DATASET	DESCRIPTION	ADDITIONAL INFO	DATA AVAILABILITY
USGS Topo Vector	• Acquires the vector data used to create the modern USGS 24K Topo Maps. Once acquired for the AOI, the data is dissolved across quad boundaries	• The data is made available as individual GDBs for each 7.5 x 7.5 minute quad, and is retrieved from the USGS Staged Products repository at: *https://prd-tnm.s3.amazonaws.com/index.html?prefix=StagedProducts/TopoMapVector/* • Once processing has finished, two layer files are copied to the user specified output folder. The layer files will need to be manually resourced. One references the singlepart polyline feature classes, while the other references the multipart polyline feature classes. I have found that the multipart feature classes can yield cleaner labels, but take longer to draw • The USGS Topo Vector script was developed by Carl Beyerhelm, Sundance Consulting, Inc., with portions adapted from Matt Panunto DOI-BLM	Lower 48 Alaska Hawaii Puerto Rico US Virgin Islands Guam American Samoa
USGS Topo Raster 24K	• Acquires USGS 24K Topo Map PDFs for the AOI, and converts them to GeoTIFFs. An output mosaic is then created from the GeoTIFFs	• Currently, the USGS 24K Topo Maps are not available as rasters, and can only be downloaded as PDFs for each 7.5 x 7.5 minute quad. This dataset is available from the USGS Staged Products repository at: *https://prd-tnm.s3.amazonaws.com/index.html?prefix=StagedProducts/Maps/USTopo/PDF/* • This dataset must be aquired by running the tool in ArcMap, as the "PDF to TIFF" conversion tool is not available in ArcGIS Pro • After the output mosaic is generated, users can either manually apply RGB color values to each class in ArcMap, or they can use the included "Topo Raster 24K Symbology" script tool in ArcGIS Pro. This tool only works in ArcGIS Pro, therefore, opting to use it will only allow users to create a .lyrx file after it applies the correct symbol colors	Lower 48 Alaska Hawaii Puerto Rico US Virgin Islands
USGS Historical Topo Raster 100K	• Acquires USGS Historical 100K Topo Map GeoTiffs for the AOI, then creates an output raster mosaic	• I attempted to identify the most recent USGS Historical 100K Topo Map GeoTiff available for each 30x60 minute quad. To do so, I referenced the master topo map spreadsheet found at: *https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/Metadata/topomaps_all.zip*	Lower 48 Alaska Hawaii
USGS Historical Topo Raster 250K	• Acquires USGS Historical 250K Topo Map GeoTiffs for the AOI, then creates an output raster mosaic	• I attempted to identify the most recent USGS Historical 250K Topo Map GeoTiff available for each 1x2 degree quad. To do so, I referenced the master topo map spreadsheet found at: *https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/Metadata/topomaps_all.zip*	Lower 48 Alaska Hawaii
USFS Topo Vector	• Acquires vector data used to create the modern USFS Topo Maps. The data is then clipped to the AOI	• The data is made available as a series of GDBs with nationwide data coverage: *https://data.fs.usda.gov/geodata/vector/index.php* • Since the data is not organized by quad, it is downloaded in full for the entirety of the US, then clipped to the AOI • For an AOI in the Lower 48, this dataset relies on the USGS Topo Vector dataset to provide contour lines. As such, users will need to download both datasets • A single layer file that references the output GDB is copied to the user specified output directory. The layer file will need to be manually resourced • Unlike the USGS Topo Vector dataset, the USFS Topo Vector dataset uses annotations instead of labels. For the annotations to display properly, a series of fonts must be installed on the user's computer, which can be obtained at: https://data.fs.usda.gov/geodata/vector/fstopo/FSTopo_Layer_files_and_fonts.zip	Lower 48 Alaska Puerto Rico
