



Assignment 3

Research on Hospitality Industry within Honolulu, Oahu Island of the State of Hawai'i

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- The O’ahu Island of Hawai’i is the main topic of our project for its social and economic aspects.
- We paid special attention to the hotels and parks of the O’ahu Island for the hospitality research.

Background

- Based on the MUP required reading regarding forced statehood for Hawaii, our group took initiative to consider economic and social impacts within the built landscape within the Aloha State.
- We decided to further focus on the Oahu Island, where the capital Honolulu is located.
- Our team decided to pay special attention to the hospitality landscape of Honolulu because the city is one of the main laboratories of service industry – only after Las Vegas – in the US.

Objective

- Per our study, most of the Hawaii tourists either rent a car or take a bus to explore the parks, famous spots, and shopping malls of the Aloha State.
- Therefore, the variables of our research are:
 - Hotels (**Point, A**)
 - Parks (**Point, B**)
 - Bus Routes (**Polygon, C**)
 - Neighborhood / Zones / Flood-prone Areas (**Polygon, D**)

Contribution

- Terry deserves 10/10 for working through Github providing code templates to build from.
- Francisco contributed by diligently going through the tutorial videos and helping code in R; he also deserves 10/10.
- Same point (10/10) is applied to Ellie who organized group meetings and troubleshooting R code errors.

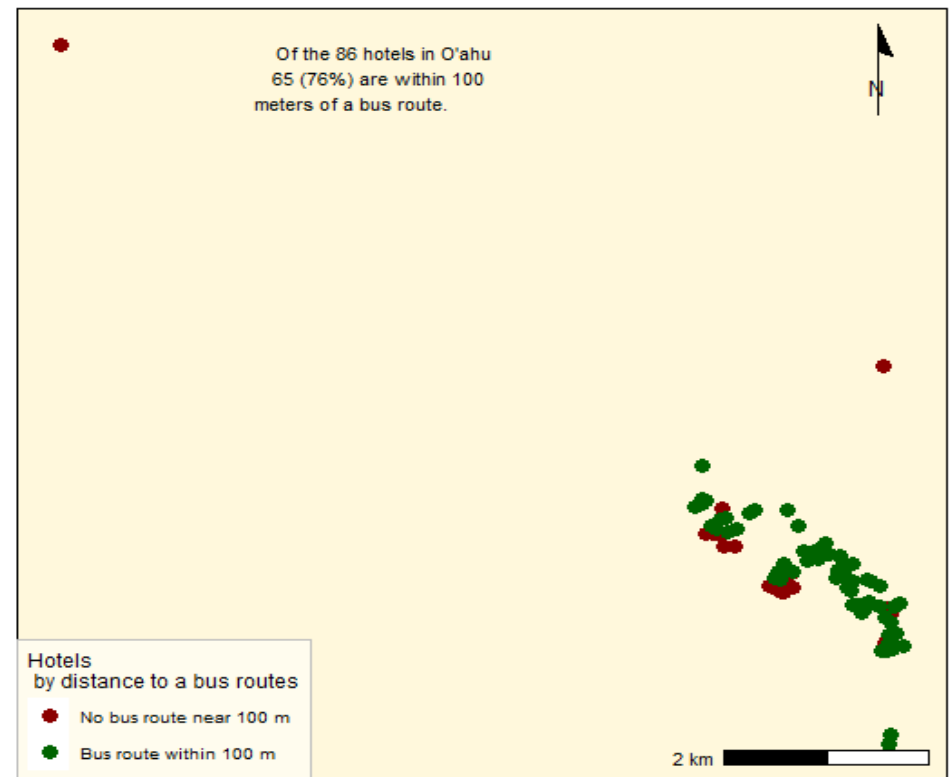
- First, we are intrigued to investigate the relationship between the bus route and hotels / parks.
- To do so, we had to explore the number and proportion of B Points with C Polygons (#7)

Were the Bus Routes built close to the Parks? (Less than 300m)



- We can confidently conclude that the Bus Routes indeed took into account of **major park** locations.

