

Latest Developments in the Canadian Economic Accounts

Canadian regional labour statistics and inter-regional movements of paid workers, 2001 to 2021



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Canadian regional labour statistics and inter-regional movements of paid workers, 2001 to 2021

Summary

This paper focuses on the newly built regional labour statistics based on the economic regions where people work. The estimates contained in the regional labour data are experimental and subject to revision. The data allow us to analyse regional labour markets as well as to track the flows of workers from one economic region to other regions. The inter-regional analyses reveal that Quebec and Ontario include the economic regions that were the largest sources or destinations of workers in 2021. Each economic region that records a large net inflow of jobs is surrounded by a cluster of economic regions that record considerable net outflows of workforce to different destinations. Such clusters have been formed around Montréal, Toronto, Ottawa, and Capitale-Nationale (around Québec City).¹ Within these clusters, the main donors of jobs are the Montérégie, Lanaudière, Laurentides, and Hamilton - Niagara Peninsula regions.

The job distribution shows that 55 out of 76 economic regions each had less than 1.0% of Canadian jobs, while the Toronto region reported the highest proportion at 19.3% in 2021. About 47 economic regions had positive, average annual growth rates of jobs between 2010 and 2021. Among them are all the economic regions in British Columbia, regions in Southern Ontario, all the regions in Quebec except the eastern ones, Prince Edward Island and the three territories. The long run analysis demonstrates that the Calgary, Edmonton, and London regions switched from recording net inflows of jobs from other regions to net outflows. While the Toronto and the Montréal regions faced upward trends in their net inflows of jobs during the last decade, the Ottawa, Winnipeg and Capitale-Nationale regions experienced mild continuous declines in their net inflows of jobs.

With the outset of the COVID-19 pandemic and the related impact of public health measures on the labour market, all economic regions lost jobs in 2020. The economic regions with the highest job losses (between 90,000 and 400,000 jobs) were employment hubs such as Toronto, Lower Mainland – Southwest (in British Columbia), Montréal, Calgary and Edmonton. The regions around the first three of these hubs ranked next. Considering the 15 economic regions with the highest job losses in 2020 (between 30,000 and 400,000 jobs), 11 of them had job recovery rates between 80.0% and 95.0% in 2021. Except for four economic regions (including Winnipeg and Edmonton), the rest of the regions in the Prairies had low recovery rates while almost half of the regions in the Atlantic provinces fully recovered.

In 2021, all the economic regions in Southern British Columbia and most of the regions in Central and Southern Quebec recorded one less week of work than the national average hours (1,685 hours).

Keywords: Economic region, regional labour statistics, number of jobs, number of hours worked, inter-regional labour movements.

1. The "Capitale-Nationale" economic region located in the province of Quebec is composed of seven regional county municipalities: Charlevoix-Est, Charlevoix, L'Île-d'Orléans, La Côte-de-Beaupré, La Jacques-Cartier, Québec and Portneuf, and includes 69 municipalities, indigenous communities and unorganized territories. It should not be confused with the "National Capital Region", the official federal designation for the region that includes Canada's capital city of Ottawa (in Ontario), the neighbouring city of Gatineau (in Quebec), and its surrounding areas.

1. Introduction

Although monthly statistics for employment are available², such statistics are based on where a worker lives. Residence-based statistics are useful for household analyses involving final demand and wealth. However, statistics related to the production of goods and services, the corresponding value added and the performance of economic regions should be based on where the person works. To build up new labour statistics in terms of region of work, the available residence-based information from the Labour Force Survey (LFS) must be adjusted. The adjustments can yield estimates for the number of workers who come to work in a region and for the number of its residents who leave the region to work elsewhere. The difference between these two values determines whether a region has a net inflow or a net outflow of workforce.

This paper reviews the methodology in creating these new experimental regional labour statistics. It analyzes the regional distributions of jobs and hours worked and unveils the inter-regional dynamics of paid workers among economic regions of work using geographic maps. This paper is the first that compares such statistics over an entire decade (2010 to 2021) and investigates the extent to which the COVID-19 pandemic restrictions affected employment and labour movements among regional economies.

The analysis contained in this paper, based on this newly developed dataset, is distinguishable from that in other studies, such as Morissette *et al.* (2016) who examined regional hiring and layoff rates built upon the residential information of workers. It is similarly distinct from Morissette (2018), in which the analysis is limited to the number of tax filers who had some paid employment income in a given year.³ In addition, the new data facilitate the integrated exploration of all regional labour markets, whereas previous papers focused on labour market features in one or a few regions. For example, Siman and Adeyemo (2019) analyzed net inter-provincial migration in the region of London in Ontario. In their study, they described the movement from one place of residence to another, using all labour force (i.e., employed and unemployed). On the other hand, this paper shows the net flows of jobs based on movement from the most recent place of residence to the place of work, focusing only on employed workers.

As it will be shown in this paper, the analyses of inter-provincial labour movements by Laporte and Lu (2013) can mask which regions in a province are suffering from labour shortages or faced with labour surpluses, key elements that these new data can highlight. It should be noted that there are some studies that go even further and focus on municipalities within economic regions. However, these studies are generally restricted to census years and analyze only a few municipalities. Using 2001 and 2006 census data, for example, Turcotte and Vézina (2010) tracked the movements of people aged 25 to 44 years from central municipalities of metropolitan areas such as Toronto, Montréal and Vancouver to surrounding municipalities.

The rest of the paper is structured as follows. Section 2 explains the new regional database and its methodology. Section 3 identifies employment hubs and the distribution of total jobs around them. Section 4 analyzes the inter-regional movements of paid workers. Section 5 explores changes in the regional labour markets during the last decade. Section 6 focuses on the impact of the COVID-19 pandemic restrictions on employment and its regional dynamics. Section 7 discusses annual average hours worked for the regions and section 8 concludes the discussion.

2. Data and methodology

Previously, labour statistics for economic regions were available only by special request. The regional labour data were released in an experimental database for the public on May 20, 2022.⁴ The published table contains several time series beginning in 2001 and the data contain regional labour statistics, such as number of jobs and hours worked by class of worker (paid workers and self-employed jobs)⁵, net regional flows of jobs for paid workers and net international flows of jobs for paid workers (those who crossed the Canada-USA border on a daily basis). All statistics are available for full-time and part-time work schedules, except for the net international flows.

2. See Table 14-10-0387-01 on Statistics Canada's website:

[Labour force characteristics, three-month moving average, unadjusted for seasonality, last 5 months \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/14-10-0387-01/2021001/article/00001-eng.htm)

3. Defined as regional "paid employment" in his paper.

4. The database can be accessed from Table 36-10-0675-01 on Statistics Canada's website:

[Labour statistics consistent with the System of Provincial and Territorial Economic Accounts, by economic regions, job category and work schedule \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/36-10-0675-01/2021001/article/00001-eng.htm)

5. Paid workers jobs include employee jobs as well as jobs held by owners of an incorporated enterprise. Jobs occupied by self-employed workers comprise employers of an unincorporated business, unincorporated own-account jobs and unpaid family-related jobs.

Since sampling for the LFS is based on economic regions, the new regional labour statistics are built upon LFS micro-databases. However, two adjustments are applied to the LFS information: the workers who were on unpaid leaves (like strikes) are excluded and secondary job holders are counted twice. The concepts of jobs and workers should be interpreted with caution in this paper, since interregional flows of jobs actually refer to interregional flows of workers filling those jobs. Some of these workers may potentially be counted twice in the flow if they leave their region to work in two different jobs during the same reference week. Finally, to construct a robust and extended time series for these labour statistics based on a region of work, LFS information is combined with available census information (see [Appendix A](#) for more details).

Census data have exhaustive information on the movements of workers from their home regions to their work regions. For an economic region, the proportion of workers who left the region to work in other regions is calculated for census years. These proportions are expanded following a logistic transformation to create a time series. The subsequent ratios are applied to the estimates of employment from the LFS (by region of residence) to obtain the preliminary estimates for the number of jobs by region of work. These regional estimates are then reconciled with provincial and territorial benchmarks⁶ of jobs.

The procedure estimates the number of workers who entered a region and the number of workers who left the region. The resulting statistics are then used to calculate the net flows of paid workers jobs for each economic region (inflows minus outflows). The reconciliation process makes the inter-regional flows consistent with the estimation of inter-provincial flows that are already provided in the provincial benchmarks.⁷ Note that the net regional flows of jobs for self-employed workers are not conceptually applicable since, by definition, their business establishments correspond with their residences.

In addition, the regional hours worked are built up from detailed NAICS⁸ industry breakdowns from the census to better reflect the influence of the industry structure of each region on the intensity of hours worked. Thus, for each region of work, the proportion of workers working in different industries is calculated from census data and is then expanded for other years. The resulting industrial distribution of jobs is combined with provincial average hours worked to estimate an aggregate number of hours worked for the region. Finally, these regional hours worked are adjusted to respect provincial and territorial benchmarks.

3. Employment hubs and job distribution among regional labour markets, 2021

This section focuses on the distribution of total number of jobs among economic regions and identifies the employment hubs and their relationships with the regions around them in 2021.

An economic region⁹ (ER) is a grouping of complete census divisions (CDs), with one exception in Ontario, created as a standard geographic unit for analysis of regional economic activity.¹⁰ The regional data reveal that the total number of jobs in Canada is heterogeneously allotted among the 76 economic regions because of their geographical and industrial distinctions. In 2021, 87.0% of total jobs were concentrated in four provinces: Ontario (39.0%), Quebec (22.0%), British Columbia (14.0%) and Alberta (12.0%) (Table 1).

The regional distribution of total jobs shows that about half of economic regions had job proportions less than 0.5% (Map 1). Such regions were in the three territories, Manitoba (except Winnipeg), Atlantic provinces¹¹ (except three regions), Saskatchewan (except two), Central and Northern British Columbia as well as Northern and Northeast Quebec. On the other hand, the highest shares of total jobs were recorded in economic regions such as Toronto

6. See following tables on Statistics Canada's website:

Table 36-10-0480-01:

[Labour productivity and related measures by business sector industry and by non-commercial activity consistent with the industry accounts \(statcan.gc.ca\)](#)

Table 36-10-0489-01:

[Labour statistics consistent with the System of National Accounts \(SNA\), by job category and industry \(statcan.gc.ca\)](#)

Table 36-10-0676-01:

[Labour statistics consistent with the System of Provincial and Territorial Economic Accounts, by industry, job category and work schedule \(full-time or part-time\) \(statcan.gc.ca\)](#)

7. The inter-provincial flows of jobs rely on both census and tax data.

8. North American Industry Classification System.

9. See: [Dictionary, Census of Population, 2021 – Economic region \(ER\) \(statcan.gc.ca\)](#)

10. Variant of Standard Geographical Classification (SGC) 2021 for Economic Regions can be found in the following link:

[Variant of Standard Geographical Classification \(SGC\) 2021 for Economic Regions \(statcan.gc.ca\)](#).

