



CALIFORNIA EMPLOYMENT VISUALIZATION PROJECT

Jacob Farley, Mark Phillips,
Val Keeranan

DATA SETS

1. **Quarterly Census of Employment and Wages (2020-2022) CSV**
2. **Short-Term Industry Employment Projections (2023-2025) CSV**
3. **Long-Term Occupational Employment Projections (2020-2030) CSV**

ETHICS & USAGE

Publisher: California Employment Development Department (data.ca.gov)

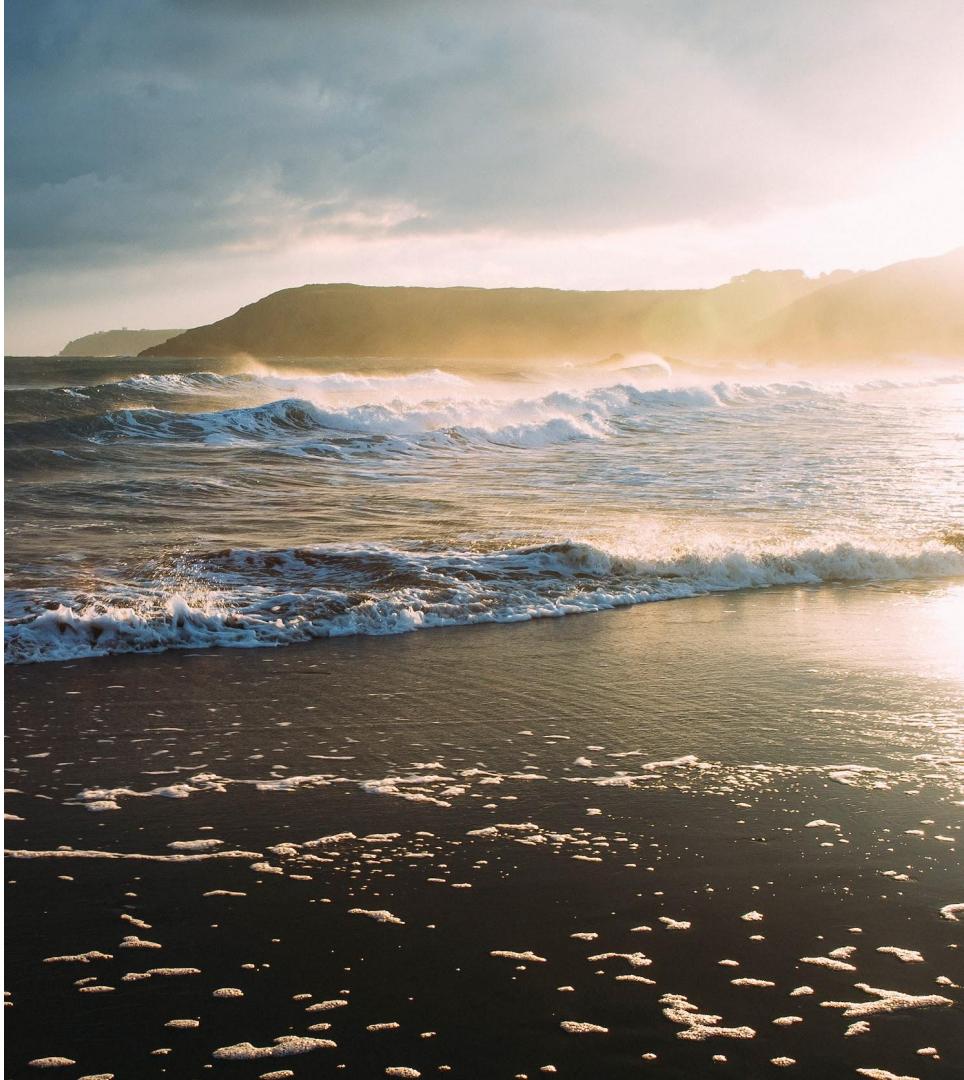
Public Access Level: This dataset is intended for public access and use

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DATA HANDLING

1. Converted CSV files to JSON
2. Cleaned data by removing duplicates and dropping unneeded columns
3. Created data groupings
4. Created dashboards and visualizations using HTML, Bootstrap CSS, Javascript, D3, Plotly and Chart.JS
5. Combined dashboards with Flask API

