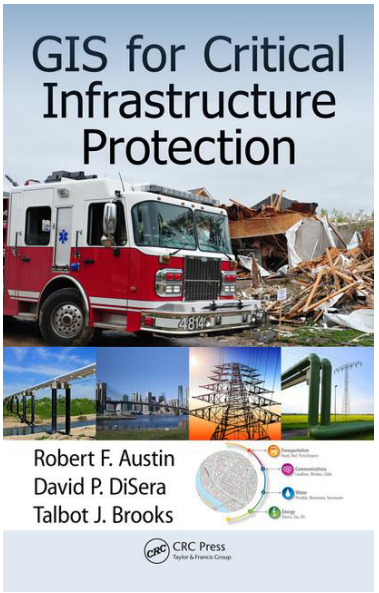

GIS for Critical Infrastructure Protection
Austin, Robert F., DiSera, David P., & Brooks, Talbot J.
CRC Press, Taylor and Francis Group: Boca Raton, FL. 2016. Reference, 250pp., 16 Color & 57 B/W Illustrations. Hardcover. $119.95. ISBN 978146659934

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GIS for Critical Infrastructure Protection illustrates an in-depth understanding of geospatial technologies, first responder needs, and the importance placed on critical infrastructure within the government and private sector. The authors explain critical roles that individuals assume throughout an emergency response and how GIS maintains a vital role in nearly every aspect of critical infrastructure management. The intended audience would consist of First Responders, Government Officials, GIS Professionals, and Utility Managers in both private and public sectors. This book contains ten chapters, and, within each chapter, a distinct aspect of Critical Infrastructure Protection (CIP) is brought to the forefront through insightful case studies and real world solutions. The book can either be read in its entirety or utilized as a reference to gain a better understanding of outreaching components of CIP. Many of the illustrations utilized in the text are presented again with color in the book's center to exhibit the ideas portrayed in reference to the text. Since this book spans many professional fields, a section of Acronyms and Abbreviations is found in the text for ease of reference. Each chapter acts to create interconnections by bridging gaps through commonalities across many professional fields that will be evident throughout the book and in the concluding chapter.

Chapter 1 provides a foundation by constructing the major themes, models, and players of Critical Infrastructure Protection in reference to GIS. Chapter 2 presents the basics of GIS for readers with limited knowledge of geographic terminology and processes. Chapter 3 presents government applications internationally while providing an insightful array of tools created by the government that can be beneficial for CIP. Chapter 4 describes the industry timeline of GIS in CIP and how the Geospatially Enabling Community Collaboration Program (GECCo) was formed. Chapter 5 defines what critical infrastructure is for local government and illustrates how local government plays a crucial role in emergency response and initial data collection and dissemination. Chapters 6 to 8 cover case studies with lessons learned for the 2012 Republican National Convention in Tampa, Florida, GECCo Project in Minneapolis and St. Paul, Minnesota, and hurricanes Katrina and Isaac on the Gulf Coast. Chapter 9 describes hazard mitigation planning utilizing GIS methodology that can be replicated anywhere. The final chapter concludes with a brief description of cyber security and natural/man-made disasters while binding all of the concepts throughout the book into a few key points.

Overall this book is well written and presented in a format that can be utilized as a reference resource or straight read. The authors' presentation of the chapters allows for an understanding of the materials from varying professional fields, from Emergency Managers to GIS Professionals. This book provides additional value to the reader in the way that it uses case studies that contain practical solutions that are linked to real world implementation. These case studies serve as excellent teaching tools for a variety of situations and each study contains lessons learned that can be implemented in everyday workflows to create a safer level of CIP.

GIS for Critical Infrastructure Protection has accomplished its objective by creating a compilation of case studies and lessons learned in a way to allow professionals to assimilate GIS, Emergency Management, and Critical Infrastructure. This book is a great professional reference, but also has real potential for Emergency Management and GIS Programs as a graduate resource. In my opinion, this book shows how to create collaboration in planning, data sharing, and foremost communication between all professionals dealing with Critical Infrastructure Protection.

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