Education Access in the State of Georgia

Advanced GIS Final Presentation | Genevieve Schiro | 05 May 2021

Project Background

Pre-Project Thoughts

I originally began my project with the goal of mapping education access for Dalits in India. However, access to the data proved very difficult. Additionally, the devastating COVID spike led me to feel like the information I was able to gather would soon be invalid.

I decided in the past week to shift my focus to something I was much more familiar with: the education system in the state of Georgia.

Why Georgia?

I grew up in the public school system in Georgia from grades 6-12. I was fortunate to personally attend schools that performed well on in national rankings. However, Georgia as a whole has consistently ranked low on education. In both educational attainment categories and quality of education, the state has consistently ranked in the bottom percentiles. As of 2020, national surveys ranked GA 34th out of 50 (Atlanta Journal-Constitution).

Understanding the Project

The state of Georgia has one of the highest income inequalities in the country. It also ranks in the top 10 for child population under the age of 18. As a result, there are areas across the state in both rural and urban settings that have extreme gaps in quality and access to education in public schools. Education inequality is one of the biggest barriers to children and young adults living in poverty. It disproportionately affects minorities, particularly in low-income areas. Unequal access to quality presents one of the greatest challenges to leaving the cycle of poverty.

Challenges

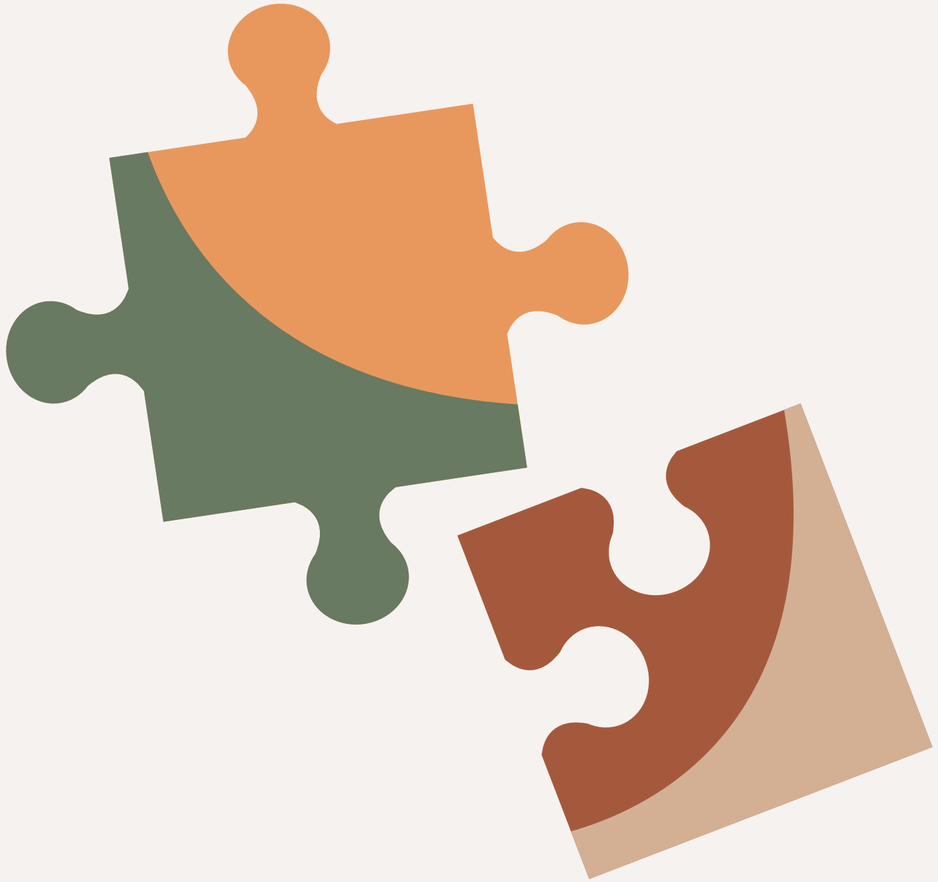
I encountered a number of challenges with the project.

