SOC 4650/5650: PS-09

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Directions

Please complete all steps below. Your map should be uploaded to your GitHub assignment repository by 4:20pm on Tuesday, April 25th, 2017. This problem set uses data from `/StLouis`.

Digitizing SLU's Campus

1. Begin by opening up your Internet browser and pointing it to Google Maps. Find the main Saint Louis University Campus, which is roughly bounded by Vandeventer Avenue on the west, Lindell Boulevard on the North, Forest Park Avenue on the South, and Compton Avenue on the East.
2. In a new map document, add the three orthoimagery tiles from the `STLOrtho.gdb` geodatabase. Also add the street centerlines feature class that you have created for your final project.
3. Make sure that the projected coordinate system for your data frame is set to "NAD 1983 StatePlace Missouri East FIPS 2401".
4. Create a new polygon feature class to represent SLU's main "Frost Campus". Set the coordinate system to the same projected coordinate system you selected in step 3.
5. When prompted, add a text field named `Name`. Otherwise use the default options that populate each window.
6. Using the Google Maps definition of the campus boundaries as a reference and the street centerlines as a guide for snapping your verticies to, create a single polygon that represents the "Frost Campus".
7. Add two additonal polygons, one on the north side of Lindell Boulevard in the block where the Wool Center is located, and one on the west side of Grand Boulevard just south of Forest Park Avenue where Reinert Hall is located.
8. Edit this layer's attribute table, entering names for each of the three polygons in the `Name` field you created.

9. Add the buildings feature class for Saint Louis City, and geoprocess it so that you are left with a new feature class that contains only building footprints within your "North Campus" polygons.

Digitizing Landmarks on SLU's North Campus

10. Create a new point feature class to represent landmarks on SLU's main "North Campus". Set the coordinate system to the same projected coordinate system you selected in step 3.

11. When prompted, add a text field named `Landmark`. Otherwise use the default options that populate each window.

12. Using the orthoimagery provided, identify ten statues, water features, and other prominent landmarks on campus that are not buildings.

13. Once you have identified these ten landmarks, enter landmark names (you can make these up as long as they are reasonable) in the `Landmark` field of this new feature class's attribute table.

Digitizing the West Pine Mall

14. Create a new line feature class to represent the West Pine Mall on SLU's main "North Campus".

15. When prompted, add a text field named `Name`. Otherwise use the default options that populate each window.

16. Using the orthoimagery provided as well as the street centerlines feature class, mark the centerline of the West Pine Mall from the Vandenventer Avenue east curb line to the west curb line on Grand Boulevard. You will need to temporarily turn off snapping to easily accomplish this. Once you have a rough line drawn, turn snapping back on and edit the verticies of the lines so that they follow the existing street centerline.

17. Repeat the previous step for the main sidewalk that runs perpendicular to the West Pine Mall from the south curb line on Lindell Boulevard to the north curb line on Laclede Avenue. This is the sidewalk that runs past the atrium entrance to Morrissey Hall.

18. Edit this feature class's attribute table by adding text to the `Name` attribute for each of your two lines.

Digitizing Athletic Fields

19. Create a new line feature class to represent the West Pine Mall on SLU's main "North Campus".

20. Use all of the default options that populate each window.

21. Using the orthoimagery provided, draw separate polygons for each athletic field and other *major* area of greenspace on the main "North Campus".

Inset Map

22. In a new data frame that uses the same projected coordinate system, create an inset map that contains the boundary of Saint Louis City as well as the North Campus feature class.

Create a Map of SLU's North Campus

23. In the layout view, create a dissemination-ready map layout (well laid out, good use of white space, title, scale bar, information about data sources, projection and authorship, and legend). The layout should be sized for 8.5"x11" printing with half-inch margins in the landscape orientation. It should contain the vector features you have created for this assignment as well as the street centerlines feature class you initially started with. Streets around campus should be labeled appropriately. Your map should be zoomed to the extent of the North Campus and should also include an inset map. Export the map as a `.pdf` file at 300dpi.