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Interjurisdictional Employment in Canada, 2002 - 2016

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Executive Summary

Statistics Canada reports data on interjurisdictional employment (IJE) in the Canadian Employer-Employee Dynamics Database using T1 tax returns and T4 Statement of Remunerations. This report provides a descriptive summary of Statistics Canada data for IJE between Canadian jurisdictions for the period 2002 to 2016 using a dataset available in French and English here: <https://www.onthepartnership.ca/datasets/>.

Interjurisdictional employment (IJE) is becoming more common in Canada, increasing from 325,590 interjurisdictional workers (IJWs) in 2002 to 408,755 in 2016 and comprising between 2.4% and 2.9% of the labour force over this period. Aggregate earnings from IJE in Canada fluctuated between a peak of \$21.13 billion in 2014 and a low of \$9.83 billion in 2003, but rose overall between 2002 and 2016.

Outgoing IJE (our focus in this report) is male-dominated, with men representing on average 62% of all IJWs between 2002 and 2016. During this period, male employment was, however, highly volatile, peaking at 418,880 in 2008 and 451,410 in 2014 before dropping in 2009 and 2015. Women's share of IJE, by contrast, was relatively stable and grew steadily, increasing by 17% from 131,910 in 2002 to 154,030 in 2016.

Across Canada, IJWs between the ages of 25 and 44 comprised between 42% and 45% of all IJWs between 2002 and 2016. Young IJWs aged 18 to 24 were the second largest group but their share of IJE declined over time with a significant shift in 2008/2009. This decline was mirrored by an increase in workers aged 45 and over. The share of IJWs aged 55 and over nearly doubled from 8% in 2002 to 15% in 2016.

Outgoing IJWs were employed in multiple industries with the dominant industry varying across the study period, as well as jurisdictions and regions. Public administration, which employs more women, was the largest industry between 2002 and 2010 and in 2016, comprising an average of 29% of IJE. It was the top employer of outgoing IJWs in Quebec and Ontario from 2002 to 2016. The number of workers in construction, traditionally a male-dominated industry, increased 164% from 29,710 in 2002 to a peak of 68,335 in 2014 before falling 30% to 54,655 in 2016. Construction was the top employer of outgoing IJWs from 2012 to 2015 and was the number one employer of outgoing IJWs in 8 jurisdictions in 2016. Fluctuations in IJE in construction likely drove fluctuations in male and in overall IJE over the study period.

Labour importing jurisdictions can be defined as those that have a ratio of incoming to outgoing workers that is greater than one. These include provinces with large resident labour forces, including Ontario (1.6) and Alberta (2.0), but also the Territories (3.1). Ontario had the highest number of incoming IJWs of any region, except for the years 2013 and 2014 when it was surpassed by Alberta. In Ontario, IJE was fairly steady over the time period and increased 18% from 118,730 in 2002 to 140,480 in 2016. Almost half of incoming IJWs were women (44%) and were employed in public administration (22%). Ontario received about 67% of its incoming workers from a bordering jurisdiction, with the majority travelling from Quebec.

Alberta's oil industry had a large but volatile impact on IJE from 2002 to 2016. In 2002, there were 61,395 incoming workers. This number doubled by 2008 to 123,185 before falling and then steadily rising to 146,530 in 2014, and falling again by 34.3% to 96,215 incoming workers by 2016. Workers came from bordering jurisdictions, including British Columbia (average 32,096/year) and Saskatchewan (average 18,237) but others travelled much further including from Ontario (average 17,243/year) and Newfoundland and Labrador (average 8,638/year). The most common industry for IJE among workers who travelled to Alberta was construction (25%) and 73% identified as male.

The Territories (Yukon, Northwest Territories, and Nunavut) were also labour importing jurisdictions with the ratio of IJWs to outgoing workers higher than the Canadian average. Incoming workers were primarily male (73%) and concentrated in oil and gas extraction and support activities and construction. In the Yukon, incoming IJE increased 20% from 1,790 in 2002 to 2,155 in 2016, worked mainly in accommodation and food services, though employment in the resource sector, including oil and gas extraction and support activities, construction, and mining increased over time, peaking in 2010-2012. Male workers averaged 61% of incoming workers but peaked at 70% in 2012. The ratio of incoming to outgoing workers in the North West Territories was also high averaging 4.3 between 2002 and 2016, although the number and ratio fell over time from 8,480 IJWs (4.7) in 2002 to 6,160 (4.3) in 2016. Most incoming IJWs were men (75%) and they were most commonly employed in construction (20%) and mining and quarrying (14%). In Nunavut, the ratio was 3.8 but the number of incoming IJWs steadily increased from 2,275 in 2002 to 5,050 in 2016. This increase was associated with growing employment in oil and gas extraction and support activities and construction; 74% of incoming IJWs in Nunavut identified as male.

Labour exporting jurisdictions can be defined as those that have a ratio of outgoing to incoming workers that is greater than one. Labour exporting jurisdictions tend to be smaller and more rural and included Atlantic Canada (1.9) and Manitoba and Saskatchewan (1.3), but also included Quebec (2.1) and BC (1.3), during the period under study.

From 2002 to 2016, the number of outgoing IJWs from Atlantic Canada increased only slightly from 51,710 in 2002 to 52,130 in 2016, but similar to the larger Canadian trend, it peaked at 74,335 in 2008 and at 76,110 in 2014. NL did not experience this second peak with outgoing IJE starting at 17,505 in 2002, peaking at 25,645 in 2008 and falling year over year to 14,320 in 2016. At 71.4% on average, the male share of outgoing IJWs from Atlantic Canada was higher than the Canadian average. While most outgoing IJWs were between the ages of 18 and 44 (66%) the number of younger workers (18-24) declined over time while the number of older workers (55 and over) increased. In 2002, most IJWs outgoing from Atlantic Canada worked in "other services"¹ (16%) and travelled to Ontario (29%). By 2016, the construction industry (21%) was a top employer and Alberta (31%) the top destination. This change began in 2005, but most jurisdictions saw a peak of outgoing workers to Alberta in 2008 and 2014. NL had the most workers heading to Alberta, peaking at 14,025 workers in 2008 and declining thereafter. In Atlantic

¹ Other services include: Administrative and support; Waste management and remediation services; Entertainment and recreation; Other services etc

Canada, outgoing IJWs from NL tended to have the highest average earnings from IJE (\$38,100/year), while outgoing workers from PEI had the lowest (\$27,566/year).

In the provinces of Manitoba and Saskatchewan, outgoing IJE followed a similar pattern to the Canadian average, rising from 35,045 in 2002 to 42,400 in 2016, and peaking at 47,935 in 2008 and 48,770 in 2014. Most outgoing IJWs were men (62%) and 42% were aged 25 to 44. Similar to Atlantic Canada, the share of workers 18-24 decreased over time from 35.5% in 2002 to 24.7% in 2016, while the share of workers 55 and over increased. Wholesale and retail trade (12.7%) and the construction industry (15.8%) were the biggest employers for outgoing IJWs from 2002 to 2016. Alberta was the top destination for both provinces, but in Saskatchewan 69% of outgoing IJWs traveled to the bordering province of Alberta, while the proportion was only 30% for Manitobans, followed closely by work in bordering Ontario (28%). In these provinces, average aggregate earnings of outgoing workers ranged from \$31,509/year (Manitoba) to \$34,402/year (Saskatchewan).

With ratios of 2.1 and 1.3, Quebec and BC also had more outgoing than incoming IJWs during the study period. In Quebec, outgoing IJE increased 16% from 88,715 in 2002 to 102,535 in 2016. On average, 44% of outgoing IJWs are women, 27% work in public administration, and 47% are aged 25 to 44. In Quebec, 85% of its outgoing IJWs travelled to neighbouring Ontario.

In BC, outgoing IJE increased by 67% from 38,230 in 2002 to 63,975 in 2016 and peaked at 76,740 in 2014. Most outgoing IJWs were men (66%), 43% were aged 25 to 44 and the largest employment industry was the construction industry (16.5%). The number of construction workers peaked at 17,660 in 2014, 23% of total outgoing IJE. Alberta was the top destination for outgoing IJWs (57%) from BC who earned on average \$36,613/year.

Jurisdictional dependence on IJE is indicated by the proportion of outgoing workers relative to the overall labour force in each jurisdiction and the proportion of each jurisdiction's aggregate earnings derived from IJE. Over the 2002 to 2016 period, outgoing IJWs comprised on average between 1.4% (Ontario) and 10.3% (Yukon) of a jurisdiction's resident labour force. Jurisdictions with on average less than 3% IJWs (Alberta, BC, Manitoba, Ontario, and Quebec) tended to have a fairly stable proportion of IJWs over the time period. In contrast, the Atlantic Provinces and Territories had more volatility in the proportion of IJWs. In the Atlantic Provinces, there was a significant increase in the proportion of IJWs from 2002, peaking in 2008, especially in NL where the proportion rose from 8.5% in 2002 to 12.2% in 2008. In Atlantic Canada overall, there was a second peak in 2014 and then another decline, except in NL where there was a steady decline from 2009 to 2016. In the Territories, the proportion of outgoing IJWs tended to be quite high in the early 2000s (14% in 2002) and steadily declined thereafter, with some small variability year to year to 6% in 2016, though no consistent pattern emerged between the jurisdictions.

Outgoing IJE aggregate earnings as a proportion of aggregate earnings of the resident labour force are another indicator of dependence on IJE. Across Canada, from 2002 to 2016, the average proportion of aggregate earnings from IJE was 2.1% and ranged between 1.1% (Ontario) and 8.2% (NL). For all jurisdictions, the average proportion increased over the time period by 0.6%, ranging from -3.9% (Nunavut) to 3.1% (PEI). The territories saw a decrease in the proportion of outgoing IJE earnings, matching the decline in IJE from 2002 to 2016.

The average share of IJWs' incomes from work in jurisdictions outside of their jurisdiction of residence can also be used as a measure of dependence on IJE. This share ranged from 36.9% (Nunavut) to 87.0% (Quebec) from 2002 to 2016 and increased for all jurisdictions by between 1.6% (Quebec) and 14.5% (BC). In Atlantic Canada, over the 15-year time-span the average share of earnings from outside the jurisdiction of residence as a proportion of total earnings for outgoing IJWs ranged from 64% to 81% in PEI, 65% to 83% in NB, 76% to 84% in NL, and 70% to 84% in NS.²

Some, but not all, IJE involves long distance labour commuting. One indication of the spatial scale of IJ mobility is the percentage of workers who pursue IJE in a neighbouring jurisdiction. This is generally high, but varies across jurisdictions, with Quebec at the top with between 82.5% and 87.0% of incoming workers travelling from a neighbouring jurisdiction, primarily Ontario. In Ontario, approximately 66.8% of incoming IJWs travelled from a neighbouring jurisdiction, primarily Quebec. The lowest proportion of IJWs came from a neighbouring jurisdiction to work in Nunavut (average 9.3%) and in the NWT (average 35.8%), while other jurisdictions received between 43.3% and 66.8% of IJWs from a neighbouring jurisdiction. IJWs in Atlantic Canada tend to travel longer distances for work. In 2002, outgoing IJWs from Atlantic Canada were most likely to travel to Ontario but Alberta had become the top destination by 2016.

Overall, IJE is an important but understudied area in Canadian labour market research that, in light of its volatility and relative importance, particularly to labour exporting regions and key industries, requires sustained monitoring and deeper analysis than was possible with this report. Between 2002 and 2016, IJE was a significant and expanding feature of the Canadian labour market. While all Canadian jurisdictions have both incoming and outgoing IJWs, some can be classified as labour importing and others as labour exporting. IJE was a particularly important source of employment and aggregate and average individual incomes in labour exporting regions such as Atlantic Canada. The distribution of IJE varied across time, jurisdiction, industry, gender and age group between 2002 and 2016. IJE for male-dominated construction workers from labour exporting regions was more volatile than that in public administration and education services, health care and social assistance which employ more women, with workers in the latter industry concentrated in jurisdictions like Ontario and Quebec. These jurisdictions also have a relatively higher share of IJ mobility to adjacent rather than more distant jurisdictions when compared to Atlantic Canada and the Territories. Overall the IJE labour force aged over time with the share of IJE among young workers 18-24 declining and that among older workers 55 and over increasing, although the extent of this shift varied across jurisdictions and was highest in Quebec.

Evidence suggests there is increasing dependence on IJE as shown in the growing proportion of the resident labour force engaging in IJE and the high proportion of earnings that outgoing IJWs receive from IJE. Those who engage in IJE tend to rely on it for most of their income, which can mean that periods of steep declines in IJE can have large impacts on household incomes, particularly in economically depressed regions such as Atlantic Canada. IJE is becoming more common across all provinces, as evidenced in the growing proportion of the labour force engaged in IJE and the increased aggregate amount and proportion of income from IJE. The Territories, in contrast, have seen a decline in IJE and were

² Percent of earnings from outside a home province is defined as total earnings earned outside province of residence divided by total earnings of outgoing workers.

significantly less dependent on IJE for income and employment by 2016 than they were in earlier periods. The Territories also have a lower male to female ratio of IJWs than other jurisdictions, sometimes equalling 1:1. Data and resource limitations prevented us from carrying out a more in-depth analysis of IJE. Access to regularly updated data down to the regional scale within provinces and territories, and to cross-sectional data including on IJ workers by industry, gender and age, and on earnings by industry and jurisdiction are needed to better assess patterns and trends in IJE including shifts in dependency and its potential consequences.

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Introduction

Interjurisdictional employment (IJE), i.e. situations where workers live in one jurisdiction (province or territory) and derive some or all of their income from work in another is an important part of the Canadian labour market that varies across jurisdictions, by age, gender and industry. It is a key but understudied statistical indicator of some kinds of extended/complex E-RGM in the Canadian context, although not all IJE involves extended/complex mobility. While there are some regional profiles available for the Atlantic region (Hewitt, 2018; Lionais et al., 2020), there are no summary descriptions of IJE across all Canadian jurisdictions, a gap addressed to some degree by this report.

Data from the national census are only available every five years and only provide an indication of employment on May 10, 2016 (Statistics Canada, 2017). Thus, census data can provide only limited information on the scale and volatility of IJE across jurisdictions. The Canadian Employer-Employee Dynamics Database (CEEDD) developed and maintained by Statistics Canada is an alternative data source for capturing IJE. Because it uses tax filer data and these data are available on an annual basis and encompass activity (based on jurisdiction of employment income) that runs the full year, they can provide clearer indications of the scale of provincial/territorial dependence on IJE as measured by proportion of the provincial labour force engaged in IJE, share of earnings and aggregate IJE earnings.

This report provides a summary description of IJE in Canada at the level of provinces and territories for the period 2002-2016 using English and French datasets derived from the CEEDD released in 2020 to CBC by Statistics Canada (Statistics Canada, n.d.) and shared with On the Move (available [here](#)). These data provide indications of the size, demographic and industry composition of the IJE labour force and its distribution across provinces and territories across time. Previous reports and publications using the CEEDD have focused on a particular jurisdiction or region (NL - Hewitt et al., 2018; Atlantic Canada - Lionais et al., 2020) and have been based on shorter timeframes than are available in the one upon which this report is based. Hewitt et al. (2018) looked at IJE from NL from 2005 to 2014 with emphasis on IJE at the intra-provincial level. Lionais et al. (2020) used data shared by Statistics Canada and derived by the CEEDD to investigate IJE from Atlantic Canada to Alberta from 2006-2011. The longer timeframe of the new dataset analysed here and data from all of Canada's jurisdictions enable us to better capture trends since previously documented peaks in IJE in some areas in 2008 and 2014, and to compare IJE dependence (as measured by share of jurisdictional labour force engaged in IJE and percent of IJW earnings from outgoing IJE) across all jurisdictions.

