EXECUTIVE SUMMARY

Best Management Practices of Archaeological Study Methods
FHWA/OH-2002/036

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State Job No.: 14775(0)
Date Printed on the Report: December 2002

For several decades, the Ohio Department of Transportation (ODOT) allocated substantial funding to ascertain the location, extent, and significance of archaeological phenomena that would be affected by ground-disturbing undertakings. As archaeological survey data accumulated from such Phase I studies, however, questions arose regarding their usefulness for project-planning processes, particularly in settings involving transportation projects in their preliminary phases of development. This Final Report presents an analysis of information about Phase I pedestrian surveys that were conducted under the auspices of ODOT, either by ODOT personnel or contractors, between 1974-2001. The Project Database Description section summarizes administrative, pre-survey, survey project, and survey design characteristics of 270 Phase I surveys to determine whether current approaches to Phase I archaeological survey provide the information needed for ODOT management and planning. The Site Database Description section presents similar sets of information for 5,424 sites (including Isolated Finds) that were discovered by the 270 Phase I surveys. Furthermore, in order to provide a foundation for a Stage I statewide predictive modeling study, a sample of sites from the Site Database was drawn based on whether a site was accompanied by "corrected" Universal Transverse Mercator (UTM) coordinates which became available as a consequence of an re-analysis funded by ODOT and performed by State Historic Preservation Office (SHPO) personnel. A total of 3,910 sites (or, 72.2% of the total number of sites analyzed), representing 118 Phase I survey projects (or, 43.7% of the total number of projects analyzed), met this criterion and formed the Modeling Sample Site Database (or, Modeling Database). In order to overcome the bulk of problems that affect the usefulness of Phase I survey data for ODOT planning, particularly the lack of accurate UTM coordinates for registering survey boundaries and the locations of archaeological phenomena, Electronic Survey (e-survey) procedures are proposed, utilizing state-of-the-art Global Positioning System (GPS) receivers, Geographic Information System (GIS) technology, and the Internet. Such protocols will expedite the Phase I process because survey-designated resources can be allocated more efficiently by discontinuing the use of variables that are useless to ODOT planning, e.g., landform and site-type, by eliminating variables that require interpretation (and are often inconsistently recorded), and by ensuring the capture of highly accurate data regarding survey intensity and the locations of archaeological phenomena. This Report also contains a review of prior predictive models for the state of Ohio as well as neighboring states, and of recommendations for correcting their theoretical and methodological shortcomings.