Carl Mazabras Geog 191 Final Exam 3-6-23

Delaware Data Inventory:

- 1. Zip Code: All Delaware County zip codes can be found in this file
- Recorded Document: A file that holds point marks for many different types of subdivisions
- 3. School District: School district coverage over Delaware County
- 4. Map Sheet: Contains all map sheets of Delaware Ohio
- 5. Farm Lot: Shows both US military and Virginia military Farm Lot areas
- 6. TownShip: Showing Geographic boundaries between all of the townships
- 7. Street Centerline: Shows the center of the pavement on the roads
- 8. Annexation: Annexations from 1853 and on
- 9. Condo: All Condo polygons shown
- 10. Subdivision: All subdivisions shown including condos
- 11. Survey: Surveys of the land in Delaware in PDF form
- 12. Dedicated ROW: Shows all Road right of way areas
- 13. Tax District: Showing tax district in Delaware
- 14. GPS: All GPS monuments form 1991-1997
- 15. Original Township: Original divisions of townships
- 16. Hydrology: Major Waterways in Delaware
- 17. Precinct: Voting precinct boundaries
- 18. Parcel: All Parcels in Delaware
- 19. PLSS: Both US military and Virginia military public land survey system
- 20. Address Point: Addresses linked to points
- 21. 2022 Leaf-On Imagery (SID file): 12 inch Resolution imagery
- 22. Building Outline: Building outline for all structures in Delaware
- 23. Delaware County Contours: 2 foot Contours of Delaware
- 24. Building Outlines DXF: Building outlines...



25. 2021 Imagery (SID file): 2021 12 inch Resolution imagery

I have the Layers, Parcel Data, Hydrology and Street Centerline shown above which is what I will be using to build the rest of my maps for this final.

Selecting and Classifying Land Uses:

Create a map that shows the 6 different major categories of land uses (agricultural, mineral, commercial, residential, exempt). These land use codes are in the Parcels data (the class column). Select one of the categories, and create a second map showing all the subclassifications in that category. Refer to the *Delaware County Land Use Codes* (below) for category and subcategory information. Symbolize each category with an appropriate color. Add appropriate additional data (such as road centerlines) for reference and make your map look decent. (approx. 1 page description + 2 maps)

In the first map that I created I kept it very simple with the divisions so it would be easy to read and so people could find their way on the map if they knew of the area. I first thought that I was not going to add in Hydrology on the map because I didn't think it would affect much. I then realized that Hydrology is a must here and almost on any large County map because there are going to be major lakes or rivers that run through the area. Once I realized how much of a grounding Hydrology would give people, I knew I had to have it as one of my 6 Major categories. I then thought I needed to show major roads because people can get a lot of information based on road direction and frequency of roads. They can tell how populated an area is because I know that the street map of say NYC is going to be very different from a map like this in Delaware. I then thought I needed a category to fill empty space, so I named it parcel data because there is plenty of information linked to the white areas; it just does not have any correlation with the other 5 categories. My 4 other divisions are Residential, Commercial, Agriculture and Industrial. I chose those because I thought they were the best description of the area and really covered the area well. The one issue that I am seeing with this map is that the densely populated areas are in a "gray" area because the line divisions are so close together. Those areas are mostly Commercial, but the Northern part of the map shows a lot of agriculture in the area with the southern part being more Commercial and Industrial. This brings me to my next map which focuses on the Industrial areas of Delaware County. Below I have each

Industrial Area separated out into 11 different divisions that were provided to me in the Final. These Divisions are vacant land, food & drink, foundries & heavy mfg, medium mfg & assembly, light mfg & assembly, Ind warehouses, Ind truck terminals, small shops, mines & quarries, grain

elevator and otherInd structures. I also have the original layers from the first map we created because there would have been a lot of missing data throughout Delaware if I were to take them out. If you look closely, you can see a couple of Vacant lots scattered throughout the map. You can also see a pretty dense industrial



area just in the middle left of the map. If the map were to be a bit bigger than I would be able to show the different Industrial areas in more detail it is just the land division lines are too thick so the data is not really able to be shown in densely populated areas.

What's Inside?

Review ch. 5 from Mitchell ("Finding What's Inside") and pay particular attention to the section "Three Ways of Finding What's Inside" on pages 145-148. Describe a scenario where this kind of analysis would help solve a particular problem, then perform that analysis using actual Delaware data layers. More creative and sophisticated analyses will be rewarded.



Please model what you do after the examples in "Three Ways of Finding What's Inside." (approx. 1 page description + map).

For this map I chose to do the different Tax Districts in Delaware County, which I did not realize are so linear until after finishing this map. So here I have 8 different Tax Districts in Delaware County, Ohio. Although I am not sure which section is linked to which Tax amount, I know that these divisions are practically the different Townships in Delaware. On the top left corner of the map, we have three different townships that fall in the same Tax District but if you look towards the center of the map you can see up to 5 different districts in a very close area. This has to do with private living areas and or low-income areas because not all towns are built perfectly with the same demographic and economic status as their neighbor. I thought this map would have been pretty interesting to make because I thought the tax Districts would be scattered all over the County rather than be very linear with clear divisions between taxes and towns. I also found it very interesting how closely the Tax Districts fall in line with the township divisions because I did not know each town is so different in population that they need to have specific tax implications for each town. So, I thought this map was going to be very hectic and all over the place with different people living next to a person in a different Tax district, but it was not. The map is clean and actually makes sense with how Delaware County is built so this map

was not only fun to make but also cool to see how the different towns of Delaware County are taxed.

Mapping Change:

Review ch. 7 from Mitchell ("Mapping Change") and create a time-change map of subdivisions in Delaware Co. View the subdivision file (in Delaware Data) and look at the table: there is temporal information here: the date that the subdivision was established (in a peculiar format). Create a graduated



color map of subdivisions based on this temporal data. Classify the data so it makes some sense (1850-1900, 1900-1930, etc.) and choose an appropriate color. (1 page description + 1 map)

For my Mapping Change map, I chose to equal divisions for my years, which means it is every 43 years. I have 5 different classifications which brings me to 215 total years to be shown on the map below. When I first created the map with the graduated color scheme in the classification dropdown the colors were not showing my data correctly. There was too much overlap between the 43-year gap, so it was pretty hard to read. I then kind of made my own graduated color using the color board dropdown when you right click the color. I wanted to go with blue, so I chose completely different shades of blue from one another all of which got darker the further back you go in history. There is a clear historical area in the center left of the map which is the heart of Delaware. There is a lot of dark blue in the area which tells me that the buildings are old, and I know that a lot of the buildings around the area are much older than people think. There is not a ton of data shown here because a lot of the land around is used for farming and there really has been no land change in the past year. There has been a lot of new change in the bottom half of

the map which is the urbanized area getting closer to the Columbus area. This shows me that Delaware is a growing County with a lot of new developments in recent years. One thing that I wish I did map for this was break down the last 43 years into different classifications to



really see the growth throughout Delaware County in the recent year. To me that would have been some cool information to show, and I am now thinking of it as I am done with the map. But I thought I was able to show my information pretty well here using the equal divisions because I know that I needed to show how old some buildings are, but I also wanted to show some of the newer buildings that have gone up.