# BOOK**REVIEW**

The goal of *Focus on Geodatabases in ArcGIS Pro* is to introduce the geodatabase file format and functionality in Esri's ArcGIS Pro software as tools for designing and managing features in operational spatial data. The book is designed as a manual for the higher education classroom or professional training, but those new to designing spatial databases or making the transition to creating and editing features in ArcGIS Pro will also benefit. *Focus on Geodatabases in ArcGIS Pro* uses realistic data and situations from local government to demonstrate concepts and exemplify the life course of data.

Focus on Geodatabase's seven chapters can be divided into four parts. Chapters one through three, comprise 41% of the book, discuss geodatabase design concepts, creating a geodatabase, and loading existing data into the new geodatabase. Chapter four extends the idea of geodatabases into ArcGIS Online and 3D maps. Chapters five and six, making up 32% of the book, guide users through ArcGIS Pro tools for creating and editing point, line, and polygon features. Chapter seven discusses ArcGIS Pro map topology and geodatabase topology.

Each chapter has a brief introduction, followed by two tutorials that guide the reader through the concepts or tools with realistic data. Each tutorial has a short introduction with learning objectives. More than half of the tutorials include a "your turn" section that allows readers to check their progress against the narrative text. Numerous screenshots help the reader follow along and ensure that those working through the tutorial stay on track. Each tutorial is followed by an exercise that allows the reader to practice the concepts or tools from the tutorial on their own. Each tutorial and exercise section concludes with recommendations for "what to turn in" if used in a classroom setting, a review of the section, study questions, and other topics to look up in the ArcGIS Pro help for further study.

Tutorials and exercises use realistic data for the fictional town of Oleander, Texas. Chapters one through three use examples related to property and wastewater for designing, building, and loading data. Chapters four through seven add examples related to stormwater, structures, surface mapping, and political and service boundaries. Of the seven chapters, all but one use property mapping concepts such as parcels, lot lines, or easements as part of the tutorial or exercise.

By the end of the book, readers will have a firm grasp of geodatabase and ArcGIS Pro functionality, tools, and vocabulary related to configuring geodatabases and creating and editing points, lines, and polygons for data commonly used in local government and services. Readers are also able to follow the life course of a dataset from requirements, design, and construction to daily use and quality control with topology. If users follow along and work through the tutorials and exercises, they will have experience in creating and editing realistic data configured in a geodatabase that encourages data quality and integrity. Chapter four may appear as an outlier in this purpose, but in actuality expands on the life
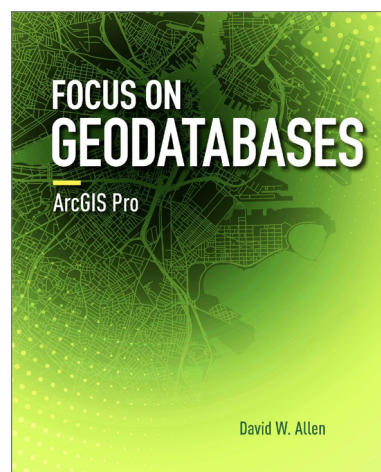
Focus on Geodatabases in ArcGIS Pro
David W. Allen

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Reviewed by Matthew J. Gerike, Research Scholar of Interdisciplinary Studies, William & Mary, Williamsburg, Virginia.

course concept by demonstrating how ArcGIS Pro easily publishes local data to ArcGIS Online feature services and maps to share information, increase access, and make operational workflows more efficient. Chapter four may fit better as the concluding chapter, but it serves as a good break between the geodatabase design of the early chapters and the ArcGIS Pro editing of the later chapters.

