management Newsletter of  
 The Long Term Ecological Research Network  
 01001100 01010100 01000101 01010010

## NSF Workshop: History and Theory of Infrastructure. Lessons for New Scientific Cyberinfrastructures

- *Florence Millerand (PAL/CCE)*

An NSF-sponsored workshop on the history and theory of infrastructure was held last September at University of Michigan, School of Information, to address an important question: What practical lessons can the history, sociology, and experience of existing infrastructures offer to the imagination, implementation, and governance of cyberinfrastructure?

The workshop brought together historians, social scientists, and infrastructural practitioners, all engaged on efforts to imagine, develop, and build new cyberinfrastructures. Members of the Comparative Interoperability Study Team (Baker et al, Network News Spring 2005, p17, <http://www.lternet.edu/news/images/spring05/NetworkNewsSpring05.pdf>) were associated with this workshop as co-organizers, presenters and/or participants. By generalizing the lessons of social and historical analysis, this workshop intended to contribute to the development of infrastructure studies as a distinctive and practically engaged field of study, while also reporting back to the NSF with useful input for the cyberinfrastructure design process.

The topics addressed were organized around four main clusters: Design, dynamics, tensions and strategies. At the design level, optimizing collaboration between social research and the design community was discussed through alternative modes of social scientists' engagements in infrastructure projects - including reading groups and co-design activities with the information management community. Also, participants discussed issues of strategic standardization, flexibility, and sustainability as well as patterns and principles in infrastructure development, tensions of scale in data infrastructure, and organizational capacities.

More information about the workshop: <http://www.si.umich.edu/InfrastructureWorkshop/>  
 Texts ("thought pieces") are available at the workshop's blog: <http://icd.si.umich.edu/~cknobel/>