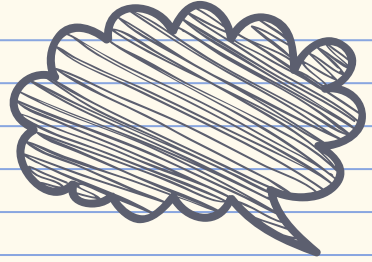


# Minimum Wage:

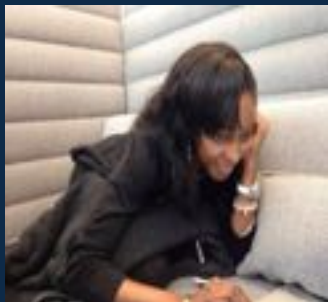
*A Historical Look at its  
Relationship with Cost of Living  
and Affordability by State*



# Team Members



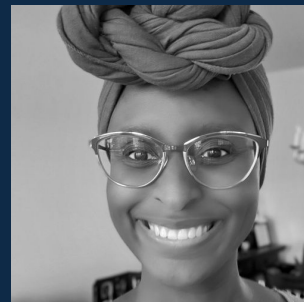
Radford Aldridge



Dieneba Diaby



Katia Gonzalez



Amber Lee



Margaret Wharton

October 7, 2021

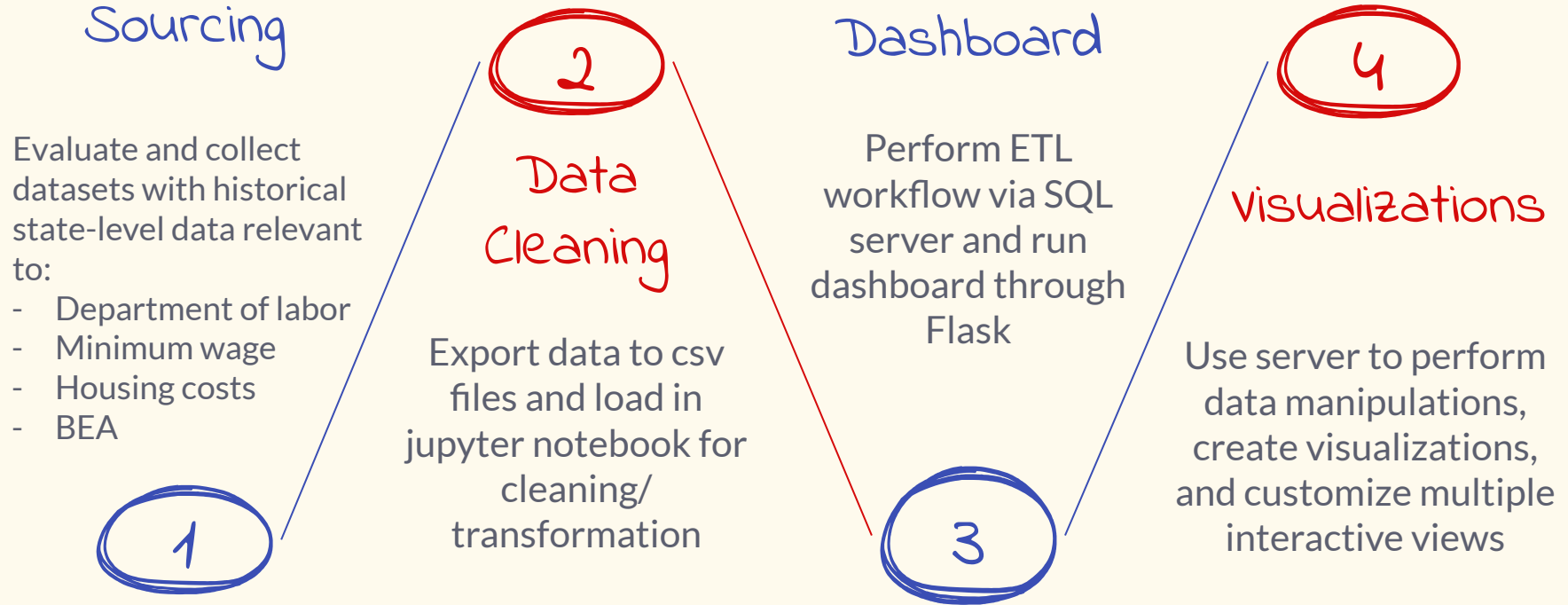
# Project Description

An interactive dashboard that allows users to explore the changes in wages versus the cost of living in the United States.

