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## **Tracking demand in online job postings by sector of activity in Alberta**

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This chapter uses information contained in online job postings (OJPs) to examine Alberta’s labour demand across various sectors, comparing them to the broader Canadian market. The chapter provides an analysis of the sectors’ pre-pandemic growth rates and sheds light on the top-growing sectors. Specifically, results delve into three sectors – mining, quarrying, oil and gas extraction; transportation and warehousing, and public administration – that exhibited the highest growth rates and discusses their labour demand trends during the pandemic and post-pandemic. Additionally, the chapter explores the different career areas within these top growing sectors, offering insights into the distribution of occupational categories within each sector. By investigating these points, the chapter provides valuable information on sectoral demand, growth patterns, and occupational distributions within top-growing sectors.

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## Highlights

- During the pre-pandemic period, the three largest sectors in terms of online job postings in Alberta and Canada were accommodation and food services (NAICS 72), retail trade (NAICS 44-45), and healthcare and social assistance (NAICS 62). These sectors showed stable and slow growth in online job postings.
- In Alberta, the public administration sector (NAICS 91) experienced rapid growth in online job postings between 2017 and 2020, with a 49% increase. However, the same sector saw a slight decrease (-4%) in Canada as a whole.
- The mining, quarrying, and oil and gas extraction sector (NAICS 21) in Alberta was one of the fastest-growing before the pandemic, but suffered a significant decline during the pandemic due to the impact of COVID-19 and a decrease in oil prices. However, this sector has shown quick recovery in demand since 2021.
- The transportation and warehousing sector (NAICS 48-49) is one of the few sectors that continued to see growth in online job postings during the pandemic, due to the rise of e-commerce. This growth has not slowed down post-pandemic, and the sector remains one of the few that has seen consistent growth in demand for workers during and after the pandemic.

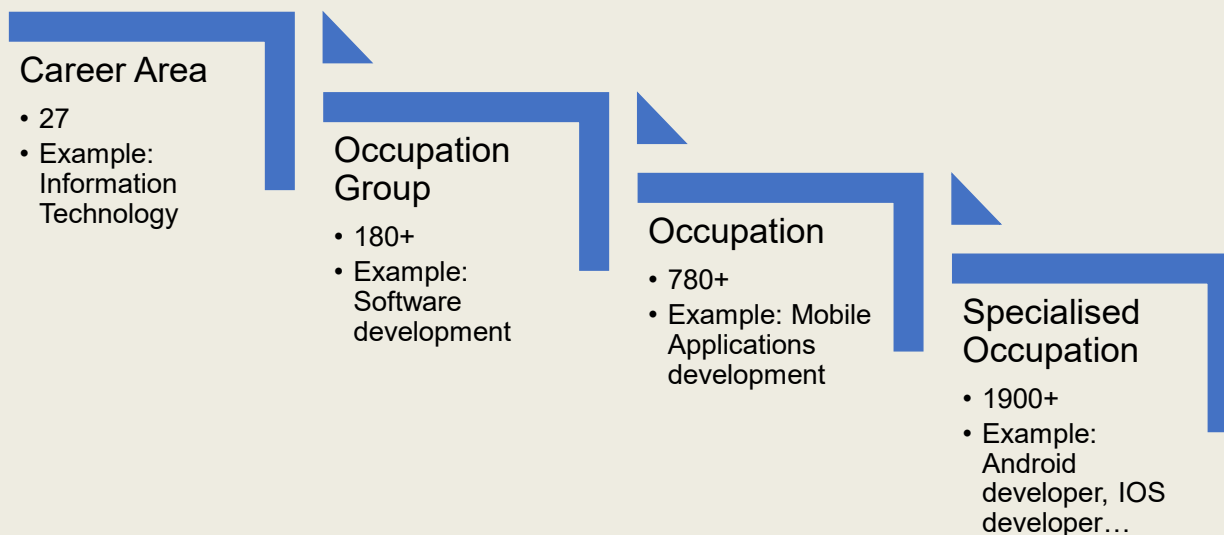
The intensity of the demand for labour can differ across types of jobs and across sectors, reflecting structural factors such as the economic and productive structure of a country or a region, or transitory shocks to the economy that lead to shifts in demand. Besides the geographical location and the education level, another key element for policy makers to understand the dynamics of labour markets is the analysis of sectoral trends.

This chapter discusses the evolution of demand in Alberta at the sector level by analysing trends in online job postings. The analysis reveals the large shock that the COVID-19 crisis had on the demand's sectoral composition as well as the trends that were already ongoing in the pre-pandemic period. As expected, while particular sectors account for a large part of the total number of online job postings, some of the sectors that used to be in high demand have experienced a slowdown, while other smaller sectors become much more prominent in the total number of OJPs. For example, demand for employees with expertise in data science was relatively small in 2015, while now they account for a much larger part of total demand.<sup>1</sup> This chapter focuses on three sectors that showed the most rapid growth in the years pre-pandemic, and analyses how the pandemic impacted them. Their growth post-pandemic, and details about demand for specific career areas within these sectors are investigated as well. The term career area is explained in Box 2.1.

### Box 2.1. Career areas in the Lightcast Occupation Taxonomy

The Lightcast Occupation Taxonomy (LOT) is a classification system that consist in four different levels: Career Area, Occupation Group, Occupation and Specialised Occupation. Career areas are the most general layer of the Lightcast occupational taxonomy. One of the advantages of this classification is the one-to-one relationship between levels, which implies that each specialised occupation maps only to one occupation and so on up in the classification hierarchy, as shown in Figure 2.1.