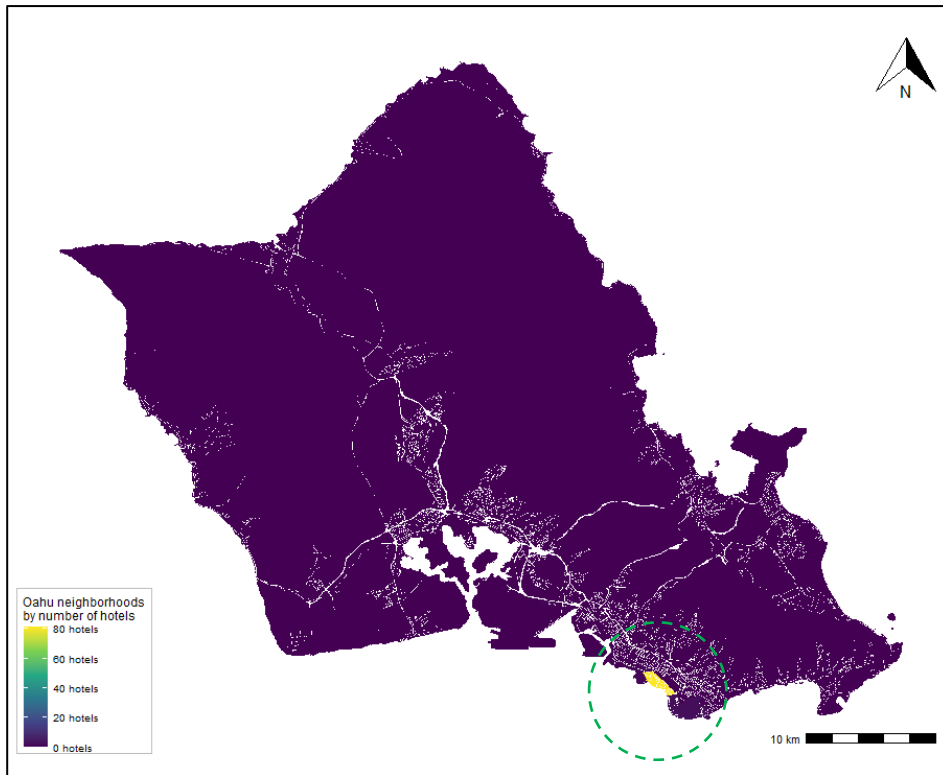
Were the hotels built close to the Bus Routes? (Less than 100m)



- We can possibly conclude that the hotels are built in consideration of the Bus Routes – possibly for the **transportation accessibility**.

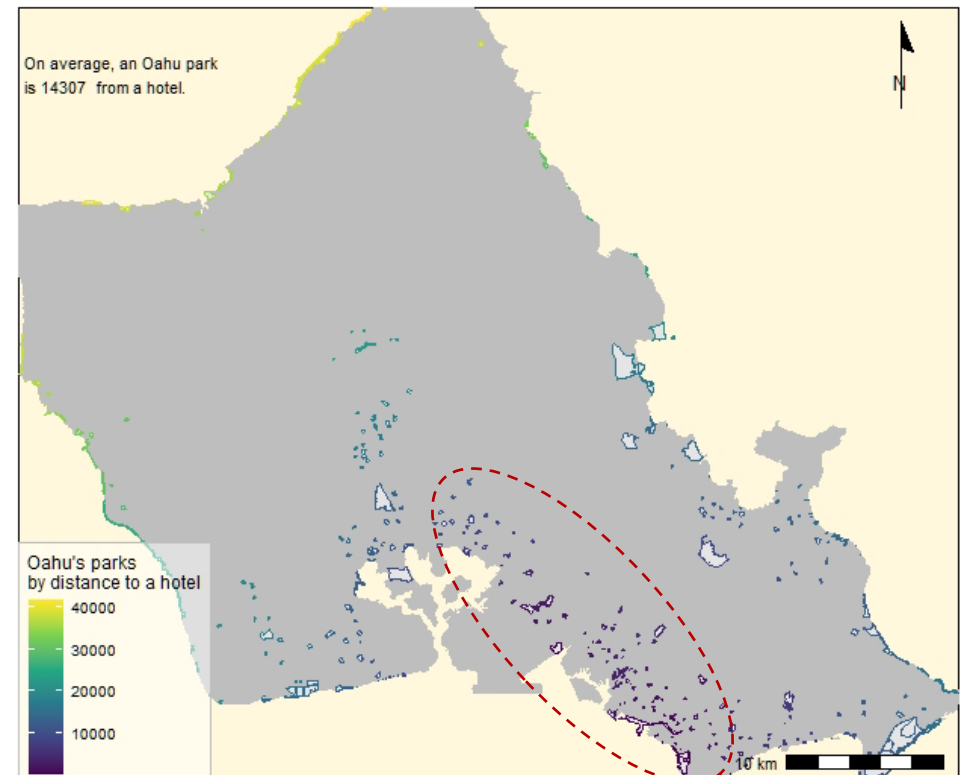
- Next, we researched how hotels in this date are melt within the surrounding landscapes.
- # and % of D Polygons containing A points (#12) and AVG distance between two point-sets (#3) were used.

Which O'ahu neighborhood accommodates hotels?



- We could conclude that the hotels cluster around the Waikiki Beach area as circled above, far from other neighborhoods.

