Final Project Prospectus

Title: Colonization and COVID-19: A case study of public health during the COVID-19 crisis in

Hawaii and Puerto Rico Notice: Dr. Bryan Runck Author: Emily Cavazos

Date: 09/29/2021

Project Repository: https://github.com/cavaz020/GIS5571.git

Google Drive Link: Time Spent: 10 hrs

Abstract TBD

Problem Statement

Describe the specific problem and the context. Provide an illustrative figure and/or context map here. In the table, translate the qualitative problem statement elements into specific requirements for the analysis.

Native Hawaiian and Pacific Islanders and Puerto Ricans have been reeling from a brutal summer of Covid-19 cases and a wave of tourism. Hawaiian and Puerto Rican locals have pushed back and pleaded for tourists to stop traveling to the island. Since locals are more likely to be in the service industry, they are more likely to come in contact with tourists who either asymptomatically or symptomatically carry the virus. Both Hawaiians and Puerto Ricans, suffering from a lack of access to proper healthcare and overall worse health than the average American, are at higher risk to be severely affected by the disease.

Using APIs, I want to look into COVID-19 cases and deaths in each of these areas over time, look at flight data to these areas, and note the states in the US with the highest rates of travel to each of the areas. (I am still looking for flight data.)

Table 1. Data used in project

#	Requirement	Defined As	(Spatial) Data	Attribute Data	Dataset	Preparatio n
1	CDC Covid-19 Data	Input Data from CDC - Cases and Deaths by state		Cases and Deaths by state	CDC COVID Data	
2	ACS Demographic s for Hawaii			Age and Sex	ACS Age and Sex Hawaii	
3	ACS Demographic s for Puerto Rico			Age and Sex	ACS Age and Sex Puerto Rico	

4	Hawaii Boundary data	Shapefile - boundary	Shapefile	Quadrangle S	
5	Puerto Rico boundary data	Shapefile - boundary		Shapefile	
6	Flight data				

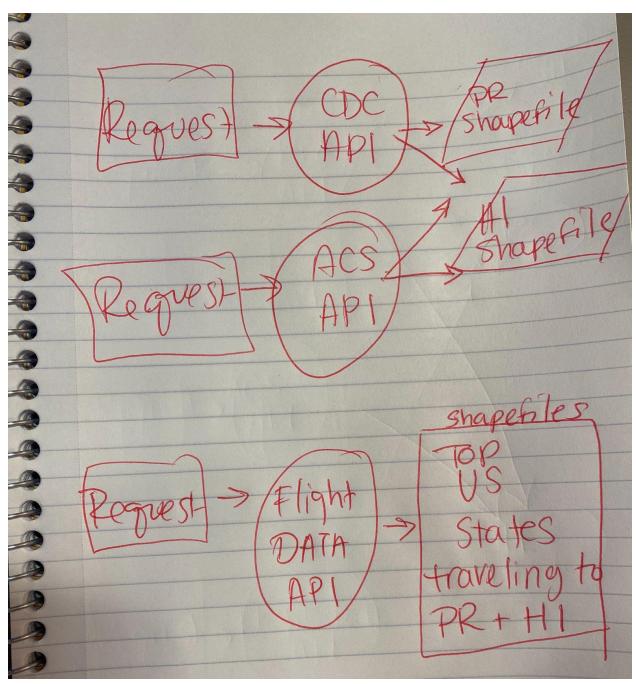
Input Data

I want to use the following data to map COVID-19 cases and deaths by each area over time. I also am looking to see if I can find flight data because I want to note the areas with the highest number of flights to these two locations. Probably by state. I also thought it would be interesting to look at age and sex of the to areas' populations as well as household sizes. Household size is interesting because oftentimes Indigenous populations have intergenerational households and this then makes it harder to quarantine should someone contract COVID-19.

Table 2. Data purpose in project analysis

#	Title	Purpose in Analysis	Link to Source
1	CDC Covid-19 Data	Cases and Deaths by state	CDC COVID Data
2	ACS Demographics for Hawaii	Age and Sex	ACS Age and Sex Hawaii
3	ACS Demographics for Puerto Rico	Age and Sex	ACS Age and Sex Puerto Rico
4	ACS Household Data		
5	ACS Household Data		
6	Hawaii Boundary data	Shapefile - boundary	Quadrangles
7	Puerto Rico boundary data	Shapefile - boundary	Shapefile
8	Flight data		

Methods



Results

The results will be in showing the states that have the highest rates of travel to Hawaii and Puerto Rico.

Results Verification

TBD

Discussion and Conclusion

I will also include a thoughtful discussion on Indigenous rights and efforts in each area as well as a direction for moving past tourism economies as these are the source of ongoing colonialism in these areas.

References

Malfer, Lindsay. 2019. "The Devastating Effects of Colonization on Hawai'i." ArcGIS StoryMaps. July 27, 2019. https://storymaps.arcgis.com/stories/83474c5d6077492d990b961bab0bcd74.

Nast, Condé. 2020. "As Puerto Rico Prepares to Reopen, Residents Are Concerned." Condé Nast Traveler. July 13, 2020.

https://www.cntraveler.com/story/as-puerto-rico-prepares-to-reopen-residents-are-concerned.

"The History of Hawaii Tells the Story of a Violent Colonization." 2021. Study Breaks. May 20, 2021. https://studybreaks.com/thoughts/hawaii/.

"Traveling to Puerto Rico? Here's What Locals Want You to Know - The Washington Post." n.d. Accessed September 29, 2021. https://www.washingtonpost.com/travel/tips/puerto-rico-covid-local/.

Self-score

Fill out this rubric for yourself and include it in your lab report. The same rubric will be used to generate a grade in

proportion to the points assigned in the syllabus to the assignment.

Category	Description	Points Possible	Score
Structural Elements	All elements of a lab report are included (2 points each): Title, Notice: Dr. Bryan Runck, Author, Project Repository, Date, Abstract, Problem Statement, Input Data w/ tables, Methods w/ Data, Flow Diagrams, Results, Results Verification, Discussion and Conclusion, References in common format, Self-score	28	
Clarity of Content	Each element above is executed at a professional level so that someone can understand the goal, data, methods, results, and their validity and implications in a 5 minute reading at a cursory-level, and in a 30 minute meeting at a deep level (12 points). There is a clear connection from data to results to discussion and conclusion (12 points).	24	
Reproducibility	Results are completely reproducible by someone with basic GIS training. There is no ambiguity in data flow or rationale for data operations. Every step is documented and justified.	28	
Verification	Results are correct in that they have been verified in comparison to some standard. The standard is clearly stated (10 points), the method of comparison is clearly stated (5 points), and the result of verification is clearly stated (5 points).	20	
		100	