Data Collection:

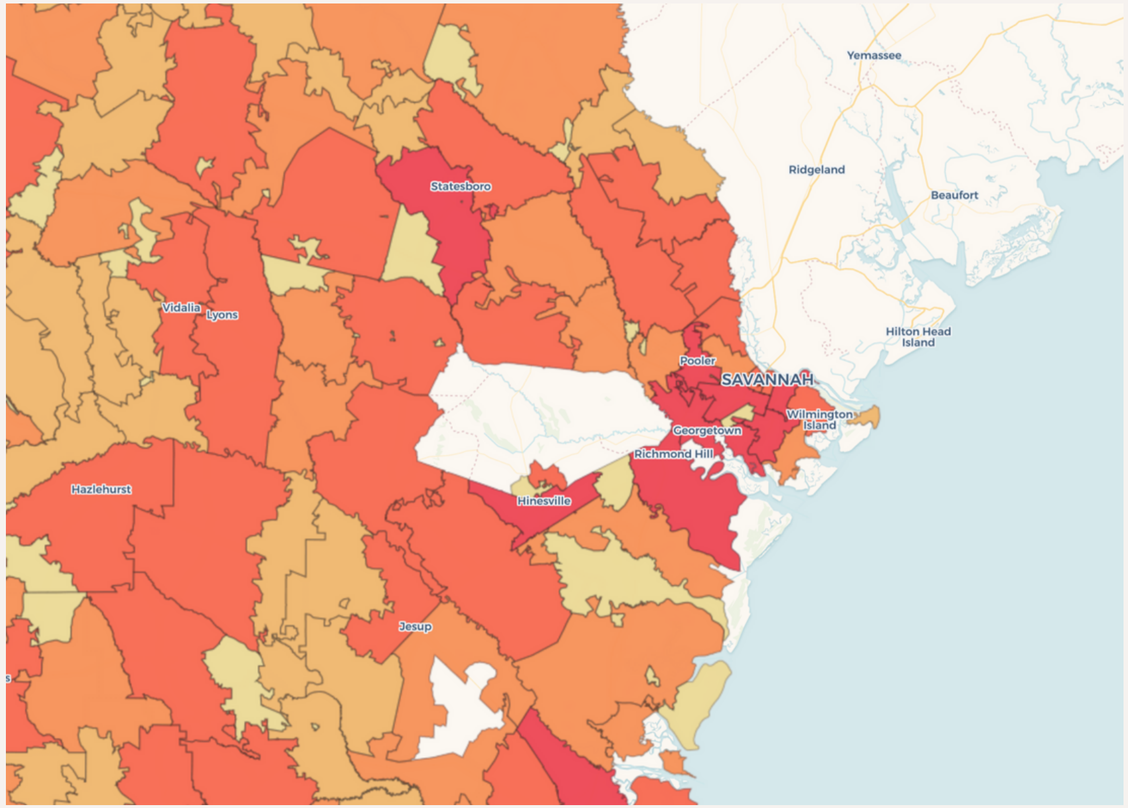
- As stated previously, my project began looking at education access for the Dalit population in India. Public data for this project was limited at best.
- GA data not standardized by county vs. zip code
- Missing sections of data (Columbus and Savannah)

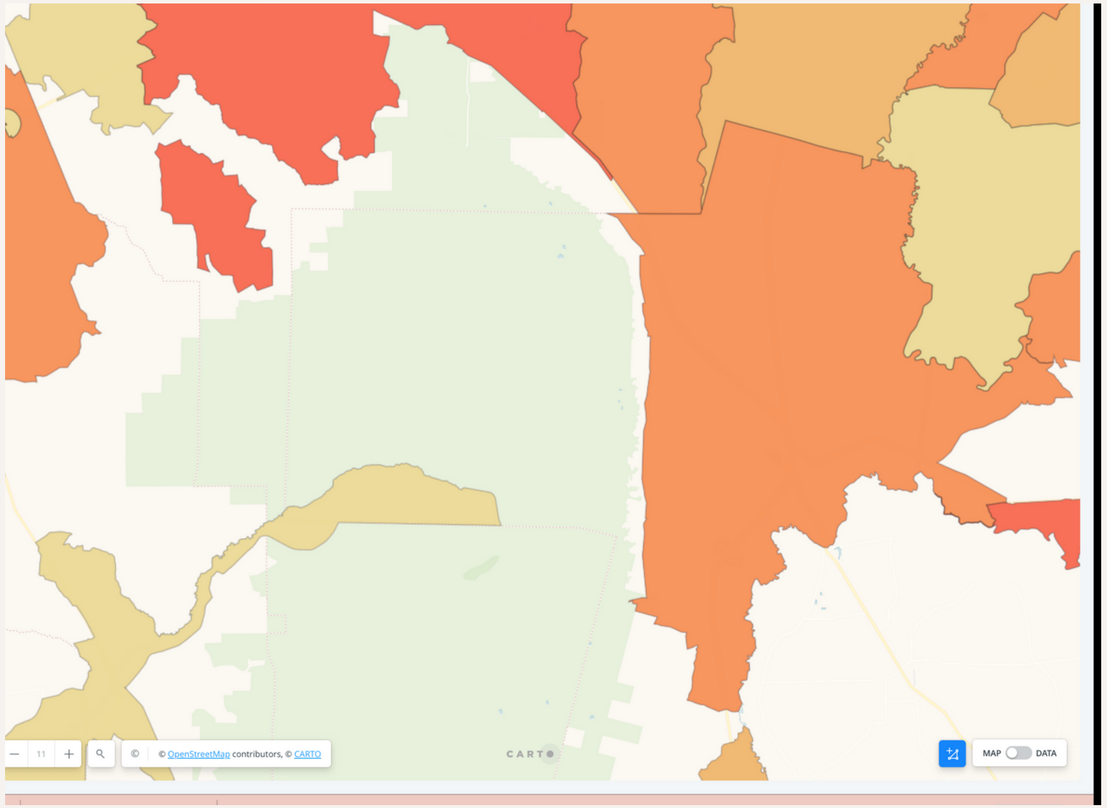
Personal Challenges:

