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Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



Western Cape List of Occupations in High Demand

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What is the List of Occupations in High Demand?

How do we identify occupations in high demand?

Context: The Western Cape economy and Labour Market

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What is the List of Occupations in High Demand?

Purpose of the List of OIHD



Signal the need for the development of new qualifications,



Act as a signpost for enrolment planning, and



Inform career guidance for learners and work-seekers.



Inform skills strategy

How do we identify occupations in high demand?

Four criteria for an occupation to be classified as being in high demand



Employment growth

- *Secondary data analysis*



Wage growth

- *Secondary data analysis*



Vacancy growth

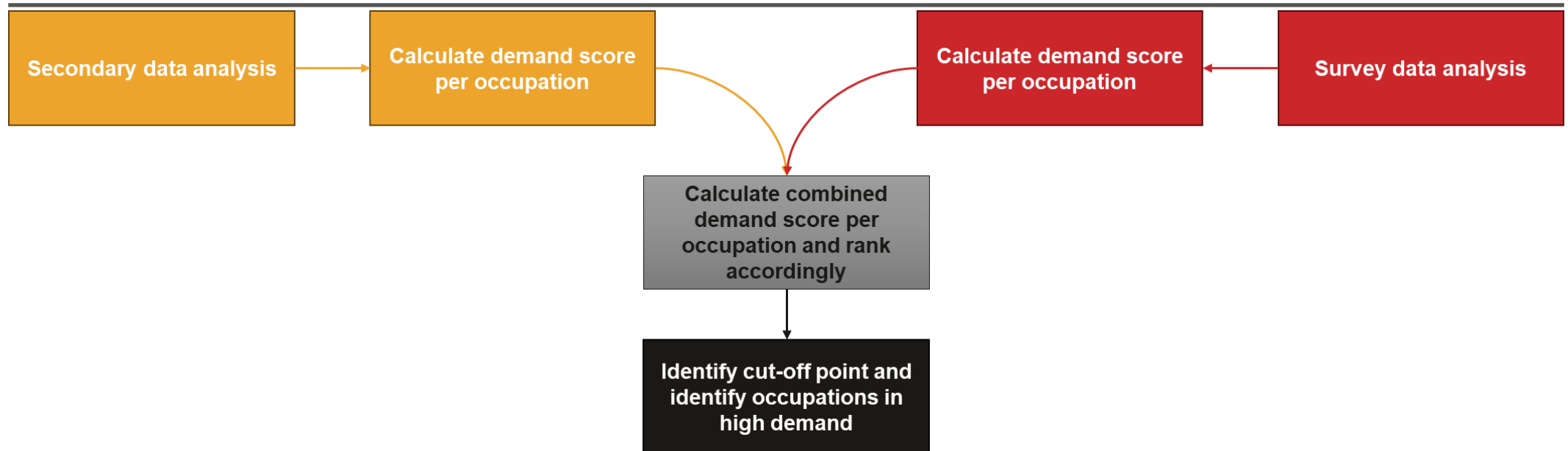
- *Secondary data analysis*



High likelihood of seeing recruitment activity in the medium-term

- *Primary data collection (survey)*

Approach to identifying occupations in highest demand



- As in previous iterations, approach still heavily inspired by UK's Migration Advisory Committee
- Most significant change from 2020 methodology is the use of a survey instead of a "Call for Evidence"

Context: The Western Cape economy and labour market

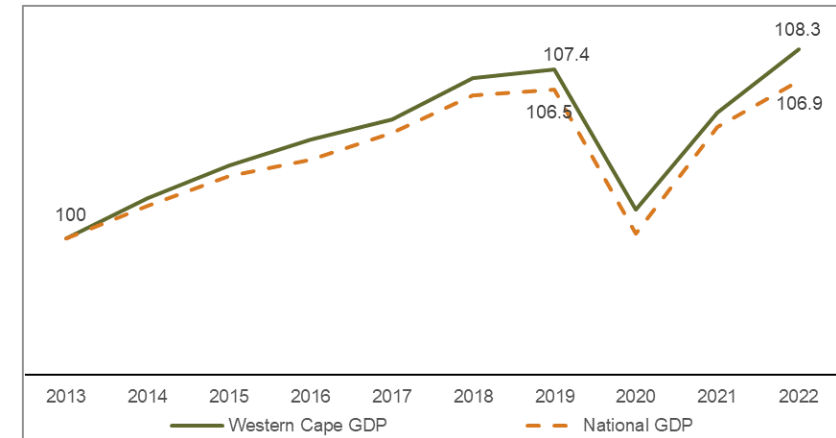
The current context

- *Western Cape has grown faster than the rest of the country in terms of output and employment*

