

Wages By Occupation Across Canada



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Problem Statement

- The problem is the lack of clarity and transparency surrounding wages across different regions and industries in Canada.
- There are many sources of information on wages and salaries but these can be difficult to access and interpret, making it challenging for workers and employers alike to make informed decisions.
- Additionally, understanding wage rates by age group and gender is important to assess pay equity.

Research Questions

- 1. What are the average wages across different occupations in Canada?
- 2. How do wages vary by province?
- 3. Which occupations offer the highest wages, and which offer the lowest?
- 4. How have wages across different occupations changed over time (Will take last 5 years only)?
- 5. Are there any significant gender pay gaps across different occupations in Canada?

Data repository & Utilities

Dataset

Public Dataset Source https://open.canada.ca/data/en/dataset/

Supporting document-Statistics Canada

https://www150.statcan.gc.ca/

Tools & Libraries





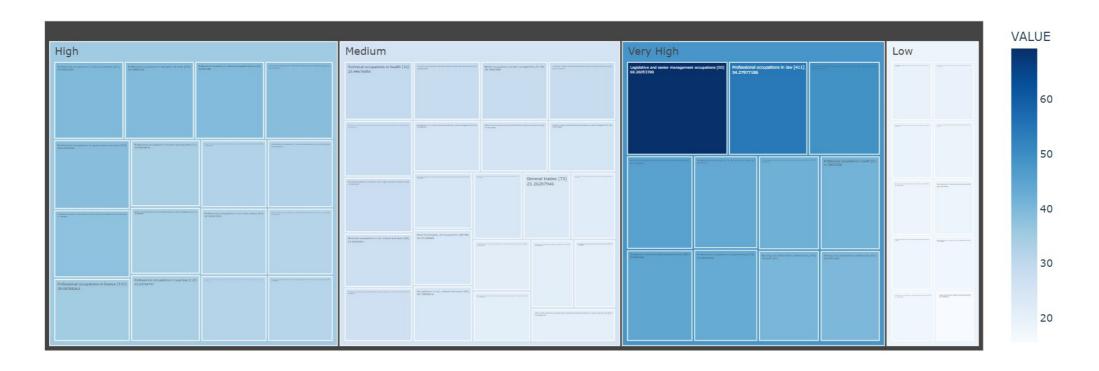






1. Canadian occupation wage averages

Average Wages Across Different Occupations in Canada



1. Canadian occupation wage averages

Average Wages Across Different Occupations in Canada (By Wage Range)







Professional occupations in education services [41]

Professional occupations in finance and business [11]

Professional occupations in social and community services [413]

Professional occupations in business [112]

0 10 20 30 40

Average Wage

Average Wage

Professional occupations in applied sciences (except engineering) [212

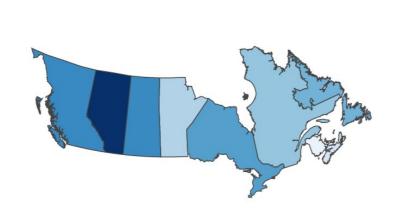
Professional occupations in law, education, social, community and government services [41

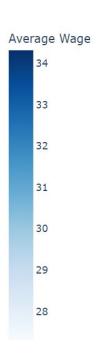
Middle management occupations in retail and wholesale trade and customer services [60]

Occupations in education, law and social, community and government services, except management [41-45]

2.Provincial wage variations: A comparative analysis

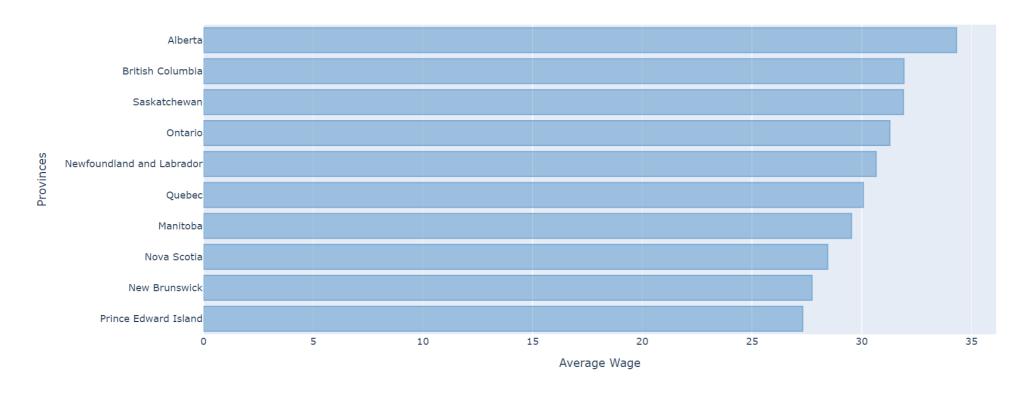
Average Wages Across Different Occupations by Province (2018-2022)