Figure 2.1. Lightcast Occupation Taxonomy (LOT) hierarchy

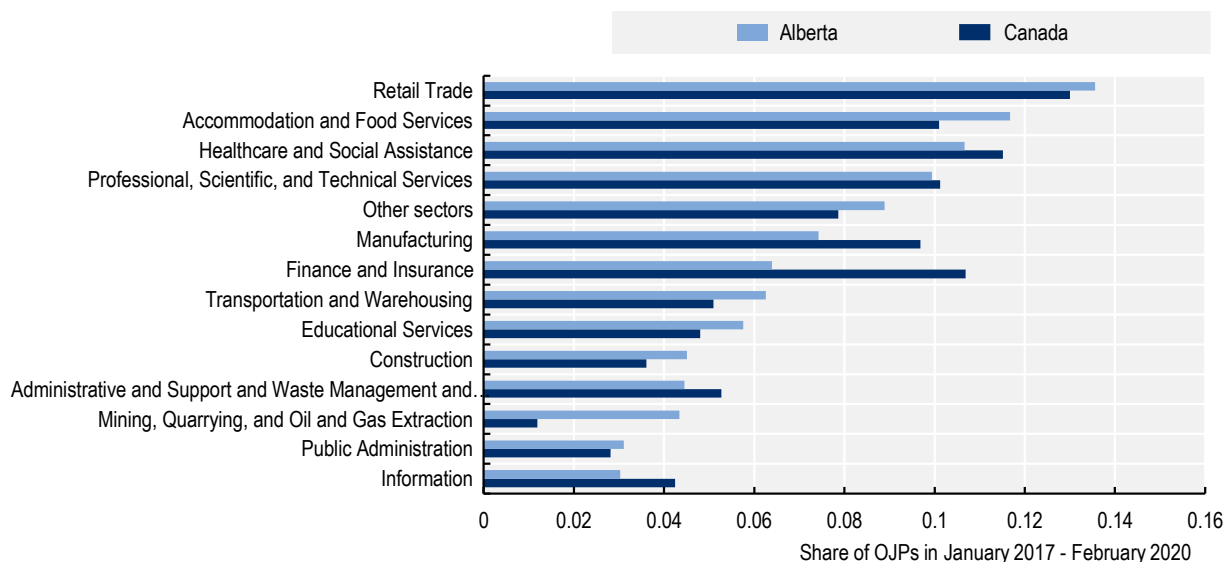


Career areas can be used to look at the distribution of different occupational categories within a sector. Someone working in the transportation sector for example could be working within the career area of transportation in the specialised occupation of driver, or as a data entry clerk in the career area of business, management and operations.

Source: Example adapted from Lightcast (2022<sup>[1]</sup>), The Lightcast Occupation Taxonomy, <https://lightcast.io/resources/blog/new-occupation-taxonomy>.

As Figure 2.2 shows, categorising the online job postings in the three years directly before the pandemic by sector leads to broadly comparable distributions of the demand for labour in Alberta and Canada as a whole.<sup>2</sup> Still, there are some small differences when ranking the sectors. In Alberta, Retail Trade (13.6%), Accommodation and Food Services (11.7%) and Healthcare and Social Assistance (10.7%) represent more than 10% of the total share of OJPs. The fourth largest sector by volume of OJPs is Professional, Scientific, and Technical Services, which contributes 9.9%. In Canada, instead, there are five sectors which are larger than 10% of the total demand: Retail Trade (13%), Healthcare and Social Assistance (11.5%), Finance and Insurance (10.7%), Professional, Scientific, and Technical Services (10.1%), and Accommodation and Food Services (10.1%). The main difference therefore is the sector Finance and Insurance, which is the third largest sector in Canada, but sixth in Alberta at 6.4% of the total demand.

Figure 2.2. January 2017- February 2020 share of OJPs per sector, in Alberta and Canada



Note: The category “Other sectors” includes all sectors that accounted for 2% or less of total OJPs in Alberta pre-pandemic: “Other Services (except Public Administration)”, “Wholesale Trade”, “Utilities”, “Arts, Entertainment, and Recreation”, “Agriculture, Forestry, Fishing and Hunting”, and “Management of Companies and Enterprises”.

Source: OECD calculations based on Lightcast data.

Alberta’s sectors with the largest number of monthly OJPs in 2015–2016 were also among the sectors with relatively stable demand during the pre-pandemic period.<sup>3</sup> In particular, on average, the top three largest sectors in Alberta (retail trade, accommodation and food services and healthcare and social assistance) had slightly fewer monthly OJPs in the period between January 2017 to February 2020, when compared to January 2015 to December 2016 (See Table 2.1).

For instance, the analysis of the Accommodation and Food Services sector indicates that, in the period in between January 2015 and December 2016, an average of 1 243 monthly job postings were published online, relative to 1 101 average monthly job postings in the period in between 2017 and February 2020. Employment figures for the same time periods show that the number of employees in the Accommodation and Food Services sector also stayed relatively stable (Statistics Canada, 2022<sup>[21]</sup>), signalling a relative balance between demand and creation of employment in the pre-pandemic period in this sector.

OJPs for Alberta’s Healthcare and Social Assistance sector stayed relatively stable as well, showing a slight decrease in the volume of new job postings (-7%) over the pre-pandemic period (see Table 2.1). Industry profiles by the Government of Alberta also show relatively steady employment numbers in the years before the pandemic (Alberta Labour and Immigration, 2020<sup>[3]</sup>; 2018<sup>[4]</sup>; Government of Alberta, 2017<sup>[5]</sup>). Employment in Alberta’s Healthcare and Social Assistance sector grew by 1.7% in 2017, and 1.6% in 2018.

