



Executive summary: thesis (business problem) and conclusions

Thesis: We aim to create a dashboard for analyzing the correlation between states, graduation number/rate, and compensation with a focus on identifying high and low-paying jobs in the job market and understanding the influence of graduation on state annual earnings.

Conclusion: States with higher graduation numbers and rates tend to have a higher annual state earning.

Data Preparation

Steps we have taken and need to take in data cleansing and setting table relations

- We Pulled data from multiple sources including BLS and external sources
- Formatting Process - Deleting Excess texts and reordering columns and rows for 50 states

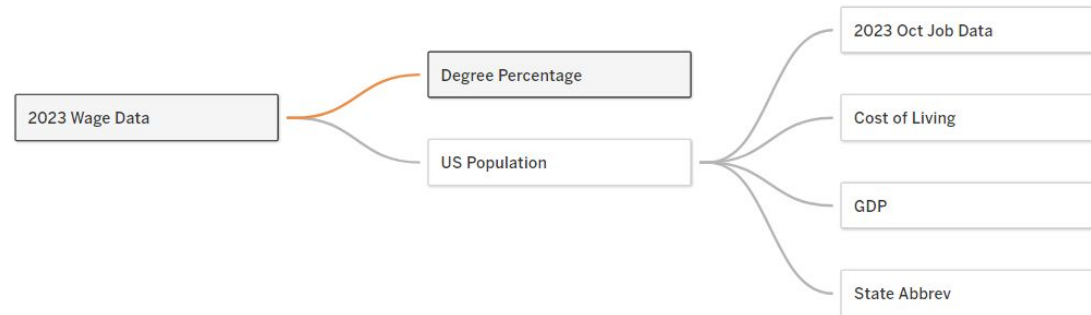
Challenges faced while data cleansing

- Format Challenges:
- Text size - Increase text size for better readability
- Excess pictures - Deleting extra icons (US State Icons)
- Color - Change all texts to black color as the standard
- Font style - Reformatted to standard excel text style
- Number formatting - Converted number through multiplication (1M -> 1,000,000)

ERD Table Relationships

Cardinality : One - to - One

Referential Integrity : All Records Match



2023 Wag... — Degree Pe... ▼

50 → ro

Choose. Learn more

Cardinality

One ▼

One ▼

Referential Integrity

All records match ▼

All records match ▼

Revert to Default

<

2023 Wage Data	2023 Wage Data	2023 Wage Data	Bin	
State	Annual Average Wage	Average Hourly Wage	Annual Average Wage (b...	
Alabama	50,620	24.3200	48,184	
Alaska	66,130	31.7900	65,936	
Arizona	58,620	28.1800	58,328	
Arkansas	48,570	23.3500	48,184	
California	73,220	35.2000	71,008	
Colorado	67,870	32.6300	65,936	

Findings and Lessons learned

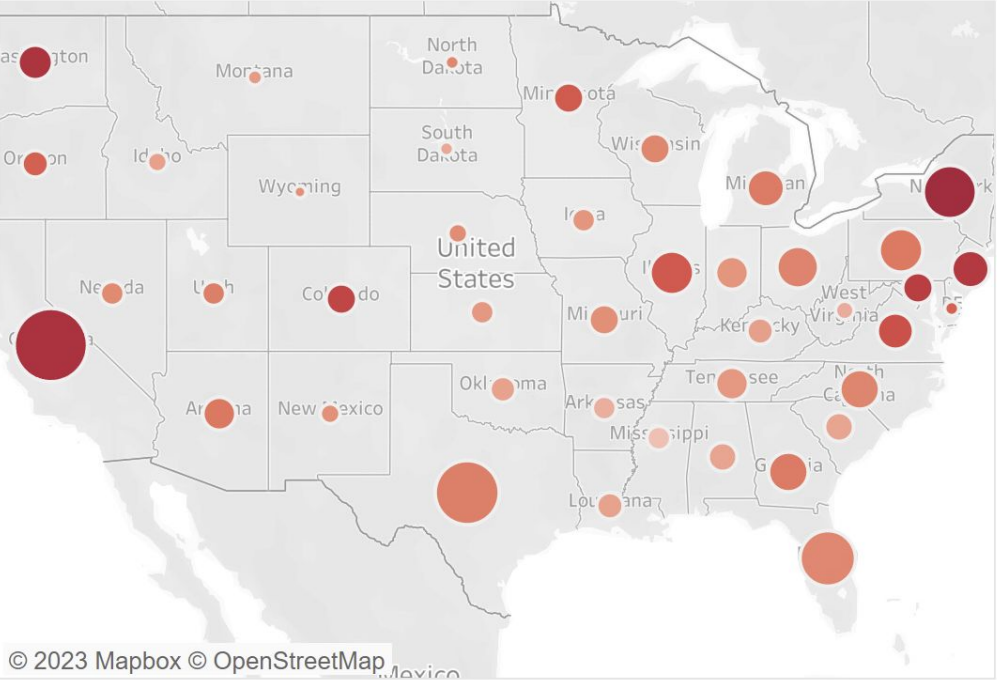
Conclusion - States with higher graduation numbers and rates indeed tend to have a higher annual state earning. This conclusion backs up our original hypothesis.

