Using the Pre-Contact Probability Model

FHWA, PennDOT, and the PHMC partnered with URS Corporation to produce a statewide pre-contact archaeological predictive model for Pennsylvania. The project involved developing statistical models to analyze the landscape at known Native American archaeological sites in Pennsylvania and extrapolating identified patterns to all areas of the commonwealth. Due to the variability of environments and pre-contact cultures throughout Pennsylvania, many different models were produced for different areas. One of the major accomplishments of the project is a complete statewide layer of archaeological sensitivity aggregated from 132 spatial subareas. This has been included in CRGIS as a pair of layers that indicate high and moderate probability. A summary report is available through PennDOT’s ProjectPATH.

PLEASE NOTE: These models are intended to be used as a planning tool and are not a substitute for consultation with the State Historic Preservation Office. The models only evaluated the potential for pre-contact sites. The probability that Contact Period and historic archaeological sites are present should still be evaluated using historic documentation.

The Pre-Contact Probability Model is available to CRGIS users who are registered as archaeologists (April 2016) or planners (June 2016). It is found on the legend between Political Boundaries and Environmental. Areas that the models give a low probability of containing pre-contact archaeological sites have no color. Although the High and Moderate layers can be selected separately, both should be considered when evaluating the archaeological potential of a project area.
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The layers are semi-transparent, so they can be layered on top of either the topographic maps or the aerial photography. It is important to remember that there are only two colors. Any other variation will be the results of the colorations on the base maps or other layers.

Complete land use cover is not currently available for Pennsylvania, so disturbance was not considered in the model. As a general rule, the model should be viewed on top of the aerial photography to look for previous disturbance.

The models are in the early stages of their lifecycle and will be continually evaluated and occasionally updated. For proper use of the models in Cultural Resource Management investigations, please see the SHPO Guidelines for Archaeological Investigations in Pennsylvania (April 2016).