Internet Reviews: Maps and Geographic Information Systems

Jennifer A. Bartlett
University of Kentucky, jen.bartlett@uky.edu

Follow this and additional works at: https://uknowledge.uky.edu/libraries_facpub

Part of the Library and Information Science Commons

Repository Citation
Bartlett, Jennifer A., "Internet Reviews: Maps and Geographic Information Systems" (2016). Library Faculty and Staff Publications. 275.
https://uknowledge.uky.edu/libraries_facpub/275

This Review is brought to you for free and open access by the University of Kentucky Libraries at UKnowledge. It has been accepted for inclusion in Library Faculty and Staff Publications by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

“I am told there are people who do not care for maps, and I find it hard to believe.”

—Robert Louis Stevenson

Essays in the Art of Writing
(London, Chatto & Windus, 1905)

From cave paintings to Google Earth, maps have been an important way for people to communicate information about their environment. Whether used to find a particular location or to learn about an area’s characteristics, the pictorial representation of geographic information is instantly understandable, GIS, “geographic information systems,” take us one step farther than basic geographical information found on maps by integrating numerical and spatial data to address real-world issues and problems. In other words, GIS enables us to process and analyze data according to their locations.

Today’s maps have progressed far beyond the messy paper road maps used for family vacations that, once used, couldn’t be folded back up. These map and GIS websites offer great starting points for everyone from elementary school students to serious cartographic researchers. Enjoy finding your way!
KENTUCKY AND REGIONAL MAPS

KyGovMaps

KyGovMaps: Showcasing Kentucky Maps and Geographic Data
http://kygeonet.ky.gov/govmaps/

Local and state governments are significant publishers of maps and geographic data. This Kentucky state site, part of the Kentucky Geography Network, is particularly fun and easy to use. Rather than basic maps, this site offers special topic maps of Kentucky highlighting demographic information such as population density, household income and unemployment rates; manmade features including state parks, airports and schools; and other topics of interest including farmers markets, recreational trails, alternative fueling stations, and hospitals.

Story Maps, based on an Environmental Systems Research Institute (esri) ARCGIS platform, combine narrative with maps to provide an interactive tour experience. Users can read sequentially through the modules, or jump to a particular location. Some topics are a Kentucky Bourbon Trail Craft Tour, Kentucky’s Frontier Trails, and Kentucky’s National Historic Landmarks.

Kentucky State Data Center

Kentucky State Data Center Maps and GIS Data
http://www.ksdc.louisville.edu/data-sources-by-topic/geographic/
The KSRC, based at the University of Louisville, is the state’s clearinghouse for Census data and works closely with the U.S. Census Bureau to provide data to the State Data Center Program. Resources at this website include administrative maps of counties, area development districts, and census tracts; links to interactive Census Bureau maps including Census Explorer; and GIS data information.

CURRENT UNITED STATES AND WORLD MAPS

U.S. Geological Survey: The National Map
http://nationalmap.gov/
The USGS is probably best known for producing a series of printed topographical maps, large-scale maps subdivided into quadrangles depicting terrain, lakes and rivers, populated areas, and man-made features. The USGS also partners with other Federal, state and local agencies to produce The National Map (TNM), an interactive topographical map including aerial photographs, elevation data, geographic place names, boundaries, and information about structures and transportation.

Using TNM requires a learning curve and is not for the casual browser. The Download Client, the primary interface for locating and downloading maps, offers a fairly extensive user’s guide with instructional videos, and with good reason. Once mastered, however, the system makes it worthwhile with sophisticated searching and retrieval options of its various datasets, including boundaries, elevation, hydrography, land cover and geographical place names. Users can export USGS map data into geographic information systems to create specific types of maps.

Somewhat easier to use is the TNM Historical Topographic Map Collection, a digital repository of more than 178,000 USGS maps printed between 1884 (which marked the beginning of the topographic mapping program) and 2006. Maps are available for download in GeoTIFF and JPEG.