Methodology

In the dataset used for this report, IJWs are defined as individuals who resided in one jurisdiction during the year as indicated on their T1 tax return, but received T4 earnings from a different jurisdiction during the year, as indicated on a T4 Statement of Remuneration. Only employees aged 18 or older who earned more than \$1,000 (in 2016 constant dollars) are included. These estimates are derived from the T1 and T4 tax files and do not include late and re-assessed taxfilers from the T1 Historical personal master file.

Interjurisdictional employees incoming to a jurisdiction (ex: to NL) are defined as individuals who received T4 earnings from NL but reported a different jurisdiction of residence on their T1 tax returns. Interjurisdictional employees outgoing from a jurisdiction (ex: from NL) are defined as individuals who identified as residing in NL but received T4 earnings from other jurisdictions. Resident employees both resided in a jurisdiction (ex: NL) and received all T4 earnings from that jurisdiction during the reference year.

Industry categories are derived from the North American Industry Classification System (NAICS). When an IJW has T4 earnings in more than one industry, he/she is counted in the industry of the job in which the IJW has the highest T4 earnings. "Other services" are defined as: Administrative and support; Waste management and remediation services; Entertainment and recreation; Other services etc.

Earnings are given in 2016 constant dollars. Percent of earnings from outside a jurisdiction of residence is defined as total earnings earned outside the jurisdiction of residence divided by total earnings of outgoing interjurisdictional workers.

Interjurisdictional Employment in Canada

Interjurisdictional employment (IJE) is becoming more common in Canada. From 2002 to 2016, outgoing IJWs ranged from 2.4% to 2.9% of the resident labour force in Canada. Aggregate earnings from IJE in Canada fluctuated between a peak of \$21.13 billion in 2014 and a low of \$9.83 billion in 2003, but rose overall and interjurisdictional workers (IJWs) earned on average \$38,654/year and on average between 70% to 80% of their earnings outside their jurisdiction of residence. Outgoing IJWs from Quebec earned the highest average earnings over the time period, equal to about \$47,276/year, followed by IJWs from Ontario at \$39,377/year.

In 2002, 325,590 interjurisdictional workers (IJWs) earned a minimum of \$1,000 outside of their jurisdiction of residence (Figure 1). This number fell slightly in 2003 and steadily rose again until 2008, when it peaked at 418,875. In 2009 the number of outgoing workers fell 10.7% to 378,430, rose again to a peak of 451,405 in 2014, and then fell to 408,755 in 2016, an increase of 26% over the period.

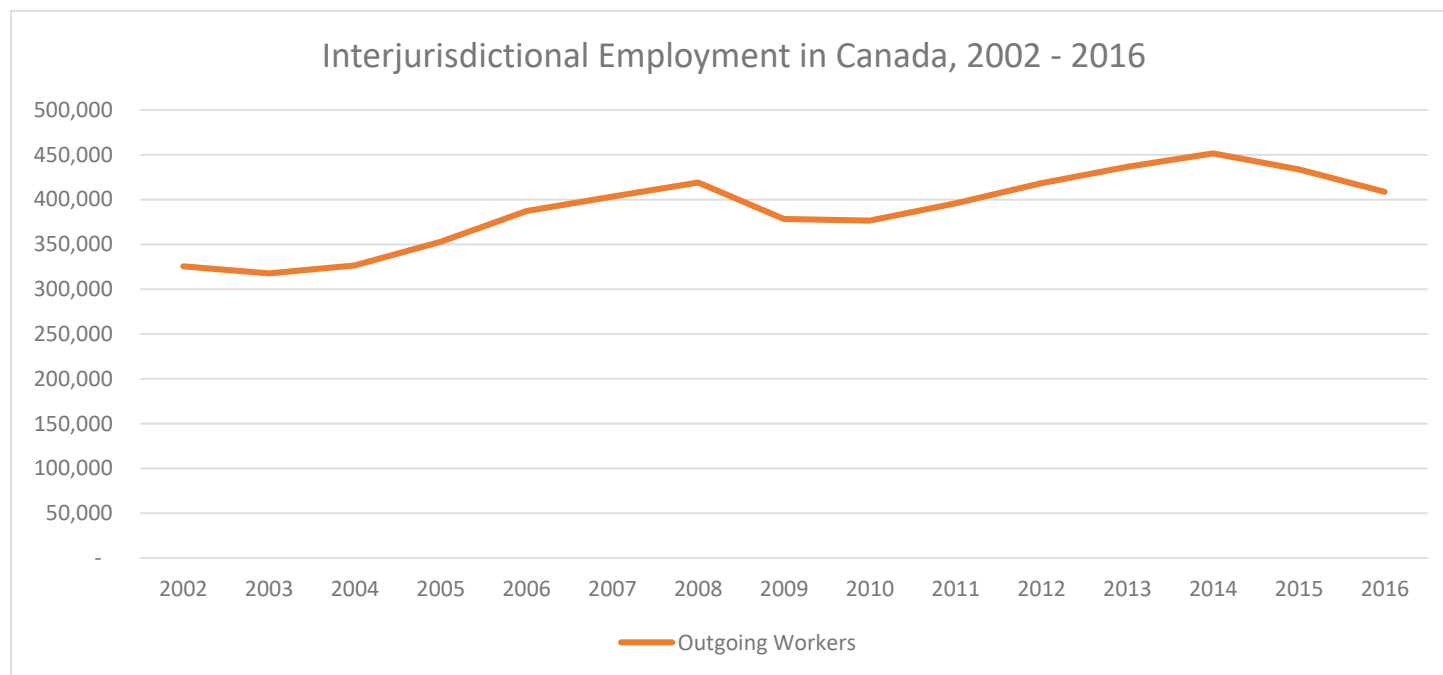


Figure 1: Interjurisdictional Employment in Canada, 2002-2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

Gender of Outgoing IJWs

As shown in Figure 2, IJE in Canada is dominated by male workers but male IJE is more volatile than female IJE. During the period 2002-2016, an average of 62.3% of outgoing IJWs were male with total count ranging from 189,435 to 296,135; female IJE was more stable and gradually increased over time from 128,250 to 157,505.

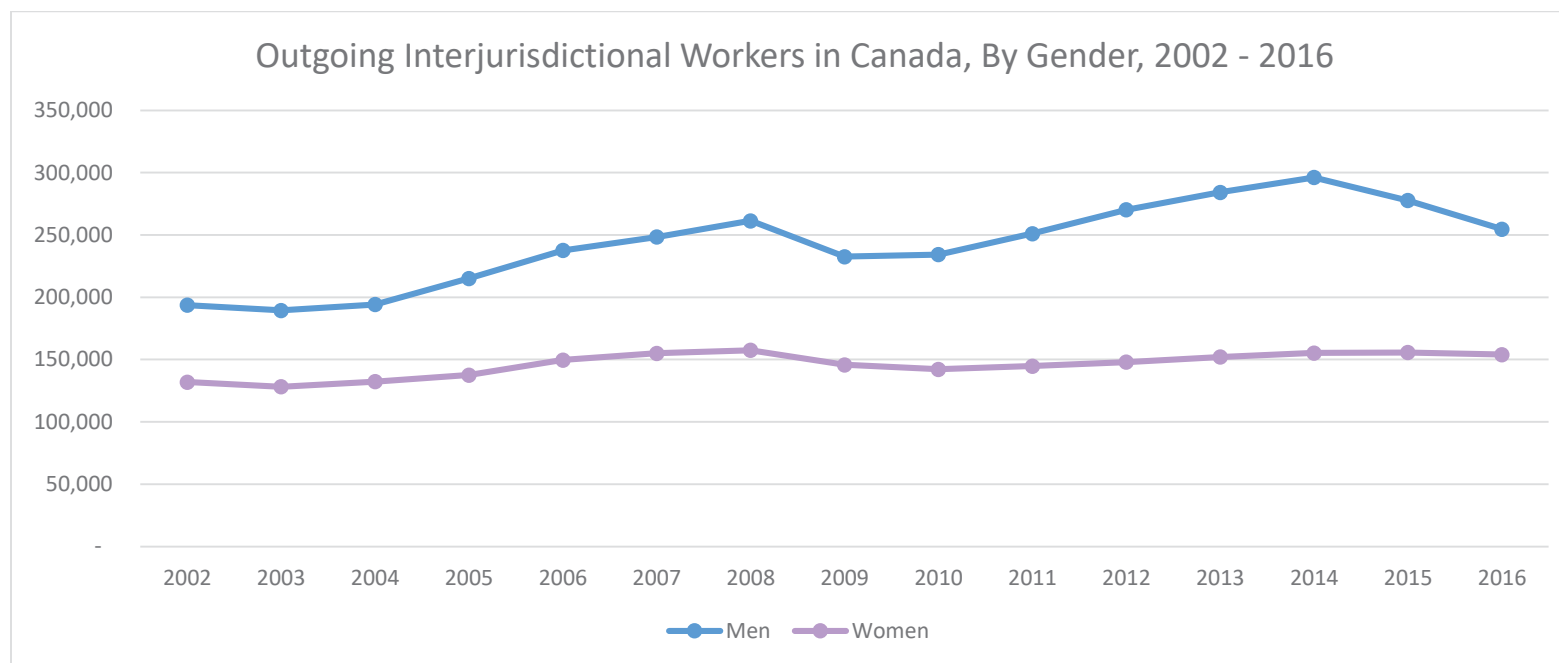


Figure 2: Outgoing Interjurisdictional Workers in Canada, By Gender, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

In 2002, there were about 30% fewer female than male outgoing workers (193,680 men compared to 131,910 women). By 2008, 261,375 men were outgoing workers, about 40% more than the 157,505 women who left their home jurisdiction for work. The number of male outgoing workers peaked at 296,135 in 2014, almost double the 155,275 women.

The Atlantic Provinces tended to have the lowest proportion of female outgoing IJWs, ranging from approximately 25% to 35%. NL consistently had the lowest proportion of women IJWs overall, with the proportion falling from approximately 30% in 2002 to 20% in 2016. Ontario and Quebec tended to have the highest proportion of female outgoing IJWs among the provinces, averaging approximately 40%. Nunavut was the only jurisdiction where women made up 50% or more of outgoing workers, peaking at 62.4% in 2010, but the total numbers of outgoing workers was low and fluctuated significantly year to year.

A majority of incoming IJWs to Alberta were men and the ratio of men to women increased from 2.17 in 2002 to 2.82 in 2016. Over the time period the number of female incoming IJWs started at 19,345 in 2002, peaked at 32,965 in 2008, fell to 23,900 in 2010, rose to 31,425 in 2014 and fell back to 25,210 in 2016. Meanwhile, the number of male IJ workers incoming to Alberta was more volatile over time starting at 42,050 in 2002 and rising 114.6% to 90,220 by 2008 before falling to 68,630 in 2010, rising to 115,105 in 2014 and falling to 71,005 in 2016.

Age of Outgoing IJWs

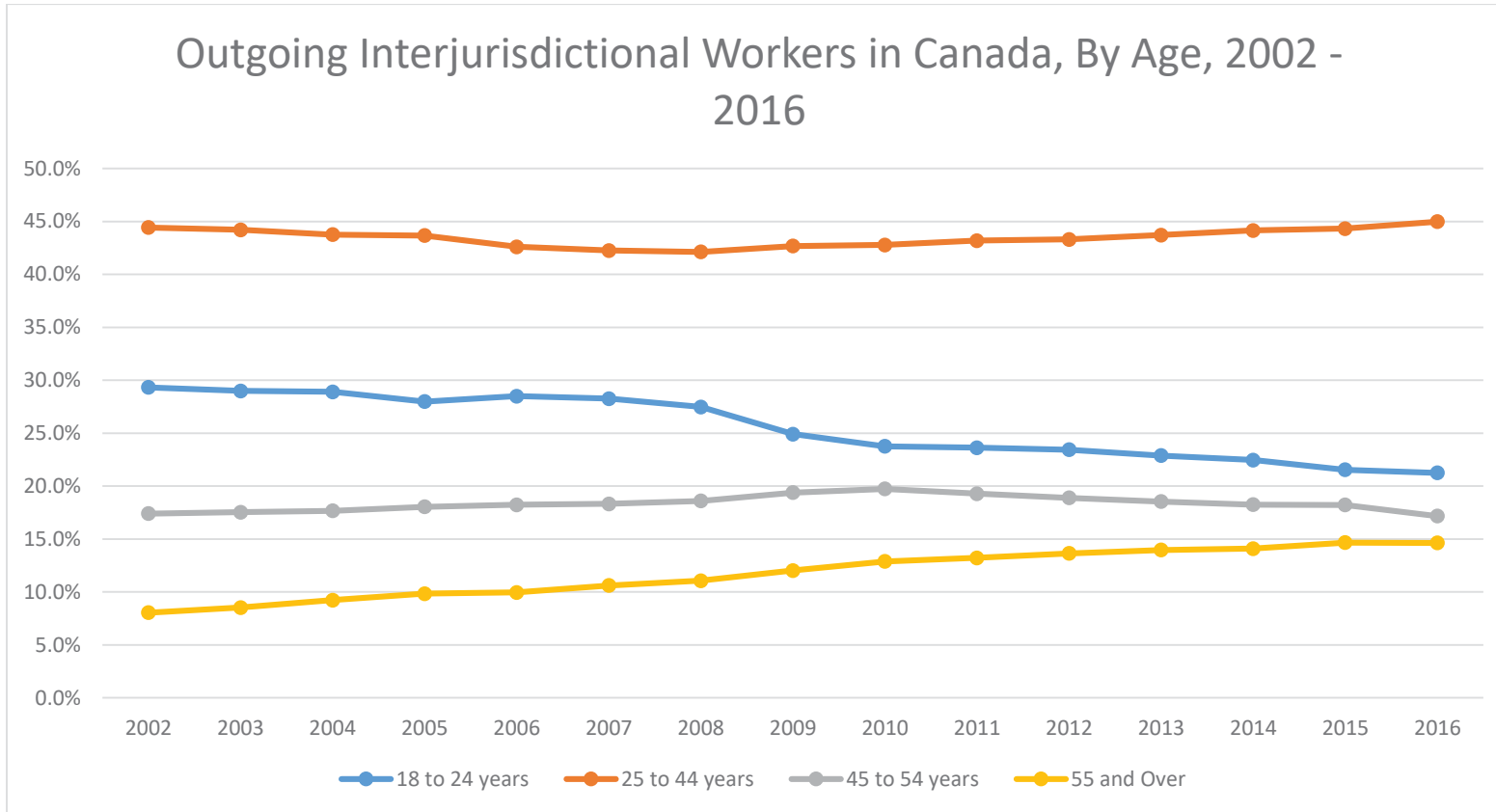


Figure 3: Outgoing Interjurisdictional Workers in Canada, By Age, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

Across Canada for this period, workers aged 25 to 44 comprised 42.1% to 45.0% of outgoing workers, followed by workers aged 18 to 24. The share of IJE for the youngest group declined from 29.3% in 2002 to 21.2% in 2016, whereas the proportion of IJWs aged 55 and over increased from 8.1% in 2002 to 14.6% in 2016 (Figure 3). The general pattern was similar across most jurisdictions and regions with some differences in the extent of shift between age groups. In Atlantic Canada, for instance, outgoing workers tended to be between the ages of 25 and 44, followed by younger workers, but the share of IJWs aged 55 and over more than doubled from 3,930 in 2002 to 11,345 in 2016. By 2016, their share of

outgoing IJE almost equalled that of the youngest group. This shift was even more pronounced in Quebec, where workers aged 55 and over outnumbered younger workers by 2016. In Ontario, the proportion of younger workers declined only slightly. In Western Canada, the outgoing IJE labour force was generally younger than elsewhere with 35.5% aged 18-24 in 2002 declining to 24.7% by 2016, while the proportion of older workers aged 55 and over increased from 7.4% of outgoing IJWs to 13.7% in 2016. The Territories was the only region with an increase in the proportion of younger outgoing IJWs over the time period, but the increase was small, from 21.7% in 2002 to 23.2% in 2016 and the proportion of older workers aged 55 and over also increased from 9.0% in 2002 to 14.4% in 2016.

