HUMAN CAPITAL LAW AND POLICY



VOLUME 8, ISSUE 1, MARCH 2018

JOBS AND SKILLS IN DEMAND: BC'S UPDATED LABOUR MARKET OUTLOOK TO 2027

HIGHLIGHTS

- •On the lookout for the hottest in job trends? We've got the latest on the updated Labour Market Outlook, 2017 2027 Edition by WorkBC.
- •The government anticipates 917,000 job openings over the next decade. Some 277,000 of these will be "new" positions created by ongoing economic and industrial growth, while the majority—roughly 70% of future vacancies —will arise as current workers transition into retirement.
- •BC's current population will not be able to fill all of the positions expected to emerge. The supply of workers will have to be expanded through

- a combination of in-migration and tapping into underutilized labour pools.
- •Two-thirds of job openings over the next decade will be in the Mainland/Southwest region.
- •Health and Professional, Scientific & Technical Services sectors will post the highest number of new jobs by 2027.
- Approximately 78% of job openings will demand some level of post-secondary education or training.
- Looking ahead, access to labour will continue to be the biggest concern for the BC business community.

On the lookout for the hottest job trends? WorkBC, an agency of the provincial government, recently released its updated Labour Market Outlook through 2027. It provides forecasts for skills that will be in demand and predictions of expected job openings by industry and occupation over the next decade. The report is commissioned by the province to help employers identify emerging trends in hiring, training and education, and to assist young adults in deciding what sorts of qualifications to pursue.

Total employment in BC is projected to reach nearly 2.7 million by 2027. The government anticipates 917,000 job openings over the next decade. Some

277,000 of these positions will be "new" jobs created by ongoing economic and industrial growth, while the majorityroughly 70% —will arise as current workers transition into retirement. Between 2017 and 2027, WorkBC estimates that the average rate of job openings as a share of employment will be approximately 3.6% per year. While some openings will be filled by younger cohorts of workers, they alone will not be enough to fill all of the positions expected to emerge. To meet the "extra" demand, the supply of workers will have to be increased through a combination of immigration, attracting people from other provinces, and tapping into underutilized labour pools (see Table 1).

A HISTORIC SHIFT

BC's workforce is soon to undergo a historic shift. For the first time, the pool of young labour force entrants will be smaller in size than the greying cohort they are set to replace (Figure 1). As highlighted in the last two census counts, BC's population aged 65 years and older is increasing and the existing population of prime working age people will not be large enough to fill all of the upcoming job openings. The youngest generation of potential workers aged 15 to 24 is also in decline. These two trends combined underscore the need to supplement the existing workforce with additional sources of talent.

JOB OPENINGS: REPLACEMENT AND EXPANSION

Job openings due to replacement generally led by retirements - are expected to gradually ramp up over time. The number of replacement openings ranges from approximately 62,000 in 2018 to 66,000 annually between 2025 and 2027. Unlike replacement vacancies, the numbers of net new jobs will fluctuate between 2017 to 2027. WorkBC forecasts 29,000 new jobs in 2018, rising to a peak of 33,000 in 2023; new jobs will then dip to 24,000 by the end of the projection period (Figure 2).

FINDING WORKERS

On average, 64,000 workers will permanently leave the labour force each year over the next decade. About half of expected job openings will be filled by individuals under age 30 who will be entering the workforce for the first time (see Figure 1). Who will be stepping up to staff the other positions? Another 15% will be filled by working-age British Columbians who are not currently in the labour force (see Table 1). The assumption underlying this projection is that in an environment of strong labour demand and rising wages, more people from historically underrepresented or underemployed groups will be drawn to work-approximately 14,000 more each year. This includes Indigenous peoples, women, individuals living with disabilities, and both younger and older people who historically may not have had the necessary supports to engage in work.

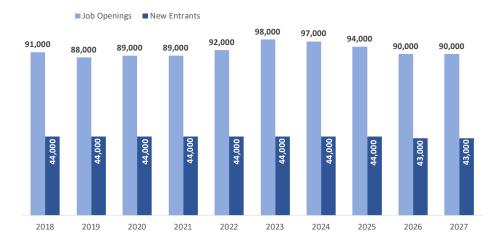
LABOUR MARKET OUTLOOK HIGHLIGHTS, BC, 2017-2027 TABLE 1:

		Share of Total Job Openings		
Total Job Openings	917,000	100%		
Replacement	640,000	70%		
Economic Growth	277,000	30%		
Supply Additions	898,000	98%		
New Entrants	438,000	48%		
Net international in-migration	244,000	27%		
Net interprovincial in-migration	80,000	9%		
Change in labour force participation	136,000	15%		
Reduced Unemployment	19,000	2%		
Note: Values rounded, percentages are shares of the total, job openings are filled through labour supply additions and				

reduced unemployment. Supply addition percentages do not sum to 98% due to rounding.

Source: BC Labour Market Oulook: 2017 Edition.

