CHANGING COST OF LIVING ACROSS THE UNITED STATES

W209.4 FINAL PROJECT

Kevin Pang, Jason Liu, Sanket Patel

A special thanks to @duto_guerra for providing RevealVizScroll!



AGENDA

- Task 1 Kevin
- Task 2 Sanket
- Task 3 Jason

KEVIN

USER?

People moving from one state to another and interested in lower cost of living.

DATA?

Time series data from 1997 to 2017 on per capita expenditure by state provided by BEA.

TASK?

Explore CoL differences across the U.S.

SUBTASKS?

- Reveal how states and/or regions are similar or dissimilar
- Show how expenditure categories change overtime
- Compare rate of change in selected categories

UAT QUESTIONS

- 1. Name 3 most expensive states in 2017 by per capita expenditures.
- 2. How much was per capita PCE for Georgia in 2017?
- 3. Where is the least expensive (lowest expenditures) state in 2017?
- 4. What is the biggest expenditure category out of these: durable goods, nondurable goods, or services?
- 5. Which region had the sharpest increase of services based expenditures from 2007 to 2017?
- 6. Which region is most similar to Rocky Mountains?

MOSCOW

- Must
 - Add labels to the map (done)
 - Show table and map side by side (done)
 - Make table sortable (done)
- Should
 - Refine text to guide users how to use the visualization (done)
 - Show both nominal in addition to proportional changes as well (done)
 - Include sub categories drill-down (done)
- Could
 - Use effects to pop the insights to be more visible (TBD)
 - Use effects to make finding similar regions/states easier (TBD)
- Won't (N/A)

LIVE DEMO

INSIGHTS?

- Cost of living in North Dakota is rising fast!
- Overall, California is not so bad, except for housing?
- Service expenditures are rising a lot faster than Goods based costs!
- Southwest states seem more affordable...

SANKET

USER

People moving from one state to another and interested wage trends of differnt occupations.

DATA

Annual wage data exported from Bureau of Labor Statistics

- Data consists of annual median wage for ~800 occupation for each state from 2007 to 2016
- Consumer Price Index for each state from 2007 to 2016

