Labour Demand Trends During the COVID-19 Pandemic

Analysis of online job postings in Canada

Labour Market Insights
from the Diversity Institute

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Future Skills Centre

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NEW RESEARCH SERIES:

Labour Market Insights

from the Diversity Institute

This new series from the Diversity Institute, as a research lead for the Future Skills Centre, aims to provide timely analysis on current patterns of labour demand across Canadian regions, industries, and occupations. In the rapidly changing world of work, job seekers, policy makers, educators, and other stakeholders require labour market information that is up-to-date, granular, and relevant. The need has become even more critical during the COVID-19 pandemic, in which the labour market has experienced the largest shock in recent history.

Reports in the *Labour Market Insights from the Diversity Institute* series will cover a variety of topics relevant to the study of labour markets and are based on analyses of collated data from online job postings across Canada, as well as other traditional and innovative data sources.

Contents


Sorry WE'RE
CLOSED
DUE TO CORONAVIRUS

Introduction

The economic shutdown that followed the COVID-19 pandemic affected a large share of the Canadian workforce. By mid-April, the number of Canadians who were unemployed or underemployed due to the shutdown reached 5.5 million,[1] and in May, the unemployment rate reached 13.7%, the highest rate recorded since comparable data became available in 1976.[2] While no part of the economy was shielded from the impacts of the shutdown, the economic risks and impacts were not uniformly distributed among Canadians. Workers employed in industries where close physical contact is required and where working from home is less common were more likely to lose their jobs.[3,4] Youth, women, and recent immigrants were also more likely to be unemployed due to the economic shutdown.[5]

Many businesses were able to rapidly move their work and service online so that a large number of workers were able to keep working during the shutdown. By April 2020, 5 million Canadians were working from home, of whom two-thirds did not work from home before the pandemic.[6] However, not all Canadian workers have access to these kinds of jobs. In reality, the possibility of remote work is skewed towards individuals who are financially better off. Existing data shows that high-income earners, families in the top decile of the income distribution, and workers with higher education are significantly more likely to have jobs that can be done from home.[7,8]

With the lifting of some COVID-19 public health restrictions in May, the economy started to recover, and employment picked up over the summer. From June to August, employment increased by 1.6 million jobs. Approximately 60% of the employment gain was achieved in June.[9] However, the rate of unemployment in August (10.2%) was still much higher than the pre-COVID-19 level in February (5.6%). At the time of writing, new infection rates are rising again, and it is possible that the economic recovery may be stalled or even reversed if new lockdown measures are required. Even without another economic shutdown, it is not expected that things will return to the pre-COVID-19 normal in the next few months or even years. The changes adopted by businesses, governments, and individuals are likely to have long-term consequences on the future of work. For example, some workers

The number of Canadians who were unemployed or underemployed due to the economic shutdown reached 5.5 million by mid-April, and in May, the unemployment rate reached 13.7%.

have expressed interest in continuing to work from home (at least partially),[10,11] and some companies have already started implementing remote work arrangements on a permanent basis.[12] On the other hand, emerging evidence shows that the economic shutdown led to worse labour market outcomes for underrepresented groups, including women, immigrants, and racialized people.[13,14,15] Without a conscious effort to build a more inclusive economy during the recovery, pre-existing structural inequalities may be exacerbated by the pandemic.

In a series of reports focused on the labour market during the COVID-19 pandemic, we discuss the trends and patterns of labour demand across Canada. This first report is based on an analysis of online job postings in the pre-pandemic and pandemic periods. We discuss both changes in total job postings and changes in job postings across geography, occupations, skills, and sectors. The data used in this paper is extracted from the Vicinity Jobs Hiring Demand Analytics Suite[1] that collates online job postings across Canada. The biggest advantage of this data is that it provides near real-time information on hiring demand by skills, location, and other granular information that is often not available from labour surveys. However, vacancies that are not posted online and hiring through word-of-mouth are not included.[16]

