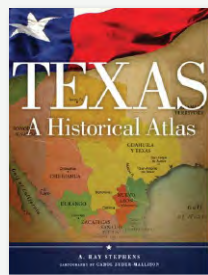


reservations, the Umatilla in Oregon and the Isabella in Michigan, to name two, appear as dots when they could easily have been portrayed as polygons. Further, some of the larger reservations are not depicted at all, like the Omaha and Winnebago Reservations in Nebraska. Lastly, whereas large reservations are almost all delineated using gray-toned linework, one reservation, that of the Navajo Nation, has been singled out and bounded by black linework. In addition, while a number of reservations are currently officially identified with the word “Nation” in their title (for example, Yakama, Jicarilla Apache, and Tohono O’odham), only the Navajo has earned the word Nation on this map. No explanation is given for this special treatment.

The index on the reverse side of the map is divided into eight categories: Land and Water, Native American Reservations, Intercontinental Airports, Landmarks, Universities, State High Points, Regions, and Populated Places. Each of these titles is noted using the tri-lingual format. All categories, except for the State High Points, are meticulously laid out in alphabetical order, and they include parks, cities and so on in nearby areas of Canada and Mexico. The High Points are arranged from highest to lowest in elevation. Finally, the right hand panels include a tri-lingual User Guide for map readers using this map for the first time.

Overall, *The Essential Geography* is an excellent map, and while the claims for it made in the press release may be debatable, I believe that this map can be used as an important tool in classrooms and elsewhere. Nonetheless, it should be used in conjunction with other maps (such as Federal Lands, Indian Lands, Airports and so on) when a fuller picture is desired. In spite of the criticism noted above, I recommend this map and hope that future editions will make any corrections in layout, missing items, and inconsistencies.



TEXAS: A HISTORICAL ATLAS

By A. Ray Stephens and Carol Zuber-Mallison.

Norman, OK: University of Oklahoma Press, 2010.

448 pages, 175 color maps, 81 color and black and white photographs, 45 charts.

\$39.95, hardcover.

ISBN: 978-0206138732

Review by: Tom Nance, National Ice Center

Texas: A Historical Atlas is a compilation of 86 essays supported by 175 vivid and easily understood maps. There are also many photographs, portraits, sketches, representations of forts and battle layouts, and county-

specific facts. The atlas describes Texas’ geography, history, and current affairs from the time of the first inhabitants to the present. As Dr. Stephens observes, “The relationship of history and geography can not be separated. One must be aware of the natural features in order to understand and appreciate the activities of inhabitants.”¹

This book is divided into three parts: “Natural Texas,” “The Texans,” and “Modern Texas.” The very brief first section (about 7% of the book), “Natural Texas,” is an introduction to the geography, weather, water, and plant life of the state. Half of the atlas is taken up with the second section, “The Texans.” It is divided into six subsections, each discussing one of the major ethnic groups (indigenous, European/American, and Mexican) or pre-twentieth-century historical events and periods that shaped the place known as Texas. This was, for me, the most interesting and engaging part of the atlas. The final section, “Modern Texas, 1900–2009,” has two subsections: “Modern Texas, 1900–1945” and “Contemporary Texas, 1945–2009.”

As I mentioned, the large middle section, “The Texans,” really captured my imagination. The tales of exploration kept me entertained, covering resistance to tyranny, disorganization and defeat, desperate victories against overwhelming odds, the founding of a nation, becoming part of another nation, and fighting for rights that, one eventually comes to realize, maybe weren’t so right. I personally enjoyed piecing together the evolution of Texas over time, and was astonished at aspects I had never before considered. For example, I had never recognized how large a role water played in shaping Texas—in more ways than just political boundaries. Most settlements began near bays, river crossings, or springs. Forts were built to protect those settlements and other key terrain, such as passes and trade routes between settlements. The wagons that blazed those trails between settlements usually followed the path of least resistance, and the road network used today closely resembles the major roads of early Texas.

The main narrative is also sprinkled with informative sidebars. I especially enjoyed the one dealing with “The Variable Vara” (p. 76) describing the use of the Spanish customary length unit in land surveying, and how it is that seven different types of vara came to be used. This book linked events together in such a way that I came to realize just how disorganized the Texas Revolution really was.

