

# US Topo

## Topographic Maps for the Nation

US Topo quadrangles are digital 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, transportation, geographic names, topographic contours, boundaries, hydrography and structures found in *The National Map*. Recently added features include Public Land Survey System (PLSS) in 12 western states and woodland tint.

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 user's guide are featured on the US Topo Web site.<sup>2</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?

- Made from nationally consistent data that are quality assured to high standards
- Richer content, multiple layers of data; more than a street map
- Continuously evolving, incorporating additional data layers and features



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





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

- Look and feel like legacy paper USGS topographic maps but with technical advantages
- Can be used on the computer or printed to scale
- Users can select the reference systems:
  - Latitude-Longitude
  - UTM (Universal Transverse Mercator)
  - MGRS (Military Grid Reference System)
- Free downloadable user tools
- Downloadable free from the USGS Store<sup>1</sup>
- Interactive capabilities with Google Maps®

### Powered by *The National Map*

In 2001, the USGS published a new vision for topographic mapping of the Nation: *The National Map*.<sup>3</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.

US Topo maps production began in November 2009 as a prototype map called “Digital Map Beta.” The Digital Map Beta maps were produced for only one year and are superseded by US Topo maps. Initial US Topo maps included orthoimagery, roads, geographic names, and integrated contours and hydrography. US Topo maps have been released for all 48 conterminous states and Hawaii. Production of Alaska US Topo maps is planned for 2013. As the US Topo product evolves, the USGS will incorporate

additional geographic data layers and features from *The National Map*. Public feedback about US Topo is welcome. This feedback assists the USGS in improving the US Topo concept.<sup>3</sup>

The orthoimage layer of US Topo maps is based on U.S. Department of Agriculture 1-meter ground resolution National Agriculture Imagery Program (NAIP)<sup>4</sup> orthoimagery, a data resource that is tone-balanced, publicly available, and nationally consistent. US Topo production and revision follows the NAIP acquisition cycle (ultimately 3-year) to complete conterminous national coverage. Data sources for Puerto Rico, the U.S. Virgin Islands, and the Pacific Territories are being assessed for eventual production of US Topo maps.

The USGS distributes digital versions of earlier US Topo and paper topographic quadrangle maps through the Historical Topographic Map Collection. These maps are available for download through the USGS store.<sup>5</sup>

### More Information

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

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

<sup>2</sup> US Topo and “Digital Maps—Beta” (<http://nationalmap.gov/ustopo/>)

<sup>3</sup> The National Map (<http://nationalmap.gov/>)

<sup>4</sup> 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))

<sup>5</sup> Historical Topographic Map Collection (<http://nationalmap.gov/historical>)