# Tips Tricks By Ariel Doumbouya, USGS, National Geospatial Program

#### USGS Adds 100K Topo Scale to OnDemand Map Products

For this months GIS Tips & Tricks, we are revisiting the U.S. Geological Survey (USGS) National Map topoBuilder tool. topoBuilder was featured in this column shortly after its initial release in October 2022. Since then, topoBuilder has become the "goto" application for USGS topographic maps and recently updated to accommodate even more features. This month, our guest columnist, Ariel Doumbouya, USGS, provides an update and tutorial to some new features in topoBuilder.

OnDemand Topo map users now have more map scale options available to them with debut of the 100K Topo or 1:100,000-scale mapping capability within the free topoBuilder application (Figure 1).

#### BACKGROUND

In February 2022, the National Geospatial Program first launched topoBuilder, a customer driven, on-demand, topographic mapping capability that enables everyone, regardless of their level of map or data expertise, to build their own customized topographic maps, known as OnDemand Topos.

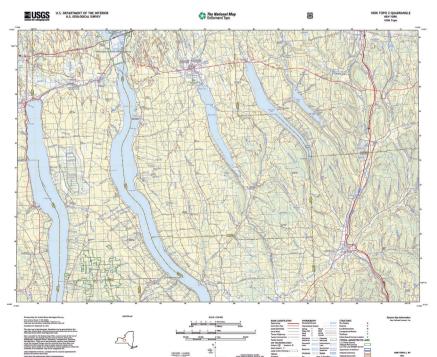


Figure 1. 100K Topo of Auburn, NY.

The addition of the 100K Topo provides a digital 1:100,000-scale mapping capability and is the first USGS expansion of its initial OnDemand Topo map options. The 100K Topo is considered a medium-scale map, ideal for providing a broad topographic overview of landscapes across a larger area and is useful for activities like recreational trip planning, land management, emergency response and more.

#### **UPDATE FEATURES**

Prior the release of 100K Topo, OnDemand Topos were initially available generally at the 1:24,000 scale or 7.5-Minute Topo, a large-scale map which closely resembles historical 7.5-minute USGS map products and US Topo maps. These are an all-purpose map scale ideal for recreation use, real estate and more.

With the addition of 100K Topo, users can now choose between it and 7.5-Minute Topo map options when creating their custom on demand maps. To learn more about map scales and how they differ in detail, content, and area coverage please visit the USGS Map Scales publication.

#### **CREATING AN ONDEMAND TOPO**

Regardless of mapping expertise, users can access the free topoBuilder application powered by the latest National Map data to make their own OnDemand Topo whenever they are needed as maps are created at the time the user requests them.

With the release of the 100K Topo, USGS topographic map coverage at the 1:100,000-scale expands from the historically available conterminous United States and Hawaii to now include Alaska and the U.S. Territories of Guam, Puerto Rico, American Samoa, Commonwealth of the Northern Mariana Islands, and U.S. Virgin Islands for the very first time.

Photogrammetric Engineering & Remote Sensing Vol. 90, No. 7, July 2024, pp. 389-390. 0099-1112/22/389-390

© 2024 American Society for Photogrammetry and Remote Sensing

doi: 10.14358/PERS.90.7.389

Step #1 — Maps are centered based on the user's area of interest and can be generated in either a georeferenced PDF or TIFF file format. Users can also utilize a tool to select National Map data content they'd like included on their map such as contours generated from the data.

Step #2 — Once in the topoBuilder web application, users simply select their "map type" as either a 100K Topo or 7.5-Minute Topo. Next, users select their area of interest for their map either by zooming in to the map to custom select a desired area or by using the search bar at the top right of the screen. Once the area of interest has been selected, users can customize their desired export format type, National Map data, and other customization options depending on map type selected (Figure 2).

Step #3 — The selected map(s) are added to the cart, then adding the request(s) to the topoBuilder queue by entering their email address and the resulting map(s) are typically delivered by email within 24 hours.



Figure 2. topoBuilder interface showing selection of on-grid and custom extent 100K Topos.

All OnDemand Topo maps are available to the public for free and users can request an unlimited number of maps, regardless of scale type.

We invite and encourage all to visit topoBuilder.NationalMap.gov to build a customized OnDemand Topo today!

If you have questions, need help, or to offer your feedback, please contact us at tnm\_help@usgs.gov.

For general GIS Tips & Tricks send you questions, comments, and tips to: GISTT@  ${\tt ASPRS.org}$ 

Ariel Doumbouya is the Cartographic Products Lead for the U.S. Geological Survey's National Geospatial Program, overseeing the planning, development, and coordination of digital cartographic products and content. She provides technical guidance and expertise in cartographic design, data content, quality assessment and control, integration, aggregation, and dissemination of cartographic products, including strategic planning for future capabilities.

Al Karlin, Ph.D., CMS-L, GISP is with Dewberry's Geospatial and Technology Services group in Tampa, FL. As a senior geospatial scientist, Al works with all aspects of lidar, remote sensing, photogrammetry, and GIS-related projects.

#### **ASPRS Directory**

### Membership/PE&RS Subscription

office@asprs.org

#### Conferences

programs@asprs.org

#### Certification

applications@asprs.org

#### Calendar

calendar@asprs.org

#### **ASPRS Bookstore**

office@asprs.org

#### **ASPRS Foundation**

foundation@asprs.org

#### **ASPRS Board of Directors**

asprsboard@asprs.org

#### **Student Advisory Council**

sac@asprs.org

## Early-Career Professionals Council

ecpc@asprs.org

#### **Region Officers Council**

roc@asprs.org

#### **Sustaining Members Council**

smc@asprs.org

## Technical Division Directors Council

tddc@asprs.org

#### **Mailing Address**

PO Box 14713

Baton Rouge, LA 70898 225-408-4747, 225-408-4422 (fax)

www.asprs.org

#### **ASPRS Workshop Series**

## It's not too late to earn Professional Development Hours

Miss one of our Live Online Workshops? You can purchase the workshops now and watch when you are ready!

Check out the workshops offered by visiting

https://asprs.prolearn.io/catalog