FIGURE 1: NEW ENTRANTS SUPPLY AND TOTAL JOB OPENINGS, BC, 2017-2027



Source: BC Labour Market Oulook: 2017 Edition

Greater participation of all British Columbians along with the growing numbers of people joining the workforce for the first time will still not be enough to meet the expected demand for workers over the coming decade. The province will also have to depend on migrants from other provinces and countries (Table 1). Thus, the government's analysis posits that the remaining one-third

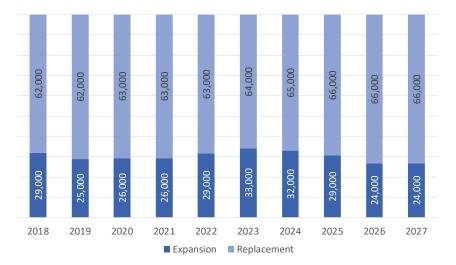
of future job openings will be filled through interprovincial migration (approximately 8,000 people a year) and international immigration (24,000 a year).

REGIONAL VARIATIONS

On a regional basis, two-thirds of job openings over the next ten years will be in the Mainland/Southwest region,

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FIGURE 2: JOB OPENINGS FORECAST, BC, 2017-2027



Note: This forecast includes construction outlined in the $\underline{B.C.}$ Major Projects Inventory considered a high probability of proceeding and aligns to BC Ministry of Finance macroeconomic forecasts, which does not include the impact of potential LNG investments.

Source: BC Labour Market Oulook: 2017 Edition.

TABLE 2: EMPLOYMENT AND JOB OPENINGS BY DEVELOPMENT REGION, BC, 2017-2027

Region	Employment	Employment Growth (Average Annual Growth Rate)	Expansion	Replacement	Total Job Openings
	2017	2017-2027	2017-2027	2017-2027	2017-2027
Vancouver Island/Coast	371,000	0.8%	30,500	103,300	133,800
Mainland/Southwest	1,549,000	1.3%	209,000	399,500	608,500
Thompson-Okanagan	255,000	1.0%	24,900	71,200	96,100
Kootenay	69,000	0.8%	5,100	19,500	24,600
Cariboo	82,000	0.4%	2,600	23,300	25,900
Northeast	41,000	1.0%	4,400	12,000	16,400
North Coast/Nechako	42,000	0.4%	400	11,300	11,700
British Columbia	2,408,000	1.1%	277,000*	640,000*	917,000
*sum over regions may not add up to BC total due to rounding					

Source: BC Labour Market Oulook: 2017 Edition.

where WorkBC expects employment to climb by 1.3% per year. Of these jobs, two-thirds will be replacements and the rest will reflect economic growth and industrial change.

Vancouver Island/Coast ranks second in both total job openings and the number of new jobs, while the North Coast/Nechako will see the fewest

total vacancies (but the region will still need to fill 11,300 positions as current workers retire or leave their jobs for other reasons).

OUTLOOK BY INDUSTRY

The updated Labour Market Outlook shows varied patterns of job

openings across industry sectors (Figure 3). Some industries will experience more openings due to economic growth and industrial expansion. By industry, Health Care will see the greatest numbers of both total openings and net job gains. Nearly 60% of job openings in Health Care will result from retirements, while the rest will come from growth of the healthcare system to meet the demands of an aging and expanding BC population. The Professional, Scientific, & Technical Services sector will post the second highest number of new jobs (45,800), with Accommodation & Food Services ranking third in net employment gains (29,700).

On the other side of the coin, the Outlook expects replacement to be the primary driver of job vacancies within many of BC's goods-producing industries.

Replacements are projected to make up more than 90% of job openings within Agriculture and Fishing (98%); Construction (97%); and Manufacturing (94%).

OUTLOOK BY OCCUPATIONAL GROUP

Three major occupational groups² are anticipated to account for more than half of total job openings in BC through 2027: Sales & Services (20%); Business, Finance & Administration (16.7%); and Management (14.6%). See Figure 4 for details. Net job gains will be led by Sales & Services (69,100 new jobs), Business, Finance & Administration (44,600) and Health (34,700).

For some of the major occupational groups, job openings reflect not just the composition of the workforce but

² Defined by <u>National Occupational Classification</u>, Statistics Canada.

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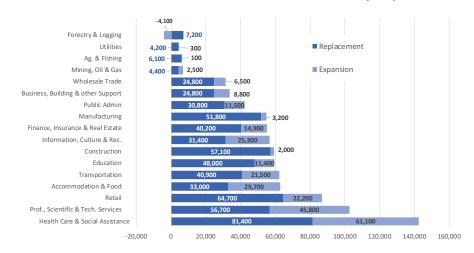
also growth in labour productivity. For example, about 98% of job openings in Manufacturing & Utilities will result from replacing current workers. Increased automation in this sector means that very few net new jobs will be created. Sizable productivity gains are also anticipated in Natural Resources, Agriculture & Related Production occupations.