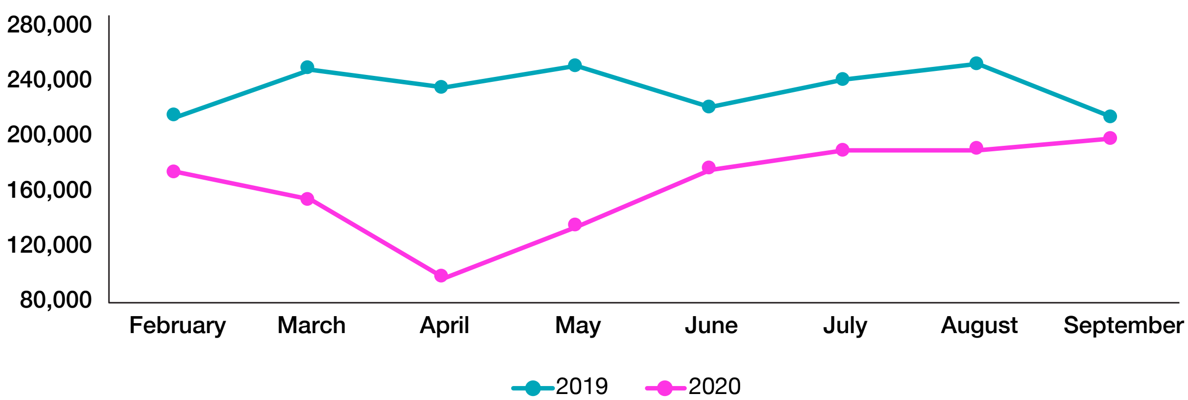
1 Vicinity Jobs Hiring Demand Analytics Suite, https://www.vicinityjobs.net/hiring-demand-analytics-suite

Labour Demand Pre-COVID-19 and During the COVID-19 Pandemic: Overall Trends

There were approximately 600,000 fewer job postings between February and September 2020 relative to the same period in 2019. This is equivalent to a 30% drop in labour demand in the reference period. As is shown in Figure 1, the largest drop in job postings occurred in April 2020, following the economic shutdown aimed at fighting the COVID-19 pandemic. There were 58% fewer job postings in April 2020 relative to April 2019. This trend for job postings mirrors that of the overall labour market, with approximately one million Canadians losing their jobs in March 2020, and two million more losing their jobs in April.

FIGURE 1

New Job Postings in the Pre-Pandemic and Pandemic Periods



Labour demand started to recover in May and continued its upward trend, approaching pre-COVID-19 numbers in September. Job postings in September 2020 were only 7% fewer than job postings in the same month in 2019. However, this is far from a return to normal. Given that organizations laid off millions of workers during the COVID-19 crisis, re-hiring is likely to account for a significant share of new vacancies in the coming months.

Labour Demand Change in the Early Pandemic Period (February to May 2020)

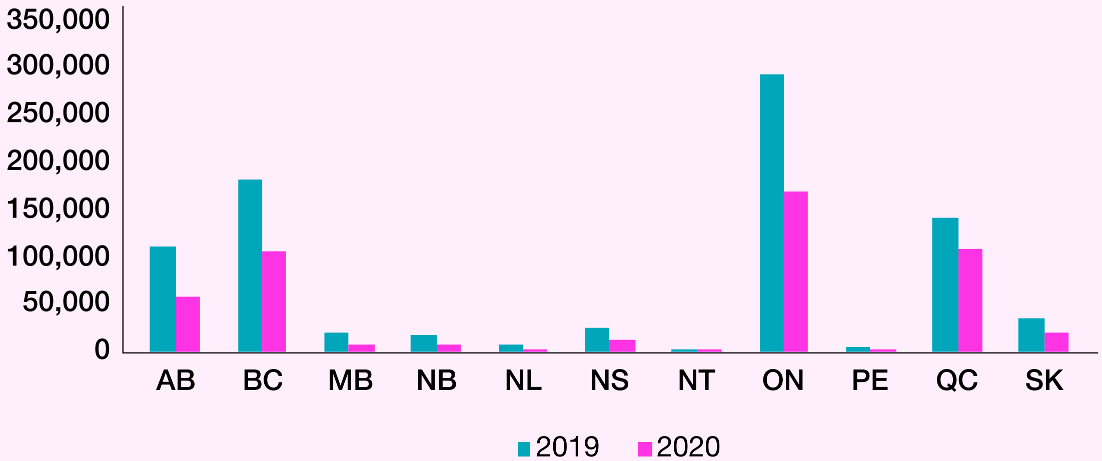
Change in Job Postings, Disaggregated:

By Province

All provinces experienced a drop in labour demand in the four-month period from February to May 2020 (see Figure 2). Ontario experienced the biggest drop in total labour demand, with 125,000 fewer job postings in 2020 compared to the same period in 2019 (a 43% drop). However, Manitoba experienced the biggest losses in relative terms, with 53% fewer job postings between February and May 2020 relative to the same period in 2019. The three territories (Yukon, Northwest Territories, and Nunavut) were the least affected regions, with a drop in new job postings of only 18% overall. However, the territories have the lowest number of online job postings in the country, with fewer than 500 new job postings in each of 2019 and 2020. Quebec also experienced a relatively smaller decline in labour demand. Job postings in Quebec declined by 23% in 2020 compared to the same period in 2019. This is surprising given that during the same period, Quebec's unemployment increased at a higher rate than the rest of Canada.[17]

FIGURE 2

Change in Job Postings During the Early Pandemic Period, February–May 2020



By Sector and Industry

In this section, we discuss changes in labour demand disaggregated by sector and industry. A significant share of job postings analyzed were not successfully mapped to their respective sectors due to a lack of reliable information. While this is an important limitation in general, we assume that it should not significantly affect the comparison we discuss here since the sector of a job posting has been tagged in the same way in 2019 and 2020.

The three sectors with the largest drop in labour demand between February and May 2020 were retail trade; health care and social assistance; and professional, scientific, and technical services (see Figure 3). Within these sectors, some industries were more affected than others. For example, in retail trade, job postings related to clothing and clothing accessories stores declined by 79%, while job postings related to food and beverage stores did not decline, and in fact slightly increased by 0.6%.

FIGURE 3

Change in Job Postings During the Early Pandemic Period, February–May 2020 (by Sector)

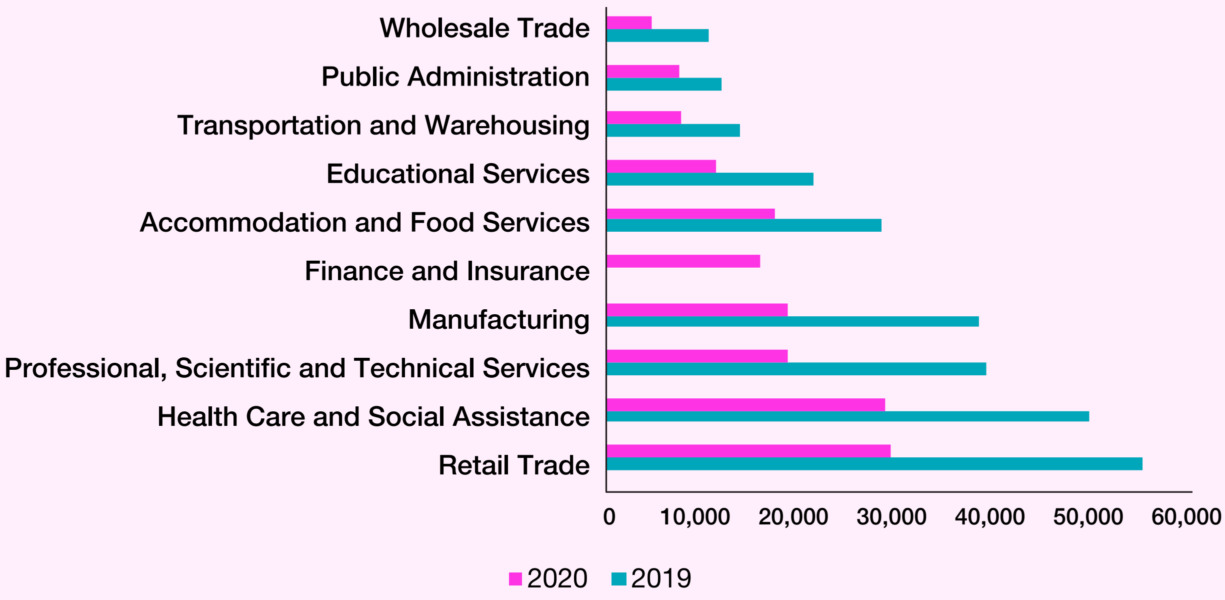


Table 1 shows the industries that experienced the largest drop in job postings. Note that the sample here includes industries that had a total of at least 2,000 job postings in the period of February to May 2019. We see that the majority of the most affected industries are engaged in activities that require physical proximity among workers or with clients, which are difficult to carry out with social distancing. A recent labour survey from Statistics Canada shows a similar trend for the initial recovery period, indicating that industries with fewer jobs requiring physical proximity have employment rates close to their pre-COVID-19 levels.[18]