11. The Atlantic provinces include New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island

with 19.3%, Lower Mainland – Southwest (in British Columbia) with 9.0%, Montréal with 7.4% and Calgary with 4.6%. These four employment hubs accounted for 40.3% of jobs in Canada.

Ontario had no regions with job proportions less than 0.5%. The Toronto economic region, with 19.3% at the national level, accounted for half of its provincial share in Canadian jobs. The job proportions gradually decrease as the distance away from this hub grows. Toronto was followed by economic regions such as Ottawa with 4.1%, Kitchener – Waterloo – Barrie with 3.7% and Hamilton – Niagara Peninsula with 3.6%, all of which represent high proportions of total jobs at Canada level. After these regions were London with 1.9%, Windsor – Sarnia with 1.5%, Northeast with 1.3% and Kingston – Pembroke with 1.2%. The Northwest region had the lowest percentage at 0.6%, which nonetheless exceeded half of the economic regions in Canada.

In British Columbia, the job proportions declined considerably beyond its employment hub, Lower Mainland – Southwest. With 9.0% of Canadian jobs, this hub received two-third of its provincial share in Canadian jobs and was followed by two other economic regions: Vancouver Island and Coast with 2.2% and Thompson – Okanagan with 1.6%. The job proportions at the national level for the rest of the economic regions in this province were less than 0.5%, with the lowest at 0.1% for Nechako.

The employment proportions in the regions around Montréal in Quebec declined more sharply than regions around Toronto, but more gradually than those around Lower Mainland – Southwest in British Columbia. Montréal, with 7.4% of jobs at the national level, attracted one-third of the provincial share in Canadian jobs and was followed by Montérégie with 3.5%, Capitale-Nationale with 2.1%, Laurentides with 1.3%, Chaudière-Appalaches with 1.0% and Lanaudière with 0.9%. Six other economic regions in this province reported shares of total Canadian jobs between 0.5% and 0.9%. The regions located in Northern and Northeast Quebec received less than 0.5% of jobs, with the lowest, Nord-du-Québec, at 0.1%.

In Alberta, Calgary and Edmonton, with national job shares of 4.6% and 4.2%, accounted for about three quarters (73.0%) of their provincial share in Canadian jobs. The proportions rapidly dropped to a range of between 0.2% and 0.7% for Alberta's remaining economic regions.

Other provinces had at most one region with proportions of total jobs above 1.0%. In Manitoba, Winnipeg received 2.3% of Canadian jobs, while the rest of its regions had less than 0.3%. In Saskatchewan, the job percentages for Regina – Moose Mountain and Saskatoon – Biggar were about 1.0%, and the rest of its regions had less than 0.5%. All regions in the four Atlantic provinces had job percentages less than 0.7%, except, Halifax in Nova Scotia that posted 1.3%. Finally, each of the three territories attracted about 0.1% of Canadian jobs.

Overall, Map 1 shows that except in Ontario and Quebec, the proportions of total jobs rapidly declined when moving away from the employment hubs. Consequently, 66.0% of total jobs existed in 12 economic regions with job proportions between 2.0% and 19.3% (Table 2: A). Such an allocation can signal that some regional labour markets depend largely on workers from other regions of the country to meet their labour shortages. The next section will investigate this further.

4. Inter-regional movements of the labour force, 2021

In this section, the inter-regional movements of paid workers in 2021 are discussed. It will be shown that regions with high proportions of Canadian jobs are related to those that were the major net recipients or net donors of jobs in the labour force.

4.1 Net flows of paid workers jobs among economic regions, 2021

Because of regional job opportunities and regional labour shortages, many paid workers decide to commute on a daily basis or do one or more round trips every month to other regions for work. Such job dynamics can be illustrated for paid workers in 2021 (Map 2). The illustration distinguishes the economic regions with net inflows of jobs, those experiencing more workers 'moving in' than 'moving out' (positive net flow), from the regions with net outflows of jobs, those experiencing the reverse (negative net flow).

Each economic region that receives a large number of workers is surrounded by a cluster of economic regions that send a considerable workforce to different destinations. Quebec and Ontario have formed such clusters around Montréal with a net inflow of about 335,000 jobs, Toronto with a net inflow of 146,000 jobs, as well as Ottawa and Capitale-Nationale with net inflows of about 32,000 and 21,000 jobs respectively. Within these clusters, the main sources of labour are Montérégie with a net outflow of 144,000 jobs, Lanaudière with a net outflow of 78,000 jobs, Laurentides with a net outflow of 66,000 jobs and Hamilton - Niagara Peninsula with a net outflow of 61,000 jobs.

Table 2 (parts B and C) ranks the remaining regions with the largest net inflows and net outflows of jobs. After Capitale-Nationale and Wood Buffalo – Cold Lake with net inflows of about 20,000 jobs and Winnipeg with 18,000 jobs, the rest of the economic regions with positive net flows posted values less than 10,000 jobs. On the other hand, after Kitchener – Waterloo – Barrie with a net outflow of 53,000 jobs; Laval with a net outflow of 43,000 jobs; Outaouais with 31,000 jobs; Chaudière-Appalaches with 21,000 jobs; Muskoka – Kawarthas with 16,000 jobs and Southeast in Manitoba with a net outflow of 12,000 jobs, the rest of the economic regions with negative net flows of jobs recorded net outflows less than 10,000 jobs.

The next section examines whether economic regions with the high proportions of jobs are solely net receivers of jobs, solely net senders of jobs, or can be both.

4.2 Relation between job concentration and net flows of jobs, 2021

Table 2 shows that most of the economic regions with high proportions of total Canadian jobs (between 2.0% and 19.3%) can be either substantial recipients of labour from other regions or important suppliers of labour to other regions.

Parts A and B of the table identify the employment centers that received a large number of workers, such as Montréal, Toronto, Ottawa, Capitale-Nationale and Winnipeg. By contrast, Parts A and C highlight the employment centers that supplied a large number of workers compared to what they received, such as Montérégie, Hamilton – Niagara Peninsula and Kitchener – Waterloo – Barrie.

Four economic regions (Lower Mainland – Southwest, Vancouver Island and Coast, Calgary, and Edmonton) with high proportions of total jobs (between 4.6% and 9.0%) were neither major labour recipients nor major labour suppliers. The three latter regions had net outflows of jobs between about 2,000 and 6,000 jobs. On the other hand, Wood Buffalo – Cold Lake with a low job proportion of 0.5% in national jobs was ranked fifth among the labour recipients (with a net inflow of 20,000).

The next section will discuss the changes in regional jobs and inter-regional movements during the last decade.

5. Regional labour markets in the decade from 2010 to 2021

This section discusses which of the economic regions attracted more employment and which of them lost more labour during the period of 2010 to 2021. Also, it explores the long-run changes in net flows of jobs in these regions.

5.1 Average annual growth rates of jobs in the economic regions

To estimate the long run trends in the regional distribution of employment, the annual growth rate of jobs between 2010 and 2021 was calculated like the compound interest rate. Among 76 economic regions, 47 regions had positive annual growth rates (between 0.1% and 6.0% a year on average). They include all the economic regions in British Columbia, Southern Ontario, all the regions in Quebec except Eastern ones, Prince Edward Island and the three territories (Map 3). Among them, the highest growth rates belonged to Nord-du-Québec with 6.0% (from about 11,800 to 22,300 jobs), Nunavut with 3.5% (from about 15,000 to 22,000 jobs), Lower Mainland – Southwest with 2.0% (from about 1,380,000 to 1,717,000 jobs) and Yukon with about 1.9% (from about 22,000 to 27,000 jobs), see Table 3: A-1. The remaining regions with labour gains had growth rates less than 1.5%.

The economic regions with large gains in the number of jobs between 2010 and 2021 were among the ones with lower growth rates. The Toronto region with an average annual growth rate of 1.5% gained 510,000 in jobs (from about 3,166,000 to 3,675,000); the Montréal region with an average growth rate of 1.1% added 153,000 jobs (from about 1,250,000 to 1,403,000); Edmonton with a growth rate of 1.4% experienced about 115,000 in job gains (from about 688,000 to 802,000) and Calgary with a growth rate of 1.1% gained 96,000 in jobs (from about 775,000 to 870,000), see Table 3: A-2.

The rest of 29 economic regions had negative annual growth rates between -2.5% and -0.1%. These economic regions were mostly in Alberta, Saskatchewan, Northern Manitoba, Northern Ontario, Eastern Quebec, the Atlantic provinces (except Prince Edward Island). Overall, reductions in the number of jobs over the decade were not very large. Côte-Nord in Quebec, with an average annual growth rate of -2.5%, recorded 12,000 in job declines (from about 52,000 to 39,000); Banff – Jasper – Rocky Mountain House, with an average growth rate of -1.8%, lost 10,000 jobs (from about 54,000 to 45,000), see Table 3: B-1. The other economic regions with the largest reductions in jobs were Camrose – Drumheller with an average growth rate of -1.3%, which lost about 15,000 jobs, and the Northeast region in Ontario with an average growth rate of -0.4%, which lost about 12,000 jobs during the decade, see Table 3: B-2.

5.2 Long-run trends in the inter-regional movements of jobs

Although 64 regions preserved their status as either net suppliers or net recipients of jobs during the period 2010 to 2021 (Map 4), a few patterns can still be identified for the long-run movements in the net flows of jobs (Table 4 and Chart 1). The patterns are discussed for those regions with significant changes in their net flows of jobs.

There are three main movement patterns for the economic regions that ended with negative net flows of jobs in 2021. Some of them experienced a decade of steady increases in their net outflows of jobs (Table 4: A-1). For example, the net flows of jobs in Kitchener – Waterloo – Barrie experienced an accelerating negative trend, from approximately a net outflow of 34,000 jobs in 2010 to a net outflow of 53,000 jobs in 2021, an increase of 18,600 in net outflows of jobs. (Chart 1: A-1). A few regions with continuous reductions in their net inflows of jobs eventually became net suppliers of jobs (Table 4: A-2). Calgary started with a net inflow of about 4,900 jobs in 2010, switched to a net job supplier in 2015, and ended up with 6,300 in net outflows of jobs by 2021 (Chart 1: A-2). Regions such as Edmonton and London had similar scenarios. Other regions had steady decreases in their net outflows of jobs (Table 4: B). The net outflows of jobs in Outaouais continuously decreased from a net outflow of 38,600 jobs in 2010 to 31,400 jobs in 2021 (Chart 1: B).

Similarly, there are three main patterns for the economic regions that ended with positive net inflows of jobs in 2021. Some regions experienced continuous increases in their net inflows of jobs (Table 4: C-1). For example, the net inflows in the Toronto region went up from about 102,000 jobs in 2010 to about 146,000 jobs in 2021, resulting in an increase of 44,700 jobs (Chart 1: C-1). A few regions switched from net suppliers of jobs to net recipients of jobs (Table 4: C-2). Among them, Lower Mainland – Southwest had a U-shape trend for its net flows of jobs: it started with a net outflow of roughly 1,200 jobs in 2010, reached a maximum of net outflows of about 4,000 jobs in 2014, and then experienced continuous reductions in its net outflows until 2018 when it started to become a net job recipient with a net inflow of about 3,800 jobs by 2021 (Chart 1: C-2). Other regions had steady decreases in their net inflows of jobs (Table 4: D). In 2010, the Ottawa region started with a net inflow of 40,000 jobs that continuously declined to reach a net inflow of 32,000 jobs in 2021 (Chart 1: D).