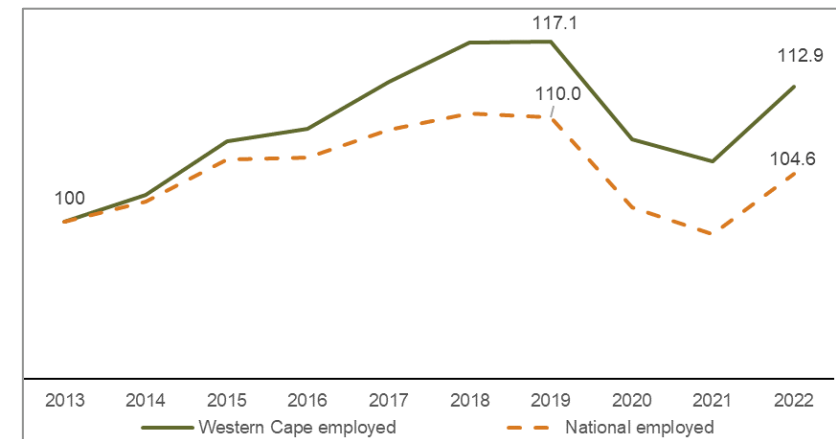
- Between 2019 and 2022, national real GDP grew by a mere 0.4% compared to average real growth of 0.9% in Western Cape.
- While employment in Western Cape has grown faster than the rest of the country over the last decade, the post-covid recovery has been a bit slower.

- 2022 vs 2019
 - WC: 3.6% fewer people employed
 - SA: 1.5% more people employed
- 2023-Q3 vs 2019-Q3
 - WC: 9.6% more people employed
 - SA: 2.3% more people employed

Western Cape and National real GDP (indexed, base year 2013)



Western Cape and National employed persons (indexed, base year 2013)

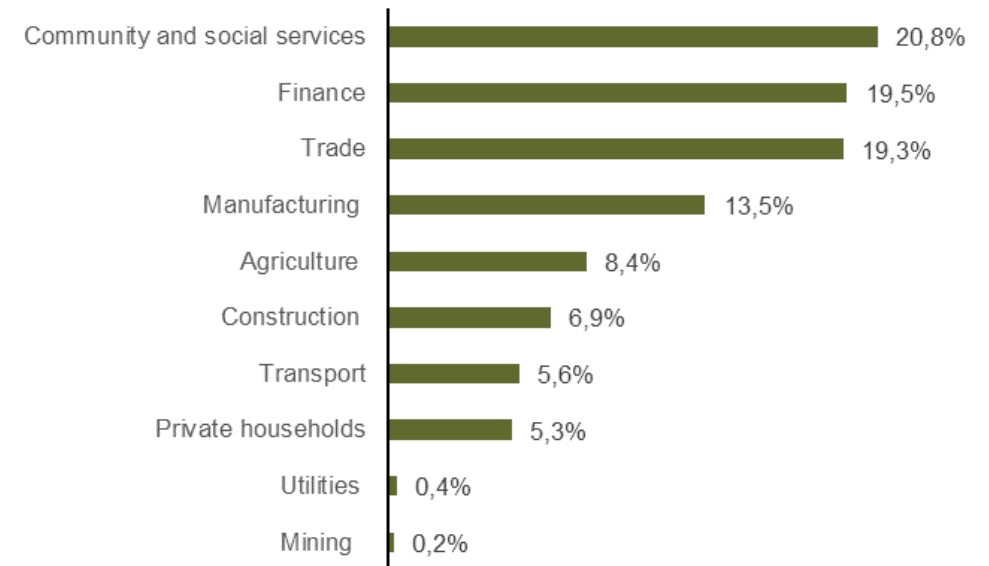


Employment by industry

- Most employed individuals in the WC worked in community and social services, finance, and trade