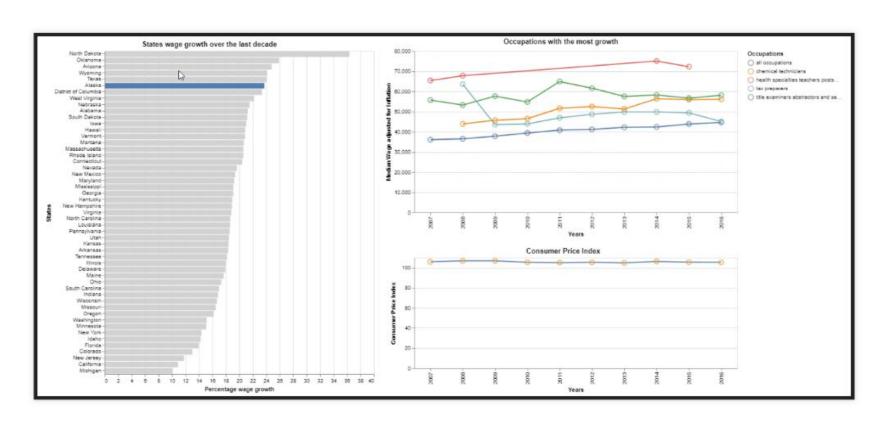
TASK

Explore impact of cost of living on wages of different occupations across US

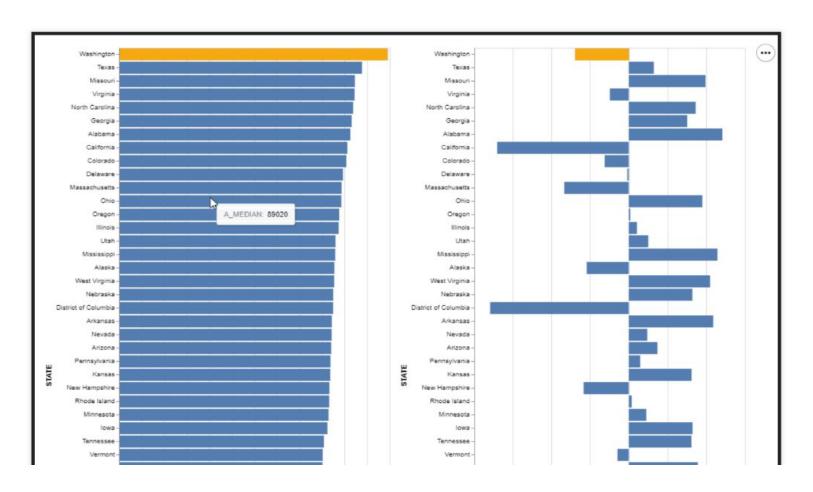
SUBTASKS

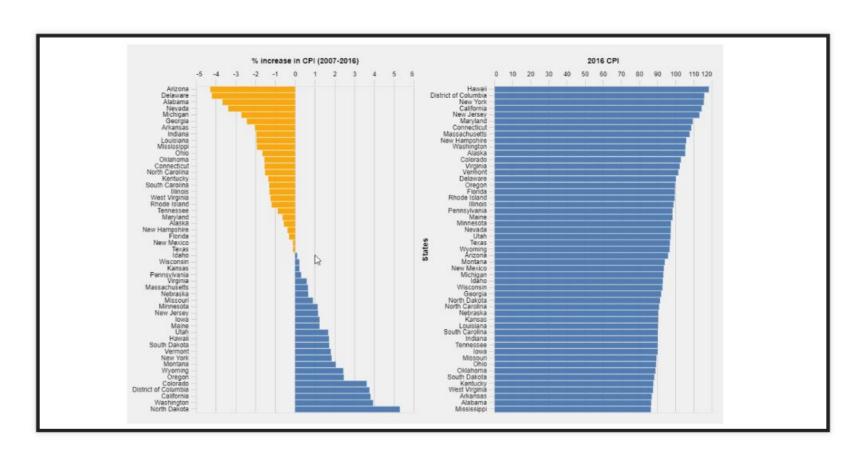
- Which states have seen the most increase in Consumer Price Index over time
- Which states are the top candidates for Tech and Teaching jobs by wages
- What are the best and worst paying occupation in any given state
- Compare trent in Adjusted median wage for any occupation across US