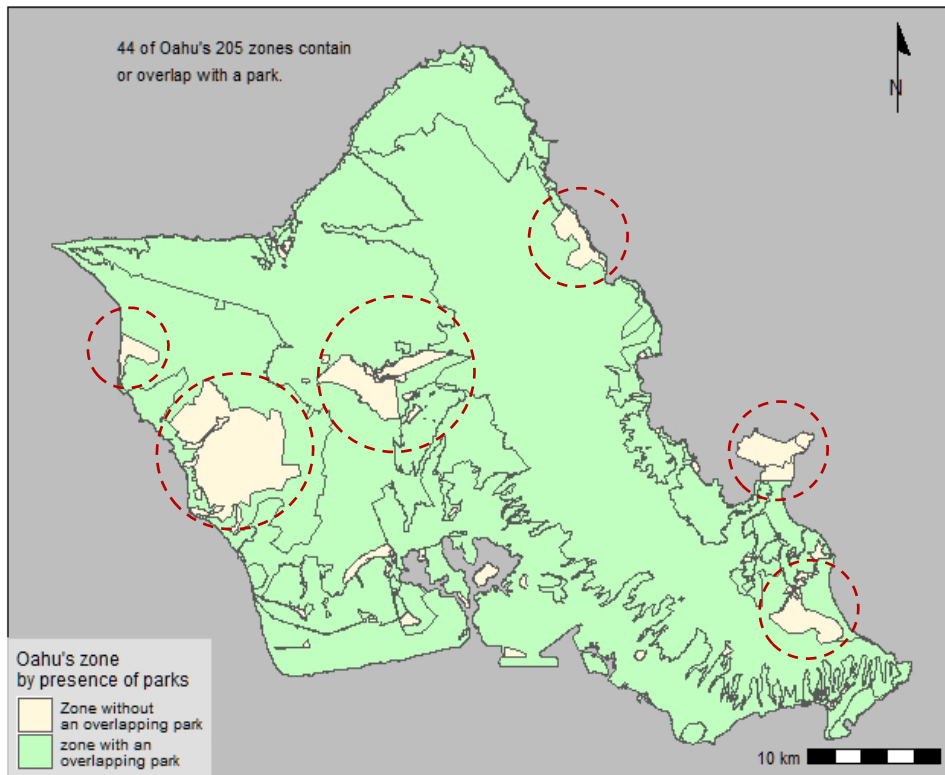
What is the average distance from a hotel to a park?



- As a plurality of parks are in the Western Shore, the mean distance from a hotel to a park is **1.43 km**. However, the parks near the Waikiki beach is much closer from hotels without any doubt.

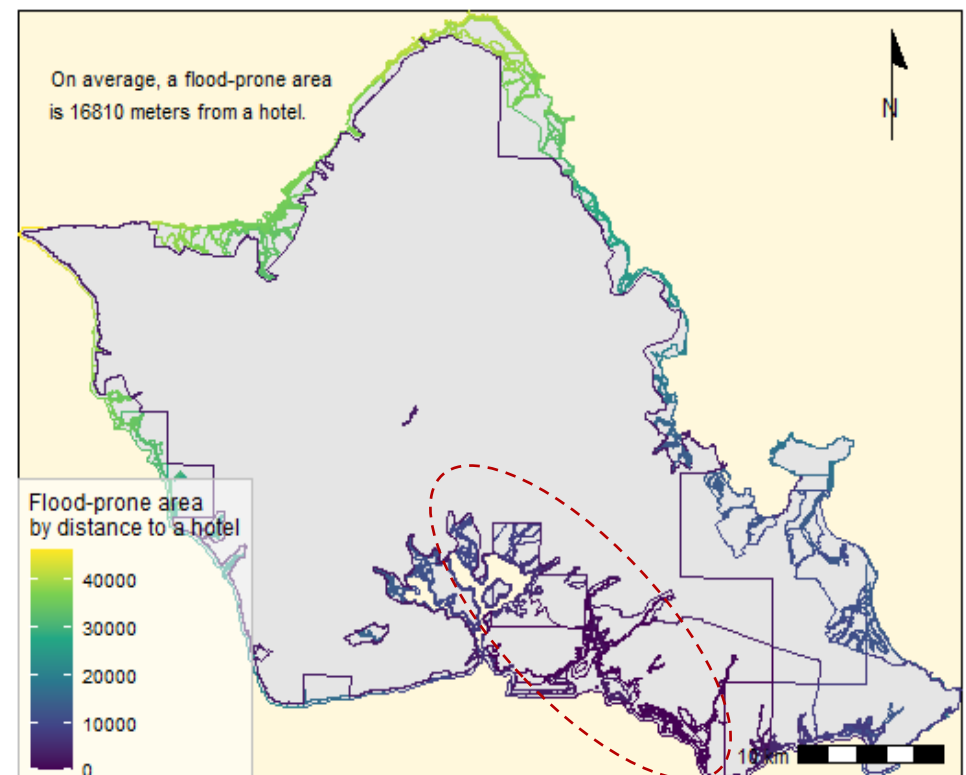
- Finally, we studied how parks and hotels are placed and positioned within the surrounding landscapes.
- # and % of D Polygons containing A points (#10) and the average distance between points (#4) were employed.

How many O'ahu zones have parks?



- We concluded that only **44** of O'ahu's **205 zones** contain or overlap with a park. Interesting fact is that the zones are not similar-sized, and the zones that contain parks are substantially larger.

What is the average distance from a hotel to a flood-prone area?



- On average, a flood-prone area is **16.81 km** away from a hotel. However, all the harbors and beach are weak against Tsunami. Evacuation plan is perhaps required for community safety.



THANK YOU VERY MUCH!

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