### **Beyond Mapping Compilation Series**



# Compilation of Beyond Mapping columns

by Joseph K. Berry appearing in GeoWorld from 1989 to 2013

The **Beyond Mapping Compilation Series** extends GIS technology from mapping and geo-query to spatial statistics and analysis that investigates spatial patterns and relationships. It presents a structured view of the important concepts, considerations and procedures involved in map analysis. The nearly three hundred monthly columns written over a twenty five year period forms an evolutionary perspective on the revolutionary elements of GIS technology that make it different from traditional map structure, content, processing and use. The discussions encourage the reader to extend the traditional role of maps from telling us "Where is What" to entirely new paradigms of "Why, So What and What If." Within this context, maps become data and map analysis becomes the means to derive information about spatial patterns and relationships within and among map layers.

< <u>Click here</u>> for a printer-friendly version of this topic (.pdf).

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#### Intended Audience

The **Beyond Mapping Compilation Series** is an online collection of Joseph K. Berry's popular *Beyond Mapping* columns published in <u>GeoWorld</u> magazine (formerly *GIS World*) from 1989 through 2013. It is intended to be used as a self-instructional text or used in support of formal academic courses for study of grid-based map analysis.

Each of the four "**Books**" in the series contains ten "**Topics**" plus an *Introduction* and *Epilog*. Each topic contains an initial set of "**Sections**" designed to develop a general knowledge of a subject area. "**Further Reading**" in each Topic provides additional sections intended for readers wanting more information or greater detail on approaches, procedures and considerations discussed in the main sections.

## **Content and Organization**

This compilation series is organized into four online books—

Beyond Mapping IV: GIS Modeling containing columns from 2007 to 2013 into 10 Topics, Introduction and Epilog
Beyond Mapping III: Map Analysis containing columns from 1996 to 2007 into 10 Topics, Introduction and Epilog
Beyond Mapping II: Spatial Reasoning containing columns from 1993 to 1996 into 10 Topics, Introduction and Epilog
Beyond Mapping I: Beyond Mapping containing columns from 1989 to 1993 into 10 Topics, Introduction and Epilog

Four hardcopy books with supplemental materials support the online compilation—

GIS Modeling Applying Map Analysis Tools and Techniques ...covers the period 2007 to 2013 (Berry, 2013; Basis Press Publisher)

Map Analysis <u>Understanding Spatial Patterns and Relationships</u> ...covers the period **1996 to 2007** (Berry, 2007; GeoTec Media Publisher)

Spatial Reasoning for Effective GIS ...covers the period 1993 to 1996 (Berry, 1995; John Wiley Publisher)

Beyond Mapping Concepts, Algorithms, and Issues in GIS ...covers the period 1989 to 1993 (Berry, 1993; John Wiley Publisher)

The companion CD-ROM with the *Map Analysis* and *GIS Modeling* books contains further readings, color graphics and software for hands-on experience with the material presented. In addition, an Instructor's CD-ROM is available that contains a comprehensive set of instructional materials for use with the book supporting a variety of seminars, workshops and courses including syllabus, PowerPoint lectures, exercises, databases, and study/exam questions and answers.

# Companion "Hands-On" Exercises

*MapCalc* software provides hands-on exercises supporting the topics in the Map Analysis book and the other books in the compilation series. Educational versions are available in student and instructor forms...

<u>MapCalc Learner</u> ...is a Student Tutorial Version with Exercises/databases, application demos and text; 100x100 configuration; single seat license for educational use only.

<u>MapCalc Academic</u> ...is an Instructor Classroom Version with all of the above material plus lecture PowerPoint's, additional exercises and exam questions/answers; unlimited analysis frame configuration; <u>multiple seat license</u> for single computer lab; educational use only.

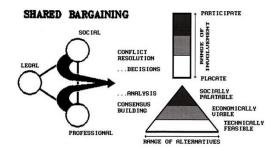
Nearly all of the graphics in the columns were created using MapCalc (formally tMAP) and its optional software, using a standard personal computer and screen capture. MapCalc software, User's Manual, supplemental readings, exercises, tutorial databases and instructor materials are royalty free and can be downloaded from http://www.innovativegis.com/basis/MA Workshop/MapCalc download.htm.

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For example, if referencing figure 1 in Section 4 "Frankly My Dear, I Don't Give a Damn" of Topic 4 "What GIS Is and Isn't: Spatial Data Mapping, Management, Modeling and More" in Book I "Beyond Mapping: Concepts, Algorithms and Issues in GIS" of the Beyond Mapping Compilation Series by Joseph K. Berry can be shortened to—

Figure is from Berry, <u>Beyond Mapping Compilation Series</u> (Basis Press, 2013) online Book I, Topic 4 "What GIS Is and Isn't" posted at: http://www.innovativegis.com/Basis/BeyondMappingSeries/

For more information about the Beyond Mapping Compilation Series and related materials, contact...

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