USFS Topo Raster 24K	• Acquires USFS 24K Topo Map GeoTiffs for the AOI, then creates an output raster mosaic	• Topo GeoTIFFs are available at 1:24,000 scale for Lower 48 and Puerto Rico, and 1:63,360 for Alaska. This dataset can be retrieved from the FSTopo Map website at: *https://data.fs.usda.gov/geodata/rastergateway/states-regions/states.php* • After the output mosaic is generated, users can either manually apply RGB color values to each class in ArcMap, or they can use the included "Topo Raster 24K Symbology" script tool in ArcGIS Pro. This tool only works in ArcGIS Pro, therefore, opting to use it will only allow users to create a .lyrx file after it applies the correct symbol colors	Lower 48 Alaska Puerto Rico
NAIP Imagery	• Acquires NAIP imagery for the AOI, then creates a mosaic dataset	• NAIP imagery is acquired from the USDA NRCS county-wide mosaic repository: https://nrcs.app.box.com/v/naip	Lower 48
Surface Management Agency	• Acquires the SMA dataset, then clips to AOI	• The data is made available as a single GDB with nationwide data coverage: *https://gis.blm.gov/EGISDownload/LayerPackages/BLM_National_Surface_Management_Agency.zip* • Since the data is not organized by quad, it is downloaded in full for the entirety of the US, then clipped to the AOI • A new field is created in the output feature class that simplifies the land ownership to major categories. A layer file that references this field is copied to the user specified output directory. The layer file will need to be manually resourced.	Lower 48 Alaska
DEM 10 Meter	• Acquires 1/3rd Arc Second (~10m) 3DEP ESRI Grids for the AOI, then creates a mosaic dataset	• The 1/3rd Arc Second 3DEP DEMs exist as a 1 x 1 degree quad dataset, and is retrieved from the USGS Staged Products repository at: *https://prd-tnm.s3.amazonaws.com/index.html?prefix=StagedProducts/Elevation/13/TIFF/* • A projected coordinate system should be specified for the output DEM if users are intending to also generate the Hillshade 10 Meter and Vector Hillshade 10 Meter products	Lower 48 Alaska Hawaii Puerto Rico
Hillshade 10 Meter	• Creates a Hillshade raster using the DEM 10 Meter mosaic dataset	• The DEM 10 Meter dataset is required in order to generate the Hillshade 10 Meter dataset	Lower 48 Alaska Hawaii Puerto Rico
Vector Hillshade 10 Meter	• Creates a Vector Hillshade GDB from the Hillshade 10 Meter raster	• The Hillshade 10 Meter dataset is required in order to generate the Vector Hillshade 10 Meter dataset • A layer file that references the output GDB is copied to the user specified output directory. The layer file will need to be manually resourced. • The Vector Hillshade script was written by Zach Beck - State of Utah AGRC	Lower 48 Alaska Hawaii Puerto Rico
DEM 30 Meter	• Acquires 1 Arc Second (~30m) 3DEP ESRI Grids for the AOI, then creates a mosaic dataset	• The 1 Arc Second 3DEP DEMs exist as a 1 x 1 degree quad dataset, and I retrieved from the USGS Staged Products repository at: *https://prd-tnm.s3.amazonaws.com/index.html?prefix=StagedProducts/Elevation/1/TIFF/* • A projected coordinate system should be specified for the output DEM if users are intending to also generate the Hillshade 30 Meter and Vector Hillshade 30 Meter products	Lower 48 Alaska Hawaii Puerto Rico
Hillshade 30 Meter	• Creates a Hillshade raster using the DEM 30 Meter mosaic dataset	• The DEM 30 Meter dataset is required in order to generate the Hillshade 30 Meter dataset	Lower 48 Alaska Hawaii Puerto Rico
Vector Hillshade 30 Meter	• Creates a Vector Hillshade GDB from the Hillshade 30 Meter raster	• The Hillshade 30 Meter dataset is required in order to generate the Vector Hillshade 30 Meter dataset • A layer file that references the output GDB is copied to the user specified output directory. The layer file will need to be manually resourced. • The Vector Hillshade script was written by Zach Beck - State of Utah AGRC	Lower 48 Alaska Hawaii Puerto Rico