Notably, as Table 2.1 shows, the number of OJPs in the Healthcare and Social Assistance sector increased by 28% in the pre-pandemic period compared to the period 2015 to 2016 when considering Canada as a whole. OJPs increased much more rapidly than employment in the Healthcare & Social Assistance sector, this latter increasing by 2-3% per year (Statistics Canada, 2022<sup>[6]</sup>). The strong increase in new OJPs coupled with a moderate increase in employment figures can be seen as evidence of shortages in the Canadian healthcare sector, which have already been noted by (Islam, 2014<sup>[7]</sup>) and (Malko and Huckfeldt, 2017<sup>[8]</sup>).<sup>4</sup>

When focusing on the most notable dynamics in Alberta, Table 2.1 shows that the sectors that had the largest pre-pandemic growth rates in new online job postings were Transportation & Warehousing (61%), Public Administration (49%), and Mining, Quarrying, Oil & Gas Extraction (46%). These dynamics are further discussed in the next subsection.

Of the three fastest growing sectors in Alberta, one behaved differently from the countrywide trend. OJPs for Public Administration increased by an average of 49% in Alberta in the period in between January 2017 and February 2020. When looking at employment figures, the total number of employees in public administration also expanded in Alberta by about 4.9% in 2019 (Alberta Labour and Immigration, 2020<sup>[9]</sup>), with the main driving factor for the increased demand for this sector stemming from replacement demand (Alberta Labour and Immigration, 2019<sup>[10]</sup>). *Alberta's Occupational Outlook (2019-2028)* (Alberta Labour and Immigration, 2019<sup>[10]</sup>) expects more than half of the job openings in “education, law and social, community and government services” between 2019 and 2028 to be caused by replacement demands, as for example previous employees retire. The high number of OJPs may, therefore, be a signal of this replacement demand and not an increase in overall demand in this sector.

By contrast, the number of OJPs in the public administration sector in between January 2017 and February 2020 stayed relatively stable in Canada as a whole, showing only a slight decrease (-4%) over the 3 years under consideration. Part of the explanation for this result might relate to a large increase in OJPs recorded in the public administration sector in the second half of 2016 (used as a benchmark to calculate the growth rate for the following 2017-2020). A large increase in the base year (in particular in the year 2016) can be followed by a relative contraction in the following years' volume of job postings as jobs are gradually filled over time. Among the potential reasons for such a large increase in job postings in the Canadian public administration sector in 2016 is the pressure that the staff of the public administration sector faced during the Syrian refugee crisis, with a sharp increase in the inflow of migrants into Canada. The quarterly financial report for September 2016 by the Canadian Government for example shows that extra budget was announced for Immigration, Refugees and Citizenship Canada (IRCC) programs to be able to handle this crisis (Government of Canada, 2017<sup>[11]</sup>). The Labour Force Survey by (Statistics Canada, 2016<sup>[12]</sup>) also showed that employment in public administration increased by 19,000 employees in September 2016, a 2.1% increase in one month.

**Table 2.1. Evolution of OJPs by sector in the pre-pandemic period**

The growth of average number of OJPs per month in between Jan 2017 and February 2020 relative to average monthly OJPs in the period 2015-2016.

Lightcast sector name	Alberta pre-pandemic (Jan 2017- Feb 2020)	Canada pre-pandemic (Jan 2017- Feb 2020)
Transportation and Warehousing	61%	42%
Public Administration	49%	-4%
Mining, Quarrying, and Oil and Gas Extraction	46%	48%
Agriculture, Forestry, Fishing and Hunting	42%	76%
Information	24%	33%
Manufacturing	15%	19%
Wholesale Trade	14%	16%
Construction	13%	41%
Finance and Insurance	13%	35%
Professional, Scientific, and Technical Services	11%	11%
Educational Services	2%	29%

Lightcast sector name	Alberta pre-pandemic (Jan 2017- Feb 2020)	Canada pre-pandemic (Jan 2017- Feb 2020)
Real Estate and Rental and Leasing	2%	29%
Utilities	-1%	16%
Management of Companies and Enterprises	-4%	57%
Healthcare and Social Assistance	-7%	28%
Administrative and Support and Waste Management and Remediation Services	-10%	5%
Other Services (except Public Administration)	-11%	9%
Accommodation and Food Services	-11%	15%
Arts, Entertainment, and Recreation	-14%	-8%
Retail Trade	-19%	-2%

Source: OECD calculations based on Lightcast data.

## Tracking the demand in online job postings published in Alberta: Top growing sectors

Two of the three sectors with the highest growth rates in OJPs pre-pandemic saw a large decrease in OJPs during 2020 (Figure 2.3). During the peak of the pandemic, online job postings for public administration jobs decreased by 39% in Alberta. Similarly, employment in this sector also decreased in 2020 but the decrease can only be partially attributed to the impact of the pandemic as the Albertan Government had already planned to reduce the public sector's spending by 7.7% in 2020 (Labour Market Information Directorate, Service Canada, 2022<sub>[13]</sub>).<sup>5</sup>

The Mining, Quarrying, Oil and Gas Extraction sector ('Mining sector' henceforth) experienced declines in the number of new job postings published online. Despite a relatively small volume of total OJPs (4%), the Mining sector contributed to about 21% GDP in Alberta over the last two decades (Wang, 2021<sub>[14]</sub>) and it showed a rapid upward trending number of OJPs pre-pandemic starting in 2017 after the oil price collapse in 2014-2016, see Box 2.2. By contrast, during the pandemic, OJPs decreased by nearly 70%, going from an average of 410 job postings to 126 per month. The reasons behind such large decline in demand intertwine the impact of the pandemic and the reduction in oil prices and its extraction in 2020.

As travel and mobility restrictions implemented during the pandemic decreased the demand for oil (Wang, 2021<sub>[14]</sub>), this also led to a significant drop in oil price (in particular in the first two months of the pandemic). Notably, the decrease in number of job postings in the oil sector does not perfectly line up with employment figures in this sector at that time. Employment in oil production is often slow to change after a price fluctuation. If demand for oil is low, companies often prefer to keep producing it, even at a loss. This is because the market conditions might change quickly and stopping and starting up oil production is more expensive than producing at a loss for a short time (Wang, 2021<sub>[14]</sub>). Combining the slow change in employment numbers with the steep decline in OJPs in 2020, it is likely that while employees were not (immediately) laid off, but that the search for new employees was instead temporarily halted.