TABLE 1

Industries that Experienced the Largest Drop in Job Postings, February to May 2020

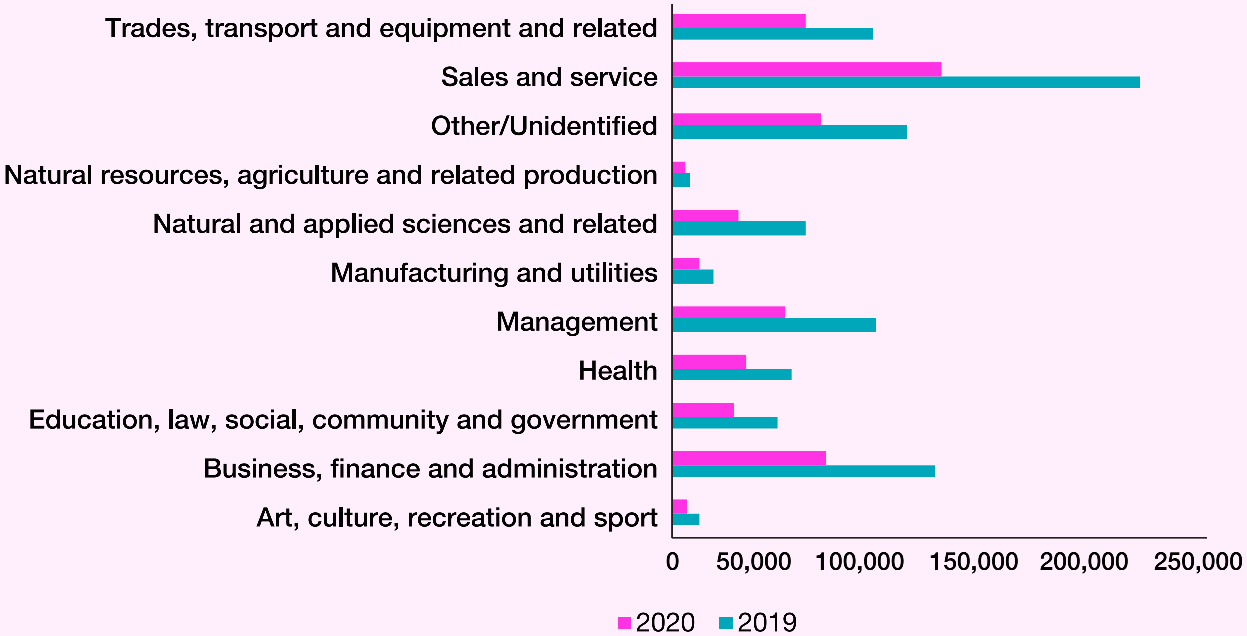
Industry	Job Postings Between February and May		
	2019	2020	Change (%)
Clothing and Clothing Accessories Stores	6,878	1,439	-79.1%
Miscellaneous Store Retailers	3,855	1,107	-71.3%
Real Estate	2,671	774	-71.0%
Rental and Leasing Services	2,149	626	-70.9%
Telecommunications	2,235	783	-65.0%
Accommodation Services	9,136	3,204	-64.9%
Amusement, Gambling and Recreation Industries	4,744	1,680	-64.6%
Securities, Commodity Contracts, and Other Financial Investment and Related Activities	2,102	776	-63.1%
Computer and Electronic Product Manufacturing	4,489	1,758	-60.8%
Machinery Manufacturing	5,401	2,123	-60.7%

By Occupation Category

Sales and service occupations were by far the hardest hit in terms of labour demand. Compared to job postings between February and May 2019, there were approximately 94,000 fewer jobs posted in sales and services occupations in the same period in 2020. There were also significantly fewer job postings in business, finance, and administration occupations and management occupations in 2020. In these three occupation groups, job postings dropped 41% to 44% from their 2019 levels. In relative terms, occupations in natural and applied sciences experienced the largest drop, with a 50% decline in postings from their 2019 level (see Figure 4).

