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PLSCS 2200

Lab 0

1. Understanding where.

Understanding where things are (location maps)



Map of public and private schools in Ithaca/Tompkins County Region. You can locate where public and private schools are in the Tompkins County. Although the map does not pinpoint the streets in which these schools are located, it shows the relate distance and the general location of the schools. There is a higher density of schools in Ithaca than the rest of Tompkins County.

2. Measuring Size, Shape, and Distribution
Calculating individual feature geometries

-2 points



Layer: Terrain: Elevation Tinted Hillside

This map shows the elevation distinction in the west of South America. As elevation increases, the color of the map converts from light green to brown to white; white being the higher elevation. This is the Andes Mountains in South America, and this map shows the elevation across a land range. This map does not show water depth.

What you explained here was needed to b

3. Determining How Places are Related

Determining overlapping relationships in space and time



Source:

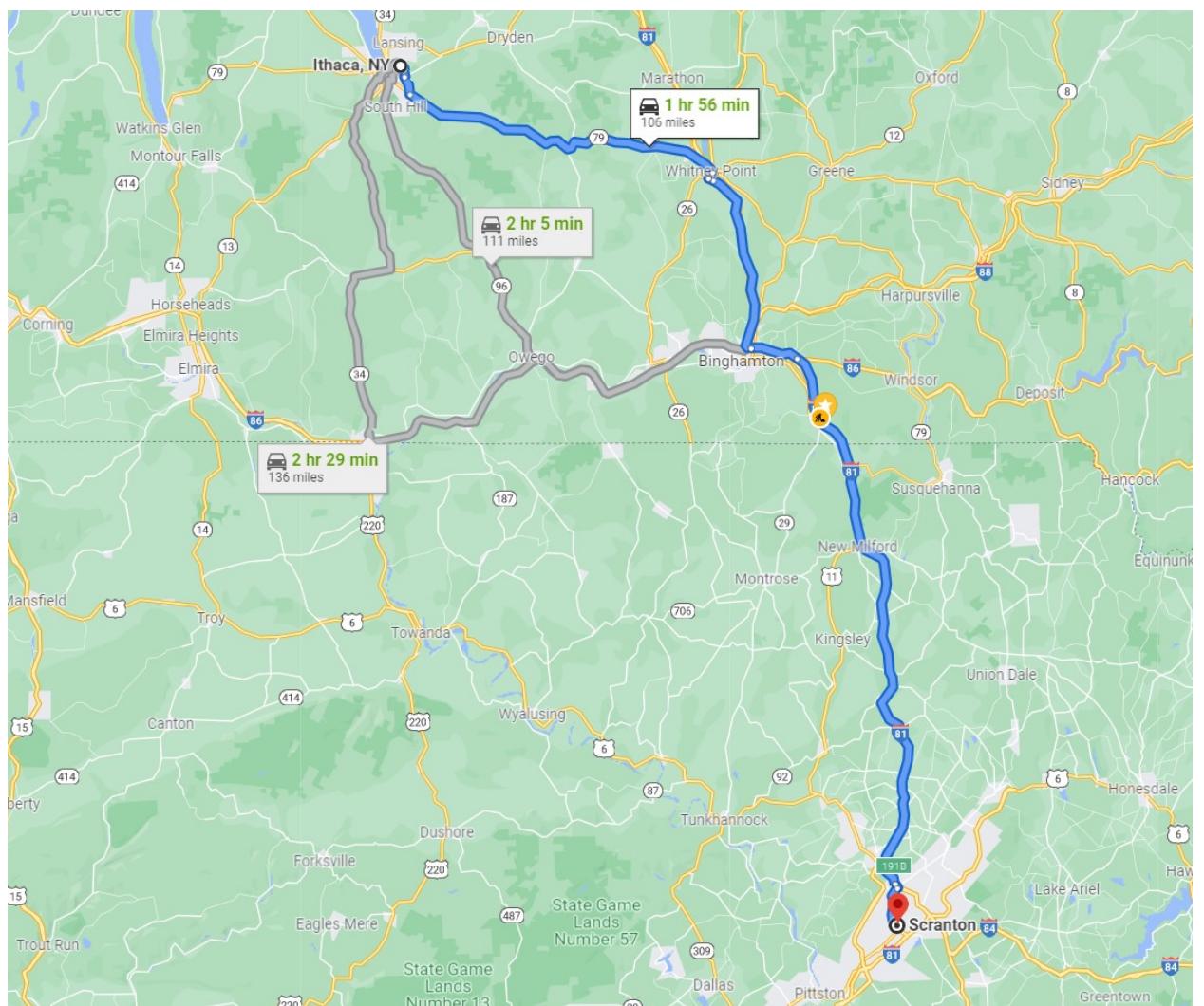
<https://dcp.maps.arcgis.com/apps/webappviewer/index.html?id=1c37d271fba14163bbb520517153d6d5>

This is a map of NYC Flood Hazard Map. We can observe the zones that are more prone to flooding and the gravity of the flooding. The layers to this map are Future flood zones by 2020s, 2050s, 2080s, and 2100s. A solid light blue indicates flood zones extensions in 2020s to 2050s. A lighter/whiter blue indicates the extension of the flood zone by 2080s to 2100s. We can see the flood zones range on space and time. Also, areas that are in the flood zone within the next two-three decades are closest to a body of water (ocean or river) and whiter blue areas are more inland. Areas closer to the Atlantic Ocean or the Hudson River are related to each other.

