





What is a US Topo map?

A US Topo map is a digital topographic map that covers 7.5-minutes of longitude by 7.5-minutes of latitude and is produced at a scale of 1:24,000. US Topo maps are freely distributable and are available for download on the Web from the USGS Store (<u>https://store.usgs.gov</u>) in Portable Document Format (PDF) with geospatial extensions. 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 function-ality of the US Topo map. Adobe Reader is available for free at <u>http://get.adobe.com/reader</u>. More information about US Topo maps and their use is available at <u>https://nationalmap.gov/ustopo</u>.

The base data layer of a US Topo map is a recent orthographic aerial photograph. These orthoimages have been corrected to remove scale distortions that result from the varying terrain and deviations of the aircraft's position from the true vertical. The maps include contours that show the shape of the Earth's surface, hydrographic features such as lakes and rivers, roads, boundaries, and geographic names. Additional data from the geographic data themes of transportation, names, elevation, hydrography, boundaries, structures (such as fire stations) and land cover (such as woodland tint) is being added to the maps as they are updated, resulting in a product that will become progressively more robust over time. Feature data is incorporated from national Geographic Information System (GIS) databases under the stewardship of USGS data programs. The US Topo map is intended for conventional map users, not for advanced GIS analysis. However, most of the data sources used are in the public domain and may be downloaded for free from *The National Map (TNM)* (*https://nationalmap.gov*).

US Topo maps are revised on a three-year production cycle.

Symbols on US Topo Maps

The underlying orthoimage for each US Topo map shows those features on the Earth's surface that are visible to the eye. Because each map is made at a scale of 1:24,000 (one inch on the map represents 24,000 inches or 2,000 feet on the ground), selected features are also shown and emphasized by symbols, geographic names, and highway route numbers.

Map features may be represented as points, lines, or polygons. They incorporate different colors and patterns to distinguish between feature types and to show each feature's importance. For example, a perennial stream is symbolized by a solid blue line while an intermittent stream is shown by a blue dashed and dotted line. A large reservoir is depicted by a polygon while a small reservoir may be shown by a point symbol if it is too small to show as a polygon.

Point symbols of different shapes and sizes depict features such as structures, dams, gates, rocks, waterfalls, and wells. Linear map symbols (lines) show such features as roads, rivers, boundaries, and contours. Color is used to show the class of information: topographic contours in brown, streams and rivers and other hydrographic features in blue, and roads in black and red. Areal features are outlined to depict the areal extent and may also be emphasized by a color tint. Names and labels are shown in different type fonts, sizes, and colors.

The 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 above a zero level surface (such as Mean Sea Level) and therefore show heights of the land and reveal the shape of the land surface. Heavier 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 below the bar scale in the map marginalia.

The cartographic representation of roads has been updated from a characterization based on organizational maintenance (Interstates, US routes, State routes, etc.) to 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, 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.

STRUCTURES

Cemetery	n		
Campground			
Fire Station	B		
Hospital	E		
Police	*		
Post Office	Ð		
Prison	*		
School (K-12)	1		
Trade/Technical School	<u>ط</u>		
College/University	ĥ		
State Capitol	*		
Trailhead	K		
Visitor Center	V		
Oil/Gas Pipeline*			
FRANSPORTATION			
Airport Features			
Airport Runway			
Railroad Features			
Railroad	-++++++++++++++++++++++++++++++++++++++		
Road Features			
Expressway			
Secondary Hwy			
Ramp			
Local Connector			
Local Road			
4WD			
Ferry			
Tunnel	≻======≪		
Trail			
Road Shields			
Interstate Route	25		
US Route	(830)		
State Route	(470)		
Forest Service Primary Route	240		
Forest Service Secondary Rout	e <u>420</u>		
Forest Service High Clearance	Route ⁷ 2 0		

PLSS T 34 N R 79 W Township/Range T 34 N R 79 W Township/Range (protracted) _____ 1 - 36 Section Section (protracted) 1 - 36 Land Grants **HYDROGRAPHY** • **Gaging Station** Gate Rock × Spring Swimming Pool Well **Perennial Stream** Intermittent Stream Submerged Stream Earthen Dam Nonearthen Dam Dam I Levee Lock Chamber/Spillway Â Rapids Waterfall Perennial Lake Intermittent Lake Reservoir 0 Nonearthen Reservoir Area of Complex Channels Inundation Area Playa Wash Settling Pond

HYDROGRAPHY – continued		BOUNDARIES				
Tailings Pond		Jurisdiction	nal Boundaries			
		Internat	ional			
Ice Mass		State or Territory —				
Canal/Ditch		County or Equivalent				
Flume		Federal Administered Lands				
Pipeline		Forest Service				
Underground Pipeline		National Park Service				
Tunnel		National Comptony				
Underground Conduit						
Capatina		Bureau of Land Management*				
		Eish and Wildlife Service				
Nonearthen Shore						
Keet		AIANNH Area*				
Foreshore		*0 u				
Estuary		*Currently on Alaska US Topo maps only				
		ABBREVATIONS				
Ocean		HwyAIANNH	wy Highway			
Freshwater Emergent Wetland	* * * *	Hawaiian Area				
Freshwater Forested/Shrub Wetlar	nd [—] ———————————————————————————————————	100				
TERRAIN		Note: Sumb	 	aalar Whan thaaa		
Contour Features		symbols ove	rlap the colors blend	d. This alters their		
Index	8000	appearance from how they are represented in the map legend.				
Intermediate						
Supplemental						
Depression Index	4000					
Depression Intermediate						
Depression Supplemental						
Shaded Relief						
Shaded Relief	A SIL					
LAND COVER						
Woodland						
IMAGES						
Orthoimage						