# An Immersive Visualization

The goal of our project was to create an interactive dashboard with a user-friendly interface and intuitive visualizations, providing an effective medium for individuals to consume, interpret, and explore our selected datasets. This dashboard provides custom views and user-driven visualizations, transforming complex data into easily understandable and shareable information.

# workflow

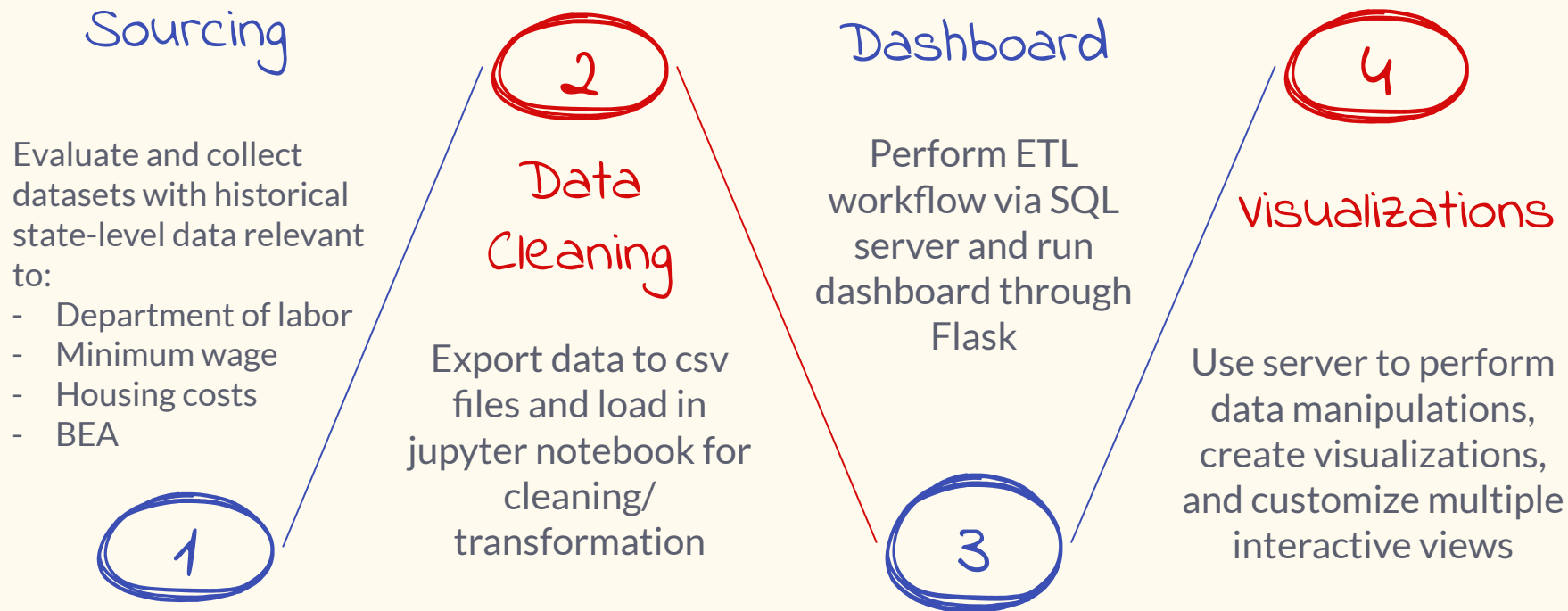


## Caveats and Limitations

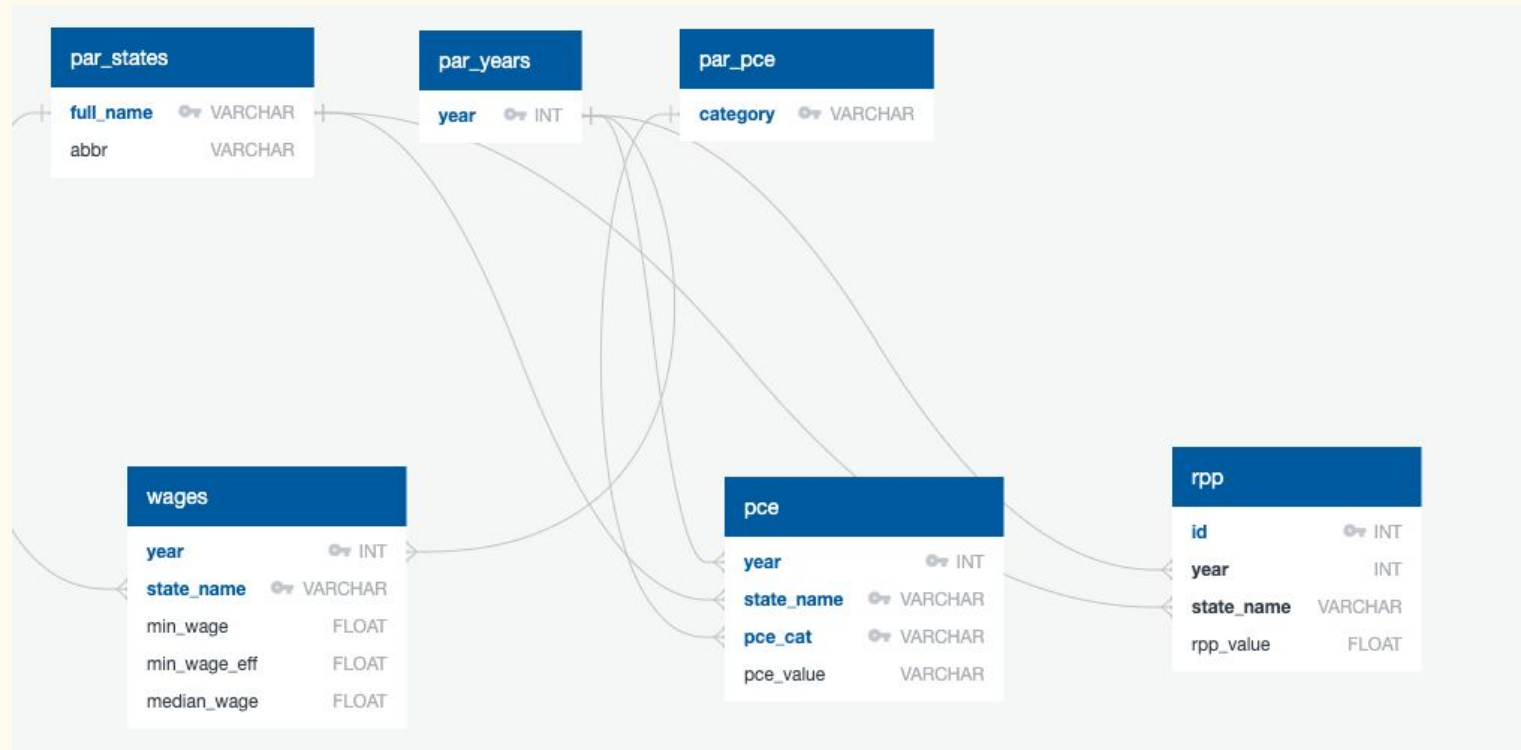
- In instances where states haven't adopted their own minimum wage, the effective minimum wage equals the federal minimum wage<sup>1</sup>
- Cost of living was only available going back to 1997
- A next step in this analysis might use more granular location data to control for the differences between urban and suburban locales

<sup>1</sup>When an employee is subject to both the state and federal minimum wage laws, the employee is entitled to the higher of the two minimum wages.

# workflow



# SQL Database





# workflow

## Sourcing

Evaluate and collect datasets with historical state-level data relevant to:

- Department of labor
- Minimum wage
- Housing costs
- BEA

1

2

## Data Cleaning

Export data to csv files and load in jupyter notebook for cleaning/transformation

## Dashboard

Perform ETL workflow via SQL server and run dashboard through Flask

3

4

## Visualizations

Use server to perform data manipulations, create visualizations, and customize multiple interactive views