### Box 2.2. Oil price collapse 2014-2016 and the impact on Alberta's economy

The years 2014-2016 saw one of the largest collapses in oil price since the second world war. The drop in price was mainly driven by a growing role of the United States' shale oil industry, shifts in OPEC policy, reassessment of geopolitical risks due to disruptions in the Middle East, and deteriorating global growth prospects (World Bank Group, 2018<sup>[15]</sup>). The WTI reference price fell from USD 105.79 per barrel in June 2014 to a minimum price of USD 30.32 per barrel in February 2016 (U.S. Energy Information Administration, 2023<sup>[16]</sup>). Alberta, as a province that exports oil, was impacted greatly by the decrease in the oil price. Alberta's GDP decreased by 7% in between 2014 and 2016 (Government of Alberta, 2022<sup>[17]</sup>) and the province suffered job losses in particular in the manufacturing and mining, quarrying and oil and gas extraction sectors (Fields and Bourbeau, 2017<sup>[18]</sup>).

After the oil prices recovered and stabilised in 2017, partially due to policy enacted by OPEC (Arezki and Matsumoto, 2017<sup>[19]</sup>), Alberta's employment rate recovered as well. Similarly, the volume of monthly OJPs in the mining, quarrying and oil and gas extraction sector in between 2017-2020 was significantly higher than in the years 2015-2016, signalling a recovery after the recession.

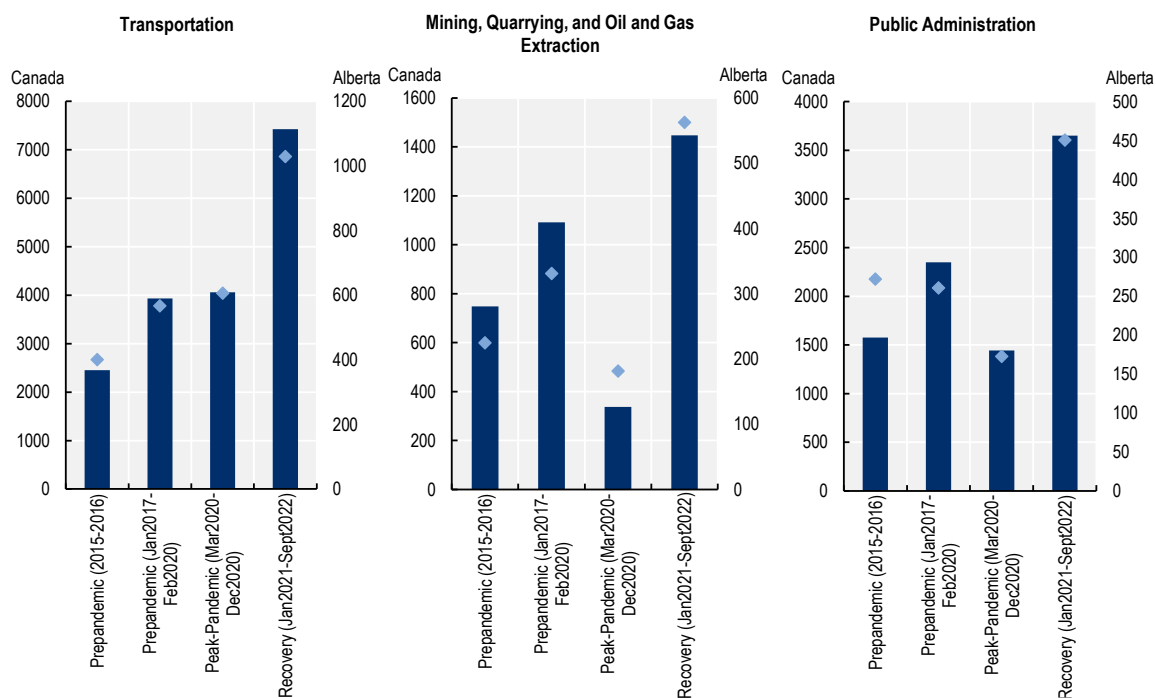
The dynamics for the third top-growing sector, the transportation sector, are particularly interesting as this is one of the few sectors where the pre-pandemic positive trend has not stopped during the peak of the pandemic. Figure 2.3 shows that the number of OJPs for the Transportation and Warehousing sector did not halt but, instead, increased – even if slightly – by 3% during the toughest months of the pandemic (March 2020 to December 2020). Different (and sometimes competing) dynamics played a key role in the demand for workers in this sector. On the one hand, this sector is responsible for passenger transportation. This segment of the sector suffered majorly due to the pandemic, with multiple lockdowns shutting down air transport and a fear of shared spaces decreasing willingness to use public transport (Conference Board of Canada, 2021<sup>[20]</sup>). On the other hand, this sector is responsible for delivering goods to businesses and to consumers, with truck transportation being the largest career area within the transportation sector. And while the number of employed truckdrivers in Canada decreased from 308 800 to 283 800 between February and June, it also increased back to 313 800 in August, which is above the initial level (Conference Board of Canada, 2021<sup>[20]</sup>). The increased demand for employment in the second half of the year is the main reason why OJPs for the transportation and warehousing sector did not decrease during the pandemic, even though there was a decline in OJPs during the first half of the year.

