



Topographic Map Resources for Teachers

How to obtain USGS Topographic Maps

- Download free traditional topographic maps in a GeoPDF format by going to the USGS Store (<http://store.usgs.gov>) and clicking on “Map Locator”. These are high-resolution scans of paper maps.
- Download the next generation “US Topo” digital topographic maps from the same site. US Topo maps are available for almost every state and will be available for all states by the end of 2012. Learn more at <http://nationalmap.gov/ustopo>
- Order paper topographic maps (traditional or US Topo) through the same Map Locator site at the USGS Store (<http://store.usgs.gov>).
- To browse popular thematic maps, go to the USGS Store (<http://store.usgs.gov>) and click on “Education Products”.

Questions? Need help on any USGS topic? Call 1-888-ASK-USGS (1-888-275-8747) or go to <http://www.usgs.gov/ask>

What’s New?

US Topo – The Next Generation of Maps
nationalmap.gov/ustopo/index.html

Scanning and Georeferencing Historical USGS
Quadrangles
pubs.usgs.gov/fs/2011/3009

Historical Topographic Map Collection
nationalmap.gov/historical/index.html

History

A 125 Year History of Topographic Mapping and
GIS in the U.S. Geological Survey
nationalmap.gov/ustopo/history.html

Topographic Mapping (historical reference)
egsc.usgs.gov/isb/pubs/booklets/topo/topo.html

History of the USGS Topographic Branch
pubs.usgs.gov/circ/1341

Historical Mapping Photographs
gallery.usgs.gov/search/Photos/topographic

Interpreting Topographic Maps

All about USGS Topographic Maps
topomaps.usgs.gov

Map Scales
egsc.usgs.gov/isb/pubs/factsheets/fs01502.html

Topographic Map Symbols
edc2.usgs.gov/pubslists/booklets/symbols/topomapsymbols.pdf

Topographic Map Margins for Educators
education.usgs.gov/lessons/mapmargin.pdf

Map Margins (short version of the above)
<https://my.usgs.gov/Public/CR-GIO/GPSWorkshops/MapMarginInfo1.pdf>

Topographic Maps Illustrating Physiographic
Features
www.nationalatlas.gov/100topos/index.html
and rockyweb.cr.usgs.gov/outreach/featureindex.html

Elevations and Distances in the United States
egsc.usgs.gov/isb/pubs/booklets/elvadist/elvadist.html

Geographic Names
geonames.usgs.gov/domestic/index.html

Coordinates, Datums, & Projections

Using Topographic Maps to Teach Coordinate Systems
education.usgs.gov/lessons/coordinatesystems.pdf

Latitude and Longitude
nationalatlas.gov/articles/mapping/a_latlong.html

UTM Coordinates
egsc.usgs.gov/isb/pubs/factsheets/fs07701.html

State Plane Coordinate System
www.usgs.gov/faq/index.php?action=artikel&cat=12&id=856&artlang=en&highlight=spcs&search=true

Public Land Survey System
www.nationalatlas.gov/articles/boundaries/a_plss.html

Principal Meridians and Base Lines
www.blm.gov/wo/st/en/prog/more/cadastralsurvey/meridians.html

Datum Shifts
thor-f5.er.usgs.gov/drg/datum_shifts_v2.pdf

Map Projections Poster
(Order a free hard copy at <http://store.usgs.gov>, product #16573)
egsc.usgs.gov/isb/pubs/MapProjections/projections.html

Map Projections Article
www.nationalatlas.gov/articles/mapping/a_projections.html

Map Projections: A Working Manual
pubs.er.usgs.gov/publication/pp1395

Using Topographic Maps

Finding Your Way with a Map and Compass
egsc.usgs.gov/isb/pubs/factsheets/fs03501.html

How to Use a Compass with a USGS Topographic Map
education.usgs.gov/lessons/compass.html

U.S. Department of the Interior
U.S. Geological Survey

Magnetic Declination
geomag.usgs.gov/downloads/publications/pt_love0208.pdf

Magnetic Declination Animation
geomag.usgs.gov/movies/movies/index.php?type=declination&format=flash

Using Maps in Genealogy
egsc.usgs.gov/isb/pubs/factsheets/fs09902.html

Lessons and Activities

27 Ideas for Teaching with Topographic Maps
education.usgs.gov/lessons/teachingtopomaps.html

Topo Salad Tray Model – a Classroom Project
education.usgs.gov/lessons/toposaladtray.pdf

Map Mysteries
education.usgs.gov/lessons/map_mysteries.html

Map Adventures (Grades K-3)
egsc.usgs.gov/isb/pubs/teachers-packets/mapadventures

What Do Maps Show? (Grades 5-8)
<http://egsc.usgs.gov/isb/pubs/teachers-packets/mapshow/>

Exploring Maps (Grades 7-12)
egsc.usgs.gov/isb/pubs/teachers-packets/exploringmaps

Teaching with USGS Topographic Map Margins
education.usgs.gov/lessons/mapmargin.pdf

Teaching About and Using Coordinate Systems
education.usgs.gov/lessons/coordinatesystems.pdf

<http://education.usgs.gov/lessons/mapresources.html>
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