The next section details the resilience of the regional labour market during the period of the COVID-19 pandemic.

6. Impacts of the COVID-19 pandemic and public health measures on regional employment and inter-regional movements, 2019 – 2021

In this section, the labour statistics for 2019 (the year before the start of the COVID-19 pandemic) are compared with the statistics in 2020 and 2021 to investigate the impacts of the restrictions resulting from the pandemic and the related public health measures on both the regional labour markets and the inter-regional labour movements.

The calculated recovery rates¹² discussed in this section will show what percentages of the regional jobs lost in 2020 (compared with 2019) were recovered in 2021.

6.1 Big regional job cuts belonged to employment hubs

A comparison of the number of total jobs between 2019 and 2020 shows that all the economic regions lost jobs in 2020 (Map 5). The economic regions with the largest proportions of Canadian jobs also recorded the greatest job losses in 2020. All the regional employment hubs experienced between 90,000 and 400,000 job reductions during the first year of the pandemic. The job declines in the Toronto region were about 392,600 jobs; roughly 193,600 jobs in Lower Mainland – Southwest, about 133,200 jobs in Montréal, and around 95,000 jobs in Calgary and Edmonton. Moreover, the regional job markets around the first three employment hubs mentioned lost between 40,000 and 90,000 jobs in 2020 (Table 5). In terms of percentage changes, all these regions lost between 9.0% and 12.0% of jobs.

However, some other regions had job reductions above 15.0% in 2020: Windsor – Sarnia in Ontario with 19.0% (58,200 job losses); Banff – Jasper – Rocky Mountain House in Alberta with 17.0% (8,900 job losses) and Gaspésie – Îles-de-la-Madeleine in Quebec with 15.0% (5,000 job losses).

Overall, the regions that lost approximately 10,000 or more jobs were all regions located in Ontario; all the regions in Quebec, except four; all the regions in Alberta, except two; three regions in the south and southwest of British Columbia; two regions in Saskatchewan; Winnipeg in Manitoba, and two regions in the Atlantic provinces (Map 5).

6.2 Regional job recovery rates, 2021

Although the impact of COVID-19 pandemic and the related public health measures on labour market were mitigated in 2021, most of the regional job markets still possessed a smaller number of total jobs in 2021 than in 2019. A recovery rate that is less than 100% indicates the portion of the regional job losses (occurring during 2020) that were refilled in 2021. A recovery rate greater than 100% indicates that the number of jobs in 2021 surpassed the level in 2019. If the rate is negative, it means that the region recorded further job losses in 2021 and thus ended up with even fewer jobs than 2019.

There are not very specific recovery patterns among the regions in Canada (see Map 6). Firstly, eleven out of 15 economic regions with the highest job losses in 2020 (between 30,000 and 400,000) had job recovery rates between 80.0% and 95.0% (Table 5). Also, most of the economic regions with recovery rates above 90.0% were in the Atlantic Provinces (eight regions), in Quebec (Montréal, Laval and four other regions), the London region in Ontario, three regions in Prairies, two regions in southwest of British Columbia and the Northwest Territories. The list of all the economic regions with more than 90.0% recovery rates can be found in Table 6.

Most of the economic regions in Southern Ontario had milder recovery rates between 80.0% to 90.0%. In the Prairies, except for Edmonton, Winnipeg, and two other regions that had recovery rates above 85.0%, the other 18 regions had weak recovery rates — even those with relatively large initial labour markets (i.e., high number of total jobs in 2019) (Chart 1). In contrast, 6 out of 11 regions located in Prince Edward Island, Nova Scotia and New Brunswick had full or more than 100% recovery rates (Chart 2).

There were two regions with strong negative recovery rates that lost further jobs in 2021.¹³ South Coast – Burin Peninsula in Newfoundland and Labrador had a negative recovery rate (-120.0%), from 11,370 jobs in 2019 to 10,830 in 2020 and then 10,160 jobs in 2021, and Swift Current – Moose Jaw in Saskatchewan had a negative recovery rate (-40.0%), from 54,850 jobs in 2019 to about 52,770 in 2020 and then 51,920 jobs in 2021.

12. The recovery rate of jobs for each region is calculated as:

$$\text{Recovery Rate} = \frac{(\# \text{ of Jobs}_{2020} - \# \text{ of Jobs}_{2019}) - (\# \text{ of Jobs}_{2021} - \# \text{ of Jobs}_{2019})}{\# \text{ of Jobs}_{2020} - \# \text{ of Jobs}_{2019}} * 100$$

13. They are not reported in Table 6.

7. Average hours worked¹⁴ by economic region, 2021

The annual average hours worked in Canada was 1,685 hours in 2021. In what follows, the hours worked for economic regions will be compared with the national level based on the average weekly hours worked of 32 hours.¹⁵

The economic regions where workforce, on average, worked at least one week less than the national level were Muskoka – Kawarthas in Ontario, almost all the economic regions in Central and Southern Quebec and all the economic regions in Southern British Columbia (Map 7). On the other hand, most of the economic regions in the Prairies, the Toronto region as well as the northern regions in both Newfoundland and New Brunswick recorded average-hours worked that were at least one week more than the national level. The economic regions with average-hours worked that were four weeks above the national level were West Coast – Northern Peninsula – Labrador, Nunavut and Wood Buffalo – Cold Lake.

In general, for a given region, average-hours worked increase when there are more full-time workers.

8. Conclusion

The movement of labour between regions is economically efficient because it allows workers to move to where they are most needed. It can also be an acceptable public policy objective at the local and provincial level, if it supports justified social and economic interests such as encouraging local development. To improve policies on inter-regional labour mobility, high quality and relevant data are needed. This paper explores the new, experimental regional labour statistics for the period from 2001 to 2021 in which labour force information is adjusted to reflect the economic regions where people work. This new database readily facilitates the analyses of regional labour markets and allows users to examine regional distributions of jobs and hours worked and to track inter-regional labour movements.

In 2021, the economic regions that were either substantial net recipients or net suppliers of labour were among the regions with the highest proportions of total Canadian jobs. There were 12 out of 76 economic regions with job proportions between 2.0% and 19.3%, and these represented 66.0% of the national jobs. Except in Ontario and Quebec, the proportions of total jobs in the economic regions rapidly dropped by moving away from the main employment hubs. Also, most of the regions in Prairies and in the Atlantic provinces were net recipients of jobs.

During the first year of the COVID-19 pandemic in 2020, the subsequent public health measures meant many Canadians were unable to work, especially in the regional employment hubs such as Toronto, Lower Mainland – Southwest, Montréal, Calgary, and Edmonton. From 2010 to 2021, 64 out of 76 economic regions preserved their directions as being either the net suppliers or the net recipients of labour force. Some of the principal labour-supplying regions had steady increases in their net outflows of jobs during the last decade.

In the future, inter-regional movements can be linked to more demographic factors and regional macroeconomic variables such as income, Gross Domestic Product (GDP) and unemployment rates to better understand the dynamics of regional economies. For example, the rapid aging of the population in one region, which is explained by its different relative age structure, can contribute to a significant decline in the unemployment rate of that region. This should help retain workers in that region while limiting labour outflows, but may also result in tightening local labour conditions and increased labour costs.

Experimental estimates of regional labour data were recently included as part of the release of annual labour statistics data. As the database is experimental, [feedback](#) is welcomed on these regional labour statistics as this product is improved in future iterations.

14. Hours worked refers to total hours that a worker spends working whether paid or not. It includes regular and overtime hours, breaks, travel time, training in the workplace; however, it excludes strikes, lockouts, maternity leaves, public holidays and sick leaves.

15. With 52 weeks in a year and with the national average hours worked at 1,685, this paper uses 32 hours ($1685/52=32$) as the average weekly hours worked in Canada.

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Appendix A: Building up the number of paid workers jobs based on a region of work

This appendix explains the process to estimate the number of jobs based on the region of work. For simplicity, we ignore the schedule dimension (full-time and part-time) of labour statistics in what follows. Also, the procedure applies other adjustments to take into account strikes, net international flows of workers and the population not covered by LFS, such as military personnel and workers on indigenous reserves.

Proportion of paid workers jobs (based on census information)

Census data contain the number of workers from region A who worked in region B (2001, 2006, 2011 and 2016 census). For each region like B that received workers from region A , the job ratio can be calculated for each year of census as follows:

$$Ratio(B_{A,t}) = \frac{\text{Number of paid workers who worked in region } B \text{ in year } (t) \text{ but were residents of region } A}{\text{Total number of paid workers who lived in region } A \text{ in year } (t)} \quad (1)$$

$Ratio(B_{A,t})$ is calculated for paid workers jobs. By changing the numerator from region B to region C , $D \dots$ or A , the job ratios for paid workers of region A who worked in region C , $D \dots$ or inside A are obtained. The sum of these ratios must be equal to 1.

To create annual time series for the proportion of residents of A who worked in B , $Ratio(B_{A,t})$, available ratios from census years are mapped to the interval of $t = 2001, \dots, 2021$ by a logistic distribution. The resulting values are expanded with a cubic spline function to get a flexible times series ($t = 2001, \dots, 2021$). Then the time series created for each ratio, such as $Ratio(B_{A,t})$, is mapped back to the interval of $(0, 1)$. After that, all of the resulting job proportions related to region A in a specific year t are renormalized, $Ratio^N(B_{A,t})$, to make sure that they add up to 1:

$$\sum_{ER=A}^{ER=Z} Ratio^N(ER_{A,t}) = 1 \quad (2)$$

Estimating the number of paid workers who work in an economic region

For year t , multiplying normalized $Ratio(B_{A,t})$ by the number of paid workers jobs from LFS (based on place of residence), $Jobs(A, t)$, the number of paid workers who lived in region A but went to work in region B is estimated as:

$$\text{Paid workers who lived in region } A \text{ but worked in region } B = Ratio^N(B_{A,t}) * Jobs(A, t) \quad (3)$$

By repeating equation (3) but changing region A to $B, C, D \dots$ in the formula, the number of other workers who worked in region B but were residents of other regions (or residents of region B (itself)) in year t are calculated. By adding them up, the total number of workers who worked in region B in year t is obtained.

The above procedure can be repeated for other economic regions that are in the same province with region B to obtain total number of paid workers who worked in those regions. The sum of these regional jobs gives the number of paid workers who worked in that province.

The estimated provincial and territorial jobs for paid workers need to be equal to their provincial and territorial benchmarks (based on place of work). However, such equalities are not necessarily guaranteed. A “Raking” procedure, which restores additivity in a system of time series measured at the same frequency, is used to update the estimated number of paid workers for each economic region in a province. The resulting provincial and territorial jobs will match with provincial and territorial benchmarks (based on the place of work).

