

DIGITAL ANTIQUITY: PLANNING A DIGITAL INFORMATION INFRASTRUCTURE FOR ARCHAEOLOGY

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Objectives. We are developing an implementation plan for a broadly useful and potentially transformative information infrastructure for archaeology. It would facilitate traditional archaeological research, enable synthetic research on a scale that is now unthinkable, and at the same time, vastly enhance the preservation of archaeological data residing in digital form (including databases, text, images, geospatial, and 3D data). The plan will address technical design issues, professional/policy considerations, and will present a sustainable business model.

Since the initiation of the grant in July 2007, we have formed a multi-institutional consortium called *archaeoinformatics.org*. The steering committee has generally had videoconferences every two weeks starting in December 2006 (with the exception of the summer), augmented by two face-to-face meetings. A meeting of the steering committee with the advisory boards is occurring in Santa Fe as we submit this report. We will report on the results of that meeting in New York.

Web Presence. <http://archaeoinformatics.org> describes the initiative, provides access to relevant documents, and archives the virtual lectures.

Virtual Lecture Series: Our planning effort involves investigation of other informatics initiatives with the goals of gathering ideas, evaluating available technologies, and learning from others' efforts on related projects. Representatives of these initiatives have provided nine highly informative "virtual lectures." We used Access Grid to provide live, public broadcasts of these lectures over the Internet. We also make them available for download. As of January 31, there had been 268 downloads of these lectures (in addition to those "attending" the live events).

On-line Survey. Archaeoinformatics.org sponsored an Internet survey to gather broader input on relevant attitudes and current conditions and needs for information infrastructure. To date, we have received 232 completed surveys. Among many other results, respondents agreed that access to data (including reports) is highly problematic, that they would use an infrastructure if it were available, and that the ongoing loss of data is a very serious problem.

Advisory Boards. We have established two advisory boards to provide external oversight and advice on the planning effort. The Disciplinary Advisory Board has 10 archaeologists with a range of backgrounds and job settings. The Technical Advisory Board has two computer or information scientists and an archaeologist experienced in science informatics.

Software Development. Under the grant (and from other sources), we are working on a prototype infrastructure for databases, text, and images, and on archaeologically focused text and image processing applications.

Case Studies. We are pursuing advance development of two case studies—one in the Southwest and one in Mexico—designed to showcase the infrastructure and make a compelling case for its research potential.

SAA Forum. At the March 2008 annual meeting of the Society for American Archaeology (SAA), we have organized a SAA Board-Sponsored forum designed to heighten engagement of the discipline at-large in the objectives of this initiative.

SAA Digital Data Interest Group: To further the grant objectives, Kintigh and Snow organized and obtained board approval for the SAA Digital Data Interest Group. For 2007, DDIG had 663 out of about 7300 total SAA members. Already in 2008 DDIG has 796 members.