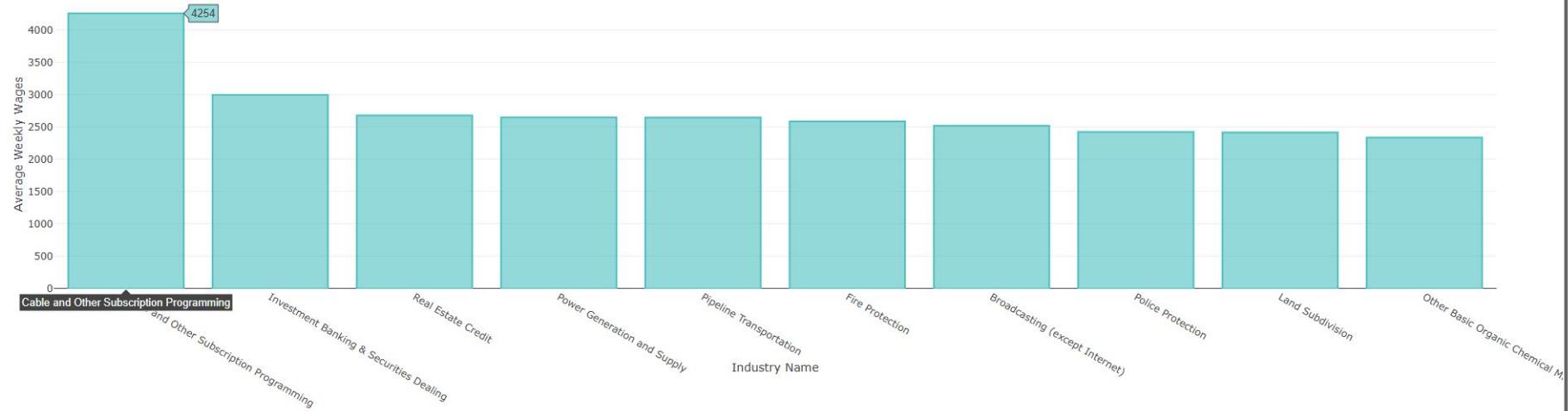


Quarterly Census of Employment and Wages 2020-2023

Mark Phillips



Average Weekly Wages by Industry for Selected Area and Year



Dashboard built using:

- HTML
- JavaScript
- D3
- Plotly

User Interactions:

- Dropdown for year and county
- Filtered chart
- Hover text on chart

FINDINGS

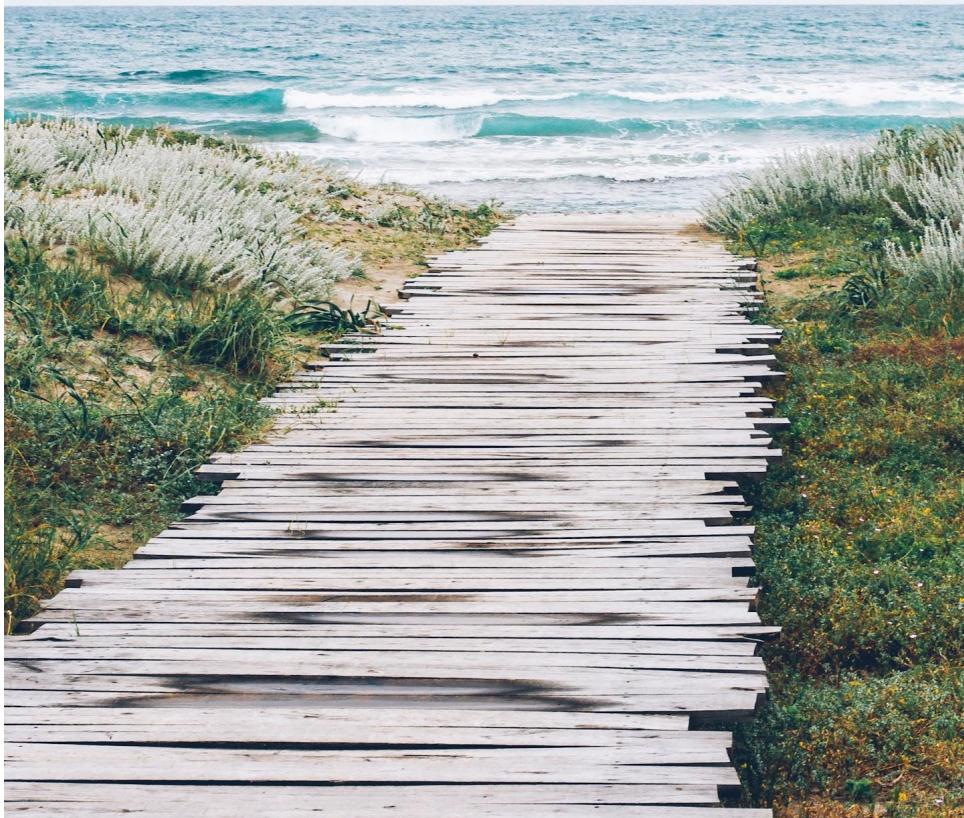
1. Across each year most counties have similar industries with the highest wages, but each county may have very different industries from one another.
2. A county such as San Bernardino consistently has industries such as Power Generation, Pipelines, or other manufacturing type industries. This is different from a county such as Los Angeles where Sports, artists/performers, or financial activity are consistently in the top industries.
3. There are some industries such as banking or investments that show up in many counties top 10 lists.