Industry of Employment for Outgoing IJWs

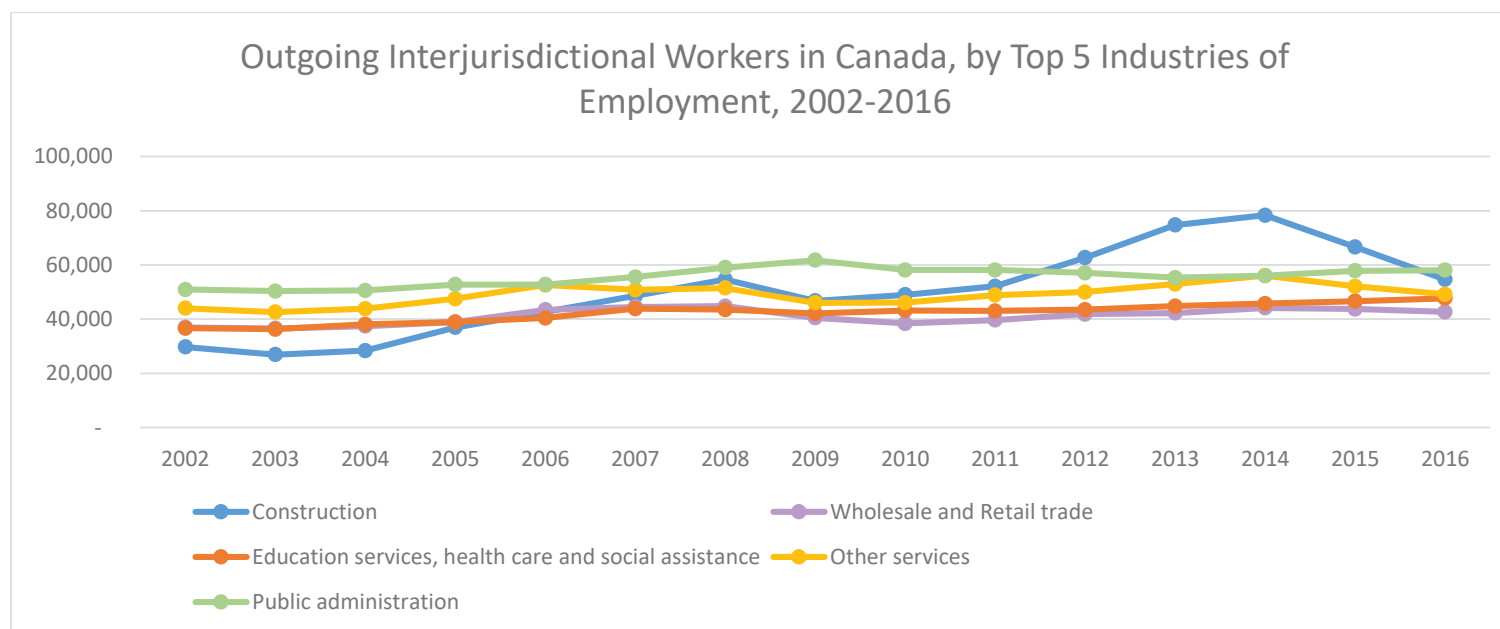


Figure 4: Outgoing Interjurisdictional Workers in Canada, by Top 5 Industries of Employment, 2002-2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

IJWs were employed in multiple industries with the dominant industry varying across jurisdictions and regions. As shown in Figure 4, the top 5 industries of employment for outgoing workers in Canada were construction; education services, health care and social assistance; public administration; wholesale and retail trade; and other services. Fluctuations in IJE in construction largely drove fluctuations in male and in overall IJE. Public administration, which employs more women, comprised an average of 28.8% of IJE and was the largest industry between 2002 and 2010 and in 2016 in Canada.

In 2002, most Canadian outgoing workers were employed in public administration (50,925) and this increased steadily over the next 15 years, with 58,090 outgoing workers employed in 2016. Construction was the most volatile industry for outgoing workers. The industry employed 29,710 workers in 2002, the number almost doubled to 54,570 by 2008 and peaked at 78,335 in 2014, before falling to 54,655 in 2016. “Other services” was another volatile industry. In 2002, 44,005 outgoing workers were employed in other services; numbers rose to 52,570 in 2006, dipped to 26,005 in 2009, rose to 56,070 in 2016 and fell again to 49,185 in 2016. Employment for outgoing workers in education services, health care and social assistance steadily increased over the time period from 36,655 outgoing workers in 2002 to 47,705 in 2016. In 2002, 36,940 outgoing workers were employed in wholesale and retail trade, increasing to an overall peak of 44,510 in 2007; 42,650 worked in this industry in 2016.

Figures 4 to 9 compare IJE by industry across jurisdictions. Construction was the number one employer of outgoing IJWs in 8 jurisdictions in 2016 including jurisdictions in Atlantic Canada and the Prairies. Public administration was the top employer of outgoing IJE in Quebec and Ontario from 2002 to 2016, on average employing 26.7% and 22.4% of outgoing IJWs, respectively. In Western Canada, wholesale and retail trade and the construction industry were some of the biggest employers for outgoing IJWs from 2002 to 2016, employing between 11.7% and 16.3% of all outgoing IJWs on average. The “Other services” industry was also a top employer for outgoing IJWs from Alberta (13.9%) and Manitoba (13.5%), while more outgoing IJWs from Saskatchewan worked in oil and gas extraction and support activities (15.0%). In 2002, most outgoing workers from the Atlantic Provinces worked in “other services” and the construction industry but, by 2016, construction had become the top industry of employment for outgoing workers for all Atlantic Provinces. Education services, health care and social assistance was a top employer among outgoing IJWs across the territories, employing between 12.7% and 26.6% on average from 2002 to 2016. In NWT and the Yukon, construction was another top industry, employing 15.5% and 11.6% of outgoing IJWs on average, respectively. In Nunavut, public administration was a top industry, employing 22.6% of outgoing IJWs on average.

Alberta

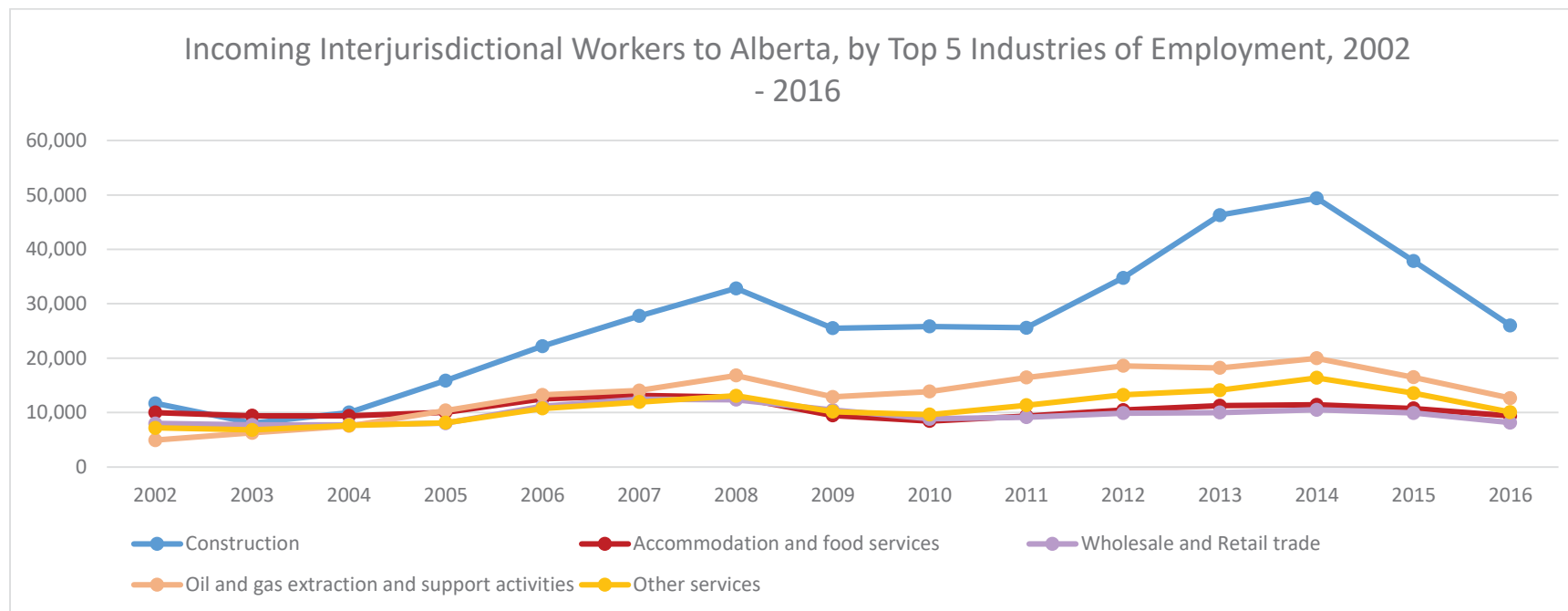


Figure 5: Incoming Interjurisdictional Workers to Alberta, by Top 5 Industries of Employment, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database

Most workers who travelled to Alberta for work were employed in the construction industry (Figure 5). This number peaked at 32,000 in 2008, before falling and then peaking again at 49,410 in 2014. In 2002, oil and gas extraction and support activities employed just 6,275 workers, but by 2014, this industry had become the second largest employer of incoming workers, with 19,980 IJWs.

Atlantic Canada

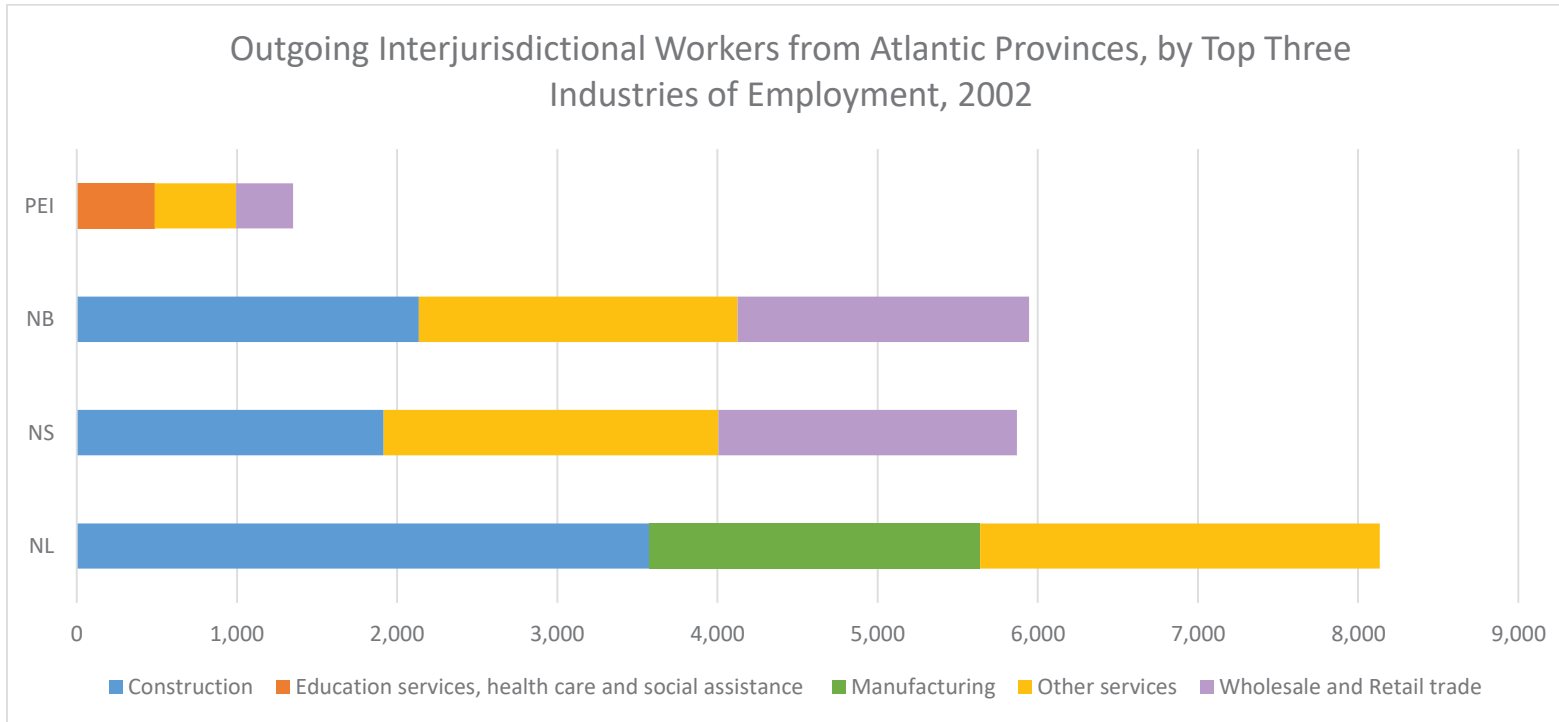


Figure 6: Outgoing Interjurisdictional Workers from Atlantic Provinces, by Top Three Industries of Employment, 2002. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

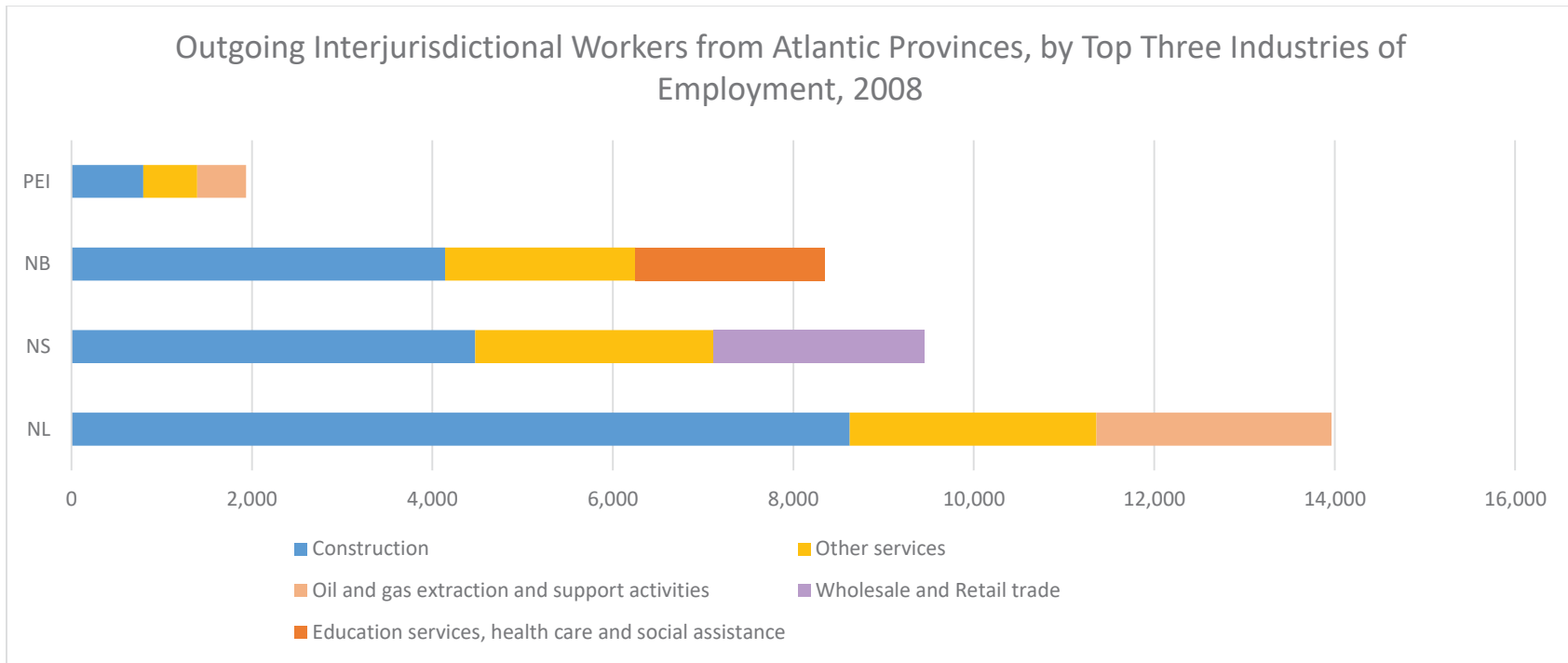


Figure 7: Outgoing Interjurisdictional Workers from Atlantic Provinces, by Top Three Industries of Employment, 2008. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

