

Name: _____

Date: _____

Landfill Activity

Background:

The Los Angeles County Sanitation District (LACSD) would like to reduce their burden on the regional landfills, such as the Puente Hills landfill mentioned in the article. You can learn more about the LACSD by visiting www.lacsd.org and clicking on the “Solid Waste & Recycling” tab.

Because the LACSD knows that your class is familiar with Participatory Sensing campaigns and data, they are hoping you can help them explore the impact of landfills by using data from a city-wide Participatory Sensing campaign, titled the “Trash Campaign,” that was conducted at a number of high schools in the Los Angeles Unified School District (LAUSD).

The task:

The LACSD is planning a public awareness campaign and wants to ask the public to take specific steps that will help reduce the landfill burden. Based on the data collected, they would like you to **make one or two recommendations** that would reduce the use of the regional landfills.

Specifically, they have asked your team to compose a letter in which you answer the following questions:

1. *What is/are the specific recommendation(s) you are proposing for the public awareness campaign?*
2. *Why do you think this will work? What evidence do you have to support this? Include any necessary plots and analyses.*

The data:

The survey questions/prompts for the Trash Campaign are provided below for your reference. The data can be found via the IDS public dashboard (<https://portal.idsucla.org/>) and can also be exported to RStudio.

Survey Question/Prompt	Variable Name	Data Type
1. Please take a photo of your trash.	photo	photo
2. Please describe your trash.	trash_name	text
3. What type of trash? <input type="checkbox"/> recyclable <input type="checkbox"/> landfill <input type="checkbox"/> compost	trash_type	category
4. Where was this trash generated/found? <input type="checkbox"/> home <input type="checkbox"/> restaurants <input type="checkbox"/> in transit <input type="checkbox"/> school <input type="checkbox"/> stores/malls <input type="checkbox"/> others <input type="checkbox"/> work	where	category
5. What activity generated this trash? <input type="checkbox"/> eating/cooking <input type="checkbox"/> cleaning <input type="checkbox"/> I found it <input type="checkbox"/> drinking <input type="checkbox"/> shopping <input type="checkbox"/> other <input type="checkbox"/> school work	activity	category
6. Where did you put this trash when you were done? <input type="checkbox"/> recyclable <input type="checkbox"/> compost/green waste <input type="checkbox"/> trash <input type="checkbox"/> litter	disposal_bin	category
7. How many recycling bins can you see from your location?	recycle_bins	number
8. How many trash/landfill bins can you see from your location?	trash_bins	number
9. How many compost/green waste bins can you see from your location?	compost_bins	number
AUTOMATIC	latitude	location (latitude)
AUTOMATIC	longitude	location (longitude)
AUTOMATIC	timestamp	date, time