FIGURE 4

Change in Job Postings During the Early Pandemic Period, February–May 2020 (by Occupation Category)



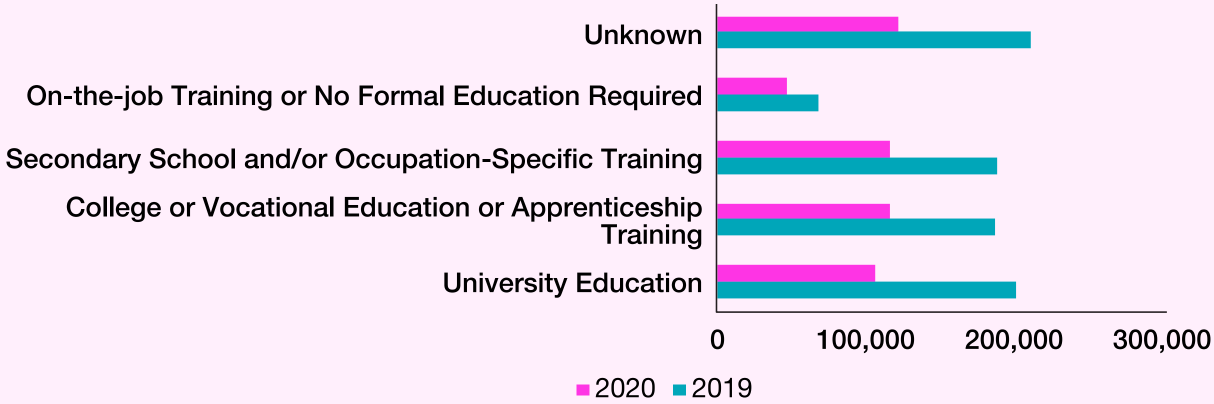
By Education/Skills Requirement

In terms of labour demand by skill level, we see that the demand for occupations requiring university education declined in both relative and absolute terms (see Figure 5). Between February and May 2020, there were 97,000 fewer job postings that required university education, relative to the same period in 2019. This is equivalent to a 47% drop from the 2019 level. Vacancies that required college or vocational education or apprenticeship training declined by 70,000 (38%) in 2020, relative to the level in 2019.

Mapping the skills requirements in job postings with their occupation group, we find that 45% of the decline in demand for university education is attributed to fewer job postings for university graduates in management occupations. Similarly, 31% of the decline in demand for college or vocational education or apprenticeship training is attributed to fewer jobs in sales and service occupations.

FIGURE 5

Change in Job Postings During the Early Pandemic Period, February–May 2020 (by Education/Skill Level)



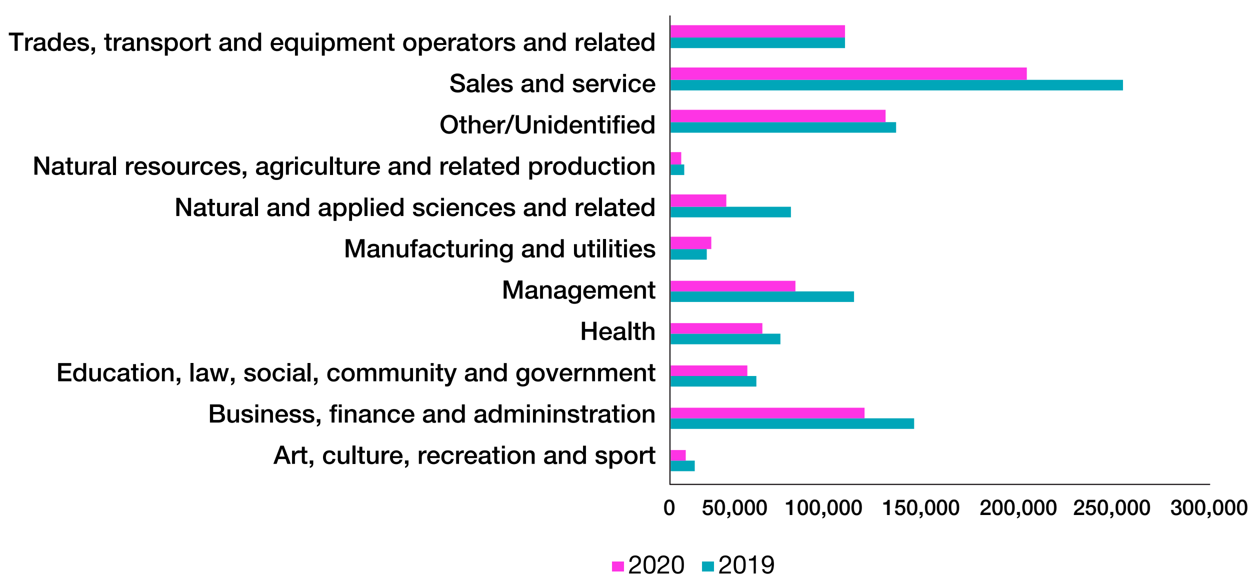
Labour Demand During the Initial Recovery Period (June to September 2020)

