PLSCS 2200: Mapping & Spatial Analysis with GIS

Fall 2021

Module 1: How to Use Geospatial Data with ArcGIS Pro

Directions:

- 1) Create a folder on the desktop of your lab computer called "Lab1."
- 2) From Canvas, download the zipped file called "Lab1Data.zip" to your new Lab1 folder.
- 3) After it's downloaded, right-click on the file and "Extract All..." . Make sure it is going into your Lab1 folder!
- 4) Within Canvas, access the textbook (Instant Access Vital Source) and find Module 1.
- 5) Go through all of the software instructional steps that the chapter provides **but** follow a different path at the very end.
 - a. In Smartbox 1.10, the author illustrates how to save a Map Package (.ppkx) as "Save package to file."
 - b. INSTEAD, choose "Upload package to Online account."
 - c. IF you receive an error message and the package fails to process, then **unclick** the "Include History Items" and try again.
- 6) Complete the questions below, and submit this document to Canvas when it is complete.

Question 1. In what measurement units was the initial map made? (This means it was the units of the first data layer that happened to be added to the map by its author, until someone changes it otherwise. See the last paragraph in Smartbox 1.8).

-3 points

The measurements that the initial map was made was on US feet (US Survey Feet)

Map unit (or measurement unit

Question 2. Fill out the following chart with the information on the datum, projected coordinate system, and units of measurement of each of the layers.

Layer	Datum	Projected Coordinate System	Units of
			Measurement
Airports	D North America 1983	NAD 1983 StatePlane Ohio North FIPS	US Survey Feet
		3401 (US Feet)	
Airports_project	D North America 1983	NAD 1983 UTM Zone 17N	Meters
Area water	D North America 1983	NAD 1983 UTM Zone 17N	Meters
Boundary	D North America 1983	NAD 1983 UTM Zone 17N	Meters
Roads	D North America 1983	NAD 1983 UTM Zone 17N	Meters
Structures	D North America 1983	NAD 1983 UTM Zone 17N	Meters

Question 3. Why can't you just use the "project" option to fix the coordinate info for the area water layer like you did for the airports layer? (Hint: think carefully about what "project" is really doing.)

The project option writes over the already existing later.

Question 4: Jane has been working on a GIS activity, and her supervisor asked her to send the map so that it could be shown during a meeting. Jane saved the map and emailed her supervisor the project file (the .aprx) as an attachment. The supervisor was frustrated that she couldn't get the map to display correctly. **What was the problem, and what did Jane have to do to remedy the situation?** not fully answered

She did not save the project file as a package, so she was able to remove the contents but not the entire project package.

-2 points

Question 5. At the end of the textbook lab instructions (Step 1.9), follow the notes provided to export the map you've created as an image (.jpg), and insert the image (picture) of the map here.

