FSTopo Legacy PDF Metadata

Tags

FSTopo Legacy, Topographic, Quadrangle, Cartographic, Historic, Imagery Base Maps Earth Cover

Summary

The FSTopo Legacy PDF is a (USFS) historical reference product that has been replaced with the new FSTopo in the FS Base Map series. The FS Base Map PDF will be the most up to date product, while FSTopo Legacy PDF will remain as a static product. The FSTopo Legacy PDF maps are geo-enabled PDF files for the entire set of Forest Service Primary Base Series topographic quadrangle maps created from the FSTopo Legacy database. FSTopo Legacy PDF map product is created using FSTopo Legacy symbology and specifications and is a static product since 2023.

An FSTopo Legacy PDF can be viewed using free Adobe Reader software. The high quality of the PDF enables offset lithographic printing. The FSTopo Legacy PDF contains feature layers which can be toggled on and off for display purposes. The geo-enabled functionality can be activated through the Adobe Edit menu, by clicking the 'Geospatial Location Tool' under Analysis.

The FSTopo Legacy is created at 1:24,000-scale (7.5-minute Quadrangles for the conterminous United States and Puerto Rico, and 1:63,360-scale (15-minute Quadrangles) over Alaska. The FSTopo Legacy Area of Interest covers the USFS National Forests and Grasslands. The cartographic database was updated accordingly as new data sources were added by means of data revision activities, which were coordinated between the National Forest/Grassland units and the USFS Geospatial Technology and Applications Center (GTAC).

Description

The FSTopo Legacy database was originally populated with Cartographic Feature File (CFF) data which was digitized from either the Primary Base Series (PBS) quadrangles or U.S. Geological Survey (USGS) topographic map series quadrangles. Data completeness reflects the content of the original source graphic, digital correction guide information, stereoscopic source, monoscopic source, supplemented with cadastral source information. Forests and Quadrangles may have undergone revision at varying dates. Check the Full revision date in the collar information.

Descriptive subtypes are used to describe the cartographic symbology characteristics of features:

Cadastral Feature Data Set: All features were derived from the Cartographic Feature File (CFF). Boundary_L andBoundary_P portray boundaries. Ownership_P portrays land that is not owned by the Forest Service within the Proclaimed Forest boundary. The source for updates is the BasicOwnership feature class from the Automated Lands Program (ALP). PLSS_L and PLSS_Pportray Public Land Survey System (PLSS). The source for updates is data from the Township and Section feature classes from the Automated Lands Program (ALP) and the BLM CAD-NSDI. Survey_L and Survey_X portray Public Land Survey System (PLSS) Land Grants, Survey Lines, Tract lines, monuments, land grants, and survey points.

Cultural Feature Data Set: All features were derived from the Cartographic Feature File (CFF). Building_P portrays large building footprints greater than 100 feet along the longest axis are displayed as polygon features. Building_X portrays small buildings are

portrayed as point features. Built-up Area_P portrays Urban areas where only landmark buildings are portrayed. Culture_P, Culture_L and Culture_X portray manmade features such as Fish Hatcheries, Pools, Piers, Sewage Disposal, Pipelines, Power Lines, Ski Lifts, Fences, Mines, Lighthouses, Located Objects, Prospects, Drill Holes, etc. This feature class was derived from the Cartographic Feature File (CFF). Large Tank_X portrays variable size point features, where the 'tank_radius' field defines the size. Recreation/Forest Service Facilities_X portrays Recreational locations, such as Campgrounds, Picnic Areas, Trailheads. The layer also contains Forest Service Offices and Facilities. The source for the Recreation facility feature class is the Infra database, which is the USFS authoritative database for manmade features.