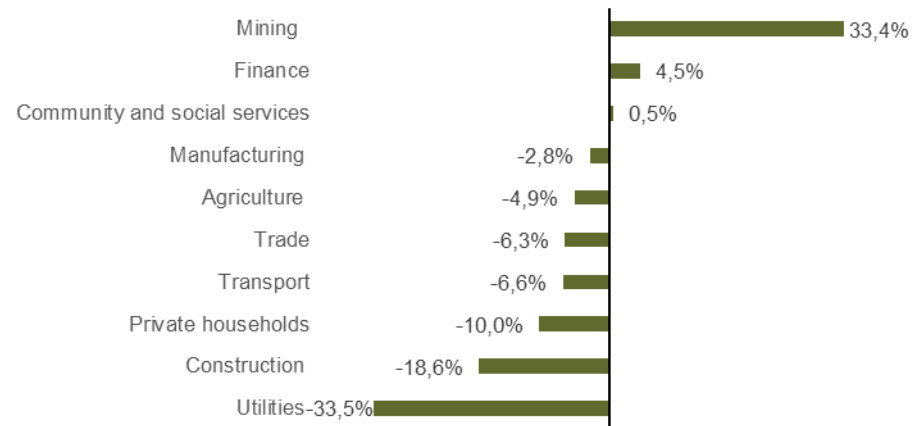
- A significant portion of the Western Cape's workforce (20.8%) works in community and social services, finance (19.5%) and trade (19.3%).
- Only 0.2% and 0.4%, worked in the utilities and mining sectors, respectively.

Western Cape 2022 employment by industry

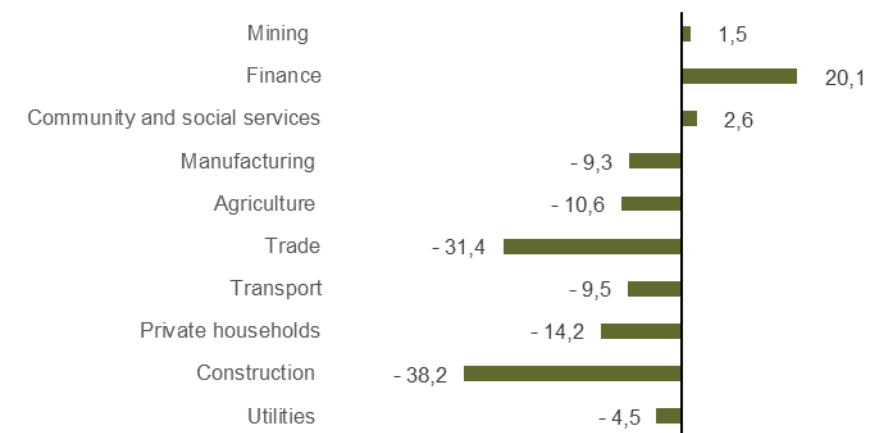


In the WC only Mining, Finance, and Community and Social Services have shown employment growth since 2019

Western Cape percentage change in employed persons (2019 – 2022)



Western Cape change in employed persons (000s), 2019 – 2022



- Largest contributors to the decrease in employment in the Western Cape:
 - Construction: Net decrease of 38 244 people → 18.6%
 - Trade: Net decrease of 31 419 people → 6.3%
 - Private households: Net decrease of 14 163 → 10%
- If not for Finance, particularly, the total employment decrease in the Western Cape would have exceeded 100 000.
- As of the 3rd quarter of 2023, only the Trade and Mining industries' employment was lower than during the same quarter of 2019.

Analysis of secondary data

Quantitative analysis



**Aim: Rank
occupations
from highest
to lowest
demand**

- *Map SASCO codes to OFO codes*
- *Analyse Employment Pressure Data in QLFS*
- *Analyse Wage Pressure data in LMDS*
- *Analyse Vacancy Pressure data in CJ/PNET dataset*
- *Produce ranked list (3-digit).*