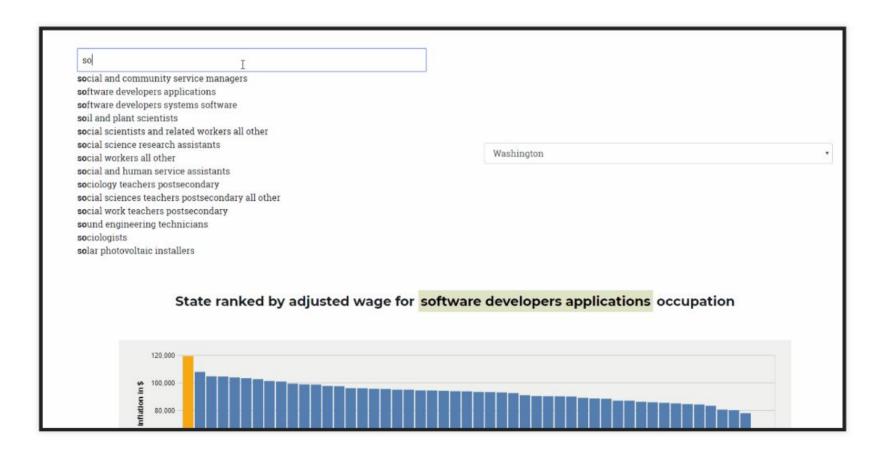
PROTOTYPE 1



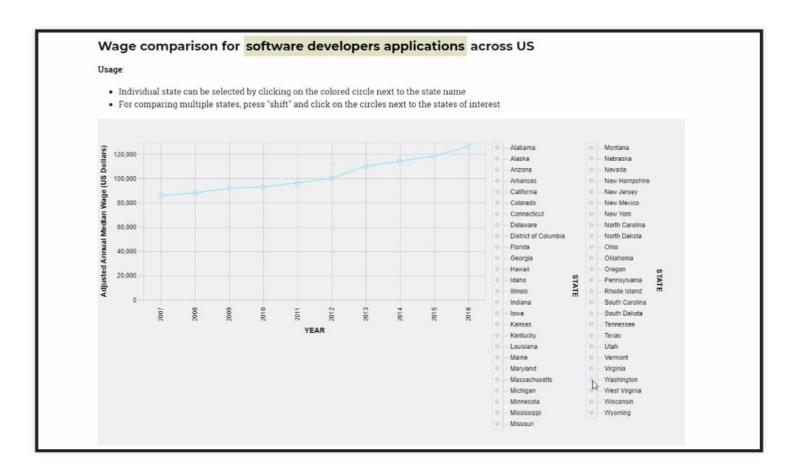
PROTOTYPE 2











USABILITY TESTING

- Identify the state with the highest median wage adjusted for cost of living for your occupation
- Identify the increase or decrease in cost of living in your state of residence and how it compares to the rest of US
- Between your current state of residence and the state you wish to relocate too, which one is trending higher in wage growth?

LIVE DEMO

INSIGHTS

- Arizona state has experience the most decrease in CPI from 2007-2016 while North Dakota has experienced the most increase
- Hawaii and Washington D.C top the chart for highest CPI. So if you are moving to one of these expect an increase in salary to maintain a similar quality of living
- Washington states has the highest wage adjusted for cost of living for people working in Software developer applications occupation
- Emergency medical technicians and paramedics have seen the sharpest increase in wages over the last decade
- In recent years Washington stated has passed California in terms of adjusted wage for Software developer applications job

JASON

USER?

People moving from one state to another.

Knowing how healthcare costs differ among states can better inform people looking to make a decision on whether to relocate. Ex. A person relocating from Alabama to New York would like to know whether he can expect to spend more or less on healthcare in New York compared to Alabama.

DATA?

Time series data from 1997 to 2017 on per capita

healthcare expenditure by state provided by BEA.

TASK?

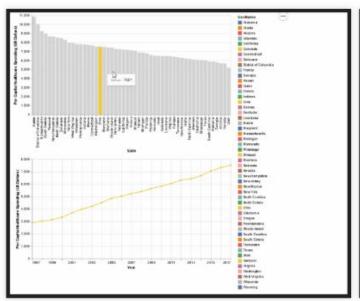
increased over a 21 year period (1997 - 2017) by state

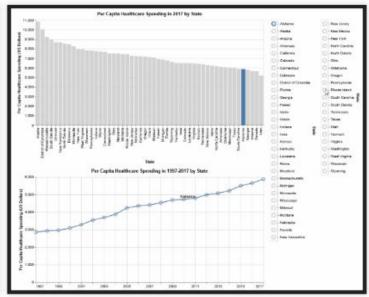
Summarize how out of pocket healthcare costs have

SUBTASKS?

- Identify the state(s) that have the most out of pocket healthcare expenses
- Identify the states(s) that have the least out of pocket healthcare expenses
- Compare growth of healthcare expenses over time by state

UAT CHANGE





LIVE DEMO

- Interactive visualization that lets users select states to compare healthcare costs
- Horizon chart added for quick overall comparison at a glance

INSIGHTS?

- Overall, healthcare costs have been trending upward in all states
- 3 most expensive states for healthcare
 - Alaska
 - District of Columbia
 - Massachusetts
- 3 least expensive states for healthcare
 - Utah
 - Arizona
 - Nevada

THANK YOU! QUESTIONS?