See my comment for 2nd Q! and, you could find a better map to show how the places are related in space

4. Finding the Best Locations and Paths

Finding the best supply locations given known demand and a travel network

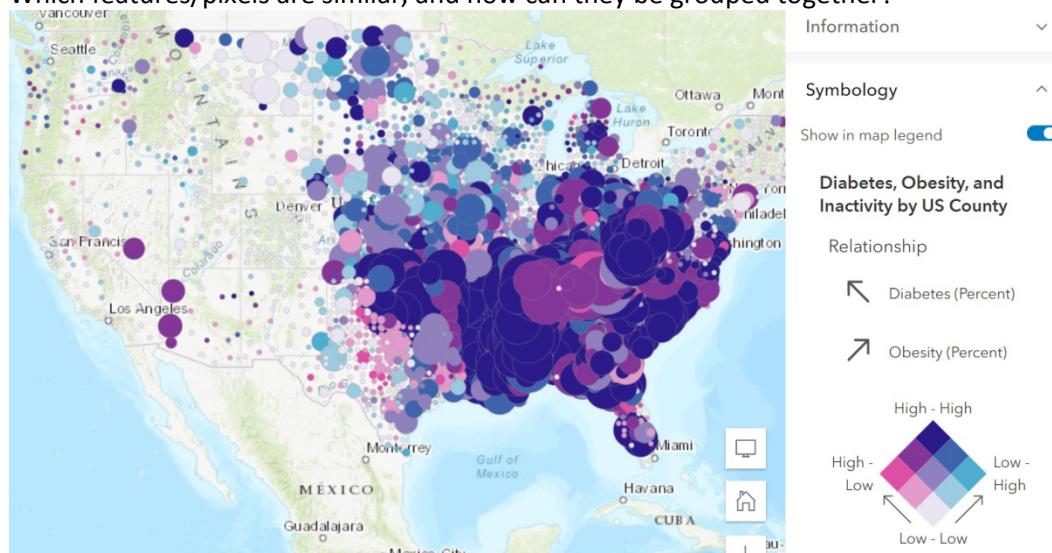


Source: Google Map

This map shows different routes to go from Ithaca, NY to Scranton, PA. Each route indicates the time it will take to get there. It found a least-cost path from both cities. However, the map does not show if this is the best route going from Ithaca to Scranton or from Scranton to Ithaca.

5. Detecting and Quantifying Patterns

Which features/pixels are similar, and how can they be grouped together?