In the post-pandemic period (starting in January 2021) the three sectors<sup>6</sup> that were growing particularly fast before the pandemic, resumed their fast-growing trends, even exceeding the number of average monthly OJPs experienced before the pandemic. For the Public Administration sector and the Mining sector, this can be seen as a swift recovery from the large declines experienced at the peak of the pandemic. For instance, relative to a 39% decrease in OJPs for the public administration sector during the peak of the pandemic, the volume of new demand increased by 153% in the recovery phase. The Mining sector even had the largest growth rate among all sectors in 2021 and 2022, going from 126 monthly average to 543 OJPs. Again, the number of employees is slow to change in this industry, but demand for employees is higher than the supply. Oil prices increased in 2021, providing incentives to produce more oil (ATB Economics, 2022<sup>[21]</sup>). Following Russia's invasion of Ukraine in 2022, there has been a lot of turmoil on the energy markets, culminating into a global energy crisis, the consequences of which are likely to be felt for the next decades (IEA, 2022<sup>[22]</sup>). As Russia's supply of oil and gas to Europe has decreased, this has put pressure on Canada's oil and gas industry to export more (Lee, 2022<sup>[23]</sup>).

The post-pandemic growth rate for Transportation and Warehousing new vacancies is also significant (+83%) despite being lower than the rebound experienced in other sectors. Notably, however, the transportation sector did not go through a slow down at the peak of the pandemic, signalling that the

demand in this sector has remained very strong in Alberta. Looking ahead, as household spending may increase after the declines during the pandemic, the transportation sector is expected to grow as well (Conference Board of Canada, 2021<sup>[20]</sup>), although the impending recession might dampen the growth.

**Figure 2.3. Evolution of online job postings in fast growing sectors: Average monthly OJPs per period**



Source: OECD calculations based on Lightcast data.

### Which occupational career areas represent the largest volume of OJPs within the top growing sectors in Alberta?

Although sectors or industries provide a good way of categorising the labour market demands, employees within a sector all have a variety of specialisations and perform number of widely different tasks. For example, the transportation sector employs, engineers, human resource management, administrative workers and many other workers in different areas and job roles. To shed more light on the demand for different types of jobs within the top-growing sectors, this section discusses the demand for specific occupational career areas within these sectors. This section also covers how the demand for different types of jobs within the sector responded to the COVID-19 crisis and which types of jobs were fastest to recover. The analysis is performed at the career area level rather than at the disaggregated occupation as it strikes a good balance between data availability and sufficient level of detail to analyse the main drivers behind the growth in OJPs within a sector.