- Coding - I struggle greatly with coding, even when the steps seem fairly straightforward.
- Centering the map polygons onto the Carto map



Missing Data Examples





Map 1

Population of Children in GA

-Population presented by zip code
-Hover-over popups with information on zip code and population

Link:
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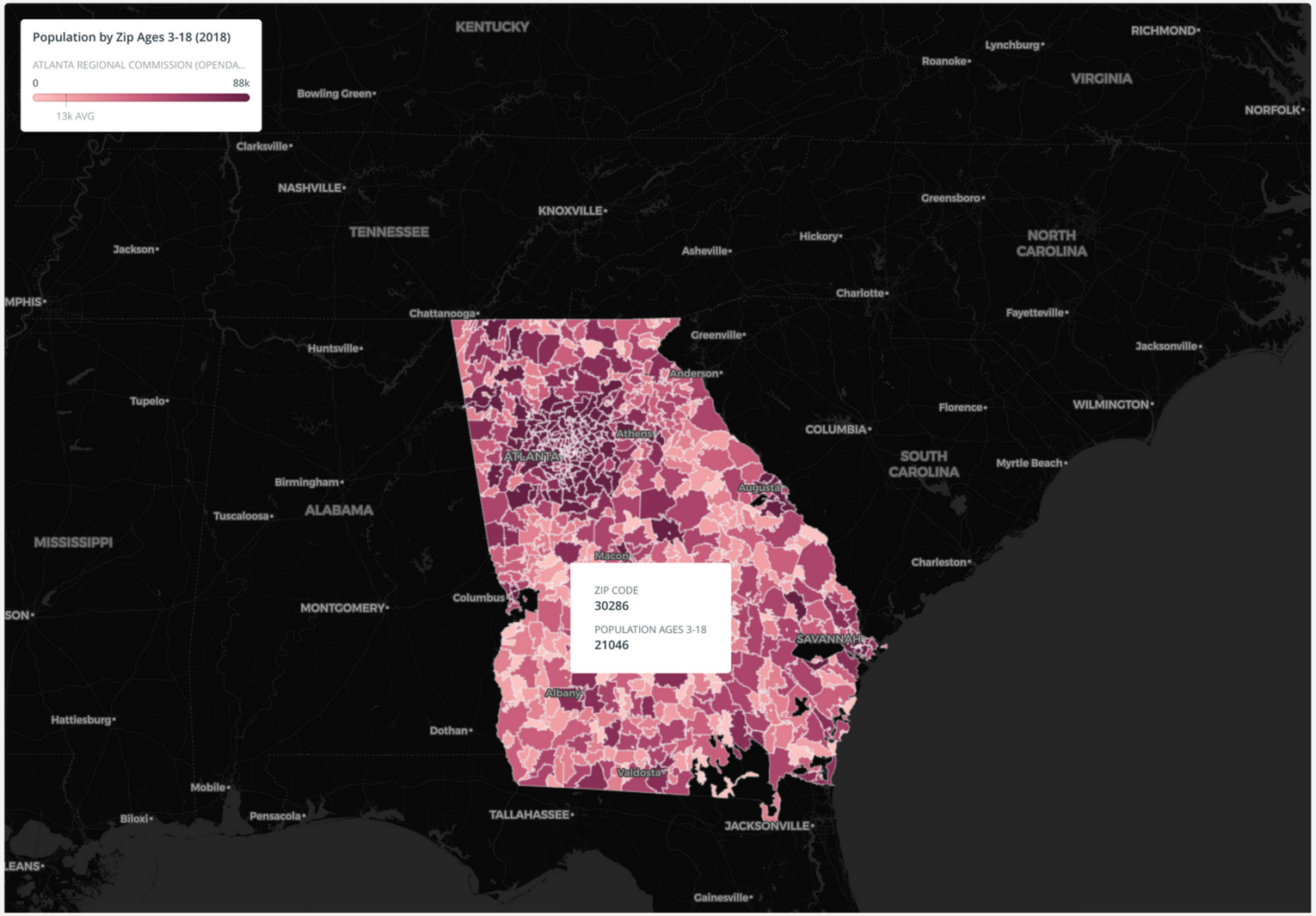