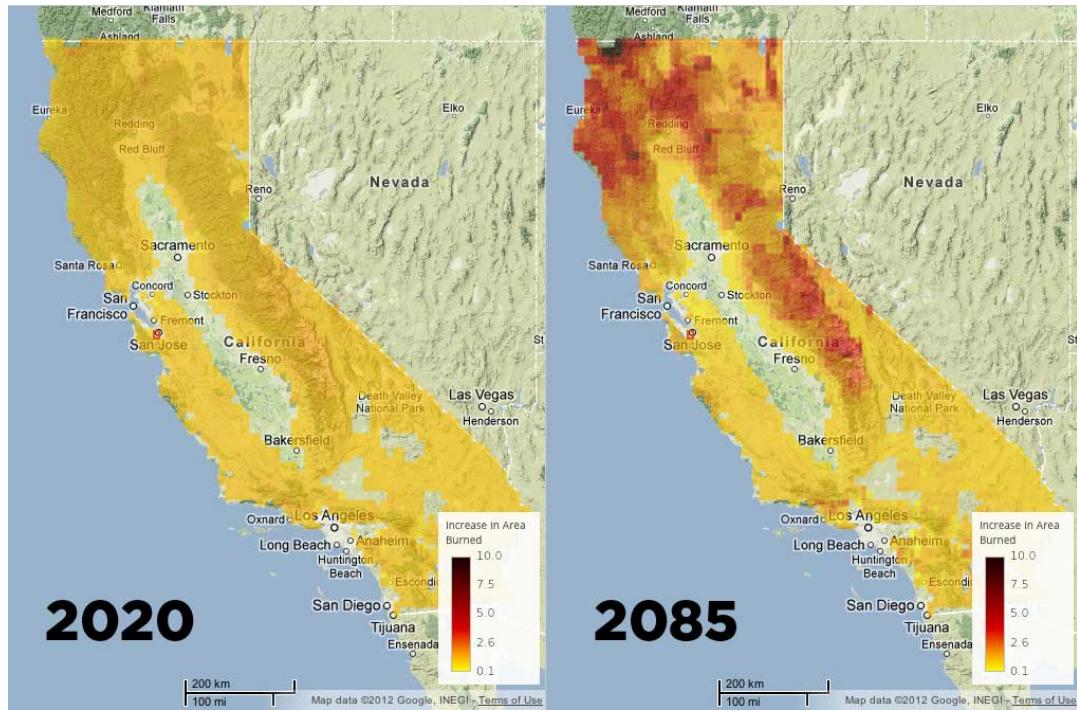


Layer: Diabetes, Obesity, and Inactivity by US County

This map shows the relationship between diabetes, obesity, and inactivity in the United States. A pink color indicates high diabetes rate, a light blue color indicates high obesity rate, and the circle size is inactivity. The pattern shown here is that inactive people have higher chances in being obsessed and/or have diabetes. Yet, there is a stronger pattern between diabetes and obesity. There are smaller circles on the East and Northwest coast of the United States but it may be because of lack of data. Moreover, this map is not presented well because the circle sizes overlap each other and cannot be distinguished from other counties.

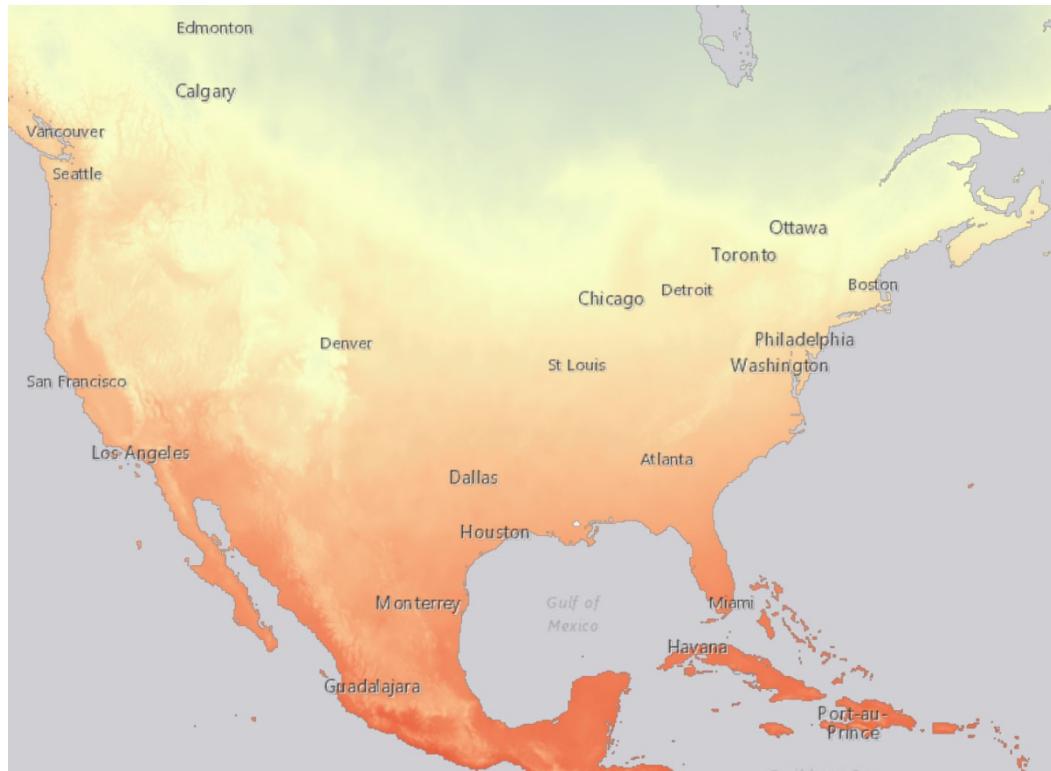
6. Making Predictions

Predicting where phenomena will move, flow, or spread



Source: <https://grist.org/cities/projecting-the-very-hot-future-of-californias-cities/>

This map shows where forest fires will expand to in 2085 in California. The red shows intensity of the forest fire range. This map would predict the range based on current trends and patterns. Grist also mentioned that modeling over a low-emission standpoint is useless, especially since big businesses will not hinder their CO₂ waste in the foreseen future. The area in the middle of California that is not in a fire hazard zone is Sacramento Valley and San Joaquin Valley.



Map of mean January Land Temperatures in North America. It visually shows the difference of temperatures by using different colors. However, this map does not show what the color range translates to in temperature.