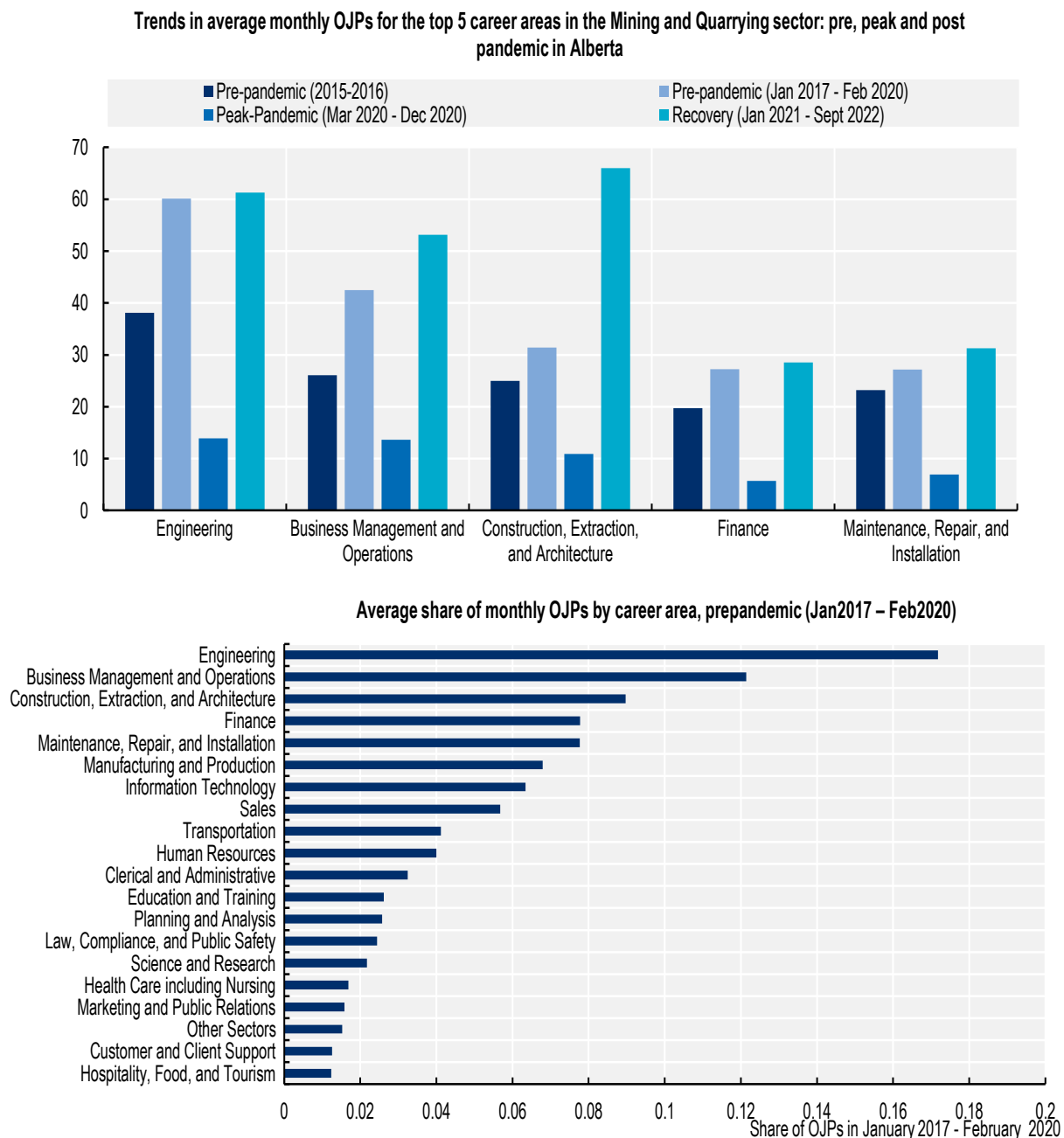


### ***The Mining, Quarrying, Oil and Gas Extraction is a volatile sector that faces labour shortages post-pandemic***

The pandemic, combined with the declines in oil price, had a large impact on the mining sector. Pre-pandemic, the majority of new online job postings in the mining sector were for engineering jobs (17%), followed by business and operations jobs (12%) (see Figure 2.4). Within the mining sector, the third largest demand was for workers in the occupational area of Construction, Extraction and Architecture at 9%. Labour demand for the top ten largest occupational career areas within this sector decreased in 2020, but the brunt of it was borne by the three largest career areas. For instance, the number of new job posts for engineers in the mining sector in Alberta dropped from an average of 60 per month to 14 new vacancies. On the one hand engineering is a mostly white-collar job which can be done from home, meaning that engineers did not lose their jobs *en masse*. On the other hand, as production slowed down fewer new engineers were needed, which still led to a sharp decline in new vacancies offered during the pandemic.

The entire mining sector is now re-emerging after the pandemic, as oil prices have increased as well. Demand for engineering jobs increased significantly, surpassing its pre-pandemic levels. The average number of monthly OJPs for engineers more than tripled compared to the peak of the pandemic. Finding engineers to work in the oil and gas industry is difficult, as there is a lot of competition from the technology sector (CBC News, 2022<sup>[24]</sup>). As countries make large investments in clean technologies and in the transition to a greener and more sustainable economy, employees in the oil and gas sector are actively encouraged to retrain to be able to work in the tech sector. Calgary has for example instituted a programme that teaches former oil and gas-professionals the skills to fulfil jobs in Calgary's digital economy (EDGE Up, 2022<sup>[25]</sup>). This dynamic, however, puts pressure on the oil and mining sector in the transition phase where the demand is still high, and is likely to stay high due to the global energy crisis triggered by Russia's invasion of Ukraine (Lee, 2022<sup>[23]</sup>). The demand for workers in the mining sector with a background in construction, extraction and architecture also surpassed pre-pandemic levels. Shortages are largest for entry level jobs, which are often physically demanding positions like field workers that help lay down pipe on service rigs, maintain it during the lifetime of the oil well and decommission it when the work is finished (Smith, 2022<sup>[26]</sup>).

Figure 2.4. Mining and Quarrying sector by career area: Shares and trends of OJPs



Note: Other sectors include Agriculture, Horticulture, & the Outdoors, Design, Media, and Writing, Community and Social Services, Performing Arts and Personal Services, which all represent less than 1% of the total share of OJPs.

Source: OECD calculations based on Lightcast data.

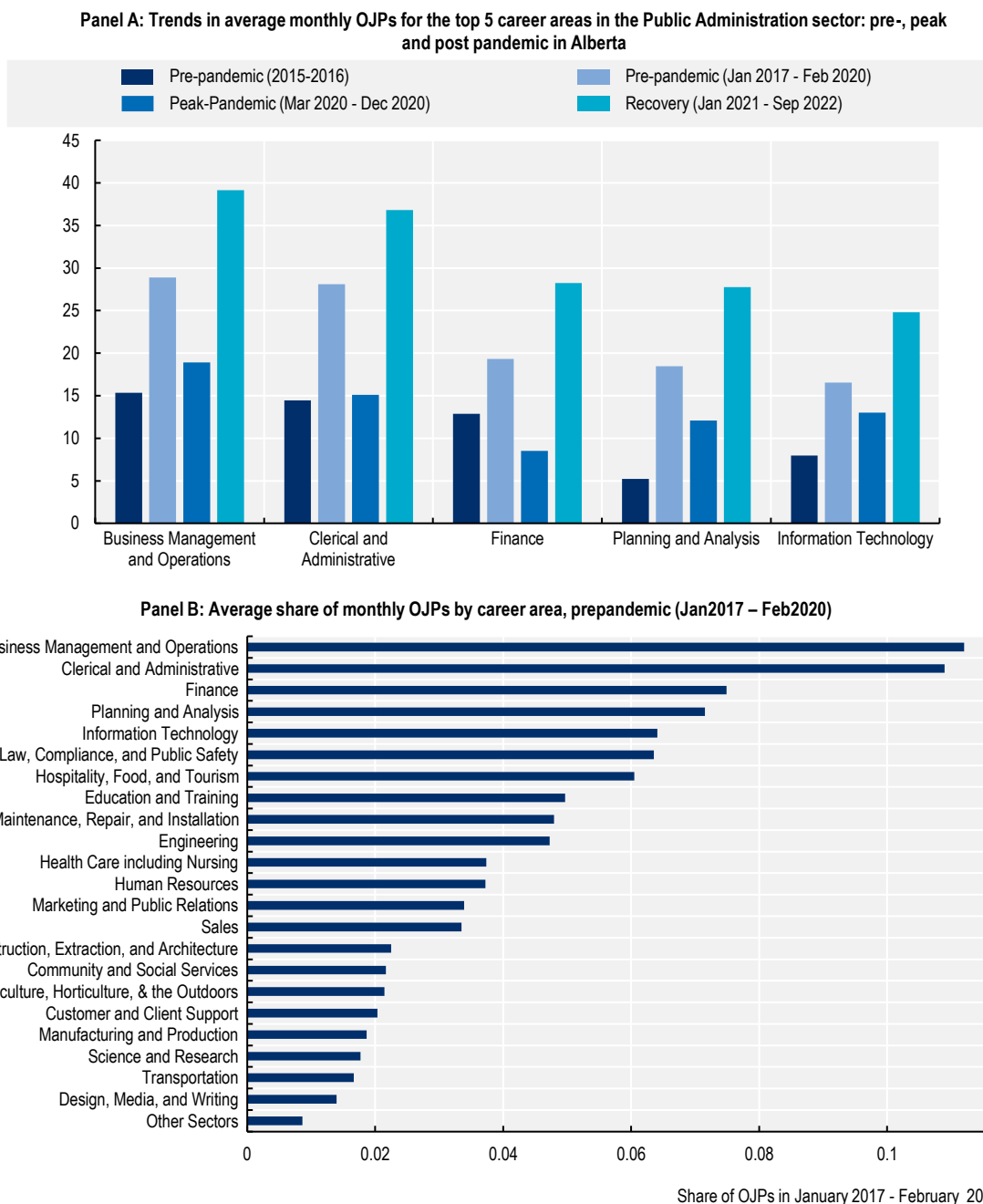
***The number of OJPs for the Public Administration sector decreased significantly in 2020***