Job Posting Gaps Began Closing, but with Variation Among Occupations and Sectors

As the COVID-19 lockdown measures were lifted and the economy began to open up, labour demand also began to increase. Total job postings in September 2020 reached 198,949, which is 93% of the level in September 2019. There were, however, differences across occupations (see Figure 6). There were still far fewer job postings in natural and applied science occupations during the initial recovery period (June to September 2020) relative to the same period in 2019 (a 53% reduction). On the other hand, there were labour demand gains in manufacturing and utilities occupations. The number of job postings for these occupations was 11% higher between June and September 2020 relative to the same period in 2019. Similarly, job postings for occupations in trades, transport, and equipment operation reached 100% of their 2019 level. On the other hand, job postings for some of the leading occupations were still significantly below their pre-pandemic levels. For example, job postings for sales and service occupations remained 21% below their pre-pandemic level.

FIGURE 6

Job Postings During the Initial Recovery Period, June–September 2020 (by Occupation Category)



Except for the agriculture, forestry, and fishing sector, all sectors of the economy had fewer job postings in the period of June to September 2020 than the same period in 2019. While demand for labour declined in all sectors, there is variation across sectors in terms of whether labour demand began returning to pre-COVID-19 levels (see Table 2). Among the sectors that experienced a large drop in job postings during the early pandemic period, the sectors that experienced rapid growth during the initial recovery period include the wholesale trade, retail trade, utilities, and other services sectors. Job postings in the wholesale trade sector in the period of February to May 2020 were down by 56% compared to the same period in 2019. During the initial recovery period, this gap narrowed by 21 percentage points. On the other hand, job postings in the real estate and rental and leasing sector were down by 64% in the period of June to September 2020 relative to the same period in 2019. This is an improvement of only 6 percentage points from the early pandemic period. The information, cultural and recreation, and finance and insurance sectors also had a slower recovery. Note that in terms of employment share, the leading sectors in Canada are health care and social assistance, retail trade, and manufacturing. While labour demand has shown some recovery, these sectors still showed job posting gaps of 25% to 39% in the period of June to September 2020 relative to the same period in 2019.

Sectors that experienced rapid growth during the initial recovery period include the wholesale trade, retail trade, utilities, and other services sectors.

TABLE 2

Decline in Job Postings Across Sectors During the Early Pandemic and Initial Recovery Periods

Sector	Gap in Job Postings, 2020 vs. 2019		
	Early Pandemic (February to May)	Initial Recovery (June to September)	Sector's Employment Share (2019)[19]
Agriculture, Forestry, Fishing and Hunting	-22.9%	15.4%	2%
Mining and Oil and Gas Extraction	-60.3%	-52.6%	1%
Utilities	-64.7%	-39.4%	1%
Construction	-36.6%	-30.2%	8%
Manufacturing	-48.7%	-38.6%	9%
Wholesale Trade	-55.7%	-34.6%	3%
Retail Trade	-54.0%	-35.8%	12%
Transportation and Warehousing	-47.5%	-26.5%	5%
Information, Cultural and Recreation	-64.5%	-58.8%	4%
Finance and Insurance	-58.8%	-50.4%	4%
Real Estate and Rental and Leasing	-69.9%	-63.9%	2%
Professional, Scientific and Technical Services	-53.0%	-52.4%	8%
Business, Building and Other Supporting Services	-38.3%	-14.5%	4%
Educational Services	-48.6%	-28.5%	7%
Health Care and Social Assistance	-48.3%	-25.9%	13%
Accommodation and Food Services	-40.0%	-22.2%	6%
Other Services (except Public Administration)	-54.7%	-31.2%	4%
Public Administration	-40.3%	-36.7%	5%