Secondary data analysis

Dimension	Source	Variable (indicator)	Description
Employment pressure	Quarterly Labour Force Survey	Employment growth	Number of employed in 2022 relative to 2019
		Employment intensity	Average weekly hours in 2022 relative to 2019
		Employment duration	Average time employed in 2022 relative to 2019
Wage pressure	Labour Market Dynamics Survey	Mean wage growth	Average wage in 2022 relative to 2019
		Median wage growth	Median wage in 2022 relative to 2019
		Conditional mean wage growth	Conditional mean wage in 2022 relative to 2019
Vacancy pressure	PNET and Career Junction	Vacancies	Number of vacancies in 2022
		Vacancy growth	Vacancies in 2022 relative to 2019
		Renewal rate	Percentage of 2022 vacancies that had to be re-advertised
		Renewal rate growth	Renewal rate in 2022 relative to renewal rate in 2019

Step 1: Assign rank to each unit group for each indicator

Step 2: Calculate average rank across all indicators

Step 3: Calculate secondary data demand score for each unit group

$$\bullet \text{ Secondary data Demand Score}_j(S_j) = 1 - \left(\frac{\bar{R}_j - \bar{R}^{min}}{\bar{R}^{max} - \bar{R}^{min}} \right)$$

Step 4: Rank unit groups according to demand score

Analysis of survey data

Primary data collection and analysis



Aim: Collect views of employers regarding occupational demand

- *Develop online surveys*
- *Disseminate surveys to network*
- *Consolidate data as received*

Survey description

Please list the specific occupations your organisation or the organisations you represent are likely to recruit for over the next three years.

- Column 1: Indicate the name of the specific occupation you will be recruiting for. BE AS SPECIFIC AS POSSIBLE WITH THE NAME OF THE OCCUPATION (e.g. "Logistics Manager", rather than just "Manager" or "Welder" rather than just "Artisan")
- Column 2: Indicate your level of certainty that recruitment will take place on a scale of 1 – 4: 1. "possibly", 2. "probably", 3 "nearly certain", and 4 "definitely".

- **Date: 8 August 2023 – 1 October 2023 (8 weeks)**
- **Total survey responses: 353 (National: 1 730)**
- **Responses to demand question: 194 (National: 788)**

Approach to analysing survey responses

Step 1: Map occupations specified in survey to the Organising Framework of Occupation classification

Step 2: Rank occupations according to the number of mentions and average level of certainty

