

Data interested in:

Is the median housing price increasing tied to homelessness?

Who is homeless?

Location of homelessness.

Information about programs for homeless.

Prosecution of homeless.

Drug use, mental illness versus homelessness

Homeless versus family availability

Number of homeless that are enrolled in school.

Lessons:

1. First lesson: what data do the students think they want to find on homeless, survey question asking if student knows a homeless person or if they are homeless. What is your experience with homelessness? Where do students gain their opinion on homelessness? Have the students develop a survey.
2. How do students use different types of data and how to analyse it.
3. Correlations between number of homeless versus education level, number of homeless versus housing price, number of spots in homeless shelters versus number of homeless as per city,
4. Change in rates of homelessness over time., Change in rates of homelessness based on location.
5. Location of homeless camps.
6. Investigating sampling types for the data that is available, Importance of sampling

For survey:

1. Age
2. Zip code
3. Married status?
4. Number of children?
5. Annual income?
6. How many homeless people do you know?
7. Are there homeless people in my neighborhood?
8. My city has programs for homeless?

Datasets:

Tidy dataset with as much information that is available.

American house survey

General social survey

Greater Los Angeles Homeless Count

SSDAN

Everyone Counts

Lessons:

Linear modelling

Hypothesis testing on various types of data.

Confidence intervals on various types of data. (homeless and repeat offenders)

Methods to collecting data.

Graphs of data.

Descriptive statistics.

Analysis types based on types of data.

Difference about samples and populations and how populations and samples are different over locations.

Conditional probabilities