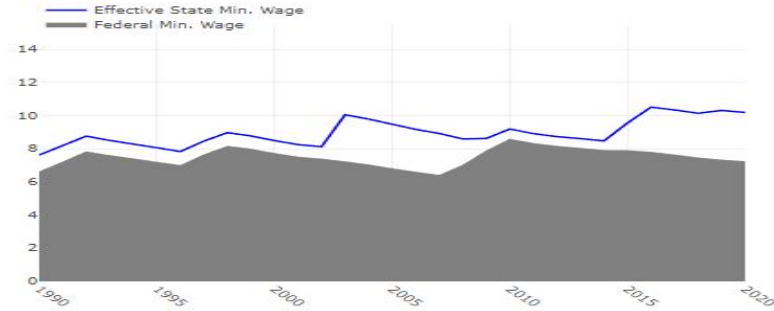
# our Dashboard

## State Minimum Wage and Cost of Living History

Alaska ▼

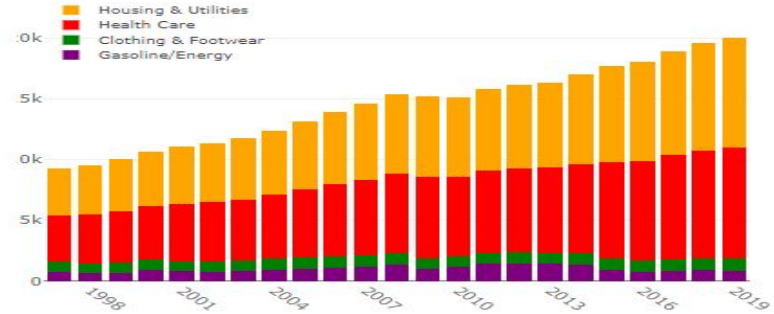
### Minimum Wage (1990 - 2020)

Mini Wage in 2020 Dollars



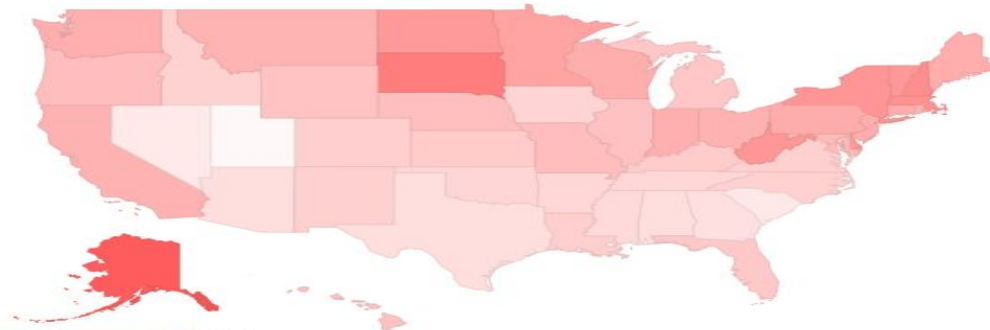
### Average Cost of Living (1997 - 2019)

Avg Annual Personal Consumption Expenditures (PCE) in 2020 Dollars



## Compare PCE Across the United States (2019)

Health Care ▼

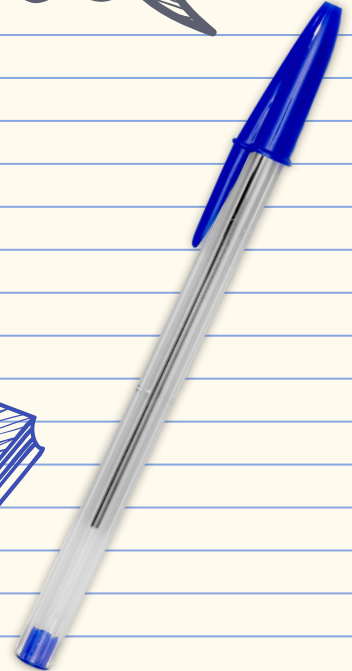
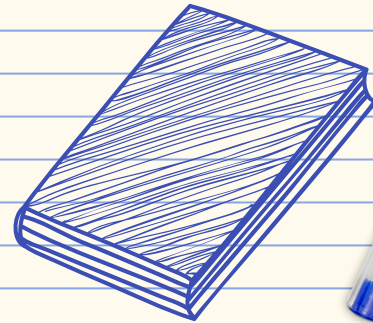


## Use Cases

- The average user should be able to quickly absorb insights related to a social issue that touches such a large part of the population.
- In addition, the interactive design helps in identifying trends and patterns that may have predictive value for policymakers, businesses, and consumers.

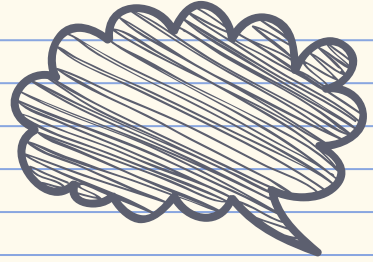


Takeaways



# Thanks!

## Any Questions?



# References

## Links to Datasets:

- Minimum Wage by State: [Changes in Basic Minimum Wages in Non-Farm Employment Under State Law: Selected Years 1968 to 2020 | U.S. Department of Labor \(dol.gov\)](#)
- Kaggle: <https://www.kaggle.com/lislejoem/us-minimum-wage-by-state-from-1968-to-2017/version/4>
- [History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938 - 2009 | U.S. Department of Labor \(dol.gov\)](#)
- BEA: <https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&acrdn=8>