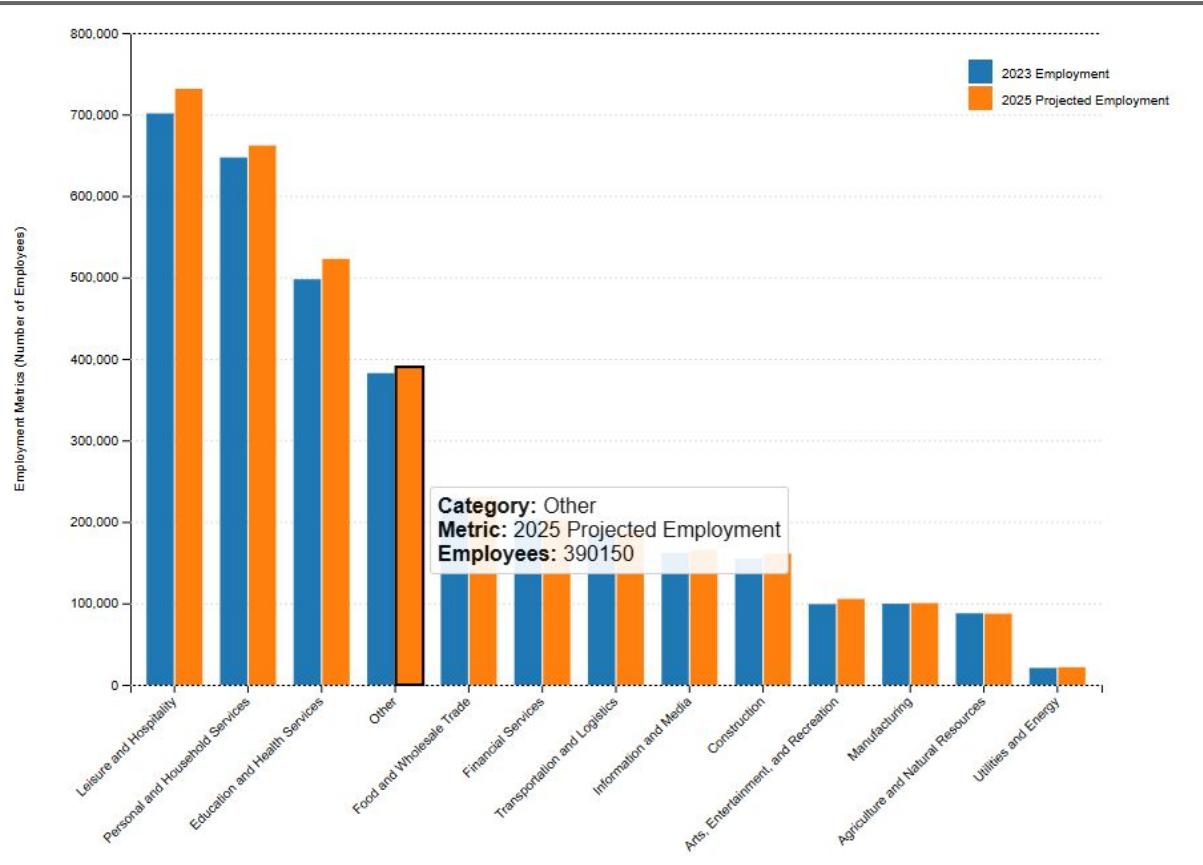
Top Counties and Industries with highest weekly wages in 2022:

