

ARCHAEOLOGICAL STANDARDS

Technical Guidance for Archaeologists in the State of Michigan



Guide 5 | www.michigan.gov/archaeology/

Guidance on Archaeological Modeling

Revised: May 12, 2026

Why Modeling is Not Appropriate:

The Michigan SHPO does not accept modeling as a method for excluding portions of a project area from survey at this time. There are several reasons for this stance:

1. First, the rural areas of Michigan are historically under surveyed, so we cannot rely on probability modeling to effectively limit survey areas because we do not have suitable information to develop accurate models.
2. Second, while some large-scale stratified-random surveys were conducted in portions of Michigan, these survey date to the 1970s. The methods employed during these surveys are not as rigorous as methods utilized today. Therefore, the results of these legacy surveys cannot be considered adequate to apply to other portions of the state.
3. Third, historically archaeological surveys have been concentrated in river valleys and landforms where modern population densities are concentrated, so this has created bias in where to expect pre-contact archaeological sites. We have vastly incomplete data for upland regions of the state.
4. Fourth, while the Michigan SHPO is in the process of building a statewide, comprehensive GIS for archaeological site and survey data, there is a substantial backlog of data to process. At this time, the mapping available to researchers and consultants is current as of 2019.

What to Prepare Instead of Modeling:

What we expect instead of modeling, is a cultural sensitivity assessment by an SOI qualified archaeologists who reviews and synthesizes all available data in a comprehensive manner to develop a holistic and richly informed assessment of the archaeological sensitivity. Data sources can include, but are not limited to:

- Existing documented archaeological sites (SHPO State Archaeological Site File & other sources),
- The presence or absence of previous surveys in the area,
- Field conditions such as geology and soils,
- Past and current landcover,
- Previous development or land use,
- Historic maps and aerial imagery,
- Archival documents,
- Anthropological data on human behavior,
- Oral histories from landowners, tribes, or other stakeholders,
- Regional archaeological contexts and literature review (focused on the project area and surrounding region—State-level contexts are not detailed enough)

We expect all of this information to be *synthesized into a narrative that discusses the probability for pre-contact and post-contact archaeological sites within the project area* and region. This synthesis should also consider potential disturbances and data gaps.

- If there are “disturbances” that impact the possibility of archaeological sites, these should be explained, supported, and justified with accompanying documentation and evidence.
- If there are gaps in data and not enough information to be able to make an informed assessment, we expect this to be presented and explained in the narrative.

NOTE: Any deviation from 100% survey coverage of an area of potential effect (APE), must be fully justified using the above information and narrative. Your alternative survey **method must be submitted PRIOR to completing survey work and approved in writing by SHPO archaeologists.**

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