Appendix B: Tables, Charts and Maps

Table 1
Proportions of total jobs and net flows of paid workers jobs by province and economic region, 2021

Provinces, territories and economic regions ¹	Economic region unique identifier	Net flows of paid workers jobs ²	Percentage of total Canadian jobs
Newfoundland and Labrador	10	-3,610	1.1
Avalon Peninsula, Newfoundland and Labrador	1010	515	0.7
South Coast – Burin Peninsula, Newfoundland and Labrador	1020	-930	0.1
West Coast – Northern Peninsula – Labrador, Newfoundland and Labrador	1030	-90	0.2
Notre Dame – Central Bonavista Bay, Newfoundland and Labrador	1040	-3,105	0.2
Prince Edward Island	11	-1,305	0.4
Nova Scotia	12	-3,125	2.5
Cape Breton, Nova Scotia	1210	-1,050	0.3
North Shore, Nova Scotia	1220	-1,810	0.4
Annapolis Valley, Nova Scotia	1230	-8,110	0.3
Southern, Nova Scotia	1240	-795	0.3
Halifax, Nova Scotia	1250	8,640	1.3
New Brunswick	13	-2,195	1.9
Campbellton – Miramichi, New Brunswick	1310	-1,100	0.3
Moncton – Richibucto, New Brunswick	1320	-595	0.6
Saint John – St. Stephen, New Brunswick	1330	-170	0.4
Fredericton – Oromocto, New Brunswick	1340	-560	0.4
Edmundston – Woodstock, New Brunswick	1350	230	0.2
Quebec	24	-33,005	22.1
Gaspésie – Îles-de-la-Madeleine, Quebec	2410	-320	0.2
Bas-Saint-Laurent, Quebec	2415	-1,095	0.5
Capitale-Nationale, Quebec	2420	21,235	2.1
Chaudière-Appalaches, Quebec	2425	-21,120	1.0
Estrie, Quebec	2430	-2,585	0.8
Centre-du-Québec, Quebec	2433	-1,255	0.7
Montérégie, Quebec	2435	-143,960	3.5
Montréal, Quebec	2440	335,080	7.4
Laval, Quebec	2445	-42,545	1.0
Lanaudière, Quebec	2450	-78,290	0.9
Laurentides, Quebec	2455	-66,400	1.3
Outaouais, Quebec	2460	-31,445	0.9
Abitibi-Témiscamingue, Quebec	2465	-1,420	0.4
Mauricie, Quebec	2470	-2,670	0.6
Saguenay – Lac-Saint-Jean, Quebec	2475	-1,540	0.6
Côte-Nord, Quebec	2480	1,380	0.2
Nord-du-Québec, Quebec	2490	3,945	0.1
Ontario	35	34,725	38.8
Ottawa, Ontario	3510	32,055	4.1
Kingston – Pembroke, Ontario	3515	675	1.2
Muskoka – Kawarthas, Ontario	3520	-16,450	0.8
Toronto, Ontario	3530	146,315	19.3
Kitchener – Waterloo – Barrie, Ontario	3540	-53,040	3.7
Hamilton – Niagara Peninsula, Ontario	3550	-60,580	3.6
London, Ontario	3560	-6,645	1.9
Windsor – Sarnia, Ontario	3570	-1,860	1.5
Stratford – Bruce Peninsula, Ontario	3580	-4,630	0.8
Northeast, Ontario	3590	-3,085	1.3
Northwest, Ontario	3595	1,970	0.6
Manitoba	46	-1,450	3.6
Southeast, Manitoba	4610	-11,740	0.3
South Central, Manitoba	4620	-425	0.2
Southwest, Manitoba	4630	-390	0.3
North Central, Manitoba	4640	-1,285	0.1
Winnipeg, Manitoba	4650	18,125	2.3
Interlake, Manitoba	4660	-8,045	0.2
Parklands, Manitoba	4670	-35	0.1
North, Manitoba	4680	2,345	0.1

Table 1
Proportions of total jobs and net flows of paid workers jobs by province and economic region, 2021

Provinces, territories and economic regions ¹	Economic region unique identifier	Net flows of paid workers jobs ²	Percentage of total Canadian jobs
Saskatchewan	47	-6,270	3.0
Regina – Moose Mountain, Saskatchewan	4710	315	1.0
Swift Current – Moose Jaw, Saskatchewan	4720	-1,165	0.3
Saskatoon – Biggar, Saskatchewan	4730	-1,975	1.0
Yorkton – Melville, Saskatchewan	4740	440	0.2
Prince Albert, Saskatchewan	4750	-4,435	0.5
Northern, Saskatchewan	4760	550	0.1
Alberta	48	6,585	12.0
Lethbridge – Medicine Hat, Alberta	4810	-1,315	0.7
Camrose – Drumheller, Alberta	4820	-1,190	0.5
Calgary, Alberta	4830	-6,275	4.6
Banff – Jasper – Rocky Mountain House, Alberta	4840	1,945	0.2
Red Deer, Alberta	4850	-700	0.6
Edmonton, Alberta	4860	-4,340	4.2
Athabasca – Grande Prairie – Peace River, Alberta	4870	-1,355	0.7
Wood Buffalo – Cold Lake, Alberta	4880	19,815	0.5
British Columbia	59	720	14.1
Vancouver Island and Coast, British Columbia	5910	-2,495	2.2
Lower Mainland – Southwest, British Columbia	5920	2,605	9.0
Thompson – Okanagan, British Columbia	5930	-3,175	1.6
Kootenay, British Columbia	5940	410	0.4
Cariboo, British Columbia	5950	620	0.5
North Coast, British Columbia	5960	915	0.1
Nechako, British Columbia	5970	295	0.1
Northeast, British Columbia	5980	1,545	0.2
Yukon, Yukon	6010	-65	0.1
Northwest Territories, Northwest Territories	6110	1,920	0.1
Nunavut, Nunavut	6210	7,075	0.1

1. Variant of Standard Geographical Classification (SGC) 2021 for Economic Regions can be found in the following link:

[Variant of Standard Geographical Classification \(SGC\) 2021 for Economic Regions \(https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1368923\)](https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1368923)

2. For a given economic region, a net flow is positive when the number of jobs provided by other regions is greater than the number of jobs provided to other regions. In the opposite situation, the net flow is negative.

Source: Table 36-10-0675-01, February 2023.

Table 2
Economic regions with the largest proportions of total jobs and the largest net regional flows of paid workers, 2021

	Jobs
A) Largest proportions of total jobs (19.3% to 2.0%)	percent
Toronto (3530)	19.3
Lower Mainland – Southwest (5920)	9.0
Montréal (2440)	7.4
Calgary (4830)	4.6
Edmonton (4860)	4.2
Ottawa (3510)	4.1
Kitchener – Waterloo – Barrie (3540)	3.7
Hamilton – Niagara Peninsula (3550)	3.6
Montréal (2435)	3.5
Winnipeg (4650)	2.3
Vancouver Island and Coast (5910)	2.2
Capitale-Nationale (2420)	2.1
B) Largest positive net flows of jobs (net inflows, net recipients of jobs) (335,000 to 10,000)	number
Montréal (2440)	335,000
Toronto (3530)	146,000
Ottawa (3510)	32,000
Capitale-Nationale (2420)	21,000
Wood Buffalo – Cold Lake (4880)	20,000
Winnipeg (4650)	18,000
Others with positive net flows	<+10,000
C) Largest negative net flows of jobs (net outflows, net supplier of jobs) (-144,000 to -10,000)	number
Montréal (2435)	-144,000
Lanaudière (2450)	-78,000
Laurentides (2455)	-66,000
Hamilton–Niagara Peninsula (3550)	-61,000
Kitchener–Waterloo–Barrie (3540)	-53,000
Laval (2445)	-43,000
Outaouais (2460)	-31,000
Chaudière-Appalaches (2425)	-21,000
Muskoka Kawarthas (3520)	-16,000
Southeast, Manitoba (4610)	-12,000
Others with negative net flows	>-10,000

Source: Table 36-10-0675-01, February 2023.

Table 3
Job changes and average annual growth rates of total jobs in economic regions over the decade from 2010 to 2021

Economic regions	Average annual growth percent	Jobs		Difference (rounded)
		2010	2021	
			number	
A) Job increases				
A-1) High average growth rates				
Nord-du-Québec, Quebec (2490)	6.0	11,800	22,300	11,000
Nunavut (6210)	3.5	14,910	21,870	7,000
Lower Mainland – Southwest, British Columbia (5920)	2.0	1,380,015	1,717,390	337,000
Yukon (6010)	1.9	21,510	26,520	5,000
Southeast, Manitoba (4610)	1.5	44,745	52,630	8,000
Kootenay, British Columbia (5940)	1.5	68,515	80,365	12,000
A-2) High positive changes in jobs				
Toronto, Ontario (3530)	1.4	3,165,635	3,675,270	510,000
Lower Mainland – Southwest, British Columbia (5920)	2.0	1,380,015	1,717,390	337,000
Montréal, Quebec (2440)	1.1	1,249,840	1,402,855	153,000
Edmonton, Alberta (4860)	1.4	687,670	802,190	115,000
Calgary, Alberta (4830)	1.1	774,870	870,485	96,000
Kitchener – Waterloo – Barrie, Ontario (3540)	1.2	627,475	712,415	85,000
Montréal, Quebec (2435)	1.1	588,690	660,420	72,000
B) Job decreases				
B-1) Strong negative average growth rates				
Côte-Nord, Quebec (2480)	-2.5	51,795	39,350	-12,000
Banff – Jasper – Rocky Mountain House, Alberta (4840)	-1.8	54,295	44,665	-10,000
South Coast – Burin Peninsula, Newfoundland and Labrador (1020)	-1.7	12,495	10,325	-2,000
Yorkton – Melville, Saskatchewan (4740)	-1.6	44,490	37,400	-7,000
B-2) Strong negative changes in jobs (other regions)				
Camrose – Drumheller, Alberta (4820)	-1.3	110,435	95,235	-15,000
Northeast, Ontario (3590)	-0.4	256,665	244,705	-12,000

Source: Table 36-10-0675-01, February 2023.