2.Provincial wage variations: A comparative analysis

Average Wage Composition in Various Provinces (2018-2022)

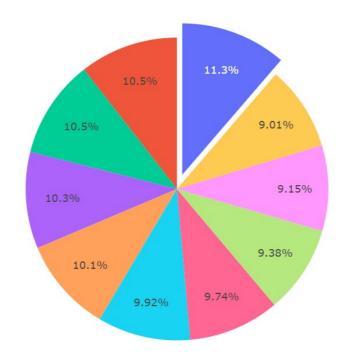


2. Provincial wage variations: compositions

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Average Wage Composition in Various Provinces (2018-2022)

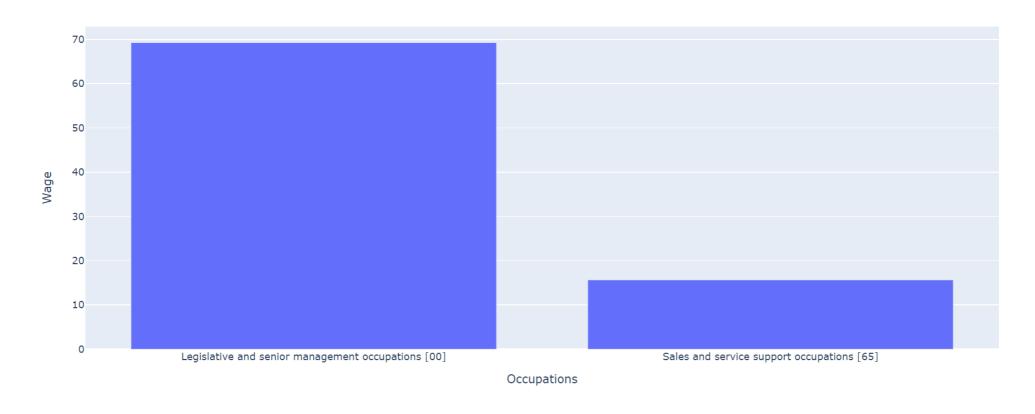




Prince Edward Island

3. The occupations with the highest and the lowest wage

Highest and Lowest Wage Occupations

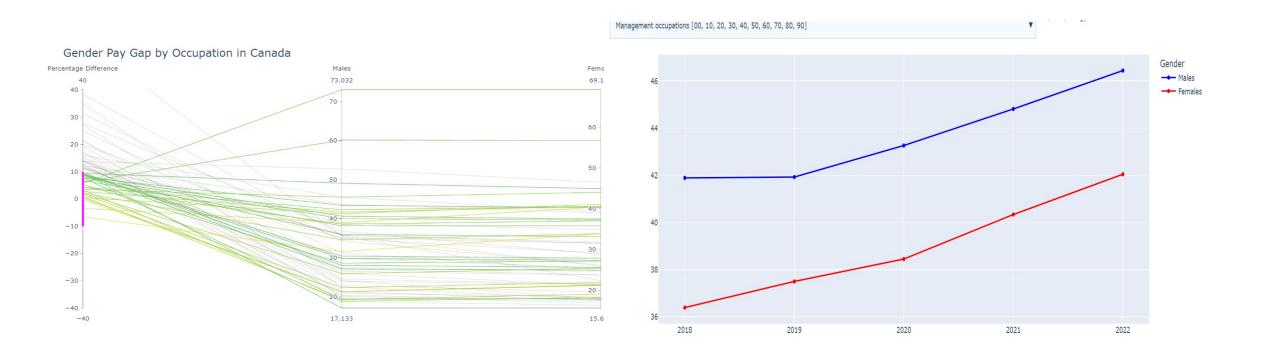


4. The last five-year analysis of wage evolution across diverse occupations

Average Wages Across Different Occupations (2018-2022)



5.Exploring gender pay disparities in Canadian occupations



Learnings & Future Work

- ➤ Based on the size of the data, it is advisable to utilize Google Colab due to the availability of free GPU resources which can effectively enhance computation performance for large datasets
- It is worth noting that the visualizations presented may not be optimal, and thus there is a possibility of generating alternate charts while considering additional factors such as age groups, skill sets, other types of jobs like part time category and experience level etc.
- In future investigations, it is recommended to consider the previously stated limitations and factors to facilitate the identification of further insights.

