

OnDemand Topo Map Symbols

What is an OnDemand Topo map?

The 100K Topo map is a general purpose, digital topographic map that covers 60 minutes of longitude by 30 minutes of latitude (an area of approximately 1,500 to 2,200 square miles) and is produced at a scale of 1:100,000. 100K Topo maps are one configuration of OnDemand Topo maps, which are free, customizable, U.S. Geological Survey topographic maps generated upon request using the topoBuilder web application (<https://topobuilder.nationalmap.gov>). OnDemand Topo maps are intended for conventional map users, not for advanced GIS analysis. The map content is less detailed than the larger-scale OnDemand Topo counterparts yet should still provide a level of detail for many land management and recreational uses. More information about OnDemand Topo maps and their use is available at <https://www.usgs.gov/programs/national-geospatial-program/topoBuilder>.

All OnDemand Topo maps are available in Portable Document Format (PDF) with geospatial extensions as well as TIFF file format. PDF maps can be viewed and printed with any conforming PDF software. Versions 9.x and later of Adobe® Reader® and Acrobat® software provide access to the geospatial functionality of an OnDemand Topo. Adobe Reader is available for free at <https://get.adobe.com/reader>.

Feature data is incorporated from national Geographic Information System (GIS) databases under the stewardship of The National Map (TNM). A portion of this large-scale data is generalized to the 1:100,000 scale for improved cartographic interpretation. Most data sources used are in the public domain and may be downloaded for free from The National Map download application (<https://apps.nationalmap.gov/downloader>).

Base content represented in these maps are derived from The National Map geospatial data themes as follows:

- elevation, such as contours and shaded relief;
- surface hydrography, such as lakes and rivers;
- geographic names, including natural features and populated places;
- transportation, including roads and recreational trails;
- boundaries, both jurisdictional and administrative;
- manmade structures, such as fire stations; and
- selected land use classifications.

OnDemand Topo Map Content

Each map is made at a scale of 1:100,000 (one inch on the map represents 100,000 inches or 8,333 feet on the ground) with selected features shown and emphasized by symbols and names.

Map features may be represented as points, lines, or polygons depending on their size and extent. They incorporate different colors and patterns to distinguish between feature types and to show each feature's importance.

Point symbols of different shapes and sizes depict small-extent features such as structures, dams, waterfalls, and wells. Linear map symbols (lines) of different colors and textures including straight, curved, solid, or dashed, represent features such as roads, rivers, and contours. Polygon features are usually the first features to be noticed on a topographic map and cover the map in some color or texture, sometimes having an outline to depict the areal extent. Polygon features include vegetation (green) or water (blue). Names and labels are shown in different fonts, sizes, and colors.

A unique feature of a topographic map is the contour. These lines do not exist on the Earth's surface. They join points of equal elevation and therefore show heights of the land and reveal the shape of the land surface. Thicker brown lines are index contours and are labeled with the elevation they represent. Closely spaced contours indicate a steep land slope; widely spaced contours show more level ground. The elevation difference between adjacent contours is the contour interval. A map of a relatively flat area may have a contour interval of 10 feet. In steep areas an interval of 100 feet or more may be used to avoid coalescence or convergence of the contour lines. The contour interval is always noted in the bottom map marginalia.

The cartographic representation of roads is based on a functional classification defined as follows:

- Expressway¹: A controlled access, divided arterial highway for through traffic.
- Secondary Highway¹: Hard surface highways including secondary State routes, primary county routes, and other highways that connect principal cities and towns, and link these places with the primary highway system.
- Local Connector¹: Hard surface roads not included in a higher class and improved and loose surface roads passable in all kinds of weather. These roads are adjuncts to the primary and secondary highway system and represent major arteries through populated places.
- Local Road¹: Roads used primarily for local traffic.
- Four Wheel Drive Road¹: Unimproved roads passable only with four wheel drive vehicles.








For more information on U.S. Geological Survey topographic maps, please visit <https://www.usgs.gov/TopoMaps>.

¹ Federal Highway Administration Planning Glossary - <https://www.fhwa.dot.gov/planning/glossary/index.cfm>






Emergency Service Features

Fire Station	
Hospital	
Law Enforcement	

Public Service Features

College/University; Technical College	
Court House; City/Town Hall	
Prison	
State Capitol	
State Supreme Court	
US Capitol	
White House; US Supreme Court	

Recreation Features

Cabin	
Campground	
Headquarters; Ranger Station	
Trailhead	
Visitor Center	


Oil & Gas Pipeline Features

Alaska Pipeline	
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Airport Features

Heliport	
Seaplane	
Airports	
Airport Runway	

Railroad Features

Railroad	
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Road Features

Closed Road	
Expressway	
Ferry	
Four Wheel Drive	
Local Connector	
Local Road	
Ramp	
Secondary Highway	
Tunnel (Connector)	
Tunnel (Highway)	
Tunnel (Local)	





Road Shields

Interstate Route	
State Route	
US Route	

























Trails

Standard	
Snow	
Water	

Contour Features

Index	
Intermediate	
Depression Index	
Depression Intermediate	

Hydrography Features

Gaging Station	
Rock	
Spring	
Waterfall	
Well	
Earthen Dam	
Nonearthen Dam	
Nonearthen Shore	
Pipeline	
Underground Pipeline	
Underground Conduit	
Flume	
Levee	
Rapids/Waterfall	
Reef	
Tunnel	
Intermittent Streams	
Perennial Streams	
Canal/Ditch	
Area of Complex Channels	
Dam	
Foreshore	
Inundation Area	
Submerged Stream	

Hydrography Features - continued

Wash	
Ice Mass	
Intermittent Lake	
Perennial Lake	
Settling Pond	
Tailings Pond	
Ocean	
Estuary	
Nonearthen Reservoir	
Playa	

Wetland Features

Freshwater Emergent Wetland	
Freshwater Forested/Shrub Wetland	

Land Cover

Woodland	
Shrub/Scrub	
Grassland	
Crop/Pasture	
Barren	

Boundaries

Wild Scenic River	
American Indian, Alaska Native, and Native Hawaiian Area	
U.S. Forest Service	
National Park Service	
U.S. Fish and Wildlife Service	
Department of Defense	
National Cemetery	
National Monument	
Wilderness Area	
Bureau of Land Management	
International Boundary Line	
State Or Territory	
County Or Equivalent	

PLSS

Land Grant	
Section	
Section Protracted	

Township/Range

T 34 NR 79 W

Township/Range Protracted

T 34 NR 79 W

Shaded Relief

Shaded Relief