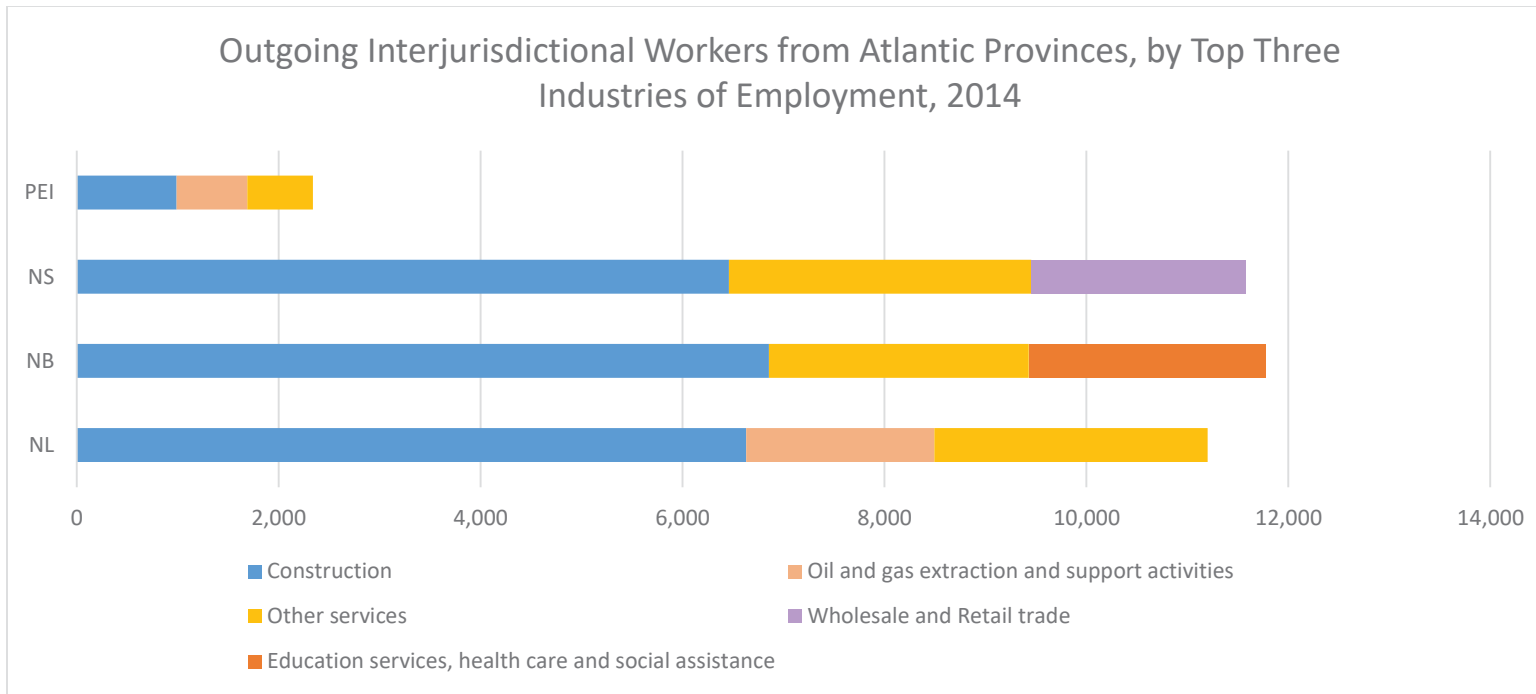


Figure 8: Outgoing Interjurisdictional Workers from Atlantic Provinces, by Top Three Industries of Employment, 2014. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

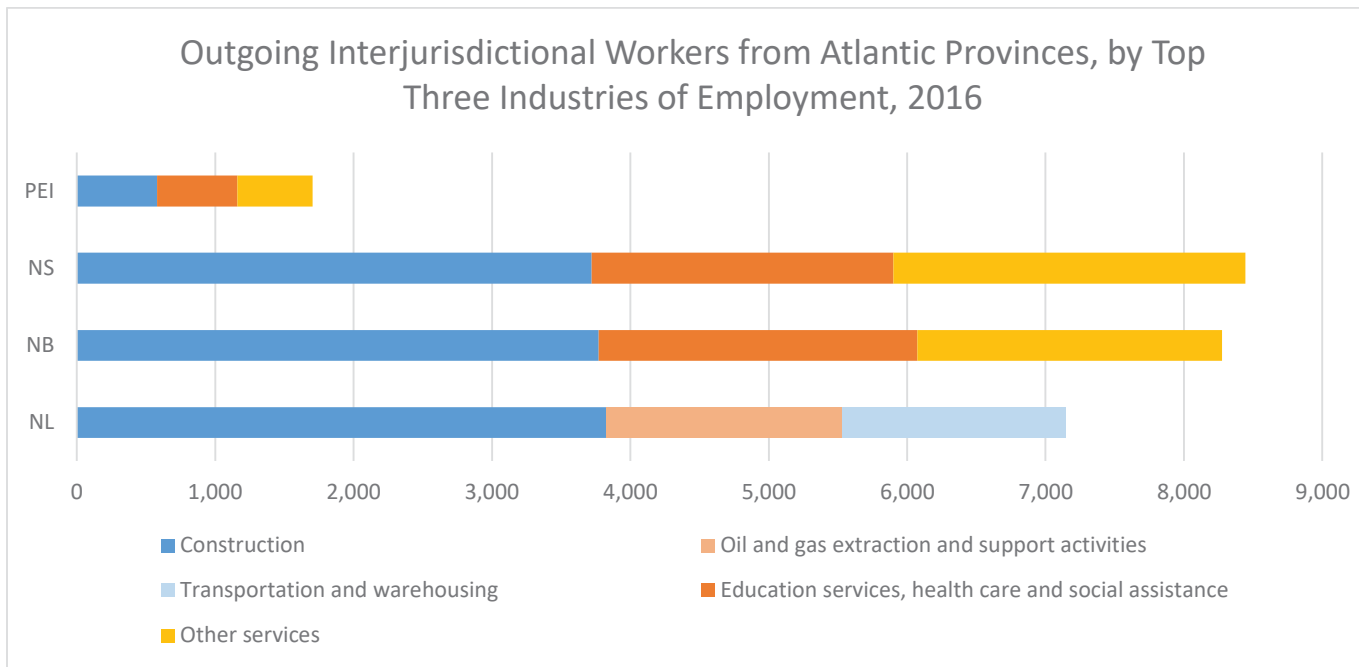


Figure 9: Outgoing Interjurisdictional Workers from Atlantic Provinces, by Top Three Industries of Employment, 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

Figures 6-9 explore IJE by industry for the Atlantic provinces. As shown in Figure 6, in 2002 most outgoing workers from the Atlantic Provinces worked in “other services” and the construction industry. In NS and NB more than 1,000 outgoing workers were employed in wholesale and retail trade, which was a top industry for PEI as well. Another top industry for outgoing IJWs from PEI was education, health care and social assistance, while more outgoing IJWs from NL worked in manufacturing.

By 2008 (Figure 7), a peak year for outgoing workers, most outgoing workers from the Atlantic Provinces worked in the construction industry, ranging from 795 in PEI to 8,625 in NL. This was followed by other services, with 600 workers from PEI and 2,735 workers from NL. In NL and PEI, oil and gas extraction and support activities was the third-ranked industry for outgoing workers (2,605 and 540, respectively), while in NS wholesale and retail trade employed 2,335, and in NB, education services, health care and social assistance employed 2,100 workers.

A second peak year for outgoing IJE from Atlantic Canada was 2014. As shown in Figure 8 this peak was again fueled by employment in the construction industry, which employed between 990 workers in PEI and 6,855 workers in NB. This was followed by other services, which employed from 650 workers in PEI to 2,995 workers in NS. Similar trends for top third employer can be seen in 2008 and 2014 as workers in NL and PEI were primarily employed in oil and gas extraction and support activities, while outgoing IJWs from NS were found in wholesale and retail trade, and in NB outgoing IJWs tended to be employed in education services, health care and social assistance.

In 2016, construction became the top industry of employment for outgoing IJWs for all Atlantic Provinces (Figure 9). For the Maritime Provinces, this was followed by education services, health care and social assistance, and other services. In NL, most outgoing IJWs were employed in oil and gas extraction and support activities and transportation and warehousing.

Labour Importing / Exporting Jurisdictions

Labour importing jurisdictions are defined as those that have more incoming than outgoing workers. These include the provinces with the largest labour forces, including Ontario and Alberta, but also include the Territories (Figure 10). In Ontario the ratio of incoming to outgoing workers stayed fairly stable from 2002 to 2016, ranging from 1.4 to 1.9. In Alberta the ratio rose from 1.5 in 2002 to 2.6 in 2013 before declining to 1.7 in 2016. In the Yukon, the ratio ranged from 0.9 to 2.0; it ranged from 3.7 to 5.8 in the NWT and climbed steadily in Nunavut from 1.0 in 2002 to 7.5 incoming to outgoing workers in 2016.

Ontario had the highest number of incoming IJWs of any region, except for the years 2013 and 2014 when it was surpassed by Alberta. In Ontario, IJE was fairly steady over the time period and increased 18% from 118,730 in 2002 to 140,480 in 2016. Almost half of incoming IJWs were women (44%) and were employed in public administration (22%). Ontario received about 67% of its incoming workers from a bordering jurisdiction, with the majority travelling from Quebec.

Alberta's oil industry had a large but volatile impact on IJE from 2002 to 2016. In 2002, there were 61,395 incoming workers. This number doubled by 2008 to 123,185 before falling and then steadily rising to 146,530 in 2014, and falling again by 34.3% to 96,215 incoming workers by 2016. Workers came from bordering jurisdictions, including British Columbia (average 32,096/year) and Saskatchewan (average 18,237) but others travelled much further including from Ontario (average 17,243/year) and Newfoundland and Labrador (average 8,638/year). The most common industry for IJE among workers who travelled to Alberta was construction (25%) and 73% identified as male.

The Territories (Yukon, Northwest Territories, and Nunavut) were also labour importing jurisdictions with the ratio of IJWs to outgoing workers higher than the Canadian average. Incoming workers were primarily male (73%) and concentrated in oil and gas extraction and support activities and construction. In the Yukon, incoming IJE increased 20% from 1,790 in 2002 to 2,155 in 2016, worked mainly in accommodation and food services, though employment in the resource sector, including oil and gas extraction and support activities, construction, and mining increased over time, peaking in 2010-2012. Male workers averaged 61% of incoming workers but peaked at 70% in 2012. The ratio of incoming to outgoing workers in the North West Territories was also high averaging 4.3 between 2002 and 2016, although the number and ratio fell over time from 8,480 IJWs (4.7) in 2002 to 6,160 (4.3) in 2016. Most incoming IJWs were men (75%) and they were most commonly employed in construction (20%) and mining and quarrying (14%). In Nunavut, the ratio was 3.8 but the number of incoming IJWs steadily increased from 2,275 in 2002 to 5,050 in 2016. This increase was associated with growing employment in oil and gas extraction and support activities and construction; 74% of incoming IJWs in Nunavut identified as male.

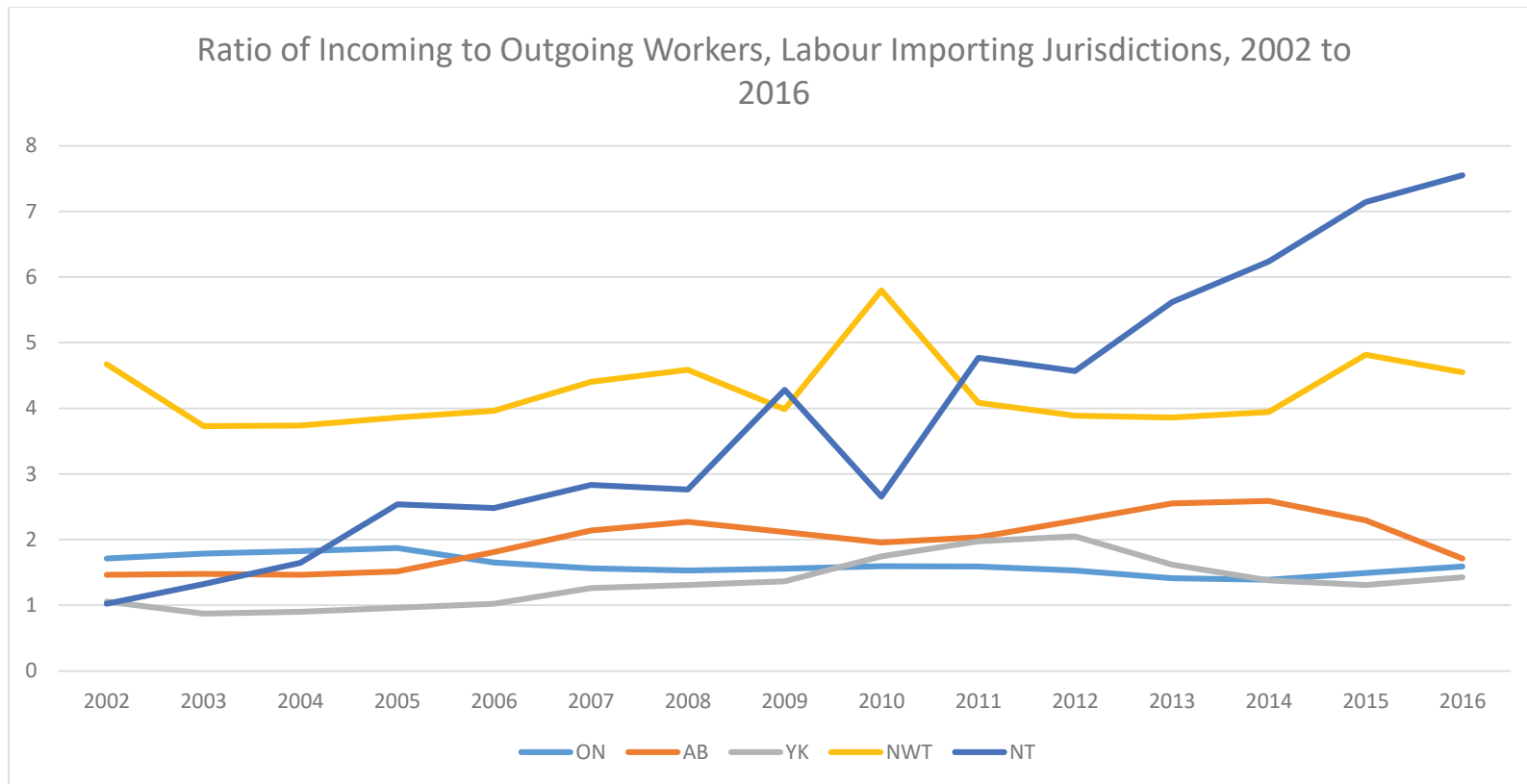


Figure 10: Ratio of Incoming to Outgoing Workers, Labour Importing Jurisdictions, 2002 to 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

