



Department of Defense Cultural Resources Data Management Needs Assessment

Project
09-443

Background:

Throughout the past decade, the DoD has been striving to achieve business transformation by implementing changes to technology, process, and governance. Part of this effort for each functional program is the definition of explicit business process standards that cross all component organizations.

During 2007 and 2008, DoD began to develop minimum data standards for DoD cultural resources spatial and related business data as well as substantially reworking the SDSFIE (Beckel 2009: Legacy Project 08-409). Previously, USAF Air Combat Command (ACC) developed, with Legacy support (Project 981755) the developing the Military Cultural Resources Analysis Database (MCRAD) as a candidate system for the cultural resources sub module of the USAF Automated Civil Engineer System – Environmental Management (ACES-EM), in coordination with other Air Force major commands and the Tri-Service CADD-GIS Center at Vicksburg (Crane 2000). As part of that effort, cultural resources data from 48 DoD installations were entered into MCRAD to test the viability of the data model and identify areas of needed refinement. There have also been other Legacy projects that have focused on collecting cultural resources related documents (Legacy Cultural Resources Bibliography and Document Library Project 08-404, Index and Database of Cultural Resources Agreement Documents Project 08-405, and Guidance for CRM Information Clearinghouse Project 07-351).

These data entry exercises have provided valuable insights into the nature and extent of cultural resources electronic data in DoD. However, there is no comprehensive inventory of electronic cultural resources data in DoD that would allow for an accurate estimate of the level of effort that would be needed to update these data with the new SDSFIE and draft DoD Cultural Resources Business Data Standards.

Objective:

This project prepared an assessment of current DoD cultural resources data and data management practices with recommendations for incorporating existing DoD cultural resources data into newly developed data standards developed for the Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE), and for DoD cultural resources spatial and associated business data.

Summary of Approach:

The project developed a questionnaire and protocol for assessing the current state of cultural resources data design and storage on DoD installations nationwide. The data assessment protocol was then implemented on a sample of installations from the Air Force, Army, Navy, and Marine Corps. The results of the data collection were analyzed and are summarized in this report. This report includes recommendations for refining the assessment process and estimates for the level of effort likely to

be needed to collect and migrate existing cultural resources data to the new standards.

Benefit:

Proper data storage and management are critical to the continued success of the DoD cultural resources management program. Collecting data in idiosyncratic formats makes those data very difficult to compare with other data sets. Every year, higher echelons attempt to collect current data on the number of historic properties in the DoD inventory, and the extent of efforts to identify and evaluate those properties. But due to the lack of consistent data or enterprise cultural resources data systems, these efforts seemingly need to start from scratch each year.

Accomplishments:

This study produced several key recommendations. Going forward, there are steps that DoD can take to help preserve their data, and make those data easier to use.

- Articulate clear policy regarding funding for the collection, storage, and maintenance of digital data. At a minimum, basic metadata needs to be collected for these data, and storage protocols developed so that the data are retained.
- Develop policies for the curation of digital data along with artifacts and field records from archaeological projects and include the requirement with project scopes of work.
- Release and actively implement Version 3.0 of the SDSFIE. At a minimum, the components should mandate that installations include a requirement in scopes of work that GIS data supplied as a deliverable be compliant with the SDSFIE 3.0.
- Installations should stipulate that associated business data be supplied in a relational database, or in tables compliant with the draft DoD cultural resources business data standard found in Legacy Report 08-369: (https://www.denix.osd.mil/portal/page/portal/CR/GIS/Other/08-369_Summary_final.pdf). Key elements of the business data would include site and eligibility data, and report and survey references.

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