Elevation Feature Data Set: ContourFS_L portrays elevation contour lines for the Alaska and Puerto Rico Area of Interest. This feature class was derived from the Cartographic Feature File (CFF). The contour labels for the CotourFS_L are displayed in the ContourFSAK_A (Alaska) and ContourFSPR_A (Puerto Rico). ContourFSAK_A contains elevation contour labels for the Alaska area of interest (for use with the ContourFS_L feature Class). ContourFSPR_Acontains elevation contour labels for the Puerto Rice area of interest (for use with the ContourFS_L feature Class). Spot Elevation (points) Marks the location of spot elevations. Elevation values are displayed in the PBS Text layers. The elevation contours for the conterminous USA was obtained from the USGS and clipped to the FSTopo Legacy area of interest. The elevation contours for the conterminous USA can be downloaded from the USGS National Map Viewer. The Countour labels for the USGS elevation contours are available for the FSTopo Legacy area of interest in the ContourUSGS_A (The USGS uses autolabels, rather than annotation).

Geodetic Feature Data Set: GeodeticControl_X contains Vertical and Horizontal control locations. This feature class was derived from the Cartographic Feature File (CFF).

Hydrographic Feature Data Set: All features were derived from the Cartographic Feature File (CFF). Drainage_L portrays features associated with water lines such as Rivers, Streams, Shorelines, Canals, Dams, etc. Drainage_P portrays features associated with water bodies such as Open Water, Swamps, Glaciers, etc. Drainage_X portrays features associated with water such as Springs, Wells, Boat Access, Gaging Stations, etc. Offshore_L portrays Offshore features, such as exposed Rock, Wreck, Shoal, Pile, Coral Reef, and Large Area Outline. Offshore_X portrays Offshore features, such as Exposed or Sunken Rocks, Wreck, and Pile.

Landcover Feature Data Set: Woodland_P portrays the US Topo vector data was obtained from the USGS for the conterminous states and Puerto Rico. This dataset was clipped to the Forest Service area of interest of FSTopo Legacy quadrangles. Data is available for download from the USGS National Map Viewer. The Woodland is a derivative land cover product created using six national map layers: three National Land Cover Database (NLCD) 2001 raster layers (Tree Canopy, Imperviousness, and Land Cover); and three vector layers (National Hydrography Dataset, Transportation Roads, and Transportation Airports). The process begins with masking the NLCD 2001 Canopy Data with NLCD 2001 Imperviousness V1 (values from 1-100), and Land Cover V1 (value 11 = Open Water). The resulting raster data with canopy values of 20 and greater are converted to woodland vector polygons and smoothed via the Paek Algorithm. The woodland polygons are masked with buffered Transportation and Hydrography (NHD Areas and NHD Waterbodies excluding Swamp/Marsh). The resulting polygons are checked for scale appropriate size (minimum size of one acre), and the small woodland polygons as well as small clearings within the woodland polygons are deleted.

Landform Feature Data Set: All features were derived from the Cartographic Feature File (CFF). Landform_L portrays surface features that have geographic significance such as Continental Divides, Levees and Spoil Banks. Landform_P portrays surface features that have geographic significance such as Glacial Moraines, Gravel or Lava Areas, Dry Lakes or Ponds, Mines, etc.

Reference Layers Feature Data Set: Quadrangle portrays the FSTopo Legacy quad footprint. Quadrangles with a Vintage > 0 (greater than zero) make up the FSTopo Legacy area of interest.

Transportation Feature Data Set: All features were derived from the Cartographic Feature File (CFF). Airfield_L portrays Heliports, Seaplane Bases, Landing Strips, Airport Outlines, etc. Airfield_X portrays Helipads, Helispots, Seaplane Anchorages or Bases. Arrows_L contains variable length arrows, used to point to features where labeling would otherwise be unclear. Example: Road number symbol pointing to a road. Railroads_L portrays features associated with Railroad Tracks. Road Shield48_X contains Interstate, U.S., State, County route marker,s vertical and horizontal Forest Service road boxes. The name field is used to label the point symbol. Conterminous US and Puerto Rico 1:24,000. Road ShieldAK_X contains Interstate, U.S., State, County route markers, vertical and horizontal Forest Service road boxes. The name field is used to label the point symbol. Alaska, 1:63,360. Transportation_L contains transportation features ranging from Trails to Highways. The source for this feature class is local, county, and state data as well as the Infra database, which is the USFS authoritative database for manmade features. Transportation_X contains features such as Gates, Berms, Bridge Abutments, etc.