Labour exporting jurisdictions are defined as those that have more outgoing than incoming workers. Labour exporting jurisdictions tend to be smaller and more rural and included Atlantic Canada (1.9), Saskatchewan and Manitoba (1.3), but also BC and Quebec (1.3 and 2.1, respectively) during the period under study (Figure 11). In Atlantic Canada, the ratio of outgoing to incoming workers tended to increase over time, peaking at 2014 and falling by 2016, but still at higher levels than in 2002. In PEI, the ratio ranged from 1.0 to 1.9; in NS, from 0.9 to 1.6, and in NB from 1.2 to 2.2. In contrast, in NL, the ratio of outgoing to incoming workers was 4.2 in 2002, peaked at 4.6 in 2007, and then steadily declined to 1.9 by 2016. Saskatchewan had a similar pattern to NL but more subdued, starting at 1.3 in 2002, peaking at 1.8 in 2006 and 2007, and falling steadily to 1.1 by 2016. In Manitoba the ratio ranged between 1.0 and 1.4. In the provinces of Manitoba and Saskatchewan, outgoing IJE followed a

similar pattern to the Canadian average, rising from 35,045 in 2002 to 42,400 in 2016, and peaking at 47,935 in 2008 and 48,770 in 2014. Most outgoing IJWs were men (62%) and 42% were aged 25 to 44. I

The ratio of outgoing to incoming workers in Quebec averaged 2.1. Outgoing IJE increased 16% from 88,715 in 2002 to 102,535 in 2016. On average, 44% of outgoing IJWs are women, 27% work in public administration, and 47% are aged 25 to 44. In Quebec, 85% of its outgoing IJWs travelled to neighbouring Ontario.

In BC the ratio rose fairly steadily from 1.1 in 2002 to 1.6 in 2012 before falling to 1.3 in 2016. Outgoing IJE increased by 67% from 38,230 in 2002 to 63,975 in 2016 and peaked at 76,740 in 2014. Most outgoing IJWs were men (66%), 43% were aged 25 to 44 and the largest employment industry was the construction industry (16.5%). The number of construction workers peaked at 17,660 in 2014, 23% of total outgoing IJE. Alberta was the top destination for outgoing IJWs (57%) from BC who earned on average \$36,613/year.

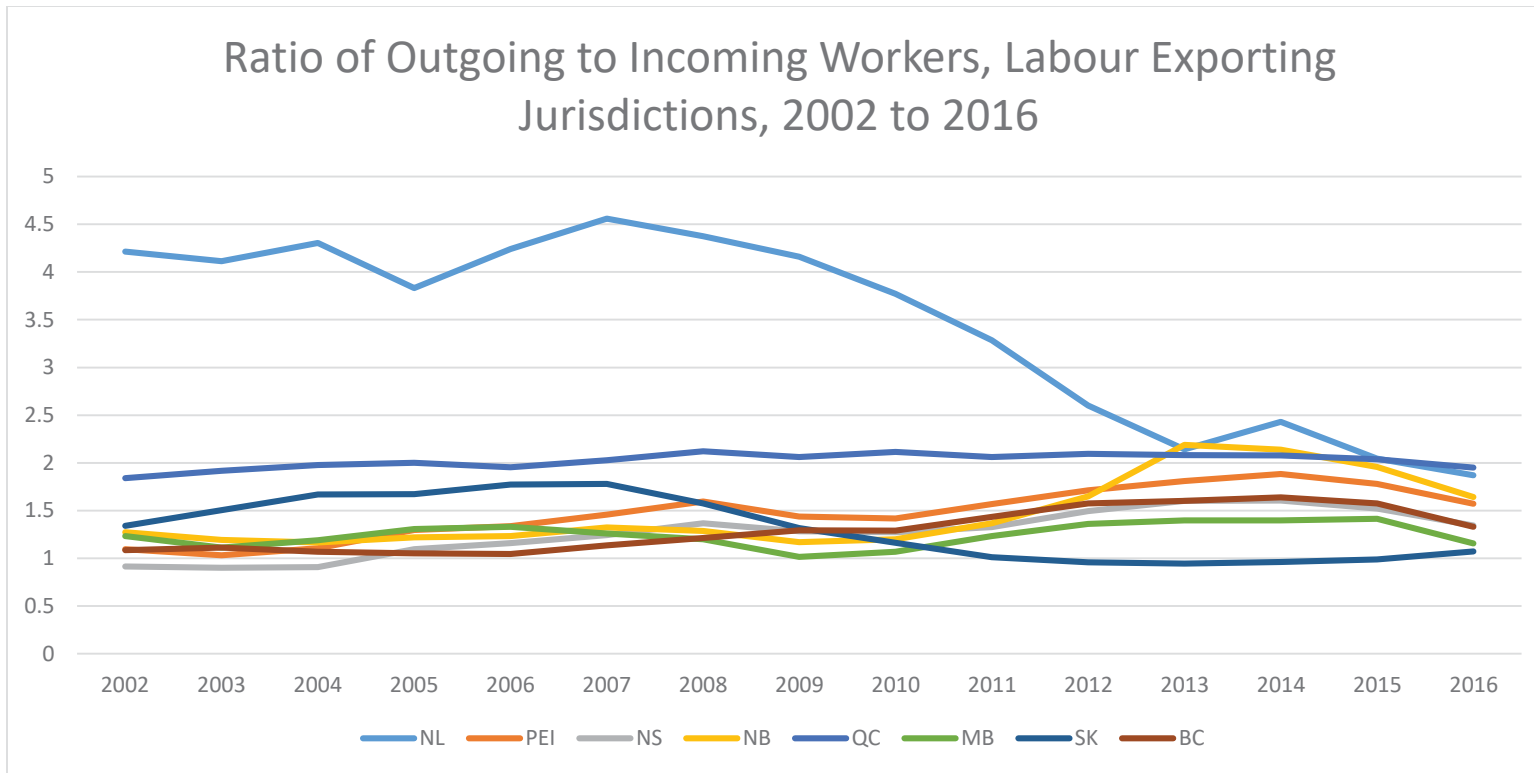


Figure 11: Ratio of Incoming to Outgoing Workers, Labour Importing Jurisdictions, 2002 to 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

Average Earnings from IJE

Outgoing IJEs across Canada earned on average \$38,654/year outside their jurisdiction of residence³. Outgoing IJWs from Quebec earned the highest average earnings over the time period, equal to about \$47,276/year, followed by IJWs from Ontario at \$39,377/year. In Manitoba and Saskatchewan, average aggregate earnings ranged from \$31,509/year (Manitoba) to \$34,402/year (Saskatchewan) with outgoing IJWs from BC earning slightly more at \$36,613/year. Within Atlantic Canada, outgoing IJWs from NL tended to have the highest average earnings from IJE (\$38,100/year), while outgoing workers from PEI had the lowest (\$27,566/year). The Territories had the lowest average earnings from outgoing IJE, ranging from \$18,224/year (Nunavut) to \$24,177/year (Yukon).

³ Equal to aggregate T4 earnings in 2016 constant dollars earned outside the province divided by number of employees who work outside the province, both sexes.

Canada

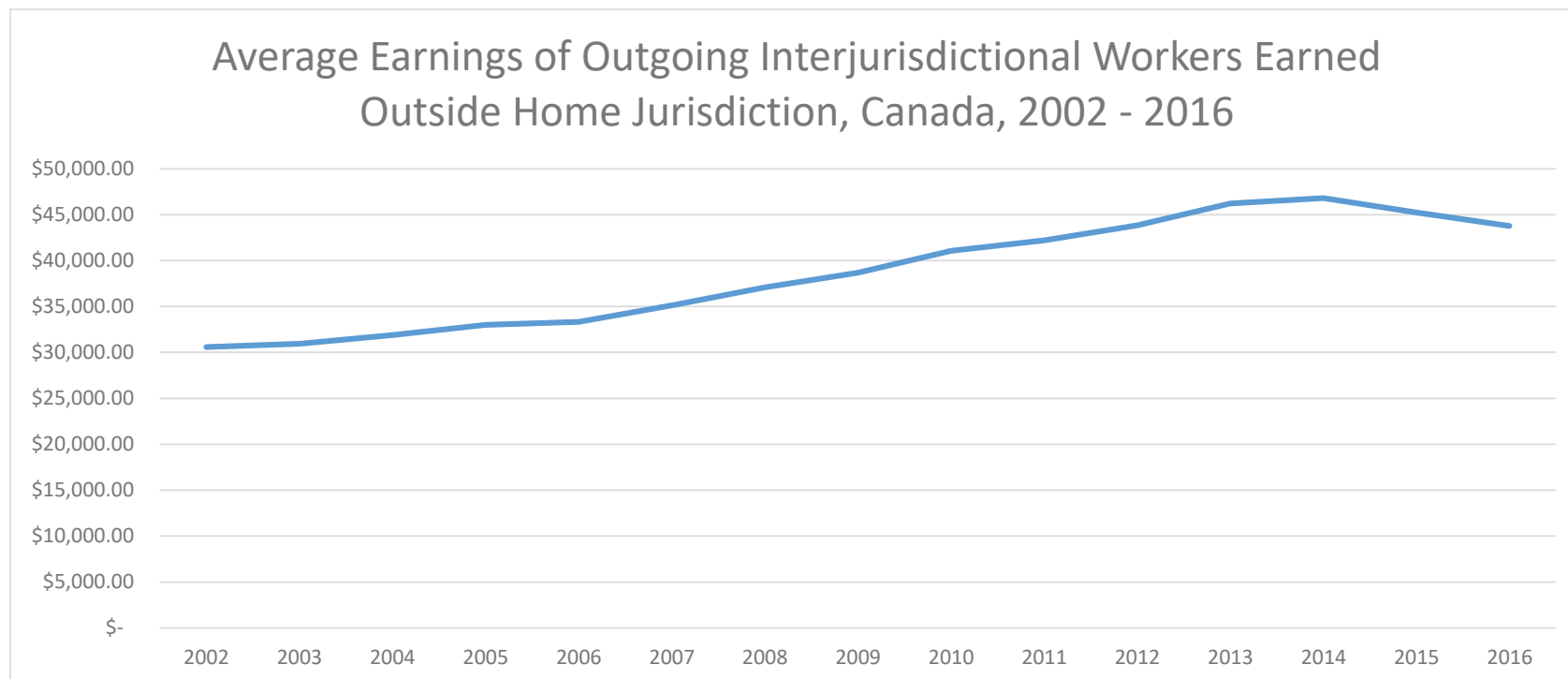


Figure 12: Average Earnings of Outgoing Interjurisdictional Workers Earned Outside Home Jurisdiction, Canada, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

As shown in Figure 15, average earnings of outgoing IJWs steadily rose from \$31,000 in 2002 to a peak of \$47,000 in 2014 before falling to \$44,000 in 2016 based on 2016 constant dollars.

Atlantic Canada

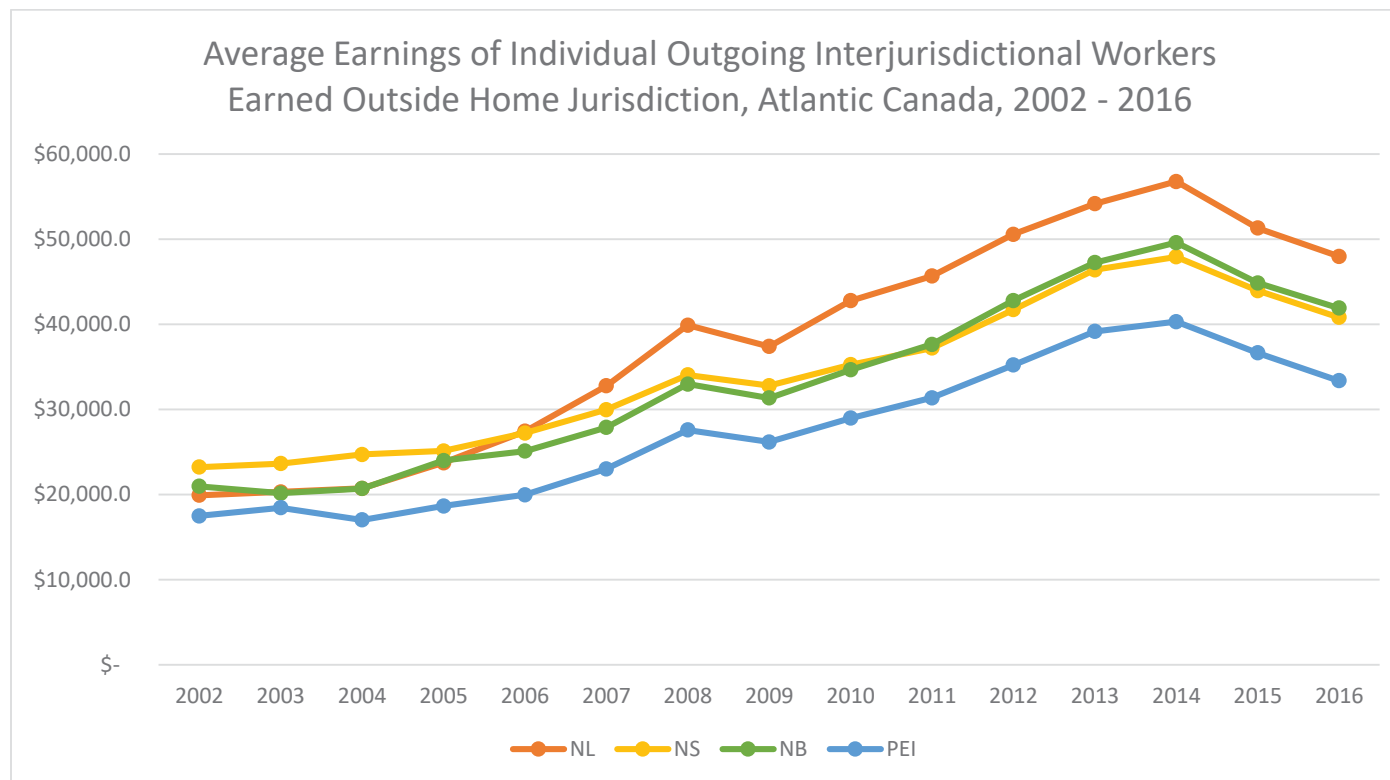


Figure 13: Average Earnings of Individual Outgoing Interjurisdictional Workers Earned Outside Home Jurisdiction, Atlantic Canada, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

As shown in Figure 16, in Atlantic Canada average earnings of individual outgoing IJWs from outside their jurisdiction of residence steadily increased from 2002 to 2014, following a similar pattern to IJE in the construction industry. NL workers tended to have the highest average earnings, while PEI had the lowest.