Table 4
Comparing the trends of main changes in regional net flows of paid workers jobs from 2010 to 2021

Economic regions	Switch year	Trend	Net flows of paid workers		Difference (rounded)
			2010	2021	
				number	
A) The main economic regions with a decade tendency toward sending out more jobs					
A-1) Net flow of jobs: Always (-)					
Kitchener – Waterloo – Barrie, Ontario (3540)	...	Downward	-34,430	-53,040	-18,600
Laval, Quebec (2445)	...	Downward	-32,050	-42,545	-10,500
Laurentides, Quebec (2455)	...	Downward	-56,725	-66,400	-9,700
Lanaudière, Quebec (2450)	...	Downward	-70,520	-78,290	-7,800
Hamilton – Niagara Peninsula, Ontario (3550)	...	Downward	-54,740	-60,580	-5,800
A-2) Net flow of jobs: Changed (+ to -)					
Calgary, Alberta (4830)	2015	Downward	4,875	-6,275	-11,200
Edmonton, Alberta (4860)	2016	Downward	2,445	-4,340	-6,800
London, Ontario (3560)	2012	Downward	505	-6,645	-7,200
B) The main economic regions with a decade tendency toward sending out fewer jobs					
Net flow of jobs: Always (-)					
Outaouais, Quebec (2460)	...	Upward	-38,600	-31,445	7,200
Interlake, Manitoba (4660)	...	Upward	-13,485	-8,045	5,400
Chaudière-Appalaches, Quebec (2425)	...	Upward	-26,000	-21,120	4,900
C) The main economic regions with a decade tendency toward receiving more jobs					
C-1) Net flow of jobs: Always (+)					
Toronto, Ontario (3530)	...	Upward	101,625	146,315	44,700
Montréal, Quebec (2440)	...	Upward	309,325	335,080	25,800
Nunavut (6210)	...	Upward	2,675	7,075	4,400
C-2) Net flow of jobs: Changed (- to +)					
Lower Mainland – Southwest, British Columbia (5920)	2018	U shape	-1,225	2,605	3,800
Banff – Jasper – Rocky Mountain House, Alberta (4840)	2012	Upward	-195	1,945	2,100
D) The main economic regions with a decade tendency toward receiving fewer jobs					
Net flow of jobs: Always (+)					
Ottawa, Ontario (3510)	...	Downward	40,135	32,055	-8,100
Winnipeg, Manitoba (4650)	...	Downward	24,890	18,125	-6,800
Capitale-Nationale, Quebec (2420)	...	Downward	26,850	21,235	-5,600

... not applicable

Source: Table 36-10-0675-01, February 2023.

Table 5
The recovery of total jobs in the economic regions with the largest job losses during the COVID-19 pandemic
(comparing 2019 with 2020 and 2021)

Economic regions	Total jobs			2019 versus 2020 Job losses		2021 Jobs recovered ¹
	2019	2020	2021	difference (rounded)	percent	percent
	number					
Toronto, Ontario (3530)	3,742,485	3,349,885	3,664,105	-392,600	-10	80
Lower Mainland – Southwest, British Columbia (5920)	1,730,275	1,536,675	1,723,165	-193,600	-11	96
Montréal, Quebec (2440)	1,417,005	1,283,795	1,403,785	-133,200	-9	90
Calgary, Alberta (4830)	903,750	805,640	867,240	-98,100	-11	63
Edmonton, Alberta (4860)	806,250	715,590	798,630	-90,700	-11	92
Hamilton – Niagara Peninsula, Ontario (3550)	706,810	618,795	680,450	-88,000	-12	70
Ottawa, Ontario (3510)	807,320	730,280	784,530	-77,000	-10	70
Kitchener – Waterloo – Barrie, Ontario (3540)	722,325	653,440	710,930	-68,900	-10	83
Montréal, Quebec (2435)	668,435	605,510	657,105	-62,900	-9	82
Windsor – Sarnia, Ontario (3570)	309,605	251,405	299,740	-58,200	-19	83
Capitale-Nationale, Quebec (2420)	441,310	387,875	404,780	-53,400	-12	32
Vancouver Island and Coast, British Columbia (5910)	430,235	390,630	427,335	-39,600	-9	93
Laurentides, Quebec (2455)	247,865	213,115	245,250	-34,800	-14	92
Winnipeg, Manitoba (4650)	439,515	406,845	434,595	-32,700	-7	85
Kingston – Pembroke, Ontario (3515)	240,750	210,725	236,130	-30,000	-12	85

1. A recovery rate that is less than 100% indicates the portion of the regional job losses (occurring during 2020) that were refilled in 2021. A recovery rate greater than 100% indicates that the number of jobs in 2021 surpassed the level in 2019.

Source: Table 36-10-0675-01, February 2023.

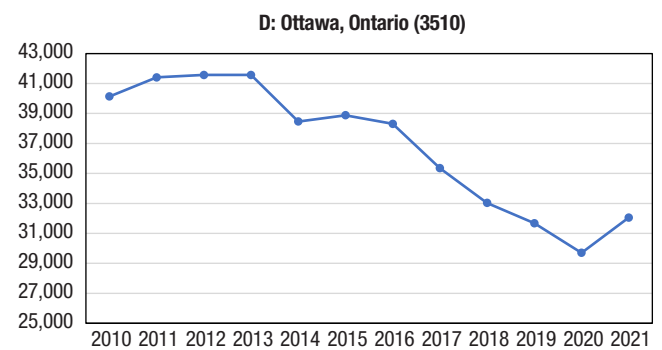
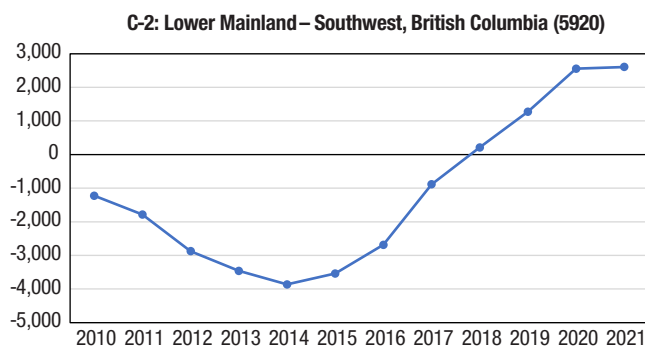
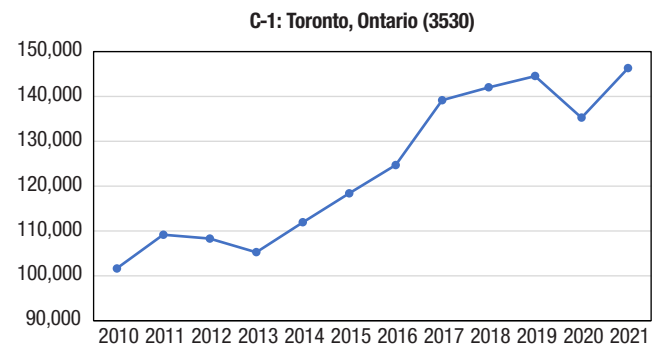
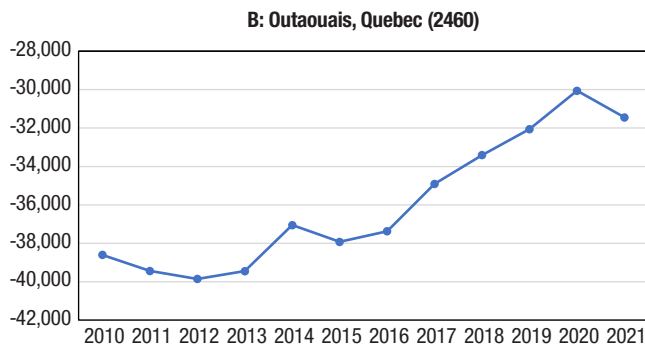
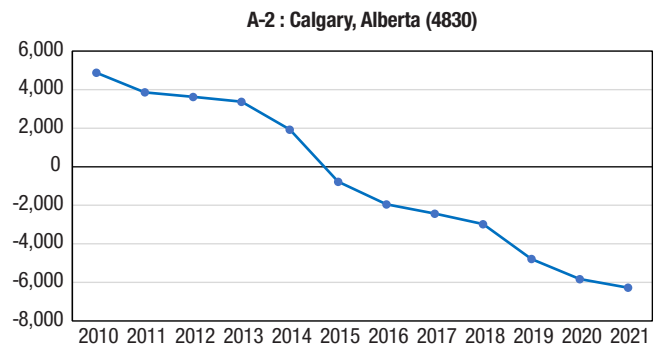
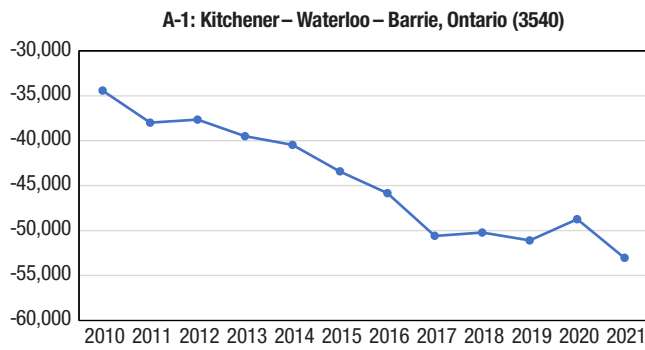
Table 6
The economic regions with the highest recovery rates after the COVID-19 pandemic in 2021 (comparing 2019 with 2020 and 2021)

Economic regions	Total jobs			2019 versus 2020 Job losses		2021 Jobs recovered ¹
	2019	2020	2021	difference (rounded)	percent	percent
	number					
London, Ontario (3560)	342,810	321,210	363,415	-21,600	-6	195
Northwest Territories, Northwest Territories (6110)	26,765	25,505	27,820	-1,300	-5	184
Moncton – Richibucto, New Brunswick (1320)	110,065	105,700	112,630	-4,400	-4	159
Fredericton – Oromocto, New Brunswick (1340)	73,245	68,915	75,225	-4,300	-6	146
Centre-du-Québec, Quebec (2433)	125,005	116,935	128,550	-8,100	-6	144
Nord-du-Québec, Quebec (2490)	22,725	20,935	23,310	-1,800	-8	133
Campbellton – Miramichi, New Brunswick (1310)	57,920	57,145	58,075	-800	-1	120
Prince Edward Island (1110)	78,835	73,795	79,265	-5,000	-6	109
Southeast, Manitoba (4610)	52,345	48,470	52,705	-3,900	-7	109
Halifax, Nova Scotia (1250)	252,280	237,445	253,345	-14,800	-6	107
Southern, Nova Scotia (1240)	48,875	44,825	48,860	-4,100	-8	100
Laval, Quebec (2445)	184,385	163,225	183,740	-21,200	-11	97
Lower Mainland – Southwest, British Columbia (5920)	1,730,275	1,536,675	1,723,165	-193,600	-11	96
North Shore, Nova Scotia (1220)	66,925	59,970	66,490	-7,000	-10	94
Vancouver Island and Coast, British Columbia (5910)	430,235	390,630	427,335	-39,600	-9	93
Notre Dame – Central Bonavista Bay, Newfoundland and Labrador (1040)	34,730	30,690	34,405	-4,000	-12	92
Laurentides, Quebec (2455)	247,865	213,115	245,250	-34,800	-14	92
North, Manitoba (4860)	806,250	715,590	798,630	-90,700	-11	92
Gaspésie – Îles-de-la-Madeleine, Quebec (2410)	33,300	28,265	32,800	-5,000	-15	90
Montréal, Quebec (2440)	1,417,005	1,283,795	1,403,785	-133,200	-9	90

1. A recovery rate that is less than 100% indicates the portion of the regional job losses (occurring during 2020) that were refilled in 2021. A recovery rate greater than 100% indicates that the number of jobs in 2021 surpassed the level in 2019.

