

# Occupational Demand and Supply

Workforce analysis assists policy makers in making decisions that will enable organizations to obtain sufficient numbers of workers with the right skills, at the right time, and in the right geographic location.

With such labour market information, policies can be devised to help organizations achieve their labour market goals.

C4SE occupation projections represent a “requirements” approach to workforce analysis. This approach focuses first on estimating the number and sources of workers required in light of the expected future economic and demographic performance of the economy.

It then focuses on the possible sources of these requirements and the number of workers that can or need to be obtained from them to meet the requirements.

Finally, it presents an assessment of the possible difficulty in meeting the requirements.

**Economic/Demographic Outlook**



**Workers Required**



**Sources of Requirements**



**Assessment of Difficulty**

C4SE occupation data is useful for workforce planning where organizations or policy makers can act to ensure that sufficient supply will be available in the future to meet demand.

Estimated new entrant requirements provide information to organizations concerned with providing education and training regarding the types of occupations and number of persons they will need to educate or train.

Estimated migration requirements provide information regarding the number of persons and types of occupations that will need to be sourced through immigration.

The possibility of shortages is identified by examining the supply sources to see if it is possible to achieve the required supply from these sources. For example, the approach estimates the number of young people leaving the education system that is required to meet supply from this source. If there is not sufficient capacity to provide education and training to achieve this number, then there will be shortages. It also estimates the amount of migration required to meet workforce supply. If it is not possible to attract the required migration then there will be shortages.

Demand for workers is determined not only by expected growth of the economy but also through the impact of fluctuating market conditions that change the relative cost of capital. Tightening labour markets raise wages relative to capital costs causing firms to replace workers with more capital. The models are able to consider technological change in terms of the mix of occupations across industries and incorporate assumptions about trend growth in productivity that impacts the need for workers.

## Available Data

Labour Force Demand  
Labour Force Demand Change  
Employment  
Employment Change  
Normal Unemployment  
Labour Force Supply  
Labour Force Supply Change  
Deaths  
Retirements  
Labour Force Average Age  
Median Annual Wages & Salaries  
Labour Force Excess Supply  
Unemployment  
Unemployment Rate  
Normal Unemployment Rate  
Unemployment Rate GAP  
Weighted Labour Market Tightness  
Rank  
Demand Rank  
Supply (Migration) Rank  
Unemployment Rate Gap Rank  
Total Demand Change (Job  
Openings)  
Total Demand Change % of Labour  
Force  
Expansion Demand  
Replacement Demand (Deaths &  
Retirements)  
Total Supply Change  
Net In-Migration % of Labour Force  
New Entrants  
Net In-Mobility  
Net In-Migration  
Net International In-Migration  
Net Interprovincial In-Migration  
Net Other In-Mobility

ESDC's national occupation classification (NOC) system of occupation definitions is adopted for the occupations. Purchases include 4 levels of data, with 500 occupations at the 4 digit level. An example of these levels is:

0 Management occupations – 1 digit

00 Senior management occupations – 2 digit

001 Legislators and senior management – 3 digit

0011 Legislators – 4 digit