Aggregate Earnings from IJE

As indicated in Figure 12, overall aggregate earnings from outgoing IJE in Canada fluctuated between a peak of \$21.13 billion in 2014 and a low of \$9.83 billion in 2003 in constant 2016 dollars, but rose overall between 2002 and 2016. Across Canada, from 2002 to 2016, outgoing IJE aggregate earnings as a proportion of aggregate earnings of the resident labour force averaged 2.1% and ranged between 1.1% (Ontario) to 8.2% (NL). For all jurisdictions, the average proportion increased over the time period by 0.6%, ranging from -3.9% (Nunavut) to 3.1% (PEI). The territories saw a decrease in the proportion of outgoing IJE earnings, matching the decline in IJE from 2002 to 2016.

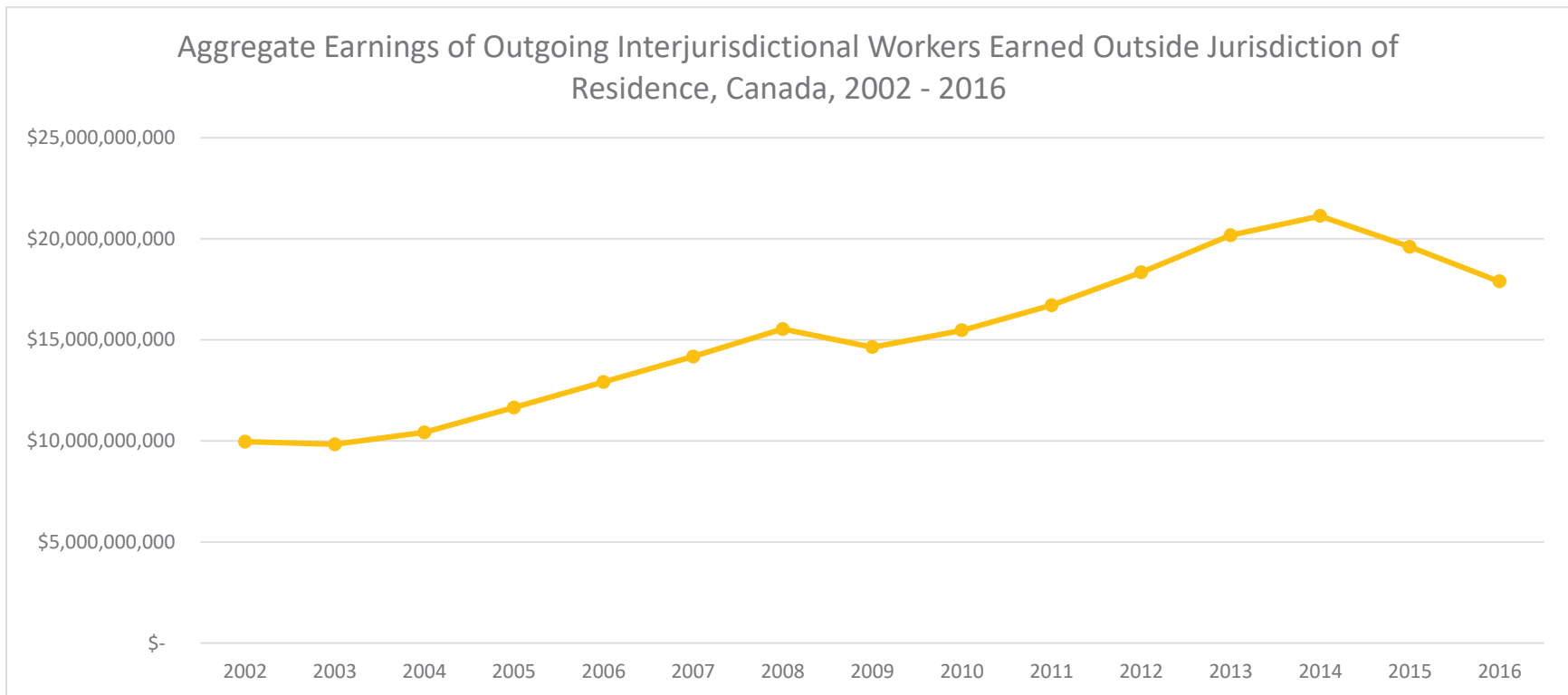


Figure 14: Aggregate Earnings of Outgoing Interjurisdictional Workers Earned Outside Jurisdiction of Residence, Canada, 2002 – 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

Aggregate Earnings By Region

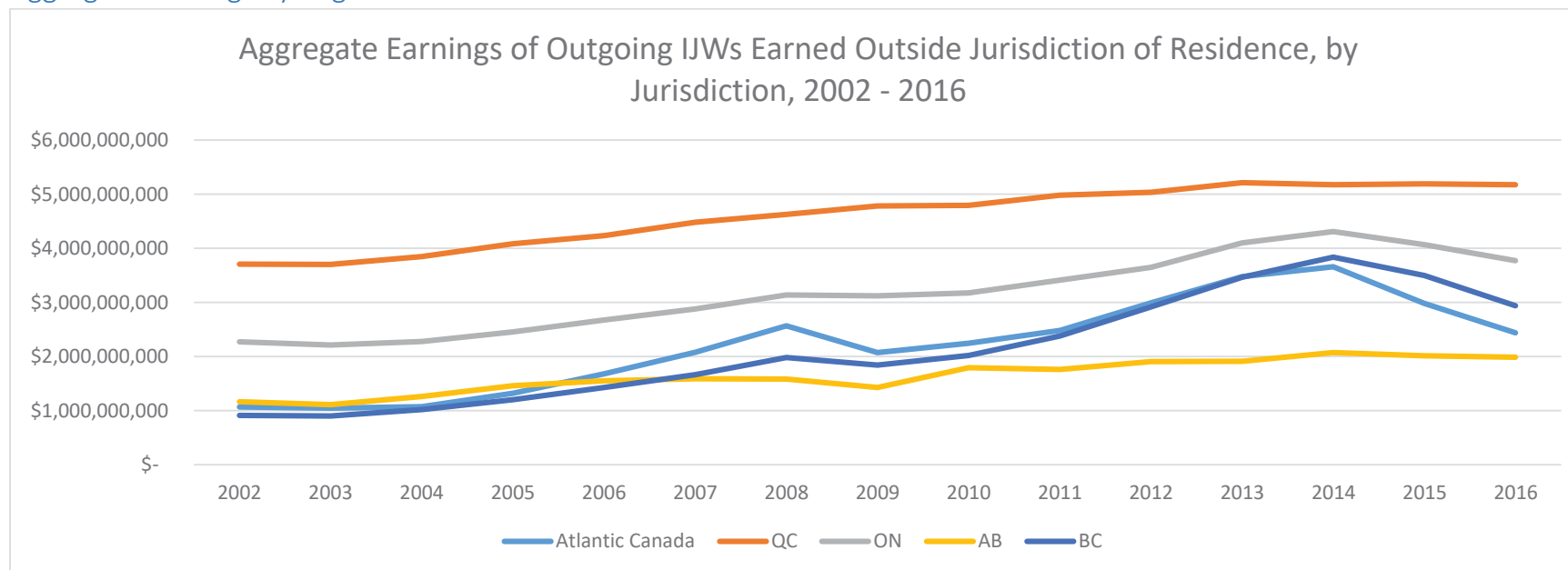


Figure 15: Aggregate Earnings of Outgoing Interjurisdictional Workers Earned Outside Jurisdiction of Residence, by Jurisdiction, 2002 – 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

As shown in Figure 13, outgoing IJWs from Quebec had the highest aggregate earnings from IJE outside their jurisdiction of residence, steadily rising from \$3.7 billion in 2002 to \$5.2 billion in 2016. This is followed by Ontario, where aggregate earnings rose from \$2.3 billion in 2002 to a peak of \$4.3 billion in 2014 before falling to \$3.8 billion in 2016. Aggregate earnings for outgoing IJWs from Atlantic Canada and BC followed a similar pattern increasing over time but with greater volatility than for Ontario and Quebec IJWs, rising from 2002 to a peak in 2008 before falling in 2009, peaking again in 2014 and falling again in 2015 and 2016. Increases and decreases in Atlantic Canada were steeper than those in BC, suggesting greater change year over year. Alberta had the lowest aggregate earnings from outgoing IJE, rising from \$1.2 billion in 2002 to \$2.0 billion in 2016.

Atlantic Canada

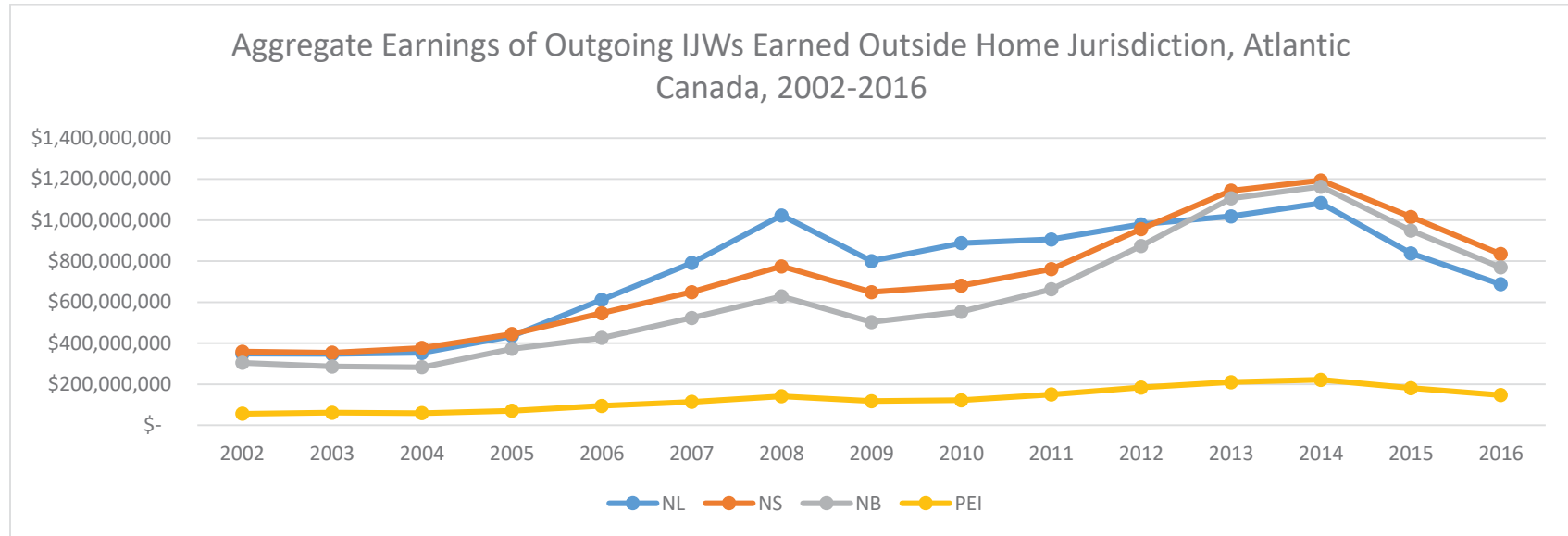


Figure 16: Aggregate Earnings of Outgoing Interjurisdictional Workers in Atlantic Canada Earned Outside Province of Residence, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

Looking more closely at Atlantic Canada, trends in aggregate earnings from IJE tend to match trends in the pattern of employment in construction, rising from 2002 to a peak in 2008 before falling in 2009 and rising again to a peak in 2014 before falling in 2015 and 2016 (Figure 14). In 2008, outgoing IJWs from NL earned \$1.0 billion outside of the province, the highest amount in the region, but total aggregate earnings for workers from NS and NB surpassed NL's in 2013. Aggregate earnings for outgoing IJWs from PEI stayed low and stable compared to other Atlantic provinces, but increased almost three-fold in constant 2016 dollars from \$56 million in 2002 to \$148 million in 2016.

Jurisdictional dependence on IJE can also be indicated by the proportion of outgoing workers relative to the overall labour force in each jurisdiction and the average share of IJWs' incomes from work in other jurisdictions. Over the 2002 to 2016 period, outgoing IJWs comprised on average between 1.4% (Ontario) and 10.3% (Yukon) of a jurisdiction's resident labour force. The average share of IJWs' incomes from work in

jurisdictions outside of their jurisdiction of residence ranged from 36.9% (Nunavut) to 87.0% (Quebec) from 2002 to 2016 and increased for all jurisdictions by between 1.6% (Quebec) and 14.5% (BC).

IJW as % of the Resident Labour Force

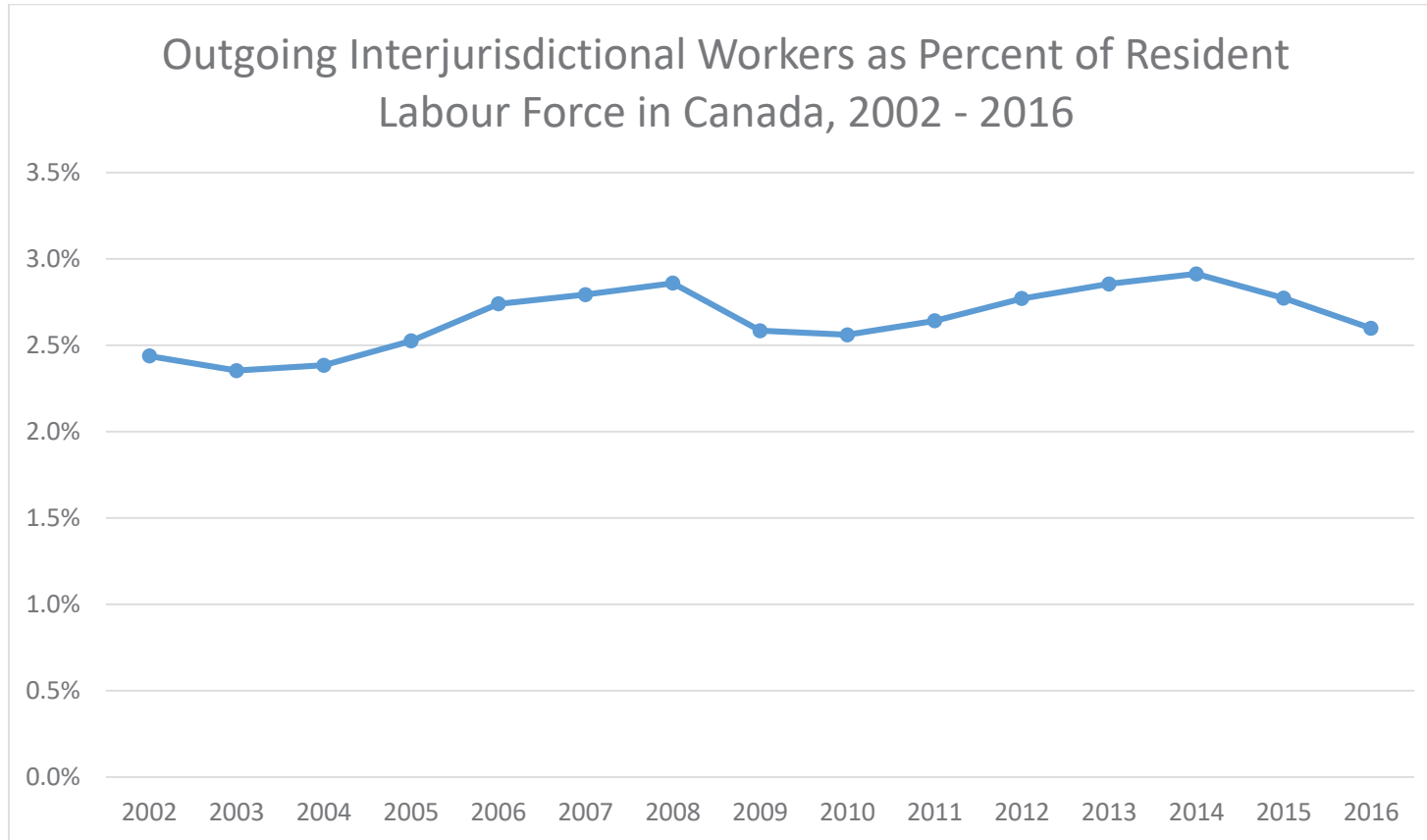


Figure 17: Outgoing Workers as Percent of Resident Labour Force in Atlantic Provinces, 2002-2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

From 2002 to 2016, outgoing IJWs ranged from 2.4% to 2.9% of the resident labour force in Canada (Figure 17). This proportion peaked in 2008, 2013, and 2014 at 2.9%.

