

Recycling in Hawaii

University of Hawaii West Oahu

PUBA 310

Introduction

One of the daunting problems that the islands of Hawaii currently facing is a shortfall of land. More specifically the use of public land for post consumption disposals (landfills). With the continuous support for the tourism industry on Hawaii, the unchecked use of plastic bottles that makes it into our landfills are exponentially increasing. The focus of the research will be based on the amount of plastic bottles that are recycled.

Research Question & Hypothesis

Is the perception of amount of recycling on Oahu more positive than the actual collection? The term "positive" will be used to measure by the survey and data collection.

Perception of recycling on Oahu is more positive than the actual amount of recycled goods.

Measurement

The research is looking for the gap between actual and perceptual. The research surveyed one particular group of the population to look at the perception of recycling and the actual amount collected by in a residential setting. The research measured the "Gap of perception" by data gathering of surveys and observation.

Conceptual Definition of the Independent variables (IV):

UHWO: Recycling takes place in many places and the college campus is no exception. There are recycling bins placed strategically through out the campus. The data that is collected is through individual students and the survey will be referring to the question on how they perceive visitors (tourist) recycle their plastic (PET) waste on Oahu.

Home recycling: data will be gathered on a midrise condominium complex with less than 20 stories and a population of 190 individual units that houses multiple members in a family unit. The information will be gathered on the actual weight of recyclables collected on a single day.

Tourist recycling: The term "tourist" refers to the dictionary definition: a person that is traveling or visiting for the purpose of pleasure. This also includes the time spent on the island to be less than 20 days in which the tourist will be going back to their respective homes

Conceptual Definition for your Dependent variable (DV):

Perception of Recycling: the perception of recycling varies greatly depending on regions of geography. Part of the recycling life cycle is the recovery or reuse of the material that was put in circulation for a consumable product. The perception that most communities recycle sometime is obscured by the rate of commodities that are collected.

Who recycles on the Oahu? Is there a measureable difference between the two types of residence?

1. Home resident: person(s) that live or legal resident of Honolulu. Is their perception different from the actual data collect by the state?
2. Tourist: non-resident that is here for pleasure on a temporary basis.

Contact Information



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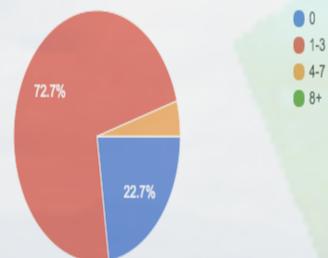
Abstract

- This research project looks at the perception and quantifiable measurements of recyclable material: Polyethylene Terephthalate (PET).
- Check the data from multiple sources such as department of land management, tax sources (HI-5) sales records, and cargo manifest.
- Look for historical data and compared with current trends to analyze the trend and project when the landfill will reach maximum capacity.
- Check tourism data with department of tourism on the annual visitors and historical tourism data.

DATA

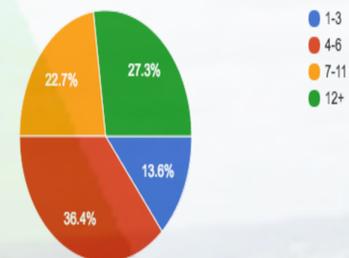
on a daily basis how many bottles do you use?

22 responses



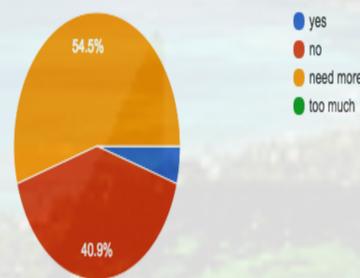
how many plastic bottles do you recycle weekly

22 responses



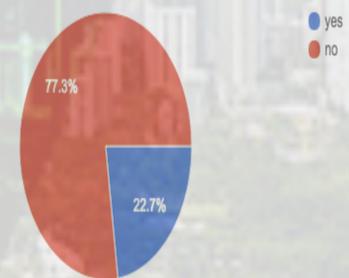
Majority of the visitors stay in Waikiki, do you think there are enough recycling bins for people to have access to.

22 responses



Do you think the state of Hawaii is doing enough with the recycling program on Oahu?

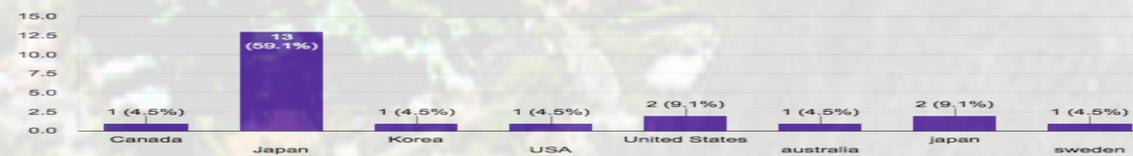
22 responses



mid-rise condominium data collection Honolulu
The building houses a mix population consisting of family sizes from 1-4 people per unit.
191 units in the building
189 PET bottles containers were counted
Average: 0.989 bottles per unit

Oahu has many visitors from around the world. which country on who you think recycles the most?

22 responses



Data Collection

Surveys: the surveys will be based on a random class on the campus of UHWO. A sample of 25 students will receive a survey to be filled out and returned. If the classroom does not have 25 participants, the remaining surveys will be conducted in a different classroom until 25 surveys are turned in. The surveys will be collected on students of UHWO only, based on full or part time status.

Data collection at a condominium: the data will be conducted on a single day (24 hours). Each floor of the condominium has a recycling box in the common area of the floor. The plastic bottles (PET) will be counted at the end of the night because the recycle bins will be collected by the facility in the early morning.

*Data collection in Waikiki: a 1 hour window in 4 different location will be observed near a waste bin to determine the amount (count) that is recycled per location. The data will be collected in 2-3 days at peak time to maximize tourist activities.

The systematic method that was utilized in the the research is as followed:

My 1st sampling frame in the classroom and campus. Calculate the percentage given on the perception of recycling by tourist. Find the median of the answers and draft a calculation by capering multiple data points from the other two collections

My 2nd sampling frame will be from the collection of recycling conducted in the condominium. Find the cumulative of plastics and find the average number per unit and calculate the annual collection by unit. The average will show the median recycled plastic per household for residential value.

*My 3rd sampling frame will be collected on the tourist on Waikiki. Due to the high foot traffic in the area, I will be able to gage the recyclable material that is collected per location.

*Data not collected

Conclusion

There are other factors that effect Recycling

1. Social construct plays a role in recycling (-/+)
- economic
- age
-gender
2. location(residential make up)
3. tourist recycling could not be defined

Implications

- The research came up short on my broad look at the hypotheses in finding a correlation between actual recycling to the perception of recycling conducted on Oahu. I believe additional research is needed to find the correlation between what is reported to the state for the HI-5 program and the total collection of polyethylene terephthalate on Oahu.

Literature Review

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