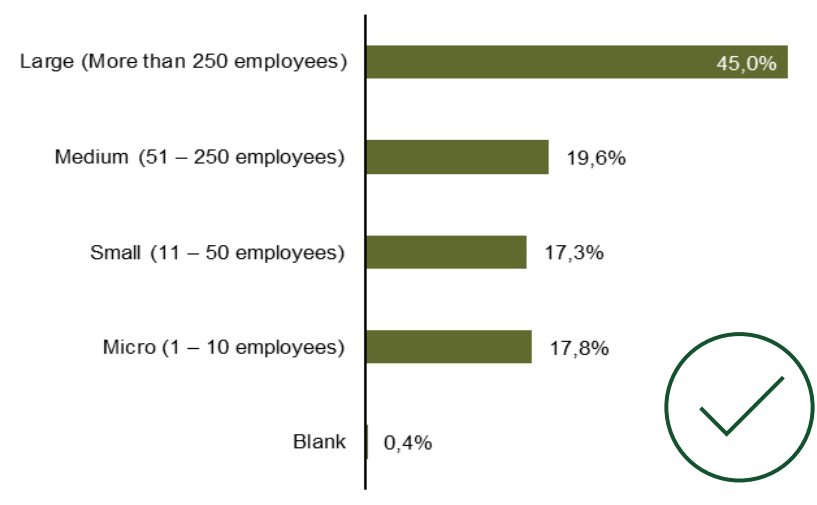
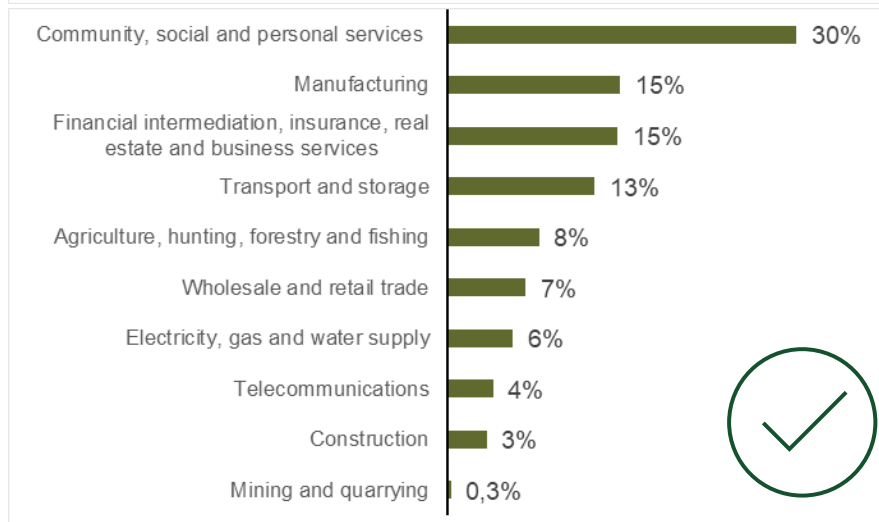
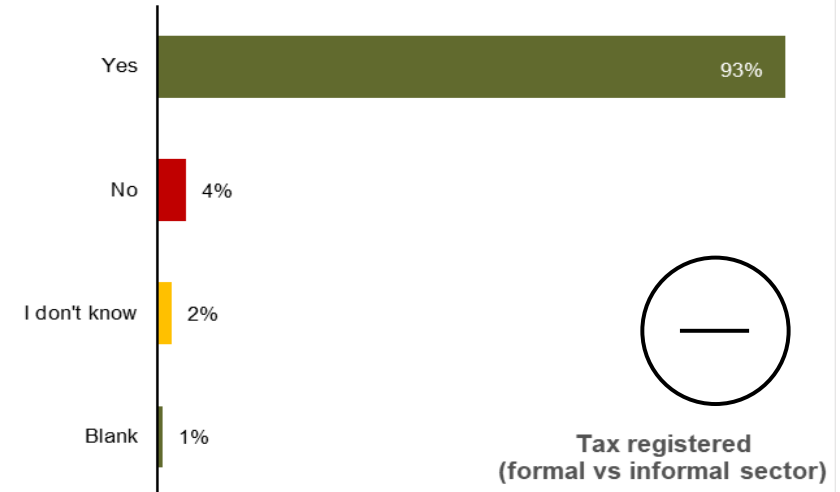
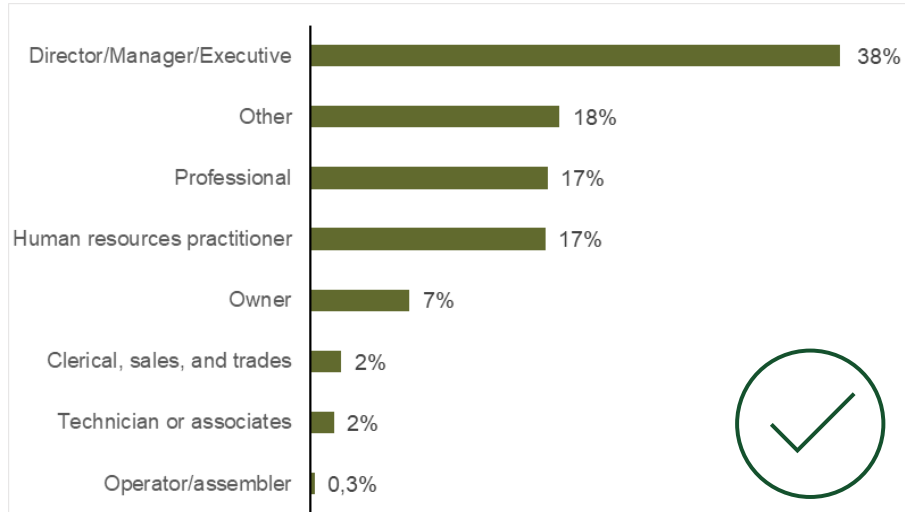
Step 3: Calculate mentions demand score (M_j)

