

“Digital Map—Beta”

Powered by *The National Map*

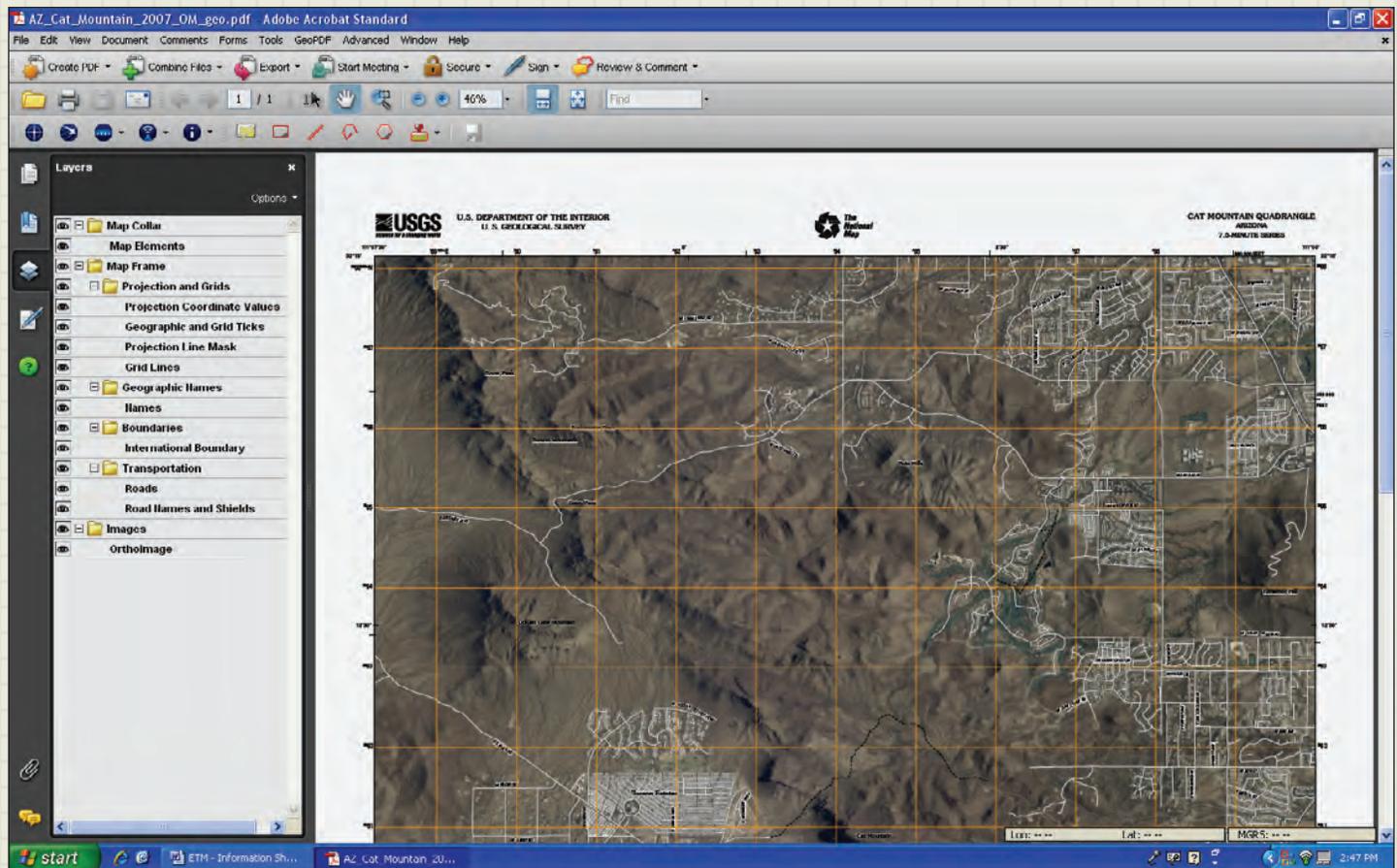
In 2001, the U.S. Geological Survey (USGS) published a new vision for topographic mapping of the Nation: *The National Map*. The objective of *The National Map* is to ensure current, consistent, seamless, and integrated geospatial data for the Nation through Federal, State, local, and other partnerships. In 2008, the USGS accelerated the goal to develop a new topographic map as a primary digital product of the program. Such maps are vital

for homeland security, research, industry, disaster response, recreation, land and resource management, and many other applications.

