Working with Geospatial PDFs

Geospatial PDF

What

A map document that relates a region on the page to a region in physical space.

It can contain common geometries:

- Points
- Lines
- Polygons

Why

- Paper maps can be cumbersome
- Easy to record accurate data
- Collect points, lines, areas
- Measure distance, perimeter, and area
- Capture georeferenced photos

How Do You Get a Geospatial PDF?

Companies that support Geospatial PDFs

- Avenza Systems
- ESRI
- Bentley
- Pitney Bowes
- SAFE Software
- TerraGo Technologies
- Hexagon Geospatial

Common ways to work with Geospatial PDFs

- Avenza Maps
- ArcMap 10.5.1 (ESRI)
- CalTopo
- The National Map (USGS)

Other Tools

- <u>QR Code Generator</u>
- <u>Dropbox</u>
- Google Earth

Generating Geospatial PDFs Using ArcMap 10.5.1

- Add data to the table of contents
- Switch from the data view to the layout view
- Set up your layout:
 - Title, Scale Bar, North Arrow, Legend, Grid, etc.
- Go to File > Export
- Choose where to save the PDF
- Title the PDF
- Go to the 'Advanced' tab and check "Export Map Georeference Information"
- Your Geospatial PDF is ready!

Pros

Easy to use for those highly familiar with the software Level of customization

Cons

High Cost Very technical software

Generating Geospatial PDFs Using CalTopo

Pros

- Navigate to the <u>CalTopo</u> website
- Zoom to area of concern
- Select base map
- Add desired data:
 - Provided by CalTopo
 - KMI
 - Draw on map
- Print to PDF:
 - Select scale, size, add title
- Your Geospatial PDF is ready!

FREE

Fairly easy to use

Many base map options

Less familiarity for some

Straight to KMZ/KML or GPX

Cons

Some imagery seems dated

Less customization

Less Data manipulation

Downloading Geospatial PDFs Using The National Map

Pros

- Navigate to the <u>National Map</u> <u>Viewer</u>
- Find products associated with your area of interest
- View Results
- Download and save
- Your Geospatial PDF is ready!

FREE

Easy to use

Perfect maps & scales 1:24000

Cons

No customization

No data manipulation

Working with Avenza Maps

Free Version

- \$0.00
- Able to purchase maps
- Can only have 3
 geospatial PDFs
 loaded at one time
- No custom symbology
- Recreational use only

Plus Version

- \$29.99/yr
- Able to purchase maps
- Unlimited number of geospatial PDFs loaded at one time
- No custom symbology
- Recreational use only

Pro Version

- \$129.99/yr
- Able to purchase maps
- Unlimited number of geospatial PDFs loaded at one time
- Custom symbology
- Supports .shp's
- For commercial & professional use

Take some time during the break to try adding maps to Avenza

If you have any questions please ask!