- $M_j = 1 - \left(\frac{R_j^M}{R^{M,max}} \right)$

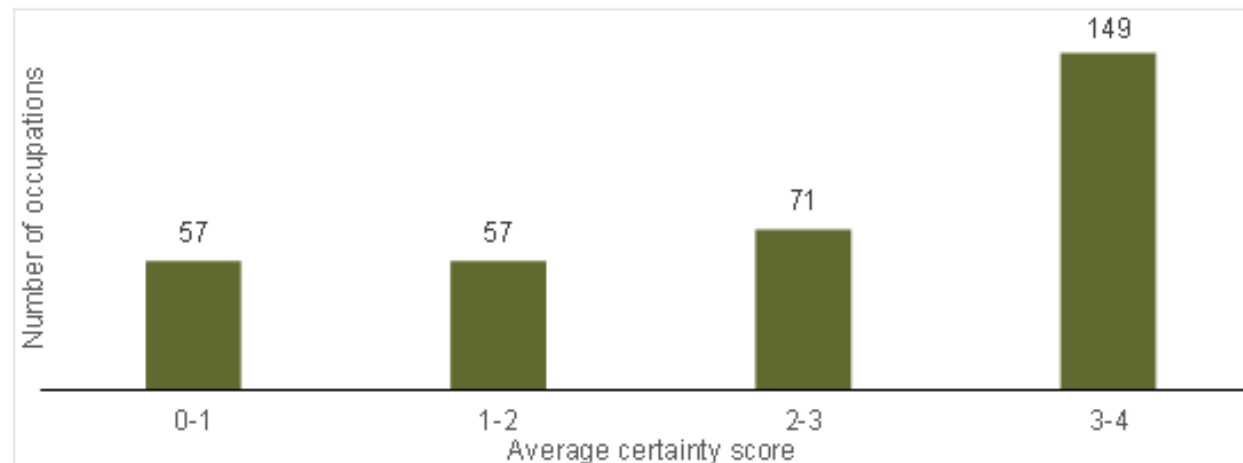
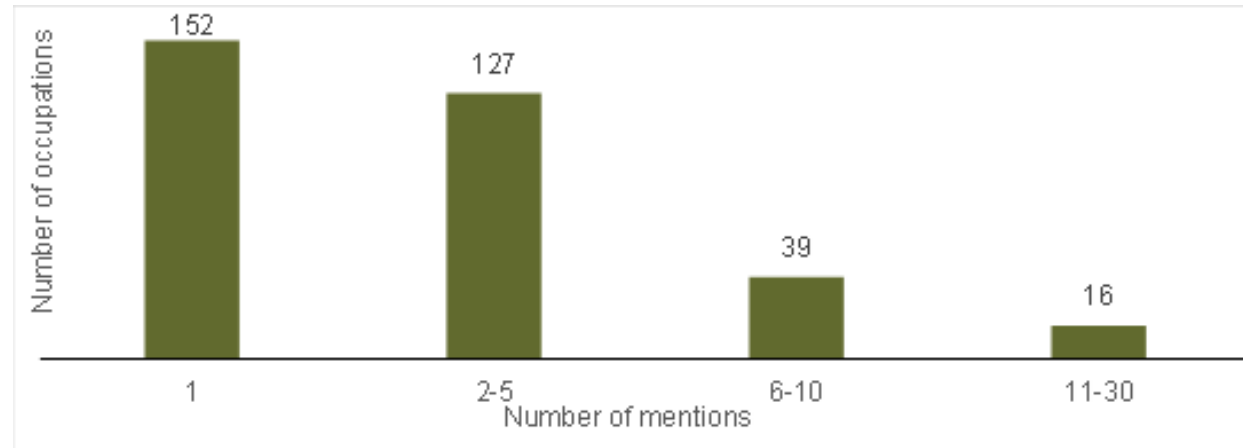
Step 4: Calculate certainty demand score (C_j)

- $C_j = 1 - \left(\frac{R_j^C}{R^{C,max}} \right)$

Sample description



Survey results frequency



Final results

The list of Occupations in High Demand

What we have now:

- Occupations ranked based on secondary data according to demand → Demand score (S_j)
- Occupations ranked based on number of mentions → Demand score (M_j)
- Occupations ranked based on average demand rating → Demand score (C_j)

Next step:

