|  |
| --- |
| Oregon State University |
| Household Income vs. Housing Ownership |
| ST 599 Big Data Project 1 |

|  |
| --- |
| Sarah Guermond Andy Olstad Jasmine Pahukula Tim Skalland  4/21/2014 |

Overview

The American Community Survey (ACS) is distributed each year to a small sample of the population in each state including Puerto Rico. It provides updated information for communities to aid in planning efforts in between the main 10-year census survey. The ACS collects social, economic, housing and demographic data. This report will focus on the economic and housing information for each state.

*Question of Interest:*

*How different are the mean household incomes for different household ownership (i.e. own with a mortgage or loan, own free and clear, rented, or occupied without payment of rent) -in the US? By state?*

Findings

Obstacles and Solutions

* Git setup:
  + Problem: getting git to work and sync.
  + Solutions:
    - Delete local connection, create new version control project in Rstudio, paste changes to new file
    - Use github for Mac/Windows
* File downloads:
  + Problem: Automating the downloading process of each state from the web.
  + Solution: Download combined US household data.
  + Problem: Combined US household data comes in 4 files
  + Solution: Download all 4, use system() to merge in command line using cat.
* Data import:
  + Problem: ~200x4million dataset breaks R when you import it
  + Solution: Find columns of interest in the command line (put command here), cut, only import 4 columns
* Code compatibility:
  + Problem: 1 mac, 3 windows, windows cannot run command line data fixes
  + Solution: upload modified data file to git repo so it doesn’t have to be created every time

Future Work

* Can get summaries per state based on year
* Differences between each of the 4 household ownership
* Look at regions (East, South, West, Midwest)