Map Digitizing

Digitizing in GIS is a process of transferring information from images or maps. You digitize by creating a layer or shapefile in ArcCatalog and then add features in ArcMap. You can digitize points, lines or polygons. When you digitize, you assign spatial and non-spatial attributes to features. Every feature you create will have to be given attribute values in the attribute table.

Helper's Guide

How to Prepare

For Before You Start, you'll need print outs of the aerial view shown in the Explorer's guide to the activity. You'll also need colored pencils. The activity itself will require computers with ArcGIS software installed.

The activity is needed to learn to create geographic features using background information. Creating field and building boundaries is one of the most common usages of map digitizing.

Work your way though this activity before working with explorers. If you have an aerial photo of the area just outside the place where you're meeting and you already have a georeferenced underlying image of the area, you can use that instead of the Capitol.jpg.

This activity uses ESRI ArcCatalog and ArcMap software.

Use ArcCatalog to create shapefiles (point, line, polygon) and specify the attribute fields.

Use ArcMap to digitize or edit the map features. You're strongly advised to close ArcCatalog once the attribute fields are created.

Note: You will not be able to add fields in ArcCatalog when you're using the editing toolbar in ArcMap. It's better to use one piece of software at a time.

Need to Emphasize

- Using ArcCatalog you can create a new point, line or polygon shapefile.
- ArcMap is used for digitizing features.
- The quality of your digitization depends on the source data and personal skills.

Related Links

- http://soa.utexas.edu/crp/gis/arcgis_tips/new_shape_file.html

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