

# Making Informed Choices in an Uncertain and Changing Job Market

## Key Findings

- The COVID-19 pandemic and measures taken to curb its transmission (e.g., social distancing, travel restrictions, school and business closures, etc.) have contributed to an unprecedented period of economic uncertainty and labour market disruption. In March 2020, Canada experienced the largest one-month increase to the unemployment rate since 1976.
- Despite these job losses — which are likely to continue in 2020 — evidence from past recessions and downturns suggests that new job opportunities will emerge. To make informed career, training and educational decisions, Canadians need to know where these job opportunities exist and what their work requirements are.
- Online job posting data can help — when combined with other sources of labour market information — by providing insights into how demand for different occupations is changing in near real-time, and about the skills and other work requirements that employers seek.
- LMIC will continue to provide access to relevant and comprehensive labour market information to ensure that all Canadians can make the best decisions possible and navigate the current crisis and beyond.

## Introduction

**More than one million (1,010,700) individuals across Canada became jobless in March,**

marking the largest one-month increase in the unemployment rate that the country has seen since 1976 (up 2.2 percentage points). While many economists and labour market experts attempt to predict the long-run repercussions of the COVID-19 pandemic, the extent to which job losses will increase, the pace of economic recovery and the future composition of the labour market all remain uncertain. Nevertheless, history does provide one assurance: there will always be

job opportunities (albeit fewer initially) but they may be different than before.

For Canadians to make the most informed career, educational and training decisions possible, it is crucial that they know where job opportunities are emerging, and how they may be changing. In this LMI Insight Report, we use online job posting data from **Vicinity Jobs** to identify the top five occupations currently growing in Canada. The analysis is based on the total growth in the number of online job postings by occupation. We also explore the work requirements of these

job postings to better understand the needs of employers in these growing areas.

## Helping Canadians Stay Informed

At the **Labour Market Information Council** (LMIC), our primary goal is to help ensure the availability and accessibility of timely, local, reliable labour market information (LMI). We partnered with Vicinity Jobs, a Canadian company that deals with big data analytics and internet search technologies. Used judiciously, data from online job postings present opportunities to explore the demand for labour in near real time at more local, granular levels, and to understand the skills and other work requirements that employers explicitly ask for. In the current crisis, with many jobs disappearing and more losses expected, it is important to determine sectors of the economy where demand is increasing so that all stakeholders — employers, educators and job seekers — can make more informed decisions.

## The Data

Vicinity Jobs collects and analyzes job posting data from thousands of websites and job boards across Canada. Each month, they identify approximately 200,000 new, unique online job postings, from which they extract a variety of information. The job posting information includes, for example, the employer, location, industry (6-digit NAICS), occupation (4-digit NOC) and work requirements (over 40,000 are possible, but only 2,500 appear regularly). This is accomplished using Vicinity's proprietary natural language processing (NLP) algorithms and taxonomy for categorizing the job descriptions found in free online job ads.

While online job postings have much to offer, there are important limitations to using these data to draw insights about the demand for labour. For example, not all job openings are advertised online. Large employers are more likely to post online than smaller businesses. Some occupations — such as healthcare or IT — are more likely to be overrepresented compared to construction, for example.

In addition, the work requirements associated with each online job posting are based on what the employer states in the posting. Requirements that are expected to be obvious — such as a degree in engineering for engineers — may be left out. Other stated requirements may not necessarily reflect what is truly needed for the position. (A more thorough review of the advantages and limitations of data collected from online job postings will be addressed in a forthcoming publication).

Despite these limitations, however, online postings still provide a good indication of how the demand for specific occupations changes over time. In addition, they reveal the kinds of skills and other work requirements that employers ask for.

## Occupations Where Online Job Postings Are Growing

In **Table 1**, we show the five occupations for which the number of online job postings increased the most across Canada from February to March 2020. During this time, posted vacancies for security guards and related security service occupations had the highest increase (up from 882 postings in February to 1343 in March).