Perry-Castaneda Library Map Collection
http://www.lib.utexas.edu/maps

This site offers extensive lists of downloadable geographic and thematic maps from across the world, browsable by geographic region. Also useful are links to maps of current interest appearing in the media; recent topical maps include a Zika virus transmission map, the Brexit referendum map, and U.S. primary election maps.
HISTORICAL MAPS

Osher Map Library
http://oshermaps.org
Based at the University of Southern Maine, the Osher Map Library and Smith Center for Cartographic Education (OML), is a treasure trove of information and online exhibits about historic maps from 1400 to the present. In addition to an extensive collection of maps of Maine and surrounding areas, OML offers information and scanned images of historic maps from the United States and worldwide.

The online exhibitions are particularly interesting, featuring brief introductions to topics including “The Golden Age of American Pictorial Maps,” “Women in Cartography,” and “Maps of Route 66.” Some material has been digitized under a Creative Commons license, and the section on educational material is particularly useful, offering worksheets, activities, games, and lesson plans. Another interesting (if only marginally map-related) collection at OML focuses on ocean liner memorabilia from the 1870s to the late 20th century, including ship plans, passenger lists, brochures, postcards, photographs and more.

Old Maps Online
http://www.oldmapsonline.org
OldMapsOnline.org is an integrated search engine indexing nearly 400,000 maps from a number of libraries and archives across the globe including the U.S. Geological Survey, New York Public Library, National Library of Scotland, Harvard, Dutch National Archives, British Library, State Library of New South Wales, Biblioteca Nacional de Colombia, and more. Map records are searchable by title, author, and keyword, and may be browsed via timeline and geographic location. A mobile interface is also available, providing access to a smaller number of maps.

OldMapsOnline is also a developer of Georeferencer, a crowdsourcing project allowing the annotation and integration of historical maps with modern aerial imagery and base maps.

David Rumsey Historical Map Collection
http://www.davidrumsey.com
Focusing on 16th through 20th century North and South American maps, the David Rumsey collection is one of the largest free digital collections of historical maps, numbering over 70,000 high resolution, freely-available images. The online interface is beautifully and thoughtfully designed, offering browsing by category, location, time period, and author; records are also full text searchable. The advanced search includes a comprehensive set of access points. One particularly useful feature for students, researchers, and map enthusiasts is the LUNA Browser, which allows users to build collections; create and embed widgets; build and link to slideshows and presentations; create and share annotations and maps, and more. In addition, some map content has been integrated into Google Earth, Google Maps, and Second Life.

Rumsey, president of the digital publishing company Cartography Associates, has been collecting historical maps and related materials since 1980. In April 2016, the David Rumsey Map Center opened at Stanford University Libraries, housing Rumsey’s physical collection of over 150,000 maps, globes, educational materials, marine charts, and other cartographic materials.

Library of Congress Map Collections
https://www.loc.gov/maps/collections/
Only a tiny fraction of LC’s massive cartographic collections has been digitized, but what is currently available is a fascinating representation of American and international history. In addition to an individual item catalog search, this site groups maps into thematic modules such as the Louisiana Purchase, the Age of Discovery, the Civil War, the exploration of space, and more. Some collections are supplemented by informative articles and essays.

EDUCATIONAL RESOURCES

Education Place Outline Maps
https://www.eduplace.com/ss/maps/
Education Place, hosted by Houghton Mifflin Harcourt, offers simple outline maps organized by continent for personal and classroom use. The United States section includes individual state, regional, and thematic maps.

ScribbleMaps
http://www.scribblemaps.com/
This website allows users to combine existing road, satellite and terrain maps with customized information. The free basic service includes features such as image overlays, flight lines, map legends, images and widgets. Users can share completed maps via e-mail and through embedding on a blog or website.

And More!
For additional resources about maps, see the World Wide Web Virtual Library’s Map History / History of Cartography site at http://www.maphistory.info. Maintained by Tony Campbell, a former Map Librarian at the British Library, this site contains thousands of links to map collection image sites, genealogical maps, map collecting societies; links to cartographic journals and newsletters, and much more.