JOBS AND EDUCATIONAL ATTAINMENT

One trend that's clear is the growing reliance on post-secondary education and qualifications. More than three-quarters of job openings in BC to 2027 will require applicants with some form of post-secondary education or training. This speaks to the rising demand for skills in an increasingly knowledge-based economy. But it is also a sign of "credential creep," as jobs that previously did not require a postsecondary qualification now do so. As noted in Figure 5, 78% (718,000) of the job openings expected in BC will require some level of postsecondary education or training. The largest share of these (42%) will require a diploma, certificate or apprenticeship qualification, while 36% will demand a bachelor's, graduate or professional degree.

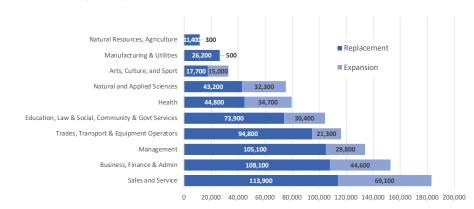
The BC Labour Market Outlook suggests that young adults should prepare not for a specific job-for-life, but for a world that rewards transferable skills, technical knowledge, and adaptable competencies. The list of top skills in demand illustrates employers' quest for talent that complements increasingly automated processes and adds value where machines can't do it all: complex problem-solving,

FIGURE 3: JOB OPENINGS BY MAJOR INDUSTRY GROUP, BC, 2017-2027



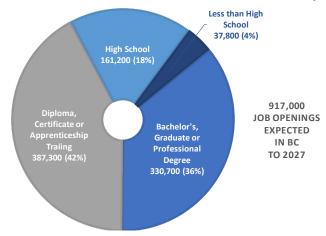
Source: BC Labour Market Oulook: 2017 Edition

FIGURE 4: JOB OPENINGS BY MAJOR OCCUPATIONAL GROUP, BC, 2017-2027



Source: BC Labour Market Oulook: 2017 Edition.

FIGURE 5: JOB OPENINGS BY EDUCATION REQUIREMENTS, BC, 2017-2027



Source: BC Labour Market Oulook: 2017 Edition.

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TABLE 3: SELECT HIGH-DEMAND OCCUPATIONS TO 2027, BC

Occupation	Projected Job Openings to 2027
Registered nurses	52,540
Nurse aides	32,353
Retail and wholesale trade managers	26,200
Administrative officers	19,800
Financial auditors/accountants	11,500
Social/community service workers	11,400
Accounting technicians/bookkeepers	10,100
IT systems analysts/consultants	9,600
Early childhood educators	9,100
Computer programmers	8,800
Insurance/financial managers	7,100
General practitioners/family physicians	6,758
College instructors	6,300
Software engineers/designers	5,000
Engineers	3,400
Human resource professionals	2,400

Source: BC Labour Market Oulook: 2017 Edition.

creativity, people management, coordinating with others, emotional intelligence, and leadership ability. At the same time, there will also be job openings for people with a basic "human touch" and a capacity to communicate, e.g., health care assistants and those who care for seniors.

Table 3 is a select list of high-demand occupations that require some form of post-secondary education or training coupled with a combination of some the key skills noted above.

THE MISSING PIECE: TECHNOLOGICAL DISRUPTION

One thing that remains to be reconciled in the updated Labour Market Outlook is the degree to which technology may disrupt the job market in the coming years. The report's job projections do not appear to embody the assumptions that some experts are making about large-scale labour displacement due to technology. For example, the Outlook sees robust demand over the next ten years for transport truck drivers (15,690 job openings), food counter attendants (14,560 openings) and retail cashiers (9,630 openings)

three jobs that some analysts believe are at a high risk of being automated. This begs the question: to what extent will technology disrupt work as we know it, thereby changing the pattern of future job vacancies?

The WorkBC Labour Market Outlook acknowledges that automation and technological innovation may help to mitigate future labour shortages, but ultimately it does not assume widespread job displacement in the next ten years. "Automation may be a benefit to our workforce rather than lead to increased unemployment in BC," the report states. The Outlook assumes relatively slow productivity growth of 0.9% each year, and it factors in rates of innovation and automation that basically mirror previous experience.

Truthfully, no one knows to what extent automation and other advances in technology will replace or augment existing jobs. At this point, shifts in technology do not appear to have reduced the level of aggregate employment in the economy. The government evidently doesn't expect this to change materially over the next decade. Of course, this assumption may prove to be wide of the mark. It is conceivable that many more

of today's jobs will be disrupted and disappear due to advances in technology.

We do know that BC's job market and economy are already feeling the effects of demographic change. Relatively fewer younger workers supporting an ever-expanding cohort of retirees will certainly pose social and fiscal challenges. While the province's existing workforce possesses a high level of skills compared to preceding generations, there are not enough workers to populate all the high-growth, high-credential job fields where openings are expected. Moreover, many employers in BC are already challenged to find even less-skilled front-line staff in sectors like retail and business services. In other words, the overall labour market has tightened, and we believe this trend is likely to persist — at least until the next recession.

For employers, the biggest worry going forward is access to labour. As shown in the 2017-2027 BC Labour Market Outlook, this is a concern for every industry, even those that aren't experiencing strong growth in aggregate employment. Demographic change and growing shortages of qualified labour portend important shifts in the job market and in the wider business environment.

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