The “Modern Texas” section is also substantial, but is far less readable. This section of the book is primarily composed of facts and figures broken down in charts and tables and mapped by county. As a compendium of statistics it is no doubt useful, but after the engaging and dramatic presentation of the previous material, it is a bit tedious.

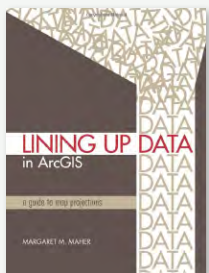
The essays were contributed by a variety of authors, so no single writing style predominates. All the essays were well written and easily understood, and accompanied by maps, charts, and diagrams which were also well designed, descriptive, and easily understood. Most of the material captured my attention and interest. It was easy, while reading the essays, to follow along on the maps, which were clear and immediately understandable.

One of Dr Stephens' main goals in publishing *Texas: A Historical Atlas* was to update and expand on his earlier version of the work, the *Historical Atlas of Texas*. While I cannot compare this new atlas to the earlier publication, I can vouch for the strengths of this edition. I grew up in Texas, in Live Oak County, and in reading through this book have learned a great deal more about my home state's history than I had imagined possible. I would definitely recommend *Texas: A Historical Atlas* as a reference and possibly a text book for Texas history and geography classes, or even generally, for the avid know-it-all Texan.

Notes

1. Author Interview, undated press release, (Norman, OK: University of Oklahoma Press, 2010).

LINING UP DATA IN ARCGIS: A GUIDE TO MAP PROJECTIONS



By Margaret Maher.

Lining Up Data in ArcGIS: A Guide to Map Projections

By Margaret Maher.

Esri Press, 2010

184 Pages

ISBN: 978-1-58948-249-4

\$24.95

Review by: Fritz C. Kessler

The map in Figure 1 shows the county outlines for West Virginia, and, offset somewhat to the east, point features for West Virginia's county seats. Obviously, the two data sets should line up but do not. If you have worked with spatial data, you have probably experienced a similar situation. Do you know how to solve this mis-alignment problem? If not, then *Lining Up Data in ArcGIS* is a resource that you should examine. *Lining Up Data* provides an elementary approach to understanding how users interact with ArcGIS to identify, define, and manipulate coordinate systems with the end goal of making sure their data aligns properly. This is a tall order for any book to fill, and this is the first text that takes this elementary yet practical method to solving the most common coordinate system problems in the GIS

(geographic information system) environment—a novel approach to a topic that has undoubtedly frustrated many GIS users.

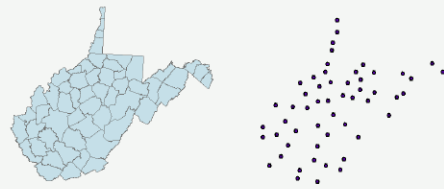


Figure 1. An example of data sets that should align but do not.

Lining Up Data begins with a Table of Contents, moves on to a Preface, a short statement on the author, and then includes an Introduction. The Introduction to *Lining up Data* simply lists thirteen common questions/problems that GIS users are likely to encounter when working with spatial data in the ArcGIS environment. These questions/problems are the basic fodder for the ten chapters that follow.

Chapter 1 is a primer on how to identify the type of coordinate system that is loaded into your ArcGIS environment. The chapter begins with a useful overview of some common error messages and warnings that users may encounter while working with coordinate systems. The utility of defining a map projection and of using the *project* command, and the differences between the two, are explained in some detail. A useful section on identifying a map projection based on the numeric extents of the coordinate values is provided. The difference between geographic, projected, and local coordinate systems is also explained.

Chapter 2 helps you identify a spatial data set's geographic coordinate system. The chapter provides step-by-step explanations of two common mis-alignment problems in ArcGIS. The first problem is a datum mismatch situation (e.g., one data set is cast in the NAD27 datum and the other is set to the NAD83 datum). The second example occurs when one data set has an assigned projected coordinate system while the second data set has only a geographic coordinate system defined. As explained in the chapter, a partial solution to these problems involves a datum transformation.

Chapter 3 assists in identifying a spatial data set's projected coordinate system. In this chapter, discussion begins with a focus on two common grid systems: the State Plane Coordinate System and the Universal Transverse Mercator coordinate system. For each grid system, attention is paid to explaining how the coordinate limits reported in the Layer Properties window can help the user identify which projected coordinate system is being used and how to remedy situations where, for example, no coordinate system definition has been applied to a spatial data set. There are many helpful hints provided throughout the chapter