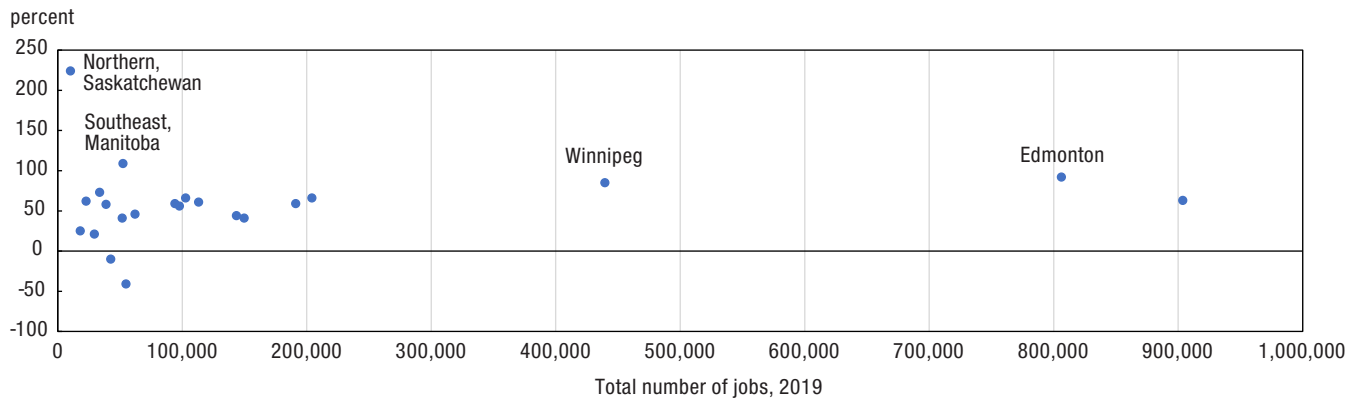
Source: Table 36-10-0675-01, February 2023.

Chart 1
Economic regions with the largest changes in their regional net flows of paid workers jobs over the period 2010-2021



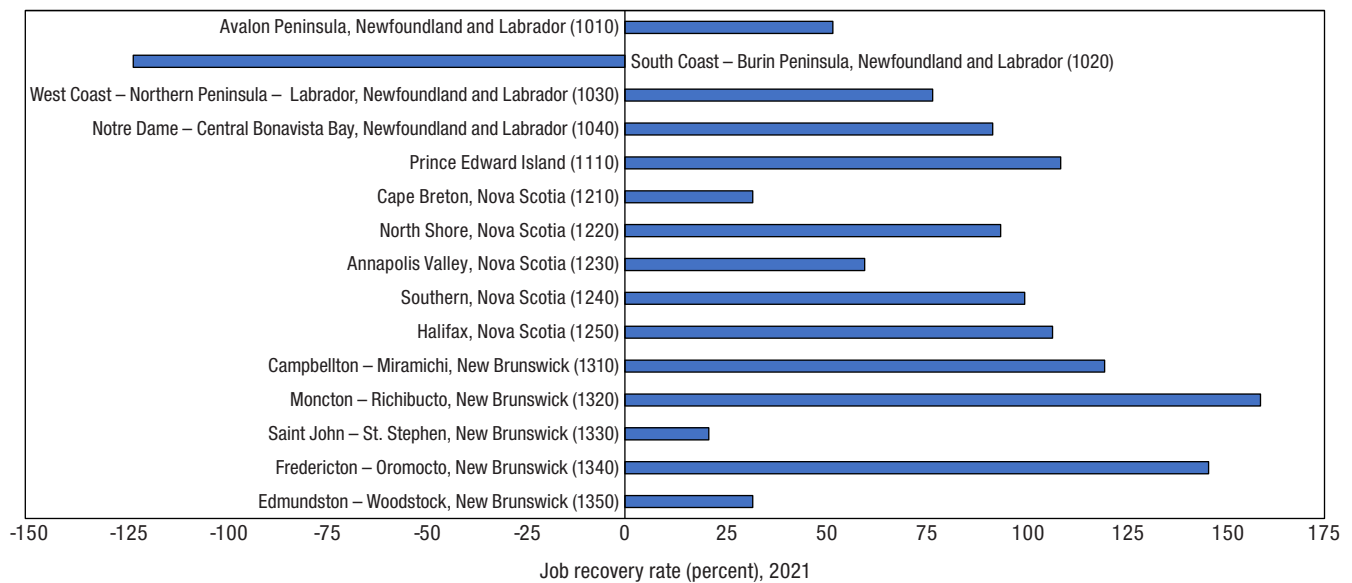
Source: Table 36-10-0675-01, February 2023.

Chart 2
Job recovery rates for the economic regions in the Prairies, 2021



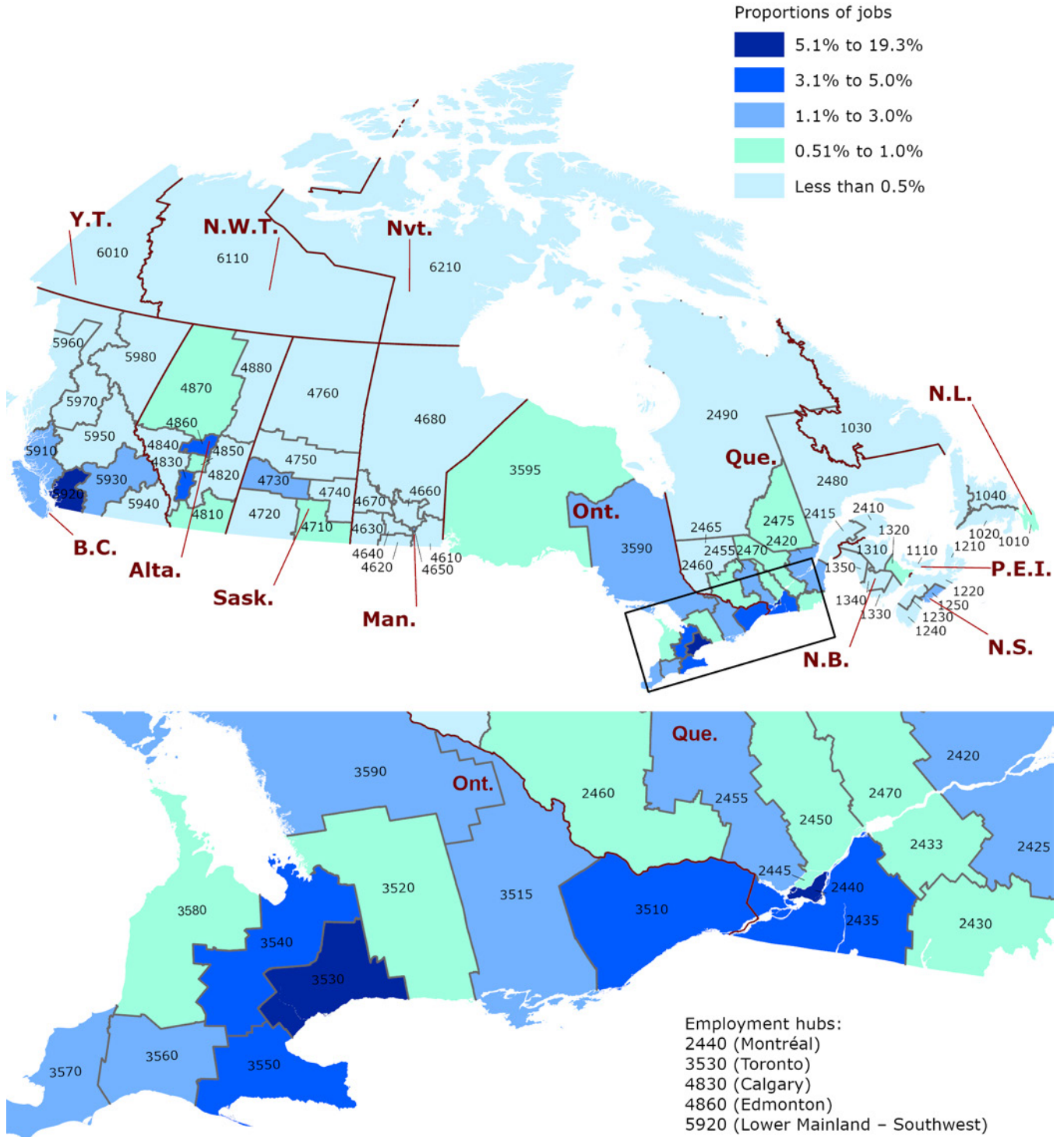
Note: The four regions with job recovery rates above 85% are identified in the Chart.
Source: Table 36-10-0675-01, February 2023.

Chart 3
Job recovery rates for the economic regions in the Atlantic provinces, 2021



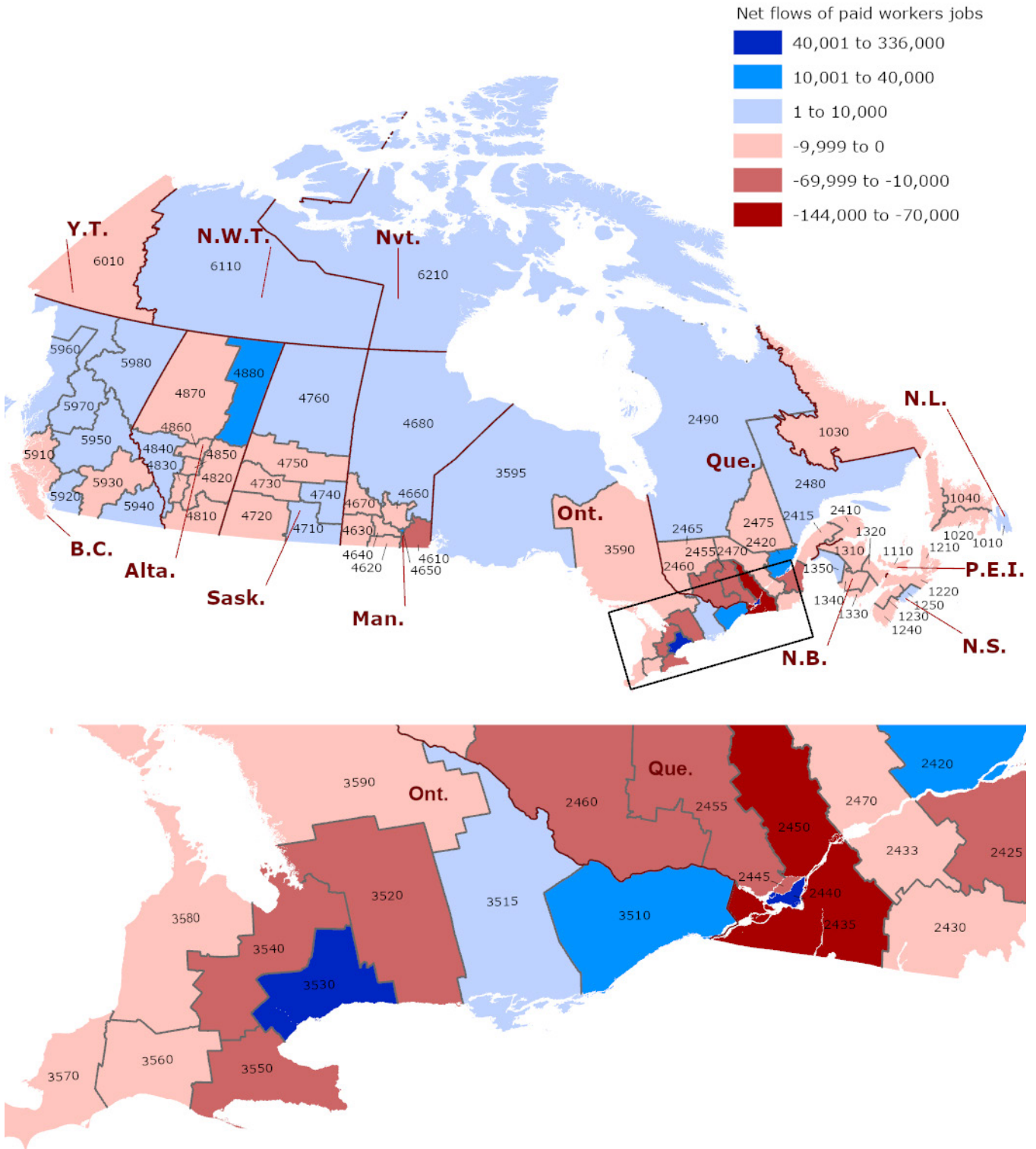
Source: Table 36-10-0675-01, February 2023.

