Project 1: American Community Survey

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Contents

Introduction

- Statistics draws together diverse backgrounds
- Some projects require several different summaries from a single dataset
  - ACS is a large *sandbox* to play in
- Given four group members it is natural that there would be four different areas of interest

Questions of Interest

1. Is there a difference in travel time between Portland and Los Angeles?
   - Applications in urban sprawl, traffic circulation, etc...

2. Is there a spatial relationship in predominant energy type usage accross states? Is there a relationship between median bill cost for various energy types?
   - Applications in solar energy (sustainable energy alternatives)

3. How do proportions of self-sufficient veterans differ from state to state?
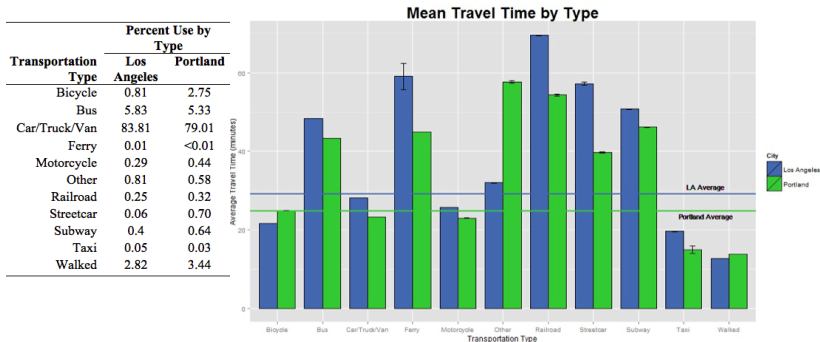   - Applications in veteran health care

Findings

Topics

1 Transportation Type

2 Energy Type

3 Veteran Disability and Benefits

4 Immigration

Transportation Type

Transportation Type

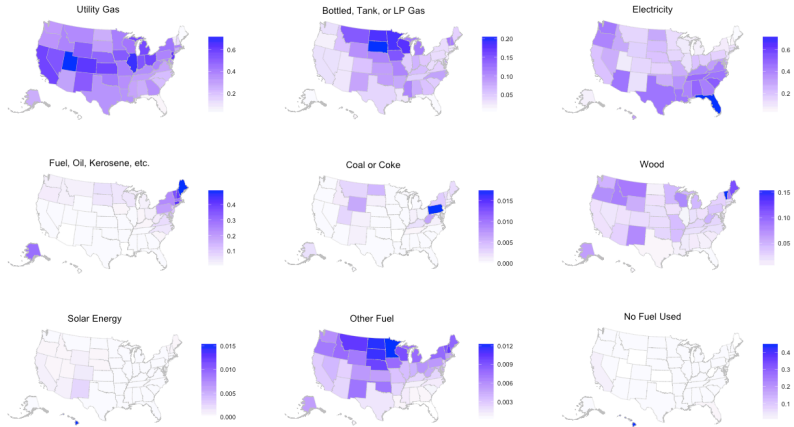|	Percent Use by Type	
Transportation Type	Los Angeles	Portland
Bicycle	0.81	2.75
Bus	5.83	5.33
Car/Truck/Van	83.81	79.01
Ferry	0.01	<0.01
Motorcycle	0.29	0.44
Other	0.81	0.58
Railroad	0.25	0.32
Streetcar	0.06	0.70
Subway	0.4	0.64
Taxi	0.05	0.03
Walked	2.82	3.44

Transportation Type

Transportation Type:Take Home Message

- Motor vehicles still the most predominant form for commuting
- Cycling and walking = longer commutes in Portland?
    - Higher proportions using these forms
    - Indicative of sprawl - Los Angelians won't walk/cycle unless they are close
- Longer commute times are not necessarily bad!
    - Higher proportion of use = more contribution to mean
    - Interesting discovery - Portlanders love their sustainable forms!
    - Walking, Cycling, Subway
- Perhaps most interesting: only one person commutes by ferry in Portland!
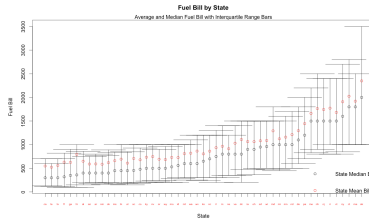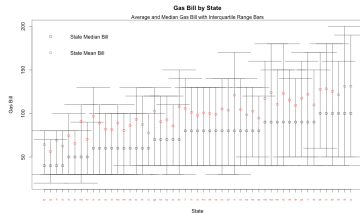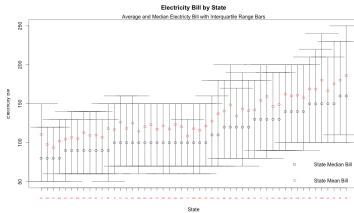
Energy Type

Energy Type

Energy Type

Energy Type

Energy Type

Energy Type:Take Home Message

Veteran Disability and Benefits

Veteran Disability and Benefits

Veteran Disability and Benefits: Take Home Message

- Observed spatial patterns with some outliers
    - Highest incidence rate in the Deep South
    - Lowest incidence rate in the northernmost South
    - Texas doesn't follow the Deep South pattern - the problem may not be in enlistment rates/political leaning!
- Minor shifts in disability rating
    - MS: Higher incidence of 10%, 50%-100%, and electing out
    - ND: Higher incidence of 20%-40%

Immigration

Overview and Questions of Interest
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Findings
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Obstacles and Solutions

Future Questions and Work

Immigration

Immigration : Take Home Message

Obstacles and Solutions

Universal:

- NA's in dataset
- Communication: Online tools (Google Groups and Google Drive)
- Continuity of project
- General github problems

Obstacles and Solutions

Individual:

- Transportation: Coding of light rail and determining scope of areas to compare
- Energy: Coding of data
- Veterans: "NA" vs "Elected Not To Answer"
- Immigrants: Technology and graphical display

Future Questions

- Incorporate sample weights and post-stratification
- Assess missing information
- Public policy applications