Post-COVID-19 Skills

Comparing the skills mentioned[20] in job postings from the period of June to September 2020 with those mentioned in postings from the same period in 2019, we see that the same ten skills rank as the most in-demand skills in both time periods (see Table 3). However, there are some differences. The share of vacancies that mention these skills showed a slight decline in 2020 for all skills except customer service and flexibility. This could be an indication that employers began including or prioritizing other skills in the COVID-19 pandemic.

TABLE 3

Proportion of Job Postings that Mention the Top 10 Skills in Demand

Skill	Postings June–September	
	2019	2020
Communication skills	39.5%	37.8%
Teamwork	37.6%	36.7%
Customer service	32.1%	32.5%
English language	29.6%	22.9%
Flexibility	16.8%	18.8%
Leadership	19.9%	17.6%
Organizational skills	17.3%	17.2%
Fast-paced setting	17.3%	17.0%
Interpersonal skills	17.5%	16.3%
Attention to detail	16.2%	16.1%

New Skills in Demand

A review of the complete list of skills mentioned in job postings shows that new skills are emerging as important during the COVID-19 pandemic, and some existing skills are gaining more prominence. These skills are particularly related to the use of human resource management software and tools, asset management tools, medical software and equipment, and personal protective equipment, as well as teleworking.

TABLE 4

Examples of Skills Experiencing Higher Demand During the COVID-19 Pandemic

Skill	Number of Job Postings that Mention Each Skill	
	2019	2020
Use of surgical mask, face mask, face shield	44	2,202
Use of holter monitor	374	1,740
Software asset management	49	1,695
eQuest	194	1,407
Medical software	69	998
HRMDirect	15	514
Use of bullhorn	20	261
Use of protective gloves	16	122

Conclusion

The COVID-19 pandemic and the lockdown measures implemented to fight the pandemic caused one of the worst economic crises in living memory. While all parts of the economy have been affected, the magnitude of the impact differs across locations, sectors, industries, and occupations. In this paper, we discuss the impacts on labour demand in Canada by analyzing changes in job postings during the COVID-19 pandemic. We discuss both the overall change in job postings and the differences across provinces, sectors, industries, and occupations.

Overall, an analysis of job postings across Canada shows that labour demand has suffered a significant shock during the lockdown. While Ontario experienced the biggest drop in total job posting numbers, Manitoba suffered the most loss when considering percentage share, with a 53% drop in job postings. Among industries, those that involve activities that require physical proximity among workers or with clients suffered the most. Within occupations, sales and service occupations are by far the hardest hit in terms of labour demand.

The number of job postings began to increase after lockdown measures were lifted in May 2020, indicating a recovery in the labour market. The job posting numbers for September showed that labour demand was approaching that of the pre-pandemic period. However, the recovery remains tenuous. At the time of writing, new infection rates are rising again, and some provinces are bringing back some of the restrictions implemented during the lockdown. If conditions worsen and more restrictions are put in place, it is possible that economic recovery may be stalled or even reversed. Even without a new set of restrictions, the economic impacts of the pandemic are likely to linger beyond 2020. Some industries and occupations may not fully recover for years to come. For example, airlines, tourism, and food and accommodation industries may experience long-term impacts. It is estimated that commercial aviation is suffering the worst financial performance in its history, with a predicted global loss of US$84 billion.[21] The International Air Transport Association does not expect that air travel will return to its pre-COVID-19 level until 2024.[22]

More than ever, there is a need for real-time labour market information to enable informed decisions by policy makers, job seekers, and other job stakeholders. This report and subsequent reports are intended to fill this need by analyzing the most current and comprehensive job postings data available for Canada.

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