Map 1
Proportions in total number of jobs by economic region in Canada, 2021



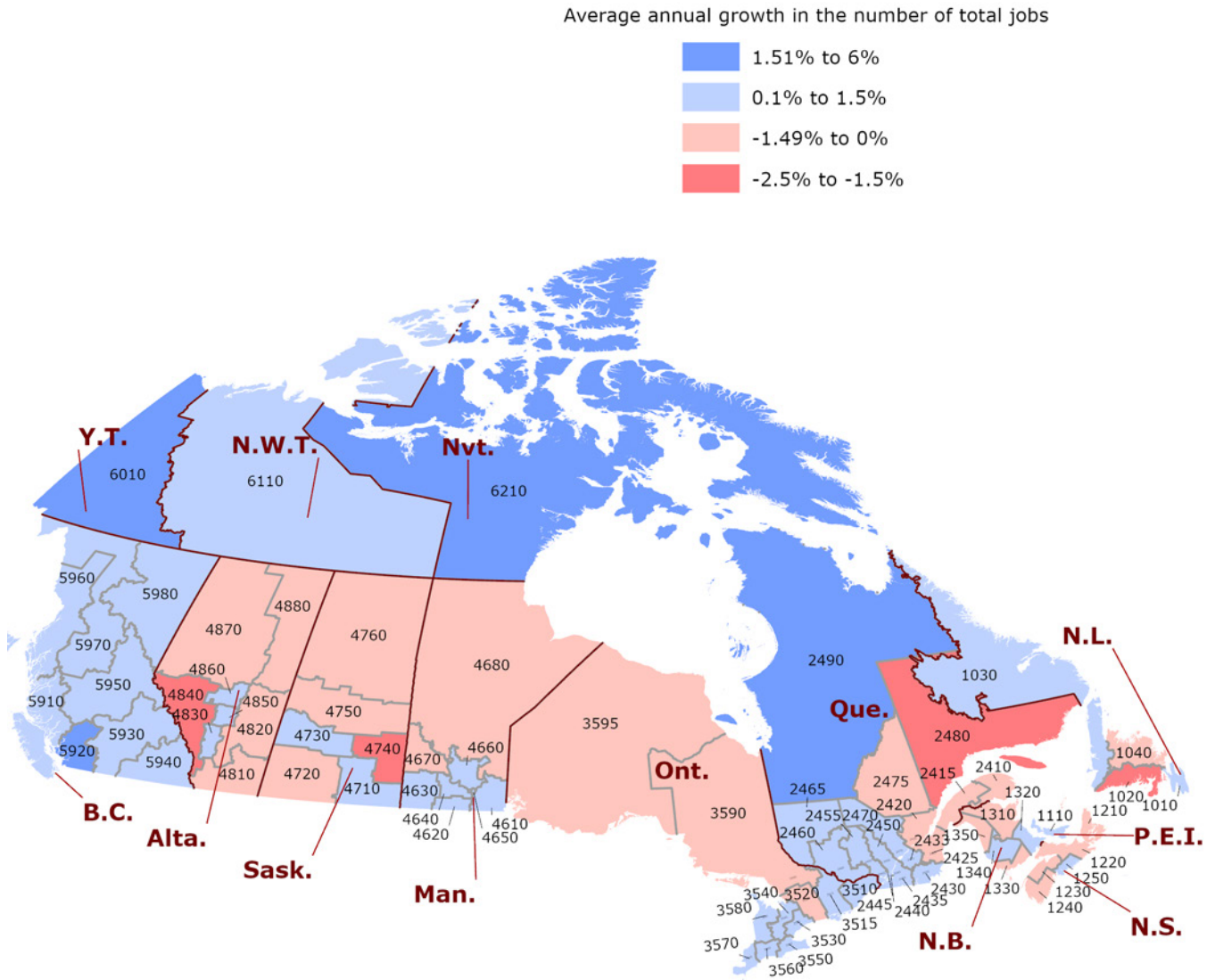
Source: Table 36-10-0675-01, February 2023.

Map 2 Net flows of paid workers jobs for each economic region, 2021



Source: Table 36-10-0675-01, February 2023.

Map 3
Average annual growth in the number of total jobs by economic region over the decade from 2010 to 2021

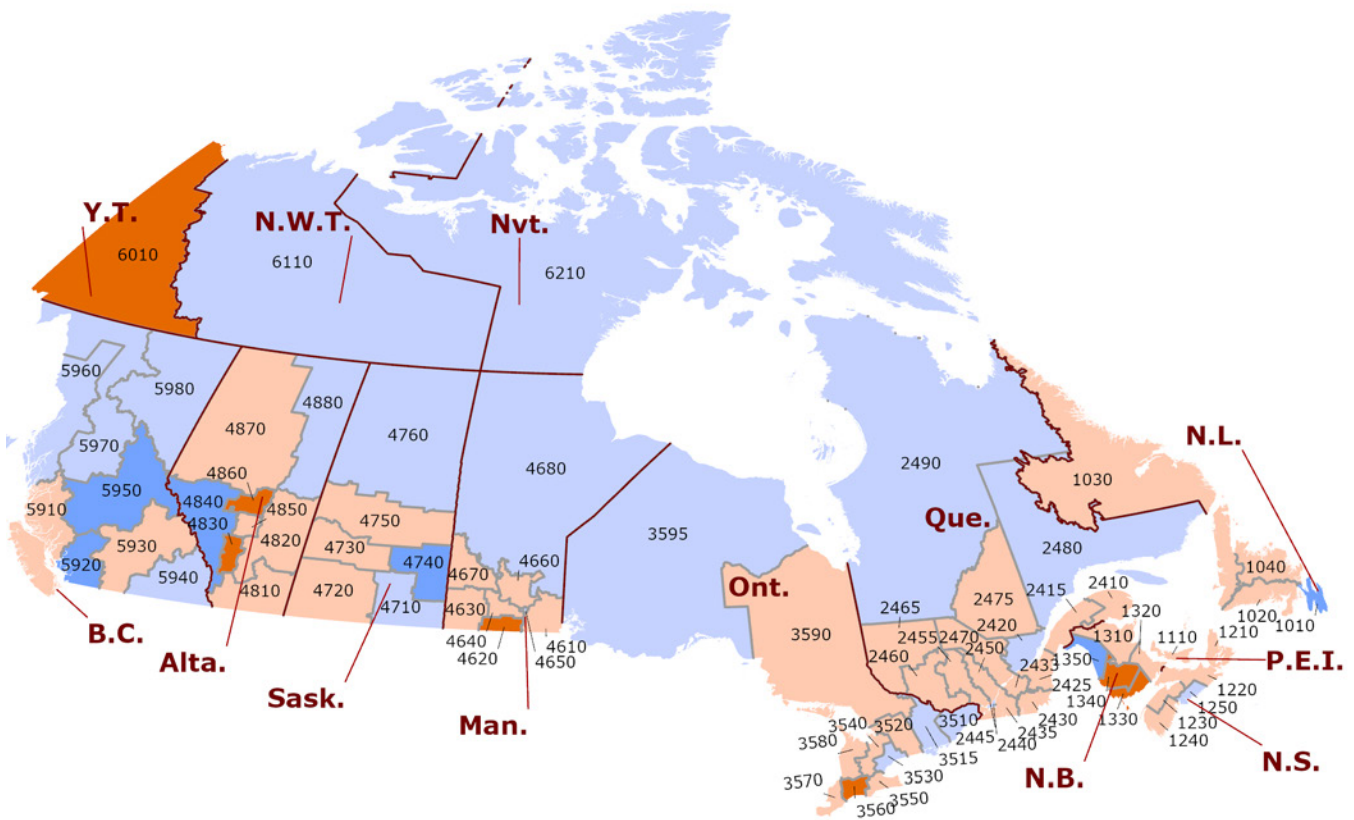


Source: Table 36-10-0675-01, February 2023.