Over the 2002 to 2016 period, outgoing IJWs made up on average between 1.4% (Ontario) and 10.3% (Yukon) of a jurisdiction’s resident labour force. Jurisdictions with on average less than 3% IJWs (Alberta, BC, Manitoba, Ontario, and Quebec) tended to have a fairly stable proportion of IJWs over the time period, with Ontario having the lowest proportion, averaging at 1.4%. In contrast, the Atlantic Provinces and Territories had more volatility in the proportion of IJWs, though with different patterns. In the Atlantic Provinces, there was a significant increase in the proportion of IJWs from 2002, peaking in 2008, especially in NL where the proportion rose from 8.5% in 2002 to 12.2% in 2008 (Figure 18). In Atlantic Canada overall, there was a second peak in 2014, and then another decline except in NL where there was a generally steady decline from 2009 to 2016. In 2016, the proportion of outgoing workers from each jurisdiction was fairly similar, with PEI having the highest proportion at 6.8%. In the Territories, the proportion of outgoing IJWs tended to be quite high in the early 2000s and steadily declined thereafter, with some small variability year to year, averaging 7.5% (NWT), 9.4% (Nunavut), and 10.3% (Yukon) over the time period. Saskatchewan also had a relatively high proportion of outgoing IJWs, averaging 6.1%.

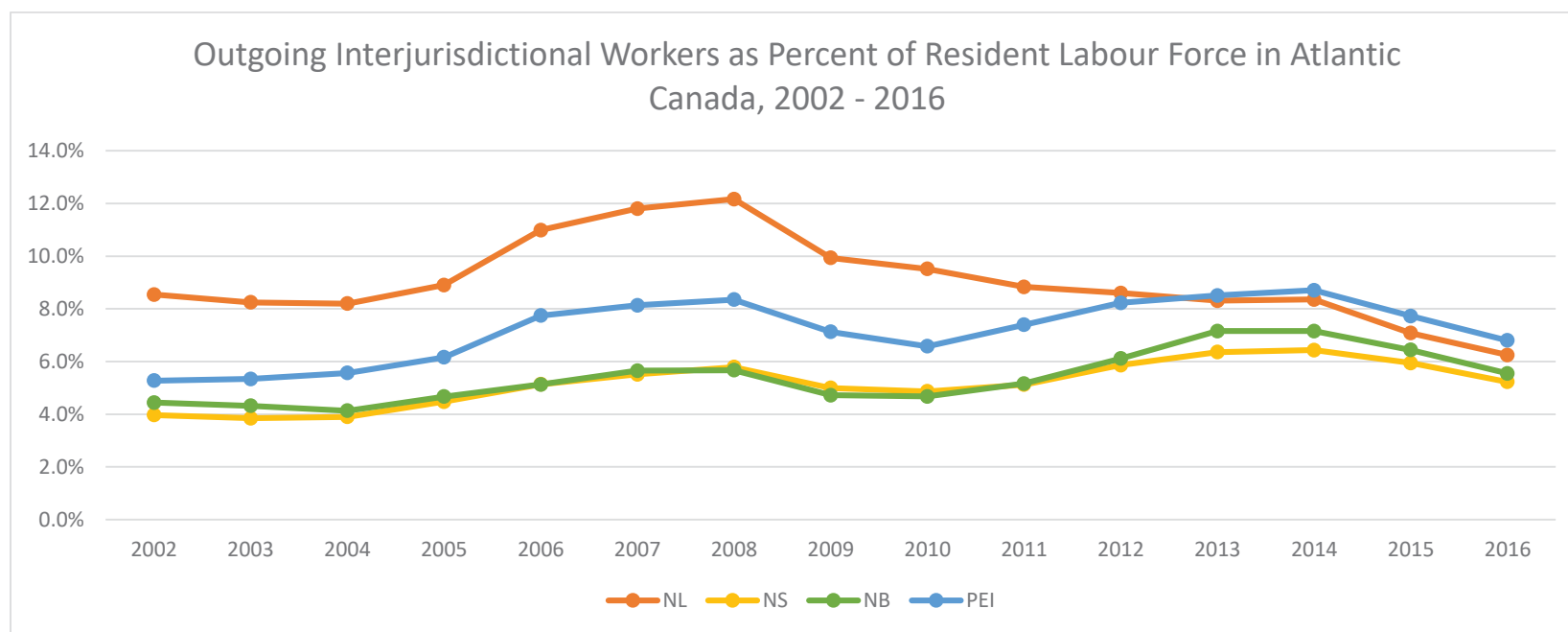


Figure 18: Outgoing Workers as Percent of Resident Labour Force in Atlantic Provinces, 2002-2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database. Figures include movement between Atlantic Provinces.

% IJW Earnings from Outside Jurisdiction

Outgoing IJW average earnings as a proportion of total earnings are a third indicator of dependence on IJE. From 2002 to 2016, the percent of earnings outgoing workers earned outside their jurisdiction of residence ranged between 70% and 80% (Figure 19). For Canada, in 2002, on average 72.5% of IJWs' earnings were earned outside their jurisdiction of residence. This rose to 73.3% in 2003 before falling to 70.0% in 2006. Afterwards it steadily increased to 76.4% in 2009, fell slightly to 76.1% in 2010, and increased to 79.1% in 2016.

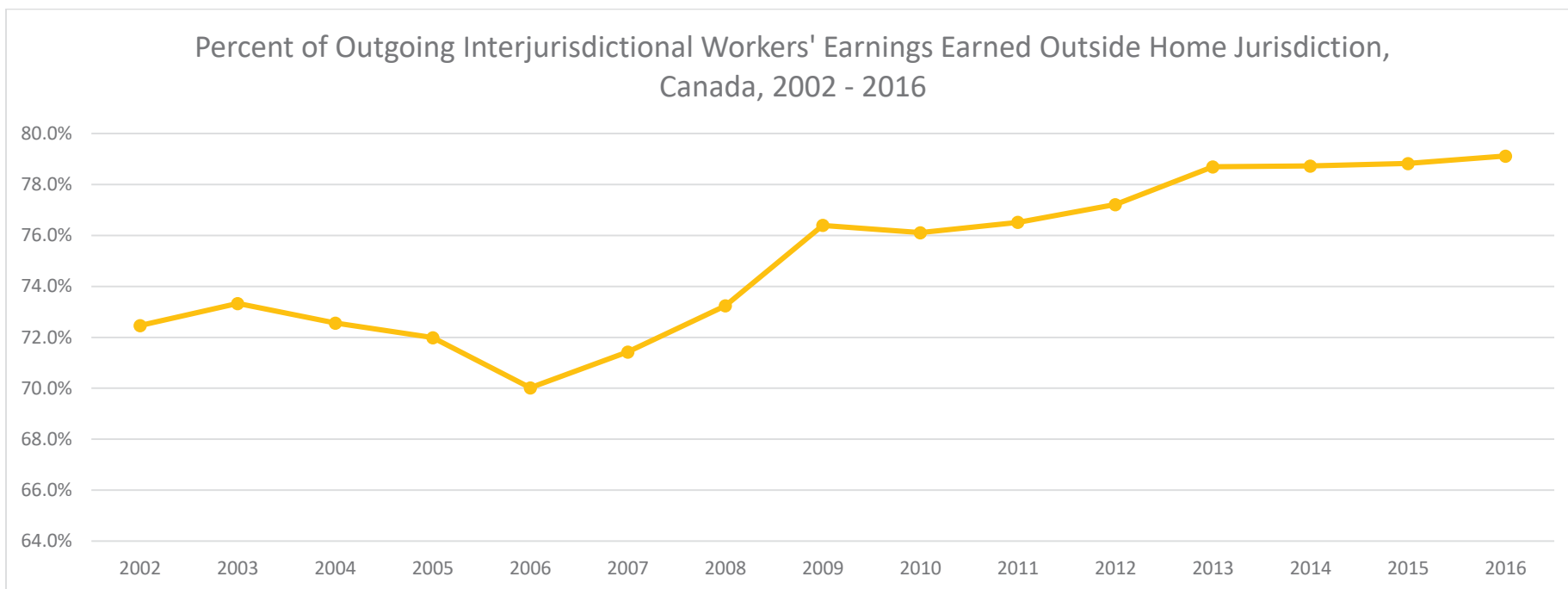


Figure 19: Percent of Outgoing Interjurisdictional Workers' Earnings Earned Outside Home Jurisdiction, Canada, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

By Jurisdiction

As shown in Figure 20, for most jurisdictions, outgoing workers earned about 65% of their total earnings outside their home jurisdiction, and this trended upwards over the time period to about 75%. Quebec IJWs had the highest average percent dependency on IJE, ranging from 83.4% to 89.1%, followed by NL, ranging from 75.9% to 84.3%. IJWs in the territories had the lowest dependency on IJE, with outgoing workers from Nunavut receiving just 18.0% to 44.7% of their total earnings from other jurisdictions.

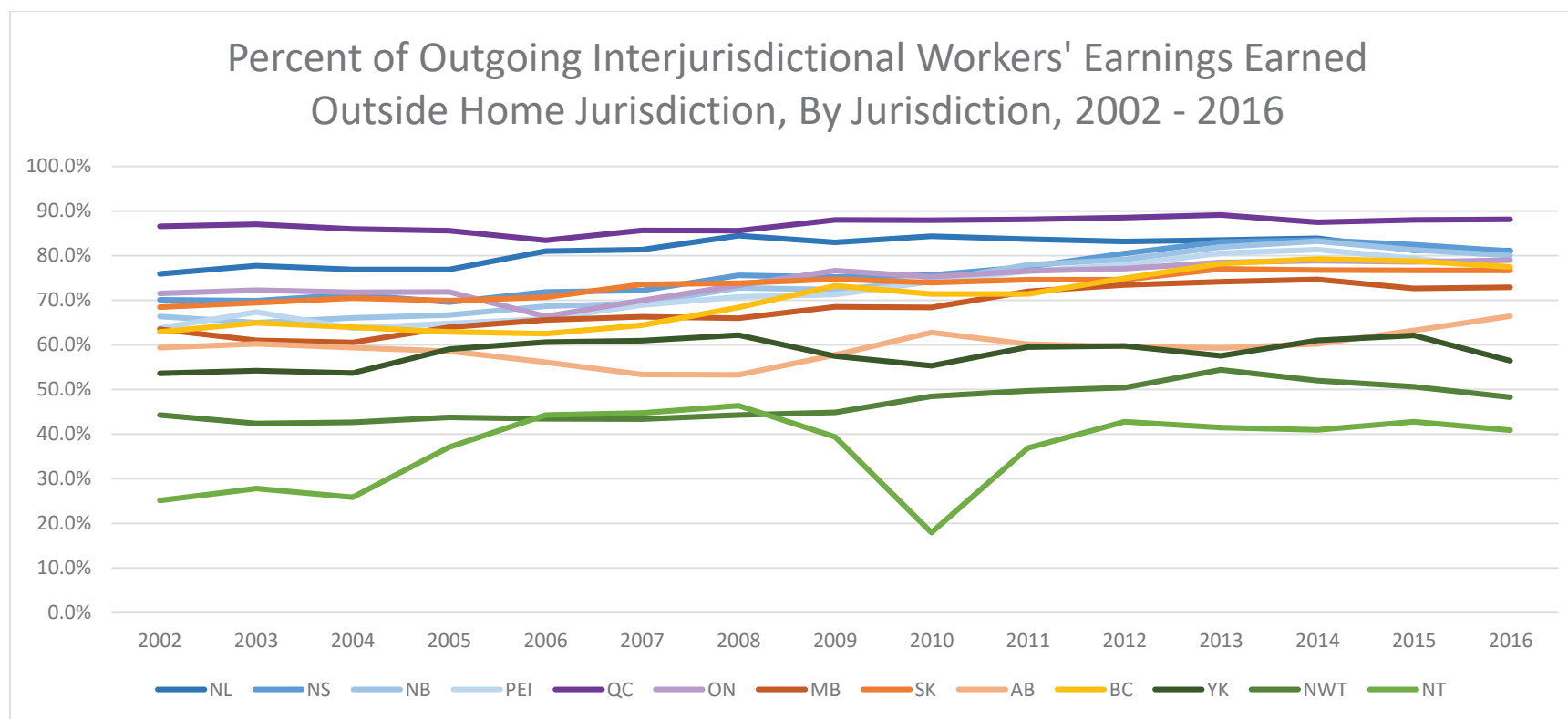


Figure 20: Percent of Outgoing Interjurisdictional Workers' Earnings Earned Outside Home Jurisdiction by Jurisdiction, 2002 - 2016. Source: Statistics Canada, Canadian Employer–Employee Dynamics Database.