Credits

USDA Forest Service, Geospatial Technology and Applications Center (GTAC)

Topics and Key words

Imagery Base Maps Earth Cover, planning, Cadaster, Boundary, Topographic, FSTopo Legacy, Cadastral, Quadrangle, Cartographic, Historic

Citation

TITLE FS FSTOPO LEGACY
PRESENTATION FORMATS hardcopy map
FGDC GEOSPATIAL PRESENTATION FORMAT map

Resource Details

DATASET LANGUAGES English
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format
STATUS FINAL
SPATIAL REPRESENTATION TYPE vector

SUPPLEMENTAL INFORMATION

The FSTopo Legacy database was originally populated with Cartographic Feature File (CFF) data which was digitized from either the Primary Base Series (PBS) quadrangle or, if not available, U.S. Geological Survey (USGS) topographic map series quadrangle. Over time, the legacy CFF data is being replaced (at least partially) with data from nationally standardized sources. Features were constructed to meet National Map Accuracy Standards, which require that 90 percent of all well-defined features shown on the map are within .02 inches of their true location. At a scale of 1:24,000-scale, .02 inches represents 40 feet on the ground. Digitizing was performed by the USFS Geospatial Technology and Applications Center (GTAC) formerly the Geospatial Service and Technology Center (GSTC).

The data was produced by one of the following methods: 1) Scanning a stable-based copy of the graphic materials. CFF were then manually digitized and attributed on an interactive computer editing station. 2) Manually digitizing from a stable-based copy of the graphic material using a digitizing table to capture the digital data. Typically, digitizing tables had a resolution of .001 inch, with a statistical repeatability of .003 inch. Attribution was performed as the data were digitized on an interactive edit station. Four control points corresponding to the four corners of the quadrangle were used for registration during data collection. A four-parameter affine transformation was performed from the processing software internal coordinates to State Plane (NAD 27) grid coordinates. The data was checked for positional accuracy by one or more of the following processes: comparing plots of the digital data to the graphic source, comparing the digital data to the digital raster scan, comparing the digital data to the graphic source. The original data was collected in State Plane (NAD 27) coordinates and databased in Geographic (NAD 27). It has since been converted to Geographic (NAD 83). Revisions to the data are performed in UTM (NAD 83).

The attribute accuracy was tested by one or more of the following methods in accordance with the data vintage: feature comparison with aerial photography, color display of CFF on interactive computer graphic system; manual comparison of the source with hard-copy plots; symbolized display of CFF on an interactive computer graphic system; selected attributes that could not be visually verified on plots or on screen were interactively queried and verified on screen. All attribute data conform to the attribute codes as of the date of digitizing.

Thematic and feature level metadata was updated accordingly as new data sources were added to the FSTopo Legacy database by means of data revision activities, which are coordinated between the National Forest/Grassland units and the USFS Geospatial Technology and Applications Center (GTAC). Data themes are updated by request of the unit using USFS corporate data, such as Cadastral data from the Automated Lands Program and Road, Trail, or Recreation data from the Infra database. Local, County and State data is used for areas outside the proclaimed forest extending the data to the Quadrangle's outline/footprint.

Extents

GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
WEST LONGITUDE -150.002184
EAST LONGITUDE 0
SOUTH LATITUDE -49.612799
NORTH LATITUDE 84.828027

Resource Point of Contact

POINT OF CONTACT
Geospatial Technology and Applications Center (GTAC)
US Forest Service
SM.FS.data@usda.gov

Resource Maintenance

UPDATE FREQUENCY **FINAL**

Use limitations

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