As a text, *Focus on Geodatabases* is effective in introducing readers to a plan, design, and build a model for creating spatial datasets and demonstrating real-world advantages that well-planned geodatabases have for enforcing data quality concepts and saving time with types of data commonly encountered in local government. Principles such as data design, valid values restrictions, domain pick-lists, and relationships relate to other spatial databases beyond Esri's geodatabase. As a technical manual, *Focus on Geodatabases* is effective in guiding users through specific ArcGIS Pro interfaces, menus, and tools related to creating and editing
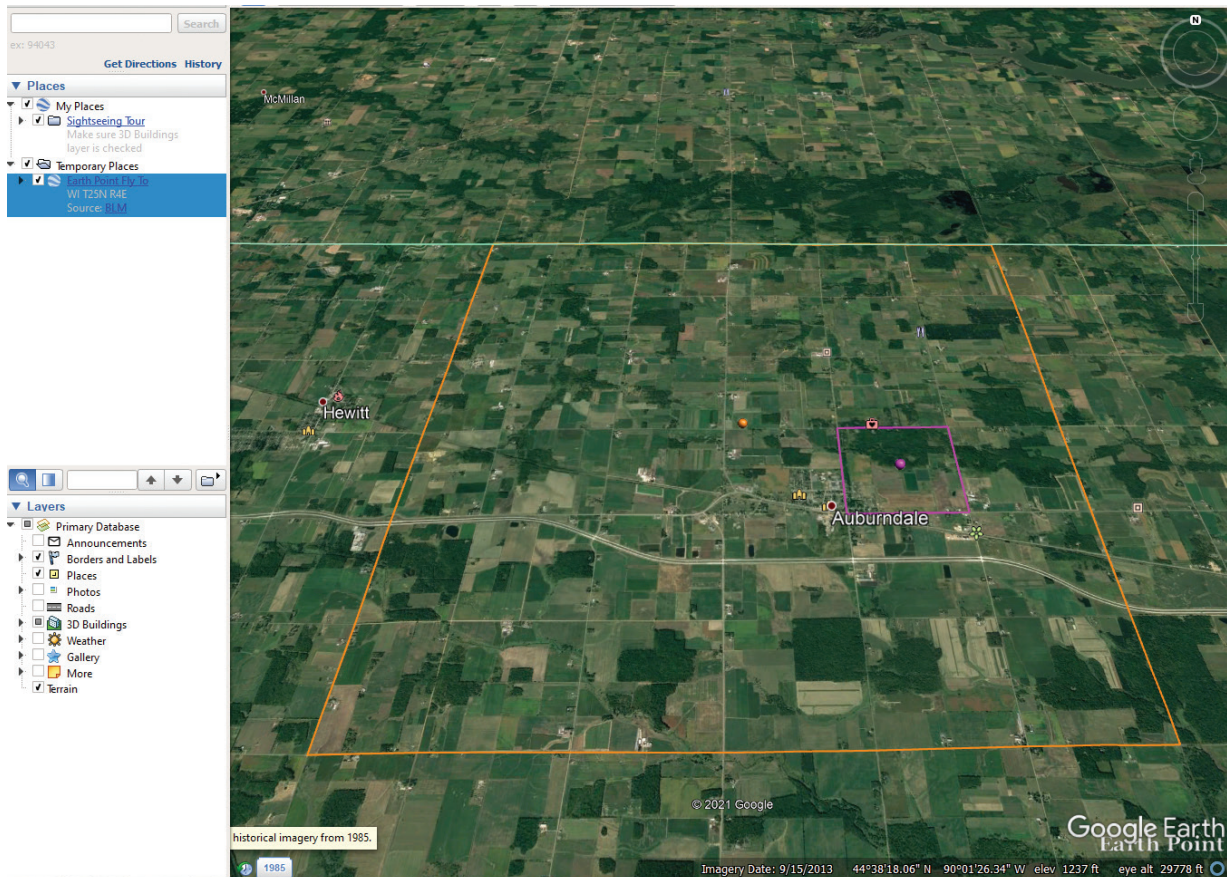
Figure 6. GoogleEarth view of the Auburndale facility showing the PLSS Township (in orange) and the Section (in purple).

In this specific example, you can zoom-in to the area of the plant and the sewage lagoon is visible in the Google Earth aerial photo, located exactly as described in the northwest quadrant of the southeast quarter-section.

Knowing the Public Land Survey System nomenclature and PLSS locators can add fast and reliable information to a GIS inquiry.

Send your questions, comments, and tips to GISTT@asprs.org.

Al Karlin, Ph.D., CMS-L, GISP, and Brandon Gravett are with Dewberry's Geospatial and Technology Services group in Tampa, FL. As a senior geospatial scientist, Al works with all aspects of Lidar, remote sensing, photogrammetry, and GIS-related projects. Brandon is a Geospatial Analyst who specializes in web-based GIS applications.

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data and does not begin to cover everything that ArcGIS Pro can do. This knowledge is particular to ArcGIS Pro, although other software may have similar tools and functionality.

Despite its success in achieving its stated goals, the title *Focus on Geodatabases in ArcGIS Pro* is not very descriptive of the breadth or emphasis of the book. Data Integrity with Geodatabases in ArcGIS Pro or Focus on Data Quality and Maintenance with Geodatabases in ArcGIS Pro are more descriptive, if wordier, alternatives as one of its potential strengths is helping GIS professionals' transition from ArcGIS Desktop to ArcGIS Pro.

Focus on Geodatabases also lacks a conclusion, with a review of the geodatabase topology section being the final text. This is a missed opportunity to emphasize the attention to detail required over the life course of operational spatial data.

Users achieve quality spatial data by not only having sound data design and implementation but also careful use of appropriate data creation and editing techniques verified by quality assurance and topology checks.

Overall, *Focus on Geodatabase*s achieves its goals and provides a solid introduction, textbook or GIS lab manual, or transition guide to both geodatabases and editing functionality in ArcGIS Pro. The real-world data scenarios are an asset to classroom use and relate to working professionals. As a textbook, *Focus on Geodatabases* is ideal for instructors that wish to emphasize planning before doing, creating and editing realistic local government property and utilities data, and maintaining data quality through structural geodatabase settings, good technique, and topology tools.