1. **San Diego County**
 - a. Offices of Physicians: **\$11,786**
 - b. Sports Teams and Clubs: **\$7,717**
 - c. Other Financial Vehicles: **\$5,090**
2. **Los Angeles County**
 - a. Offices of Bank Holding Companies: **\$11,337**
 - b. Sports Teams and Clubs: **\$7,977**
 - c. Other Ground Passenger Transportation: **\$7,701**
3. **San Bernardino County**
 - a. Plastics Materials: **\$5,101**
 - b. Purchased Iron and Steel Pipe: **\$4,323**
 - c. Adhesive Manufacturing: **\$4,237**

Short-Term Industry Employment Projections 2023 - 2025

Jacob Farley





Dashboard
built using:

- HTML
- JSON
- D3
- JavaScript
- CSS
- Plotly

User
Interactions:

- Hover Text on Chart
- Clickable Bars
- Filtered Info Table

FINDINGS

Industries with the largest growth in employment from 2023 to 2025:

1. Leisure and Hospitality: **30.2K**
2. Education and Health Services: **25K**
3. Personal and Household Services: **14.7K**

Industries with the lowest growth and decline in employment from 2023 to 2025 :

1. Manufacturing: **820**
2. Agriculture and Natural Resources: **-433**
3. Financial Services: **-585**

Largest industries projected employment growth:

1. Leisure and Hospitality:
701,200 employees in 2023 to **731,443** in 2025
2. Education and Health Services:
497,661 employees in 2023 to **522,697** in 2025
3. Personal and Household Services:
647,133 employees in 2023 to **661,867** in 2025

Smallest industries projected employment growth:

1. Utilities and Energy:
20,600 employees in 2023 to **21,500** in 2025
2. Agriculture and Natural Resources:
87,700 employees in 2023 to **87,267** in 2025
3. Arts, Entertainment, and Recreation:
98,980 employees in 2023 to **105,350** in 2025

Long-Term Occupation Employment Projections 2020-2030

Val Keeranan



Dashboard built using:

- HTML
- JavaScript
- JSON
- D3
- Bootleg CSS
- Plotly & Chart.js

User Interactions:

- Occupation Dropdown
- Employment Info Filtering
- Hover Text on Charts



FINDINGS

Occupations with the largest projected growth in employment from 2020 to 2030:

1. Nurse Practitioners: **58.6%**
2. Physical Therapist Assistants **41.8%**
3. Physician Assistants: **40%**

Occupations with the largest projected decline in employment from 2020 to 2030:

1. Word Processors and Typists: **-38.5%**
2. Textile Cutting Machine Setters, Operators, and Tenders: **-25%**
3. Data Entry Keyers: **-24.4%**

Occupations with the highest median hourly wage:

1. Nurse Anesthetists **\$117.38**
2. Emergency Medicine Physicians **\$116.12**
3. Physicians, All Other **\$115.3**

Occupations with the lowest median hourly wage*:

1. Gambling Dealers **\$15.50**
2. Taxi Drivers **\$15.76**
3. Waiters/Waitresses, Bartenders, Hosts **\$16**

*The minimum wage in California in 2023 was \$15.50, then increased to \$16 in 2024.

California occupational employment is projected to grow by 8.9%, employing 1,736,100 more people at a median hourly wage of \$24.73, or \$51,450 annually by 2030.



THANK YOU!