Other Findings

1. Higher GDP and cost of living in a state has a positive correlation with the average annual salary in that state.
2. Higher level services such as in education, business, technology tend to have a higher number of employees and higher wages.
3. States with higher percentage of population with advanced degrees have higher employment rates in Business and Financial services than manufacturing and labor services.

State Annual Salary Factors

Population vs. Annual Salary



Annual Average Wage
45,180 76,600

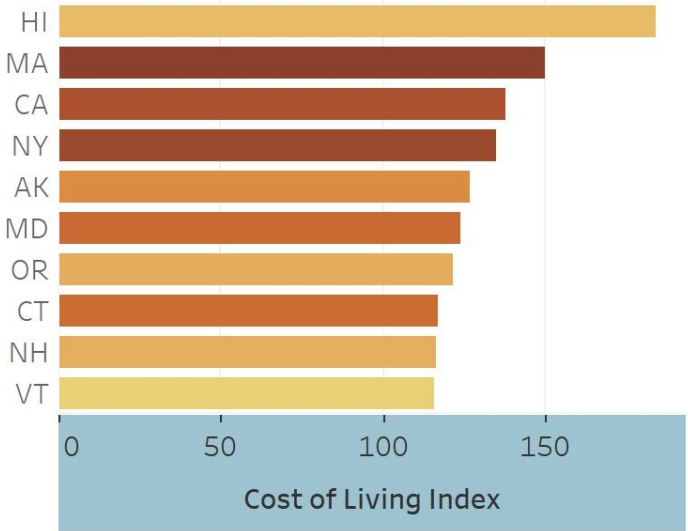
Annual Average Wage
59,190 76,600

Population
• 578,803
