

# US Topo

## Topographic Maps for the Nation

US Topo is the next generation of topographic maps from the U.S. Geological Survey (USGS). Arranged in the familiar 7.5-minute quadrangle format, digital US Topo maps are designed to look and feel (and perform) like the traditional paper topographic maps for which the USGS is so well known. In contrast to paper-based maps, US Topo maps provide modern technical advantages that support faster, wider public distribution and enable basic, on-screen geographic analysis for all users.

US Topo maps are available free on the Web. Each map quadrangle is constructed in GeoPDF® format from key layers of geographic data (orthoimagery, roads, geographic names, topographic contours, and hydrographic features) found in *The National Map*.

US Topo quadrangles can be printed from personal computers or plotters as complete, full-sized, maps or in customized sections, in a user-desired specific format. Paper copies of the maps can also be purchased from the USGS Store.<sup>1</sup> Download links and a users guide are featured on the US Topo Web site.<sup>3</sup>

US Topo users can turn geographic data layers on and off as needed; they can zoom in and out to highlight specific features or see a broader area. File size for each digital 7.5-minute quadrangle, about 15-20 megabytes, is suitable for most users. Associated electronic tools for geographic analysis are available free for download.

### What Makes US Topo Different from Other Electronic Maps?

- Richer content, multiple layers of data; more than a street map
- Can be used on the computer or printed to scale
- Look and feel like legacy paper USGS topographic maps but have technical advantages



Figure 1. US Topo of the Coffeyville East, Kansas quadrangle



**Figure 2.** Detail of the Coffeyville East, Kansas US Topo

- Made from nationally consistent data that are quality assured to high standards
- Downloadable free from the USGS Store<sup>1</sup>
- Free downloadable user tools
- Users can select the reference systems:
  - Latitude-Longitude
  - UTM (Universal Transverse Mercator)
  - MGRS (Military Grid Reference System)
- Direct “mash-up” capabilities with Google Maps®
- Continuously evolving, incorporating additional data layers

### Powered by *The National Map*

In 2001, the USGS published a new vision for topographic mapping of the Nation: *The National Map*.<sup>2</sup> The objective of *The National Map* is to ensure current,

consistent, seamless, and integrated geospatial data for the Nation through Federal, State, local, and Tribal partnerships. In 2009, the USGS National Geospatial Program (NGP), working with partners in the public, private, and academic sectors, developed capabilities to rapidly produce US Topo maps from *The National Map* data. These new maps are vital for homeland security, research, industry, disaster response, recreation, land and resource management, and many other applications.

The prototype of the US Topo, “Digital Map—Beta,” has been available since June 2009. A US Topo map includes all of the content of the earlier “Digital Map—Beta” plus integrated contours and hydrographic features.

The image map layer of US Topo maps is based on U.S. Department of

Agriculture 1-meter ground resolution National Agriculture Imagery Program (NAIP) orthoimagery, a data resource that is tone-balanced, publicly available, and nationally consistent. US Topo production and revision will follow the NAIP acquisition cycle (ultimately 3-year) to complete conterminous national coverage. Data sources for Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands, and the Pacific Territories are being assessed for eventual production of US Topos.

As the US Topo product evolves, the USGS will incorporate additional geographic data layers from *The National Map* and will also provide digital, historical versions of paper-based USGS topographic map quadrangles. Public feedback about US Topo is welcome. This feedback assists the USGS in improving the US Topo concept.<sup>3</sup>

### More Information

The USGS (<http://www.usgs.gov/>)

<sup>1</sup>The USGS Store (<http://store.usgs.gov/>)

<sup>3</sup>US Topo and “Digital Maps—Beta” (<http://nationalmap.gov/ustopo/>)

US Topo and “Digital Map—Beta” Download (<http://nationalmap.usgs.gov/ustopo/quickstart.pdf>)

<sup>2</sup>*The National Map* (<http://nationalmap.gov/>)

NAIP ([http://www.fsa.usda.gov/Internet/FSA/\\_File/naip\\_2009\\_info\\_final.pdf](http://www.fsa.usda.gov/Internet/FSA/_File/naip_2009_info_final.pdf))