Map 4 The status of net flows of paid workers jobs by economic region over the decade from 2010 to 2021

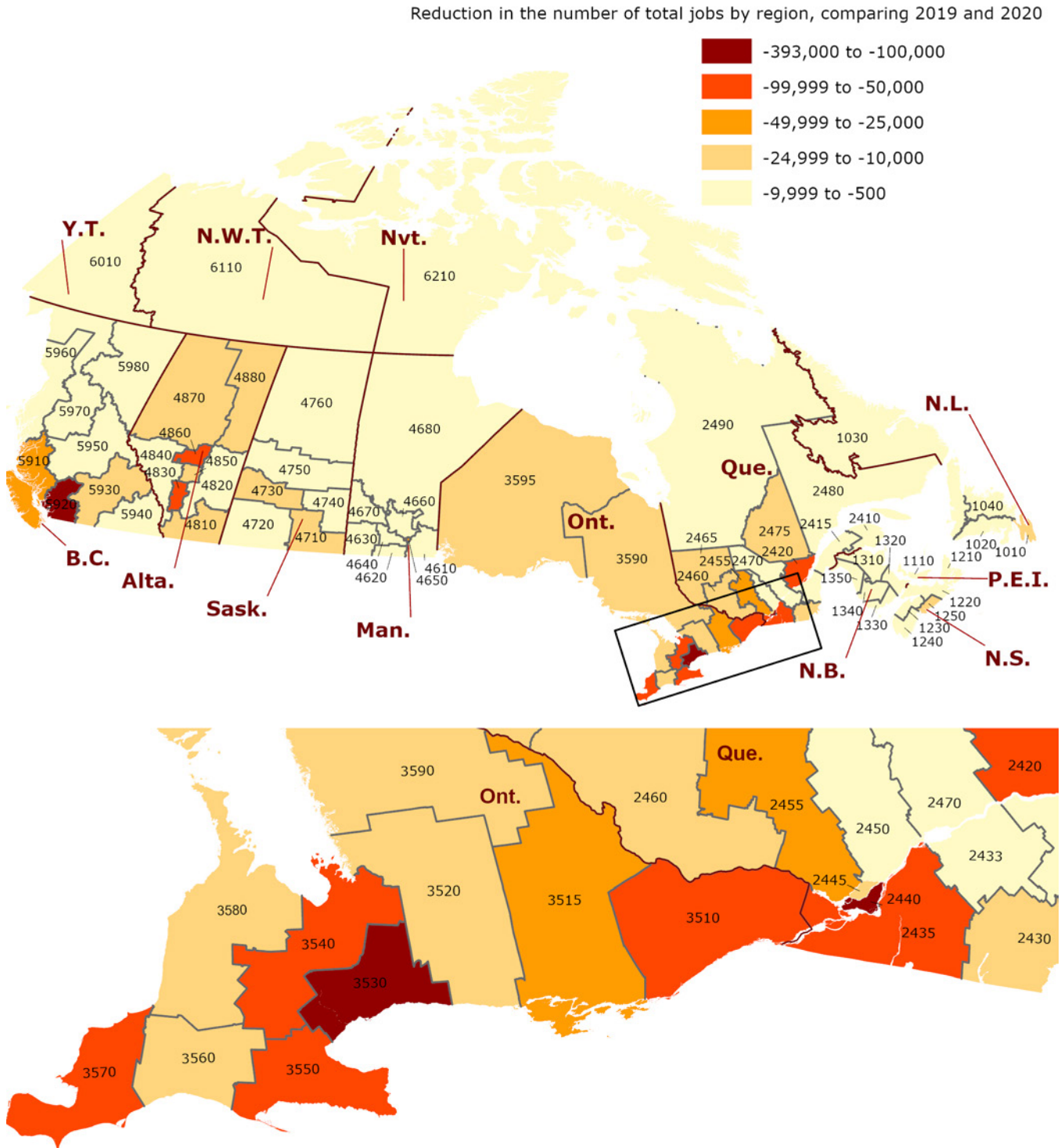
Net flows of paid workers jobs by region

- Always net recipient of paid workers jobs
- Always net supplier of paid workers jobs
- Changed to net recipient of paid workers jobs
- Changed to net supplier of paid workers jobs



Source: Table 36-10-0675-01, February 2023.

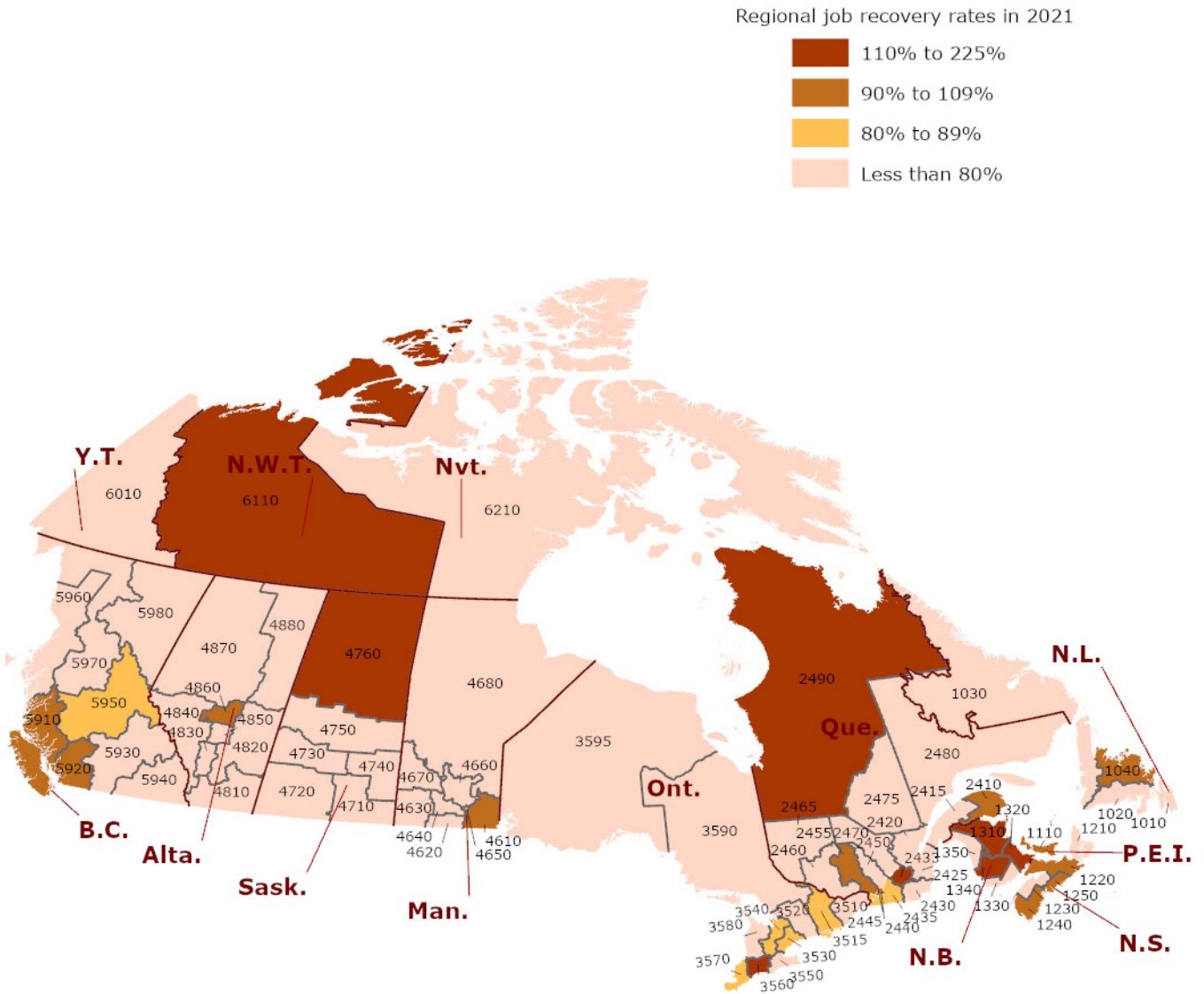
Map 5
Reduction in the number of total jobs in each economic region between the last year before the start of COVID-19, 2019, and the first year of the pandemic, 2020



Source: Table 36-10-0675-01, February 2023.

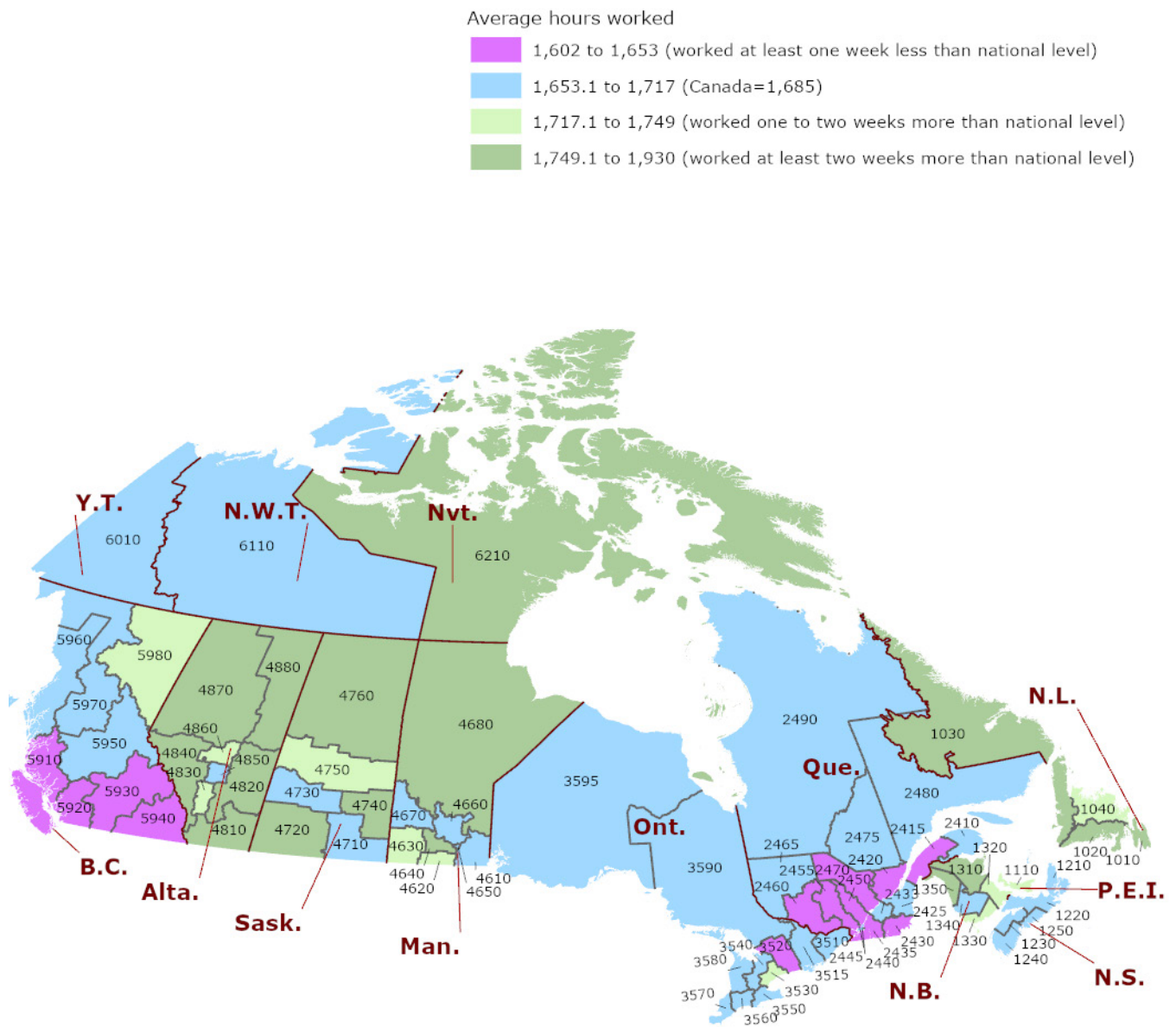
Map 6

Recovery rate of jobs by region in 2021, after the job losses occurred during the COVID-19 pandemic in 2020



Source: Table 36-10-0675-01, February 2023.

Map 7 Average hours worked in each economic region, 2021



Source: Table 36-10-0675-01, February 2023.