Abstract

Site suitability modeling in geographic information systems has not been previously used to
gauge the strength of historic structures as preservation candidates. The goal of this project was
to develop an ArcGIS model and related methodology to serve as a screening process when
evaluating a large number of potentially eligible structures. While an automated method cannot
truly replace an evaluation by an expert, it can serve to make the process of evaluating a structure
more efficient. This model can be used to streamline the evaluation process, and save time and
resources by removing from consideration those structures that are obviously unsuitable, and
ranking the remaining candidates based on various criteria. An expert can then make the final
evaluations. As a case study by which to develop and test the modeled evaluation process,
structures on the Main Garrison area of Fort Ord were evaluated using the model. Fort Ord is a
former United States Army post north of Monterey, California. Closed in 1994, it contains a
large number of structures dating from between 1940 and the late 1980s. Despite Fort Ord’s
significant role in US military history throughout much of the 20th Century, there are currently
no plans to preserve any of the structures on the base. Confirming the validity of the proposed
model workflow, Fort Ord buildings identified in an a priori assessment of building significance
scored highly in the model. These results suggest the model workflow can become a useful
addition to the cultural resource management toolkit. Additionally, this framework can also
potentially be useful as historic communities evolve and develop, in determining which
structures to preserve.