Map 2

Children in HS, Elementary school, and Kindergarten, with data about poverty

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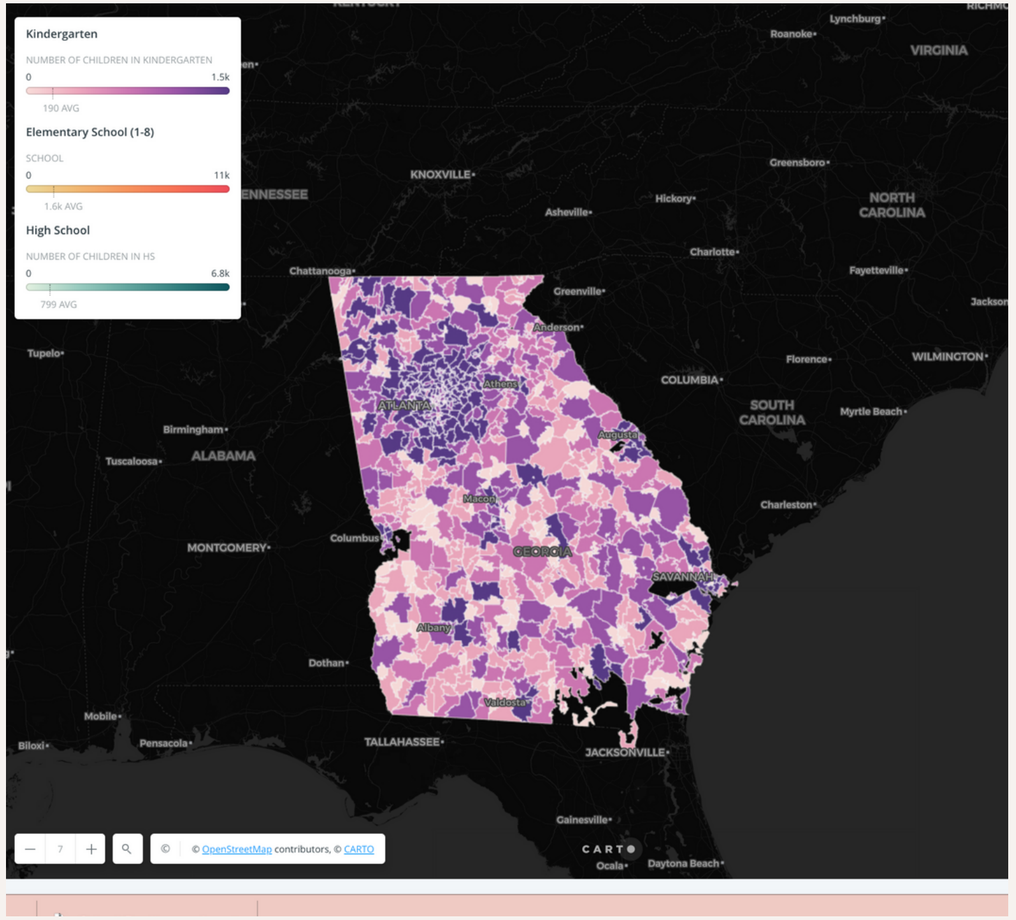

LOOKING FORWARD:

Since I began this iteration of the project recently, I still have several steps I will take before the due date. These include:

- Add produced maps to the webpage with data about each school level (elementary, middle, and high school)
- Better synthesize maps to visual education-poverty-income relationship
- Publish github site
- Modify the website to contain information about education inequality presented in this presentation & a more in-depth look at the connection between poverty and education, and the impact of unequal access to quality education.

Data Sources (Mapping Data):

- Open Data -- Atlanta Regional
- Willis, K. (21 January 2020). Most and least educated states 2020: Georgia fails to crack the top 20. *The Atlanta Journal-Constitution.*

Questions for Class:

- When modifying the website, would you recommend a more colorful or minimal design?
- Do you think I should create a separate tab on the site to contain more information or keep it all on one page and interspersed data between the maps?