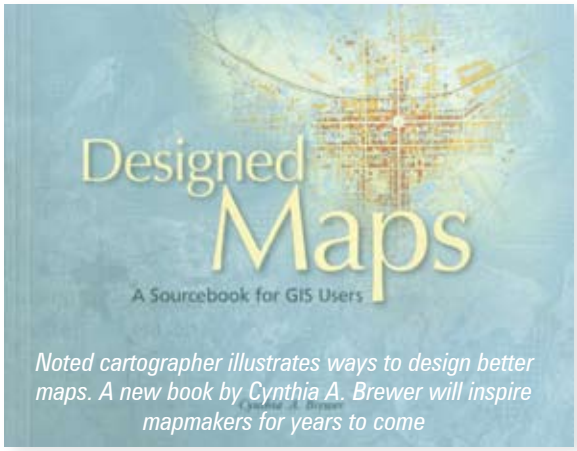
New books



Noted cartographer illustrates ways to design better maps. A new book by Cynthia A. Brewer will inspire mapmakers for years to come

The maps in Cynthia A. Brewer's *Designed Maps: A Sourcebook for GIS Users* look lavish enough to hang on a wall. But the author hopes the cartographic work featured in her new book from ESRI Press will be seen not just as pretty maps. She would like the maps to be viewed as visual solutions to design challenges that geographic information system (GIS) users and other mapmakers face on a daily basis.

"Map designers work from visual examples. Some GIS users receive little exposure to a variety of strong designs. I wanted to put some good-looking maps in front of them and help them build their own abilities to make excellent maps," said Brewer, a cartographer and professor in the Department of Geography at The Pennsylvania State University.

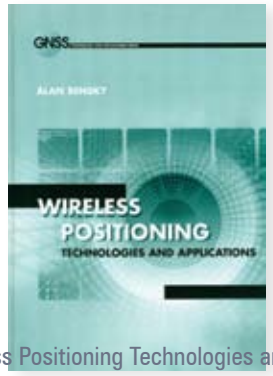
The book is a companion to Brewer's 2005 ESRI Press best seller, *Designing Better Maps: A Guide for GIS Users*. She differentiates between the two, explaining that while the first book focused more on cartographic design specifics, such as map labeling, color use, layout creation, and legend design, "*Designed Maps* provides the inspiration for excellent design."

Of the more than 70 maps featured in the book, Brewer chose six to redesign. She refashioned each three different ways to show readers some alternatives. "The intent of the redesigns is not to improve on the original map, but to show different approaches one could take depending on audience and the medium in which the map will be displayed," she wrote in the book.

The maps selected for publication in *Designed Maps* came from several sources, including the Map Gallery at the ESRI International User Conference. The stunning topographic maps include one of Switzerland that artfully renders the high-relief landscape. Readers also will find navigation maps such as a Paris street map that uses brightly colored labels to pinpoint clubs and tourist attractions; visitor and recreation maps like the one of Chicago's bike trails; infrastructure maps including a New York City road resurfacing map; category maps such as one depicting chimpanzee ranges in Africa; and quantitative maps including one excerpted from the Census Atlas of the United States that shows the largest net migrations of people between California and other states in the years 1955–1960 and 1995–2000.

Brewer also includes an ArcMap Tips section, complete with example images of cartographic effects, for experienced users of ESRI's ArcGIS software. "I also wanted GIS users to learn about the cartographic tools that are buried among the GIS tools," she said. "Seeing something you want to accomplish—whether it's a special line effect, a transparency effect, or a color combination—is a way to get you to go hunting for the tools that offer that capability."

Designed Maps: A Sourcebook for GIS Users (ISBN 978-1-58948-160-2, 220 pages, $39.95) is available at online retailers worldwide, at www.esri.com/esripress, or by calling 1-800-447-9778.



Short-range wireless positioning technologies extensively covered in new book

Wireless Positioning Technologies and Applications by Alan Bensky is a comprehensive, one-stop resource for surveyors-engineers seeking to learn more about s technique's theory of operation, advantages and disadvantages, applicability in different domains, implementation procedures, and accuracy. Real-life examples together with 161 diagrams help bring all options into sharp focus.

After introducing wireless positioning fundamentals along with various personal, commercial, and industrial applications, the book guides engineers step by step through radio signal time-of-flight methods, the signal strength method, the angle of arrival system, and the geometric use of distance measurement to determine location. Bensky discusses location awareness applications and implementations using cellular networks. Professionals are brought up to speed on fast-developing techniques involving local area networks (WLANs), personal area networks (WPANs), and radio frequency ID (RFID). Moreover, readers will find coverage of the distance measurement features in the new IEEE 802.15.4a spec for low-rate wireless personal area networks. This practical resource offers detailed guidance on how to implement important wireless technologies, including direct sequence spread spectrum, frequency hopping spread spectrum, and ultrawideband (UWB).

The book also explores possible ways of counteracting accuracy impairments caused by noise, multipath, and fading, as well as limitations of antenna directivity and time measurement precision. *Wireless Positioning Technologies and Applications* is available now from Artech House, a leading publisher of books and software for professionals in high-technology industries. [artech@artechhouse.com; http://www.artechhouse.com]