Evaluation Brief EB3
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Developing Effective Maps for Interpretive Materials

Simple and intuitive maps are effective for the majority of visitors

Although maps are often included in a range of interpretive materials, research has shown that many visitors have trouble interpreting certain types of maps and using them for wayfinding. For instance, maps with many symbols and those with less-familiar symbols are harder for visitors to use because they require extensive cognitive translations. "The reader has to be able to understand and locate the symbols and translate these symbols back into the reality of the place they are in, understand that the map does not include all the features of the place, and find the features they need. It is these mental steps that are important in understanding the success or otherwise of maps" (Moscardo, 1999, p. 6). In addition, Moscardo found that many users made inappropriately literal translations of symbolic features on the maps, failing to recognize that they were symbols rather than illustrations. "The obvious conclusion is that any use of maps as interpretive tools needs to carefully consider the number and types of abstractions and symbols used" (Moscardo, 1999, p. 19). The National Park Service has also noted in its accessibility guidelines that, "The less clutter[ed] the map, the more visitors that can use it (Harpers Ferry Center Accessibility Task Force, 1999).

Topographic maps can be confusing to novice users

Topographic maps in particular are an abstraction that will be difficult for many visitors to interpret. Although topographic maps are indispensable tools for geoscientists and serious hikers, for novice users "given their lack of training or experience with these maps, topographic displays can resemble a jumbled array of randomly converging lines circling, and curving in haphazard directions across a maps surface" (Rapp, Culpepper, Kirkby, & Morin, 2007, p. 5).

To help undergraduate geology students develop their skills with topographic maps, Rapp *et al.* found both shaded and stereo-visual versions of standard topographic maps easier to understand. Because a shaded relief map looks more like a picture of the landscape, many people find them easier to interpret and use (United States Geological Survey, 2002).

Recommendations:

- Use a shaded relief map of the South Rim and adjacent canyon in the *Walking Guide*, similar to the one that visitors encounter in Park literature, rather than a topographic map like in the current prototype.
- Maintain the overall level of simplicity found in the prototype *Walking Guide* map.
- Standardize place names and symbols with those found in Park publications, but avoid unfamiliar abbreviations like "CVIP."
- Test prototype versions of the map with potential visitors.

References

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