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## On the Cover

Saving time and money are among the benefits extolled for implementing geographic information systems. A model for predicting the economic value of geographically referenced data is discussed in this issue in an article by Stephen R. Gillespie of the U.S. Geological Survey. URISA is pleased to introduce a new and updated cover design for the *Journal* to begin the 21st Century. We hope you enjoy the new "look."

*Publisher:* **Urban and Regional Information Systems Association**

*Editor-in-Chief:* **Harlan Onsrud**

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*Managing Editor:* **Robert Berry**

*Executive Director:* **David J. Martin, CAE**

*Electronic Journal:* <http://www.urisa.org/journal.htm>  
username = URISA2000  
password = ORLANDO

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EDITORIAL OFFICE: Urban and Regional Information Systems Association, 1460 Renaissance Drive, Suite 305, Park Ridge, Illinois 60068-1348; Voice (847) 824-6300; Fax (847) 824-6363; E-mail [info@urisa.org](mailto:info@urisa.org).

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SUBSCRIPTION AND ADVERTISING: All correspondence about advertising, subscriptions, and URISA memberships should be directed to: Urban and Regional Information Systems Association, 1460 Renaissance Dr., Suite 305, Park Ridge, Illinois, 60068-1348; Voice (847) 824-6300; Fax (847) 824-6363; E-mail [info@urisa.org](mailto:info@urisa.org).

*URISA Journal* is published four times a year by the Urban and Regional Information Systems Association.

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US ISSN 1045-8077

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# *Editorial: Revised Mission and New Appointments*

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With our first issue of the year 2000, we are pleased to introduce an expanded mission for the URISA Journal as well as newly appointed Editors and Article Review Board.

## **Mission Statement**

The URISA Journal is a peer-reviewed journal published both in print and online by the Urban and Regional Information Systems Association, a non-profit international association for information technology professionals. The Journal is published quarterly and adheres to access and copyright policies designed to further the advancement of knowledge and science. Articles are accepted for publication in the following areas:

**Urban and Regional Information Science** - sciences which advance research in the spatial and temporal relationships of phenomena in the natural and human-modified environment, including advances in planning, urban modeling and in environmental, transportation and engineering information systems.

**Applications** - applied research advances relating to information system developments in areas such as public health, emergency response, crime analysis, marketing, cadastral mapping, vehicle routing, infrastructure development, environmental assessment and similar applications.

**Social, Organizational, Legal and Economic Sciences** - advances in understanding the social, organizational, institutional, legal, ethical and economic environments affecting the design and use of information technologies in urban and regional settings.

**Geographic Information Science** - tools, techniques and methods for analyzing, displaying, visualizing, and communicating spatial data, including the tools, techniques and methods of geographic information systems (GIS), spatial statistics, spatial analysis and computer science.

**Information and Media Sciences** - emerging and related areas pertaining to multimedia, virtual environments, spatial simulation, digital libraries, human computer interaction, and web-based GIS.

**Spatial Data Acquisition and Integration** - tools, techniques and methods of geodesy, surveying, photogrammetry, global positioning systems, remote sensing, engineering and computer science to acquire, manage and integrate spatial data.

**Geography, Cartography and Cognitive Science** - advances in understanding the manner in which people think about and represent their geographic surroundings, including advances in geography, cartography, cognitive science, computer science and related sciences.

**Education** - advances relating to the teaching and learning of material in any of the above described areas.

As shown on the following page, the Journal has put in place a solid team of academic editors and a newly appointed Article Review Board (ARB) to appropriately manage the expanded coverage of the Journal. Serving on the ARB requires an application process and submittal of a vita for evaluation by the editors (see <http://www.urisa.org/journal.htm>). While all individuals appointed must have a significant peer-reviewed publication record within the preceding five years, the application process to serve on the ARB is relatively open and democratic. The editors will be adding new members to the ARB as demand for additional reviewers in some areas becomes evident and as appointments expire. We invite you to review at the web site the vitas of the individuals who have been appointed to date and we think you will agree that their credentials are very impressive.

Other recent changes to the Journal have included institution of a copyright policy that allows authors to retain full but non-exclusive copyright in their works, provision of both paper and online versions of the Journal and implementation of a peer review process that is now entirely electronic. Combined with newly appointed editorial and review boards that represent the very best of the field, we believe the URISA Journal is positioned to make lasting and expanding contributions to the advancement of knowledge and science as we enter the new millennium.

Harlan Onsrud

## *In this Issue...*

Three articles, a special report, and a review of literature are presented in the Winter 2000 issue.

A model for predicting the benefits of using geographic information systems (GIS) technology is described by **Stephen R. Gillespie**. The multiple regression equations in the model were developed by the U.S. Geological Survey.

The results of studying GIS implementation by four grassroots organizations are explored by **R. E. Sieber** to investigate alternatives to traditional models of GIS implementation.

**Michael J. Greenwald** examines organizational and technological support issues involved in creating multi-jurisdictional GIS by contrasting an earlier federal project with a current regional support project.

A special report on critical issues in geographic information science resulted from a National Science Foundation (NSF) workshop on the needs for basic research in this area. **David M. Mark** edited the report that details the recommendations participants made to the NSF.

**Zorica Nedovic** contributes a review of current journal literature. The selected articles are assigned to one of nine categories. Also contributing to this section are **Ted Koch** and **Ken Dueker**.