As can be seen in Figure 2.5, while the growth in OJPs for the public administration sector has been strong in the pre-pandemic period, the relative volume of job postings is still small. Smaller sample sizes are typically related to higher volatility, and results analysing the public administration sector need to be interpreted with this caveat in mind, especially when further disaggregation at the career area level is carried out as in this section.

In the pre-pandemic period, jobs in the business management and operations and clerical and administrative occupational areas represented the largest share of new online job postings published in the public administration sector. As mentioned in previous sections, however, the volume of new OJPs for this sector decreased significantly during the pandemic. Such decline can only partly be attributed to the negative shock of the COVID-19 crisis as the Albertan Government had already planned to reduce the public sector's spending by 7.7% in 2020 (Labour Market Information Directorate, Service Canada, 2022<sup>[13]</sup>). The overall impact of both drivers, however, resulted in the decrease in the number of OJPs in all of the top 20 largest occupational areas in this sector, all with a similar intensity.<sup>7</sup>

Starting in 2021, the volume of new OJPs in the public administration sector in Alberta recovered swiftly, with the demand in the top 20 career areas increasing significantly. Amongst the sharpest increases in new OJPs within the public administration sector, the demand for workers with a background in Hospitality, Food and Tourism was particularly strong.

Figure 2.5. Public Administration sector by career area: Shares and trends of OJPs in Alberta



Note: Other sectors include Personal Services and Performing arts, which both represent less than 1% of the total share of OJPs.  
 Source: OECD calculations based on Lightcast data.

### ***OJPs for Transportation and Warehousing sector kept increasing during and after the pandemic***

Revenue in the logistics and transportation sector is closely related to household spending. For instance, households use transportation to travel around, and in fact household spending on personal travel accounted for 11% of Canada's GDP between 2015-2019 (Transport Canada, 2021<sub>[27]</sub>). Besides that, transportation brings materials to the manufacturing sector and makes sure that goods are delivered to consumers (Transport Canada, 2021<sub>[27]</sub>). As households earn more, they consume more as well. The last couple of years a large share of consumption has taken a new form, as more and more consumers shop online. The pandemic, which led to shops closing, drastically increased the prevalence of e-commerce. Online shopping and home delivery has increased the demand for transportation. While regular retail sales fell by 17.9% in between February and May of 2020, e-commerce sales in Canada nearly doubled (+99.3%) (Aston et al., 2020<sub>[28]</sub>). Post-pandemic, online sales show no signs of slowing down, although physical shops have been able to open their doors again (Shaw, Eschenbrenner and Baier, 2022<sub>[29]</sub>).

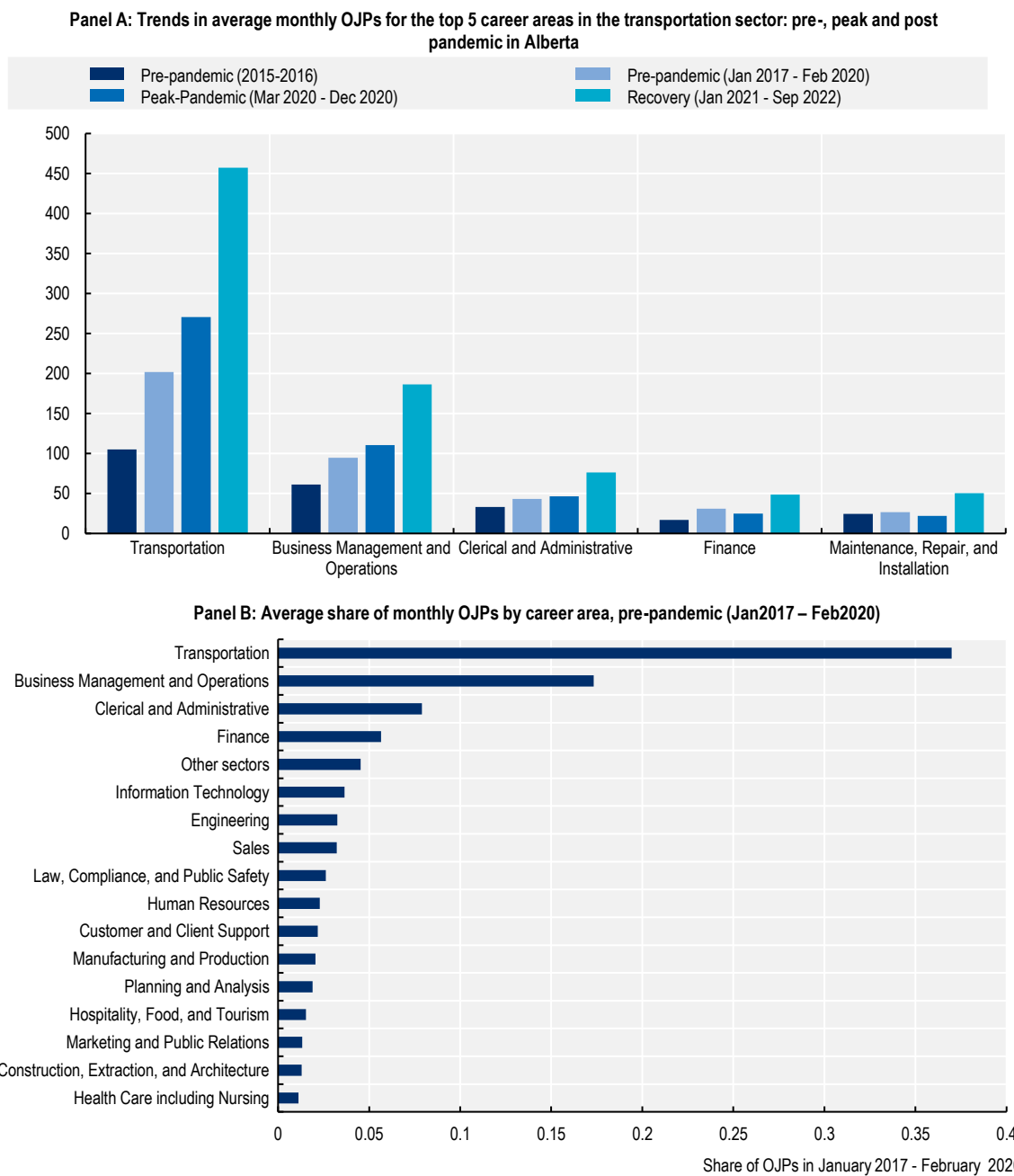
Data from the Alberta's industry profile for 2020 (Alberta Labour and Immigration, 2021<sub>[30]</sub>) shows that the Transportation and Warehousing industry accounted for roughly 6% of total employment in Alberta in 2021. Employment in this industry is also expected to increase at an average rate of 1.2% from 2020 to 2023. The strategic importance of this sector is confirmed by the fact that, over the last 10 years, employment in this industry in Alberta rose by 11 500. This is a 10.6% increase, leading to 120 200 people employed in the industry in 2020. 87.8% of employees in this industry worked full-time and 12.2% were part-time (Alberta Labour and Immigration, 2021<sub>[30]</sub>).