○ 10,000,000
○ 20,000,000
○ 30,000,000
○ 39,237,836

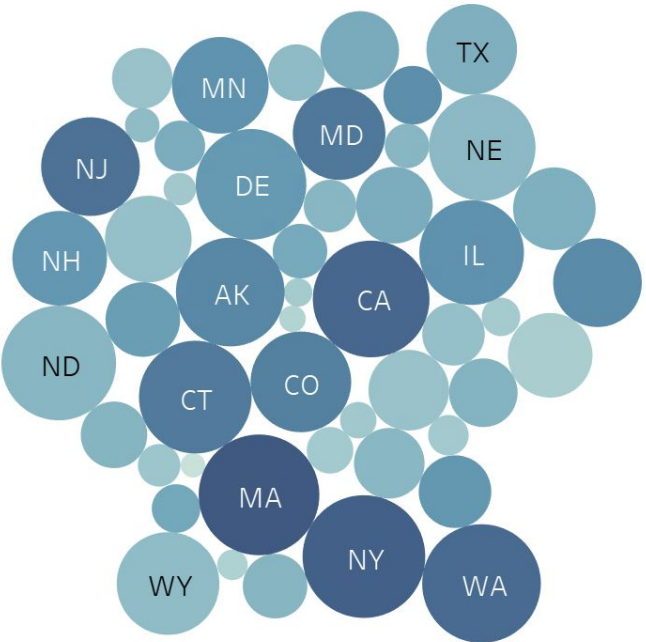
Annual Average Wage
45,180 76,600

Cost Living vs. Annual Salary

States



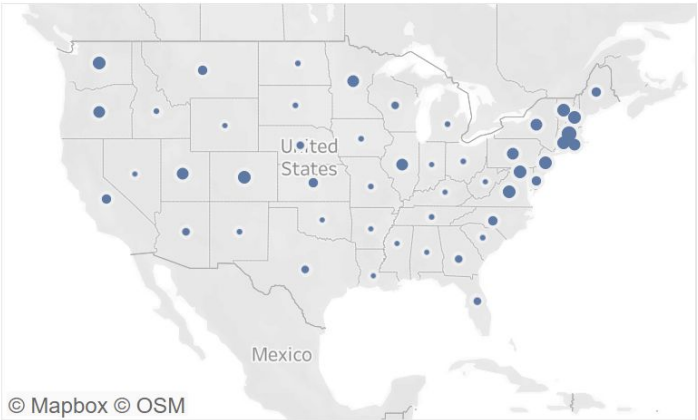
GDP vs. Annual Salary



State Wage and Occupation

2023 Occupation Distribution

States Pop % of Bachelor's Degree Holder



State Annual Wage Overview

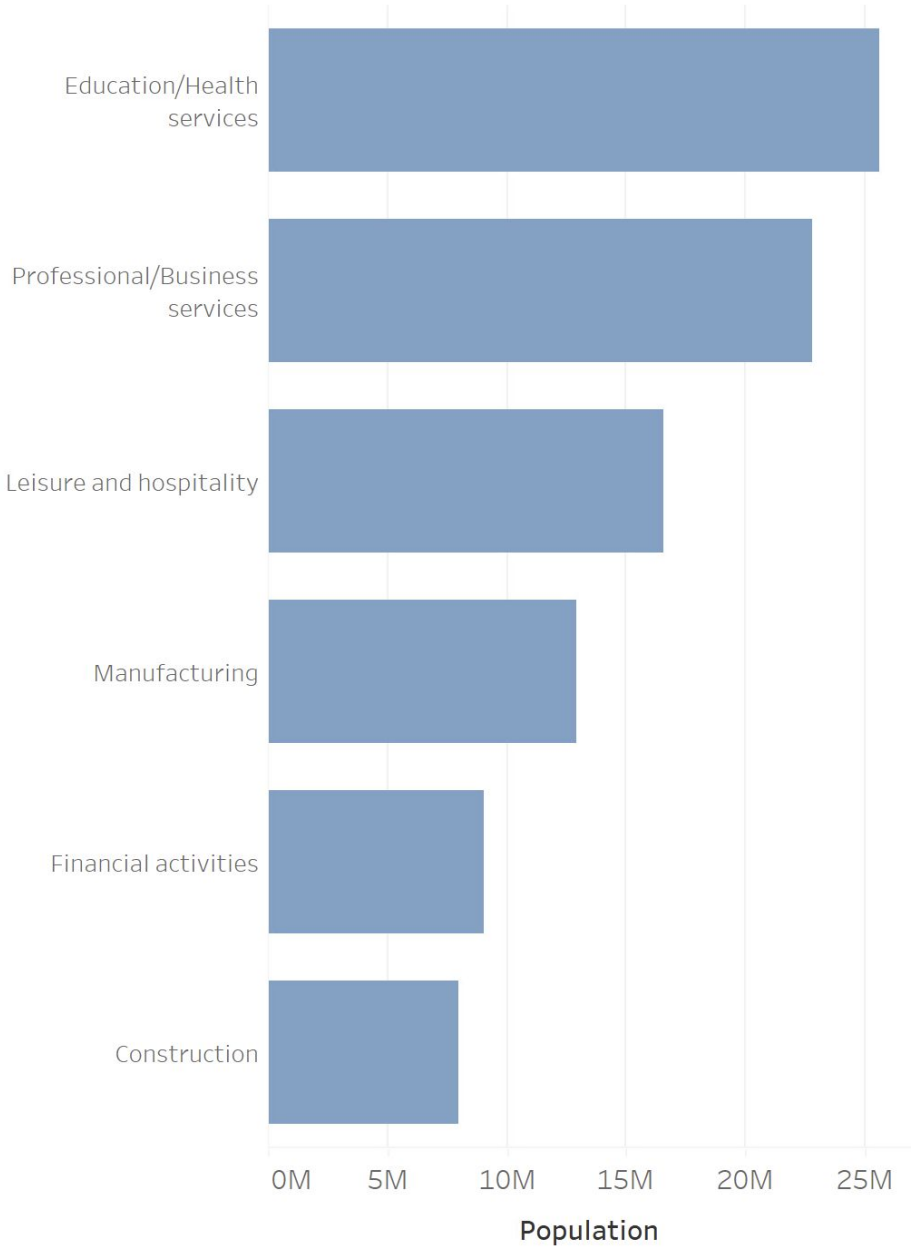


Bachelor's Degree ..

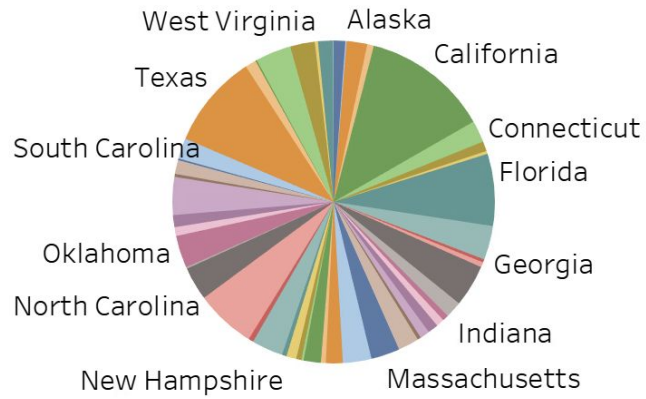
- 0.2412
- 0.2478
- 0.2527
- 0.2645
- 0.2698
- 0.2743
- 0.2757

Annual Wage

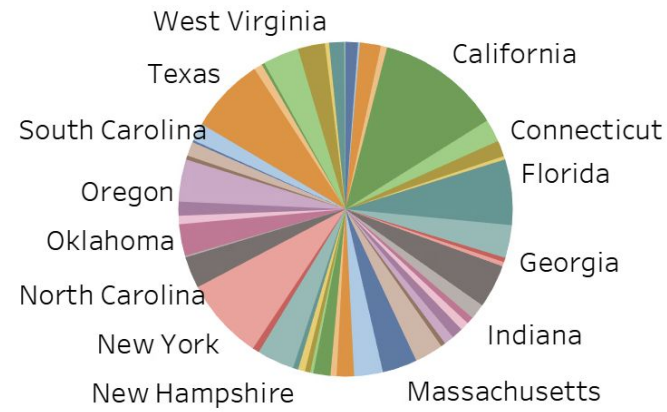
- 45,180
- 48,570
- 49,170
- 49,890
- 50,620
- 50,650
- 50,810



No.of Professional/Business Workers by State



% Pop with Advanced's Degree by State



Occupation State

- ☐ Maine
- ☐ Maryland
- ☐ Massachus...
- ☐ Michigan
- ☐ Minnesota
- ☐ Mississippi
- ☐ Missouri
- ☐ Montana
- ☐ Nebraska
- ☐ Nevada
- ☐ New Hamps...
- ☐ New Jersey
- ☐ New Mexico
- ☐ New York
- ☐ North Carol...
- ☐ North Dakota
- ☐ Ohio
- ☐ Oklahoma
- ☐ Oregon
- ☐ Pennsylvania
- ☐ Rhode Island
- ☐ South Carol...
- ☐ South Dakota
- ☐ Tennessee
- ☐ Texas
- ☐ Utah
- ☐ Vermont
- ☐ Virginia
- ☐ Washington
- ☐ West Virginia
- ☒ Wisconsin
- ☐ Wyoming

No. Of workers in selected sectors by State

