



Paul A. Longley



Michael F. Goodchild



David J. Maguire



David W. Rhind

Effective use of today's powerful GIS technology requires an understanding of the science of problem-solving that underpins it.

Since the first edition was published a decade ago, this book has led the way, with its focus on the scientific principles that underpin GIS usage. It has also provided thorough, up-to-date coverage of GIS procedures, techniques and public policy applications. This unique combination of science, technology and practical problem solving has made this book a best-seller across a broad spectrum of disciplines.

This fully updated 3rd edition continues to deliver on these strengths.

KEY FEATURES OF THE THIRD EDITION

- Presents principles and techniques of GIS alongside the latest trends in data, software, societal exploitation of technologies, and industry developments
- Thorough coverage of Principles, Techniques, Analysis as well as Management and Policy

- Now includes coverage of the latest Internet mapping interfaces and hand-held devices, and discusses their adoption and use in scientific investigation
- New or extended coverage of Web2.0, open-source GIS, the GeoWeb, virtual Earths, and neogeography mashups
- Applications of how GIS is used to solve problems from the global to the local levels in a broad range of disciplines, and for government, business, and community initiatives

A TEXT PACKAGE TO SUPPORT LEARNING

- Dedicated on-line Virtual Campus exercises for lab classes or on-line learning
- In-text student-centered activities to foster review, research and learning by doing
- In-chapter summaries of key points
- In-chapter Review and Research activities
- Instructor's resource site with comprehensive instructor manual, PowerPoint slides, and suggested activities



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