Perhaps not surprisingly, Figure 2.6 shows that, in January 2017-February 2020 37% of all OJPs in Alberta's transportation sector were looking for people with specific background in transportation activities. This career area includes truck drivers amongst other occupations. Canada has been predicting shortages in the number of truck drivers for years, mostly because a large part of drivers is reaching retirement age (Statistics Canada, 2019<sub>[31]</sub>). This replacement demand is expected to increase the number of job postings looking for truck drivers. Another large share (17%) of job postings in between January 2017 and February 2020 were seeking workers in the area of Business, Management and Operations. This field represents a more white-collar part of jobs within the transportation area.

Job postings for workers with specific transportation skills as well as workers in managerial careers also represented the largest share of new vacancies in the transportation sector during the peak of the pandemic.<sup>8</sup> Furthermore, OJPs looking for transportation personnel are the main reason that demand for the entire sector increased during the pandemic, as they for instance increased from 202 on average per month to 271. During the first months of the pandemic, OJPs for transportation personnel did decrease, but in the second half of 2020, demand increased rapidly, as stores started reopening and more people started to use e-commerce.

Post-pandemic, the demand for employees in the transportation career area continued growing by 69%, averaging more than 450 online job postings per month. Shortages in this area are expected to continue for the coming years (Conference Board of Canada, 2021<sub>[20]</sub>). In 2022, the province announced they expanded the eligibility criteria for the Driving Back To Work grant programme<sup>9</sup> and increased the budget to CAD 30 million for the coming three years, in hopes of combatting the shortages in this area (Government of Alberta, 2022<sub>[32]</sub>; Aldrich, 2022<sub>[33]</sub>).

**Figure 2.6. Transportation sector by career area: Shares and trends of OJPs in Alberta**



Note: Other sectors include Education and Training, Science and Research, Personal Services, Community and Social Services, Agriculture, Horticulture, & the Outdoors, Design, Media, and Writing, and Performing Arts, which all represent less than 1% of the total share of OJPs.  
 Source: OECD calculations based on Lightcast data.

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## Notes

<sup>1</sup> See Chapter 4 for a closer look at data mining analysts and business intelligence analysts and on digitalisation in general.

<sup>2</sup> Job postings based in Alberta make up 12.7% of all of Canada's OJPs.

<sup>3</sup> Partially, this has to do with the fact that small changes in the number of job postings have a much larger relative effect on small sectors than on large sectors, so more volatility in smaller sectors is to be expected.

<sup>4</sup> These papers describe that physician shortages, in particular, in rural areas lead to unequal access to healthcare. Alternatively, a large increase in OJPs, coupled with a moderate/low increase in employment figures could be evidence of churn/high turnover. However, in the context of the healthcare sector, it is more likely that shortages are playing a role.

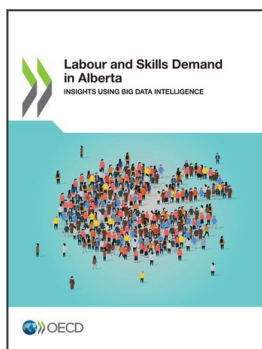
<sup>5</sup> This top growing sector has been discussed in comparison to the trend for the entirety of Canada in the previous subsection.

<sup>6</sup> Public administration, mining and transportation sectors.

<sup>7</sup> None of the career areas stand out as having diminished particularly more than others. The two largest career areas: Business, Management and Operations and Clerical and Administrative went from 29 postings to 19, and from 28 to 15 postings respectively.

<sup>8</sup> 2020 is also the year that the province of Alberta announced their “Driving Back To Work” programme (see Box 3.1 in Chapter 3) to combat shortages (Therien, 2020<sub>[34]</sub>).

<sup>9</sup> See Box 3.1 in Chapter 3.



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