- Rank occupations according to combined demand score → Weighted average score (D_j)

$$D_j = \frac{w_s S_j + w_m M_j + w_c C_j}{w_s + w_m + w_c}$$

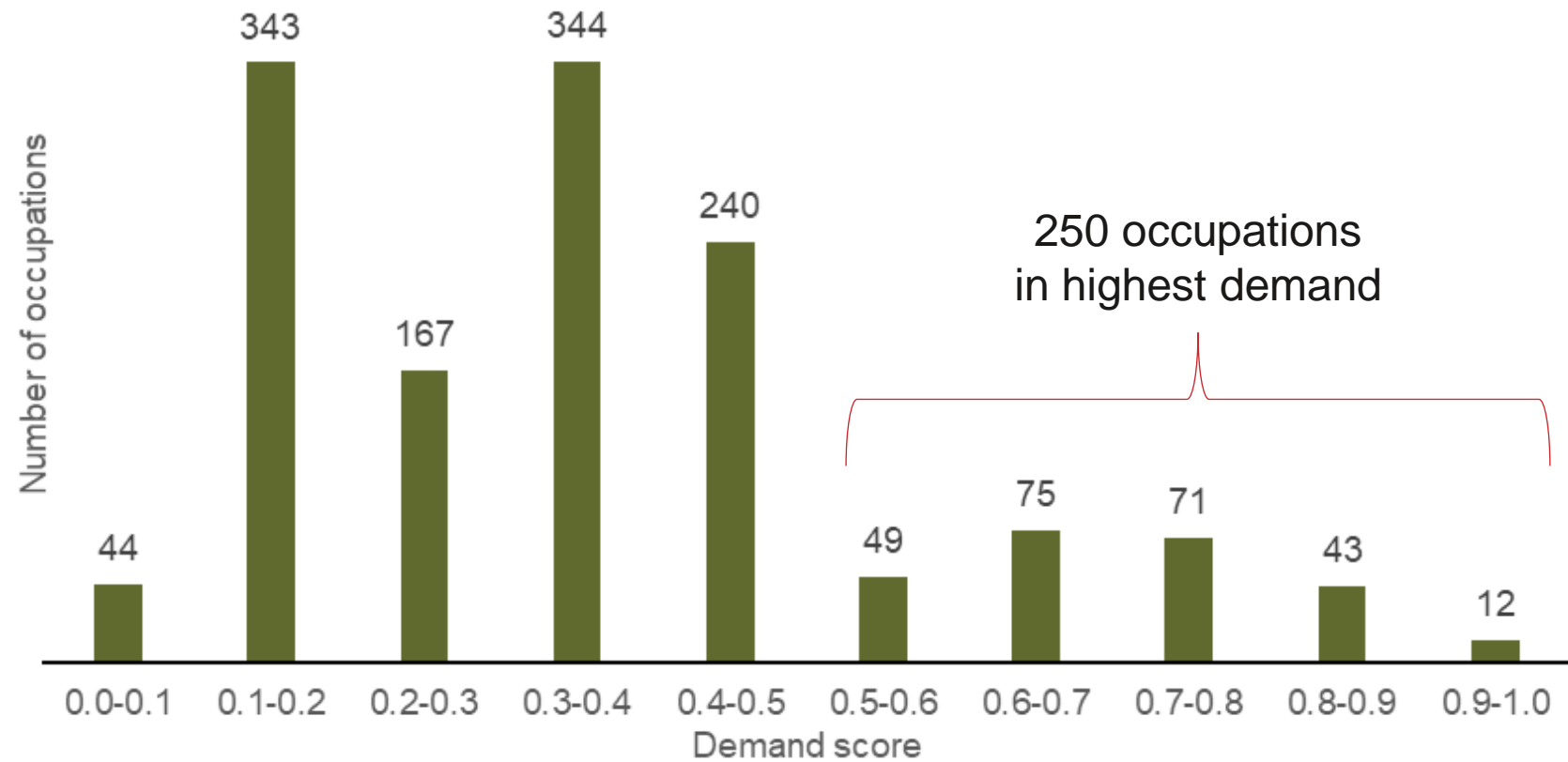
$$w_s = 1$$

$$w_m = 1$$

$$w_c = 0.1$$

w_c has small weight to small variance in responses

Demand score distribution



Introducing the List of 250 OIHD

[Link to Excel Sheet with List of Occupations in High Demand](#)



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THANK YOU
