

## **Mapping the Final Frontier**

USGS releases more than 400 updated US Topo maps of Alaska Released: 9/3/2013 2:30:00 PM

Contact Information: U.S. Department of the Interior, U.S. Geological Survey Office of Communications and Publishing 12201 Sunrise Valley Dr, MS 119 Reston, VA 20192 Rebecca Anderson h Phone: 907-786-7042

<u>Tracy Fuller</u> **1**% Phone: 303-202-4532

<u>Mark Newell</u> **b** Phone: 573-308-3850

More than 400 new topographic maps are now available for the state of Alaska. The new maps are part of the U.S. Geological Survey <u>Alaska Mapping Initiative</u>, to update foundational data for the state and to replace the existing maps that are about 50 years old.

"These new digital maps of Alaska are elevating our visual record of the surface of the state to 21<sup>st</sup> century levels," said Anne Castle, Assistant Secretary of the Interior for Water and Science. "The associated <u>advances</u> in human safety, navigation, and natural resource management cannot be overestimated. The productive <u>partnership</u> between the State government and the USGS is facilitating acquisition of the necessary data to complete digital mapping of Alaska, which is a critical chapter in the history of our geographical knowledge of the North American continent."

The first 400-plus new <u>US Topo maps</u> for Alaska <u>are now accessible</u> and are the beginning of a multi-year project, ultimately leading to more than 11,000 new maps for the entire state. The goal of the AMI is the production of a complete series of digital topographical maps at a scale of 1:25,000 to replace the 1:63,360-scale maps produced about 50 years ago. The maps will be published in digital

PDF format (GeoPDF<sup>©</sup>) and are available for <u>free download</u> and manipulation on a computer.

These new maps include several layers, with an option for the user to turn them on or off. Major updated features include:

- Satellite <u>image</u> layers which allows a recent view of the earth's surface.
- Contours and shaded relief layers showing the lay of the land derived from newly acquired 5-meter radar <u>elevation</u> data.
- Surface water features from the USGS <u>National Hydrography Dataset</u>, which are updated by local stewards and USGS.
- Glaciers updated using <u>Randolph Glacier Inventory</u> data.
- <u>Boundaries</u> integrated from multiple sources, including Census and major Federal landholders.
- The <u>Public Land Survey System</u> layer from the Bureau of Land Management.
- <u>Roads</u> from a commercial vendor under a USGS contract.
- Railroads and the <u>Trans-Alaska oil pipeline</u> data from local sources.
- Important <u>buildings</u> including police stations, schools, and hospitals.
- Airports, heliports and seaplane landing strips compiled by USGS from multiple sources.
- Feature names from the USGS-maintained <u>Geographic Names Information</u> <u>System</u>.

To ensure that the maps meet current accuracy specifications and standards, the maps will be made using newly acquired elevation and imagery data from multiple state, federal and commercial sources. The map-making process will be largely automated using software specially adapted by the USGS to create approximately 11,275 digital map quadrangles, covering the entire area of the state.

Mapping in Alaska did not keep pace with records for the rest of the nation as a result of difficult terrain, remote locations, and vast distances. Modern mapping information does not exist over the majority of land in the state. Prior to this effort, topographical maps for much of Alaska were about 50 years out of date and not produced to current standards, which rely largely on high resolution digital imagery and elevation data. As a consequence, essential public services have suffered, among them transportation planning and safety, urban and regional planning, economic development, natural resource management, conservation and scientific research.

This new generation of digital topographic maps will continue the rich and valuable USGS cartographic history, and serve the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect quality of life.

## For more information and download, go to: <u>http://nationalmap.gov/alaska/</u>



Historically, Alaska has been a proving ground for many developments in modern surveying and mapping. Field surveying and topographical mapping of the Alaskan interior by the USGS began in the 1890s following the discovery of gold in the Yukon. Travel was often by dog sled and pack train, canoe and walrusskin kayak as shown in this undated photo. (Larger image)



Part of a new US Topo quadrangle map of Fairbanks, Alaska – southwest borough with enhanced elevation contours, surface water, names, transportation, and structures data. (Larger image, 25 MB)