**Table 1. Top Five Occupations for which Online Job Postings Increased in March 2020**

Rank	Occupation		Number of Jobs Observed by Occupation		Total change
	Title	Code	Feb 2020	March 2020	
1	Security guards and related security service occupations	NOC-6541	882	1343	+461
2	Home support workers, housekeepers and related occupations	NOC-4412	1620	2030	+410
3	Store shelf stockers, clerks and order fillers	NOC-6622	921	1195	+274
4	Retail and wholesale buyers	NOC-6222	547	738	+191
5	Transport truck drivers	NOC-7511	1751	1934	+183

**Note:** Data are organized by the 4-digit codes of the National Occupation Classification (NOC) system.

## Top Skills and Other Work Requirements

As the employment of millions of Canadians becomes uncertain, many find themselves suddenly asking “What now?” For some, reskilling has become key to protecting their current positions. For others, the need for a career change has been unexpectedly imposed upon them. When it comes to protecting a current job or finding a new one, it is imperative that incumbents and candidates alike have the right skills and competencies employers are looking for.

Vicinity data allow us to draw insights into the these and other work requirements (see **Box 1**) for which employers are looking. In **Table 2**, we present the top three work requirements by category (knowledge, skills, tools and technology, and other) for each of the top five occupations listed in **Table 1**.

### Box 1: Getting to the Skills and Other Work Requirements

Vicinity Jobs first links job postings to work requirements using its own proprietary taxonomy. In partnership with Vicinity and Employment and Social Development Canada (ESDC), LMIC reclassifies each work requirement based on ESDC’s Skills and Competencies Taxonomy:

- o **Skills:** The developed capacities that an individual must have to be effective in a job, role, function, task or duty
- o **Knowledge:** The organized sets of information used to execute tasks and activities within a particular domain
- o **Tools and Technology:** The categories of tools/technology used to perform tasks
- o **Other:** The work requirements not captured in the other three categories: work activities, work context, interests, and personal abilities and attributes

**Table 2. Top Three Work Requirements by Category and Occupation**

	<b>Security guards and related security service occupations</b>	<b>Home support workers, housekeepers and related occupations</b>	<b>Store shelf stockers, clerks and order fillers</b>	<b>Retail and wholesale buyers</b>	<b>Transport truck drivers</b>
 <b>Knowledge</b>	English language	English language	French language	English language	English language
	First Aid	First Aid	English language	Product Management	French language
	French language	CPR	Occupational Health and Safety Act	French language	Bilingual
 <b>Skills</b>	Communication skills	Communication skills	Customer Service	Customer Service	Teamwork
	Customer Service	Teamwork	Teamwork	Communication skills	Customer Service
	Teamwork	Interpersonal skills	Communication skills	Decision-Making	Communication skills
 <b>Tools and Technology</b>	Closed circuit television (CCTV) systems	Microsoft Office (Word and Excel)	Point of sale (POS) systems and software	Microsoft Office (Excel, Word, Outlook, Access, and PowerPoint)	Navigation equipment
	Microsoft Office (Word, Excel, and Outlook)	SAP	Forklifts	Pallet jacks	Global positioning system (GPS) software
	Intrusion detection and prevention systems	Mechanical lifts	SAP	Point of sale (POS) systems and software	Forklifts
 <b>Other</b>	Flexibility	Flexibility	Fast-paced setting	Attention to detail	Attention to detail
	Attention to detail	Self-starter / Self-motivated	Flexibility	Self-starter / Self-motivated	Flexibility
	Self-starter / Self-motivated	Work under pressure	Attention to detail	Flexibility	Fast-paced setting

## The Way Forward

While the March 2020 employment losses are a stark reminder of the gravity of the pandemic, we must remember that the labour market is ever-changing. Jobs are continually being created and phased out, requirements of existing jobs are shifting, individuals enter and exit the workforce, and new businesses enter the market while others leave. The steps to curb the spread of COVID-19 (e.g., social distancing, travel restrictions and large-scale quarantine resulting in business closures) have magnified these dynamics and underlying uncertainty thereby reinforcing the

challenges in determining the composition of jobs that will be available.

Nevertheless, as recovery takes shape and new and different opportunities emerge, LMIC will continue to investigate and report on the work requirements of jobs in Canada. This includes current research on the identification and measurement of skills and other workplace competencies, which is critical to those looking to enter the workforce, switch jobs or careers, or provide support to job seekers, such as career development practitioners, trainers and educators.

## Acknowledgments

This LMI Insight Report was prepared by Anthony Mantione of LMIC.

For more information about this report or other LMIC activities, please contact Anthony Mantione at [anthony.mantione@lmic-cimt.ca](mailto:anthony.mantione@lmic-cimt.ca) or Tony Bonen, Director of Research, Data and Analytics, at [tony.bonen@lmic-cimt.ca](mailto:tony.bonen@lmic-cimt.ca).