



SDSFIE Cultural Resources Data Model

**Project #
08-409**

Background:

Federal agencies have accumulated vast repositories of cultural resources data; however, a lack of data standards and broad-based management tools has rendered data management and sharing difficult. The DoD Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE) is a geospatial data standard, first developed and released in 1993, for a wide array of GIS data, including cultural resources. The Solutions and Technology for the Advancement and Refinement of the SDSFIE (STARS) Team goal is to transition the current SDSFIE to a Logical Data Model (LDM) recognized by geospatial data standards bodies, implemented by the entire DoD community, and maintained through DoD business requirements.

Objective:

The objective of this project was to establish the Cultural Resources Logical Data Model (LDM) to be integrated into the overall re-engineered SDSFIE 3.0 LDM by following an accepted and repeatable process; making effective modeling choices and ensuring a "Cultural Resources Community" acceptance and endorsement.

Summary of Approach:

The STARS Team followed a mature set of Modeling processes and procedures to develop the Cultural Resources model for SDSFIE. A logical, supportable and repeatable process was followed, making the right modeling choices and ensuring a Cultural Resources Community acceptance/endorsement.

An initial kick-off meeting (net-based) was held on 24 Jun 2008 to brief the Subject Matter Experts (SME) on roles/responsibilities, goals of the modeling activity as it relates to the SDSFIE LDM, understand the Cultural Resources needs from the SMEs, and establish the initial schedule moving forward.

The STARS team conducted the modeling workshop to identify new content, delete content, and modify existing content. The workshop allowed the lead modeler, based on SME guidance and commentary, to identify, feature by feature, on:

- What is the geometry? (point/line/polygon)
- What are the attributes defining the "essence" of the feature?
- What is the required metadata?
- What are the relationships to other features?

This analysis with the SME group yielded a modified Cultural Resources model of eleven selected features and

related attribution consistent with the SDSFIE standard modeling conventions as well as a set of recommendations for the SDSFIE Common/Cross-Functional Model (TBD). The initial model was posted on the SDSFIE website (www.sdsfie.org) for SME review and comments. This feedback on the initial model resulted in a revised version of the model. The lead modeler processed comments, feedback, and decisions reached during the Initial Review period and then revised the model resulting in a final version.

Upon completion of this logical, supportable, and repeatable modeling process, the STARS Team published the final Cultural Resources model on the SDSFIE website as the approved version to be integrated into the SDSFIE Release 3.0 (LDM).

Benefit:

The results of this project provided a complete set of Cultural Resources feature types as part of the overall SDSFIE. The Cultural Resources Model 11 feature types are:

- Archaeological Site
- Cemetery or Burial Site
- Cultural Resource Potential Area
- Cultural Restricted Access
- Cultural Survey Area
- Historic District
- Historic Landscape
- Historic Object
- Native Affiliation
- Sacred Site
- Traditional Cultural Resource

Accomplishments:

The actual Data Model:

- SME approved Cultural Resources Logical Data Model
- Spreadsheet defining all Cultural Resources Data Model Elements (Names, Attributes, Definitions, and Domain values)

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