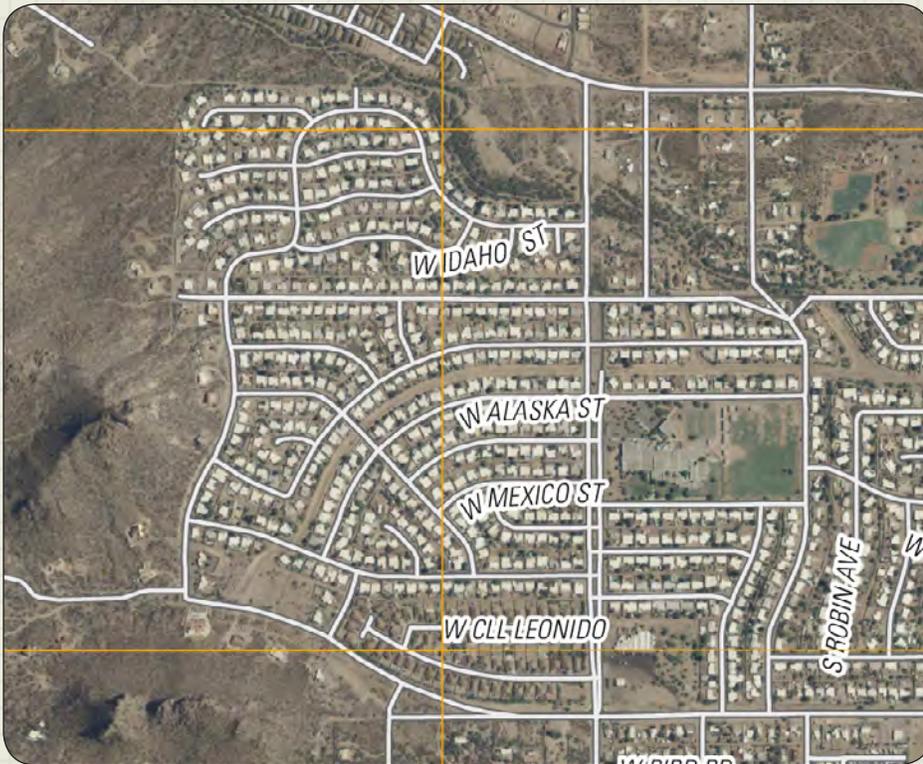
The “Digital Map—Beta”

The USGS National Geospatial Program (NGP), working with partners in the public, private, and academic sectors, has developed capabilities to produce the “Digital Map—Beta” (“Dig-Map—Beta”). The initial focus

has been on image maps, using data from *The National Map*, along the Gulf of Mexico and Atlantic Ocean coasts. This effort supports hurricane-related emergency response and helps to refine and advance mapping methods and products. The image map is a first step toward the ultimate goal of national coverage of a digital topographic map product that will include all of the information content of traditional printed maps.



Cat Mountain, Arizona, “Digital Map—Beta”.



Detail from the Cat Mountain, Arizona, “DigMap—Beta” incorporating National Agriculture Imagery Program (NAIP) orthoimagery (June 2007), roads from the National Transportation Dataset (2008), and names from the Geographic Names Information System (2008).

The next generation USGS topographic map will be a digital product made from *The National Map* data. The initial version, the “DigMap—Beta”, includes orthoimagery plus roads and geographic names in the traditional 7.5-minute quadrangle format. Ultimately, there will be digital topographic maps that include all data available from *The National Map*: orthoimagery, elevation, hydrography, boundaries, transportation, geographic names,

structures, and land cover. When contours are incorporated, the term “Beta” will be dropped.

Approach

The USGS will first focus on the image map layer of the “Digital Map—Beta” using U.S. Department of Agriculture 1-meter ground resolution National Agriculture Imagery Program (NAIP) orthoimagery. This imagery is available publicly, nationally consistent, and

tone-balanced. NAIP imagery file size is manageable for Internet distribution and download.

Map production will follow the NAIP acquisition cycle (ultimately 3-year) to complete conterminous national coverage. Data sources for Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands, and the Pacific Territories will be assessed for eventual production of the “Digital Map—Beta.” The new maps will be made available online, initially as pre-packaged GeoPDF files. Ultimately, the pre-packaged files will include, or be accompanied by, high-resolution scans of older USGS maps covering the same quadrangle areas. The GeoPDF files are viewable using widely-available commercial software packages.

Data development partnerships will enhance the holdings of *The National Map*. Integration of additional content will begin with national hydrography and contour data, after which these layers will be added to the maps.

With time, the NGP’s Map-on-Demand system will be enhanced to provide an online tool for users to create their own maps for customized areas from the most current data in *The National Map*. Tools also will be made available to discover, obtain, and overlay geospatial datasets from other sources.

More Information

The USGS (www.usgs.gov)

“Digital Maps—Beta” (http://nationalmap.gov/digital_map/)

The National Map (nationalmap.gov)

“Digital Map—Beta” Download (http://nationalmap.gov/digital_map/quickstart.pdf)

NAIP (<http://www.fsa.usda.gov/FSA/apfoapp?area=home&subject=prog&topic=nai>)