Atlantic Canada

Across Canada, NL IJWs tended to have the highest proportion of earnings from outside the jurisdiction (Figure 21). Over the 15-year time-span, earnings from outside the jurisdiction made up 64% to 81% of total earnings for PEI outgoing workers, 65% to 83% for NB outgoing workers, 76% to 84% for NS outgoing workers, and 70% to 84% for NL outgoing workers.⁴

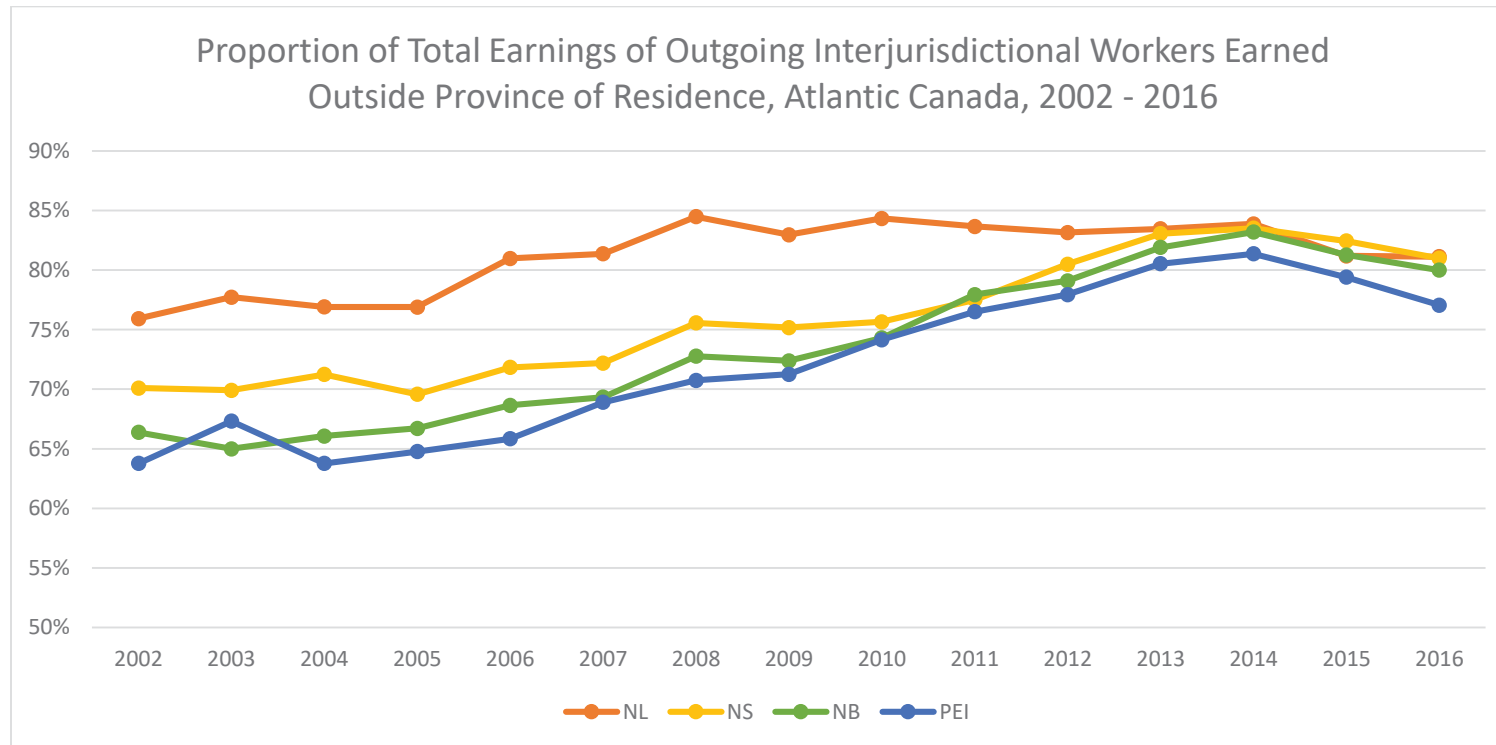


Figure 21: Proportion of Total Earnings of Outgoing Interjurisdictional Workers Earned Outside Jurisdiction of Residence, Atlantic Canada, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

⁴ Percent of earnings from outside a home province is defined as total earnings earned outside province of residence divided by total earnings of outgoing workers.

IJE in Neighbouring Jurisdictions

Some, but not all, IJE involves long distance labour commuting. One indication of the spatial scale of IJE mobility is the percentage of workers who pursue IJE in a neighbouring jurisdiction (Figure 22 and Appendix, Table 1). This is generally high, but varies across jurisdictions with Quebec at the top with between 82.5% and 87.0% of incoming workers travelling from a neighbouring jurisdiction, primarily Ontario. In Ontario, approximately 66.8% of incoming IJWs travelled from a neighbouring jurisdiction, primarily Quebec. The lowest proportion of IJWs came from a neighbouring jurisdiction to work in Nunavut (average 9.3%) and in the NWT (average 35.8%), while other jurisdictions received about 43.3% to 66.8% of IJWs from a neighbouring jurisdiction. IJWs in Atlantic Canada tended to travel longer distances for work. In 2002, outgoing IJWs from Atlantic Canada were most likely to travel to Ontario but Alberta had become the top destination by 2016.

Quebec had the highest proportion of incoming workers from a neighbouring/bordering jurisdiction, ranging from 82.5% to 87.0%. A majority of these workers arrived from Ontario (75.9% to 80.9%), while only a small proportion came from NB (4.5% to 6.1%). Similarly, in Ontario, a majority of incoming workers were from Quebec (60.8% to 65.6%) with only a small portion from neighbouring Manitoba (3.0% to 4.1%). Saskatchewan had a fairly high proportion of workers arriving from neighbouring Alberta (64% to 72.4%) while only 9.1% to 12.5% arrived from Manitoba.

In the territories and some Atlantic Provinces⁵, in some years incoming workers from a neighbouring/bordering jurisdiction made up less than 50% of all incoming workers. With the exception of the Maritime provinces, these tend to be geographically large jurisdictions where people are less likely to live near the border. In the Atlantic Provinces, PEI had the highest proportion of incoming workers from a neighbouring jurisdiction. In 2002, 67.1% of incoming workers to PEI came from the Atlantic Region but this proportion steadily decreased to 54.1% in 2016. While the proportion of incoming workers from NB (14.5% to 19.9%) and NS (22.3% to 26.6%) stayed fairly steady over this period, the proportion of incoming workers from NL fell 27.6% to 9.7% from 2002 to 2016. In NL, most workers from a neighbouring jurisdiction arrived from NS (20.4% to 27.3%) with an increasing proportion arriving from Quebec, up from 6.3% in 2002 to 13.6% in 2016. In NB, there was a more balanced proportion of incoming workers from neighbouring jurisdictions, with 29.5% to 35.6% from NS and 16.5% to 22.8% from Quebec. Nunavut had the lowest proportion of incoming workers from a neighbouring/bordering jurisdiction and the proportion steadily decreased from 15.2% in 2002 to 5.0%

⁵ While the Atlantic Provinces do not all border, they are a relatively small region that were grouped together. Quebec was included in figures for NB and Newfoundland and Labrador as they share a border.

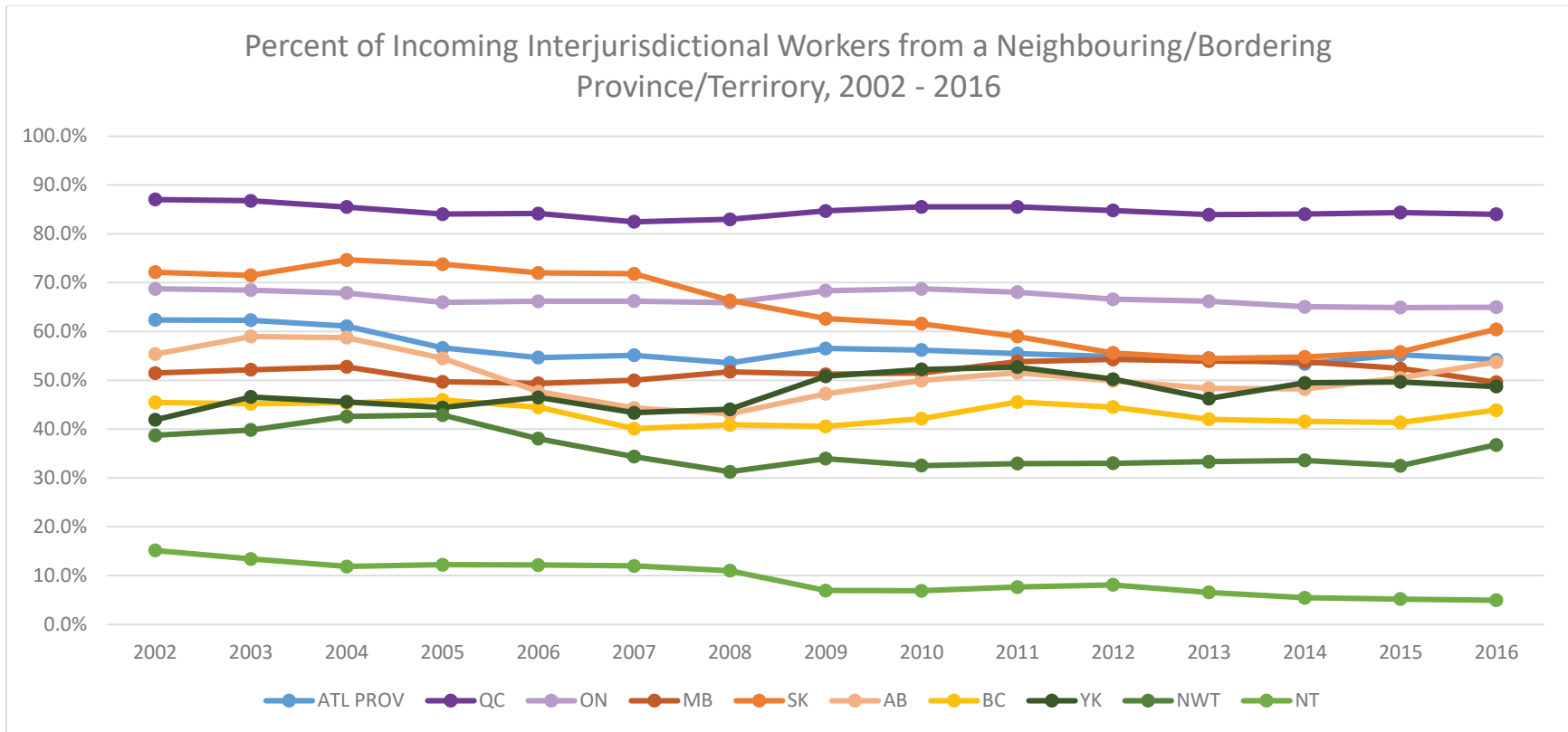


Figure 22: Percent of Incoming Interjurisdictional Workers from a Neighbouring / Bordering Jurisdiction, 2002 - 2016. Source: Statistics Canada, Canadian Employer—Employee Dynamics Database.

Conclusion

IJE comprised an increasing proportion of employment in Canada between 2002 and 2016. Outgoing IJE (our focus in this report) is male-dominated, with men representing on average 62% of all IJWs; male IJE was highly volatile whereas women's share of IJE, by contrast, was relatively stable and grew steadily between 2002 and 2016. Across Canada, IJWs between the ages of 25 and 44 comprised between 42% and 45% of all IJWs between 2002 and 2016. The share of young workers declined while that of older workers 55 and older increased over time.

Outgoing IJWs were employed in multiple industries with the dominant industry varying across the study period, as well as jurisdictions and regions. Public administration, which employs more women comprised on average 29% of IJE and was the top employer of outgoing IJWs in Quebec and Ontario. The number of workers in construction, traditionally a male-dominated industry, increased 164% from 29,710 in 2002 to a peak of 68,335 in 2014 before falling 30% to 54,655 in 2016. Construction was the top employer of outgoing IJWs in 8 jurisdictions in 2016. Fluctuations in IJE in construction likely drove fluctuations in male and in overall IJE over the study period.

All jurisdictions had both incoming and outgoing labour forces but the ratio of incoming to outgoing was higher in some jurisdictions including Ontario, Alberta and the Territories (labour importing jurisdictions) and the ratio of outgoing to incoming higher in labour exporting jurisdictions (Atlantic Canada, Quebec, Manitoba, Saskatchewan and BC). Alberta's oil industry had a large but volatile impact on IJE from 2002 to 2016 drawing workers from bordering jurisdictions, as well as Ontario, Quebec, and Atlantic Canada. The most common industry for IJE among workers who travelled to Alberta was construction (25%) and 73% identified as male.

Jurisdictional dependence on IJE is indicated by the proportion of outgoing workers relative to the overall labour force in each jurisdiction and the proportion of each jurisdiction's aggregate earnings derived from IJE. Over the 2002 to 2016 period, outgoing IJWs comprised on average between 1.4% (Ontario) and 10.3% (Yukon) of a jurisdiction's resident labour force. Jurisdictions with on average less than 3% IJWs (Alberta, BC, Manitoba, Ontario, and Quebec) tended to have a fairly stable proportion of IJWs over the time period. In contrast, the Atlantic Provinces and Territories had more volatility in the proportion of IJWs. Outgoing IJE aggregate earnings as a proportion of aggregate earnings of the resident labour force are another indicator of dependence on IJE. Across Canada, from 2002 to 2016, the average proportion of aggregate earnings from IJE was 2.1% and ranged between 1.1% (Ontario) and 8.2% (NL). For all jurisdictions, the average proportion increased over the time period by 0.6%, ranging from -3.9% (Nunavut) to 3.1% (PEI). The territories saw a decrease in the proportion of outgoing IJE earnings, matching the decline in IJE from 2002 to 2016.

The average share of IJWs' incomes from work in jurisdictions outside of their jurisdiction of residence can also be used as a measure of dependence on IJE. This share ranged from 36.9% (Nunavut) to 87.0% (Quebec) from 2002 to 2016 and increased for all jurisdictions by between

1.6% (Quebec) and 14.5% (BC). In Atlantic Canada, over the 15-year time-span, earnings from outside the jurisdiction of residence as a proportion of total earnings for outgoing IJWs ranged from 64% to 81% in PEI, 65% to 83% in NB, 76% to 84% in NL, and 70% to 84% in NS.⁶

Some, but not all, IJE involves long distance labour commuting. One indication of the spatial scale of IJE mobility is the percentage of workers who pursue IJE in a neighbouring jurisdiction. This is generally high, but varies across jurisdictions, with Quebec at the top. The lowest proportion of IJWs came from a neighbouring jurisdiction to work in Nunavut and in the NWT. IJWs in Atlantic Canada tend to travel longer distances for work. In 2002, outgoing IJWs from Atlantic Canada were most likely to travel to Ontario but Alberta had become the top destination by 2016.

Evidence suggests there is increasing dependence on IJE as shown in the growing proportion of the resident labour force engaging in IJE and the high proportion of earnings that outgoing IJWs receive from IJE. Those who engage in IJE tend to rely on it for most of their income, which can mean that periods of steep declines in IJE can have large impacts on household incomes and regional economies, particularly in economically depressed areas such as some parts of Atlantic Canada with high dependency on IJE.

Overall, IJE is an important but understudied area in Canadian labour market research that, in light of its volatility and relative importance, particularly to labour exporting regions and key industries, requires sustained monitoring and deeper analysis than was possible with this report. Data and resource limitations prevented us from carrying out a more in-depth analysis of IJE. A key gap in this dataset is intra-jurisdictional information on the distribution of IJE. We know from earlier Atlantic Canada-focused reports that IJW dependence varies across census divisions within jurisdictions. Gender, industry and other variables can also differ within jurisdictions. Access to regularly updated data down to the regional scale within provinces and territories, and to cross-sectional data including on IJ workers by industry, gender and age, and on earnings by industry and jurisdiction are needed to better assess patterns and trends in IJE including shifts in dependency and its potential consequences.

⁶ Percent of earnings from outside a home province is defined as total earnings earned outside province of residence divided by total earnings of outgoing workers.

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Appendix

Table 1: Percent of Interjurisdictional mobility to a neighbouring / bordering jurisdiction

	NL				PEI			NS			NB				QC		
	QC	PEI	NS	NB	NL	NS	NB	NB	PEI	NL	QC	NS	PEI	NL	ON	NL	NB
2002	2.8%	4.5%	23.6%	6.4%	2.2%	31.0%	22.0%	24.2%	4.2%	5.8%	6.3 %	31.6%	3.4 %	4.0 %	86.8 %	0.3 %	2.5 %
2003	2.7%	5.1%	22.8%	7.3%	2.4%	28.5%	21.0%	26.7%	4.5%	5.4%	6.1 %	33.7%	3.3 %	3.7 %	87.7 %	0.3 %	2.5 %
2004	2.8%	4.5%	22.0%	6.8%	2.9%	26.4%	21.8%	26.3%	4.5%	5.3%	6.1 %	34.1%	3.7 %	2.6 %	87.6 %	0.2 %	2.5 %
2005	2.9%	3.0%	15.4%	6.7%	3.2%	23.7%	19.6%	21.2%	3.6%	5.6%	6.0 %	27.7%	3.1 %	2.6 %	86.9 %	0.3 %	2.4 %
2006	2.4%	3.7%	12.4%	5.3%	2.5%	19.5%	18.1%	19.6%	3.9%	5.0%	5.1 %	26.0%	2.9 %	2.1 %	85.1 %	0.3 %	2.3 %
2007	2.3%	2.8%	10.4%	4.5%	2.3%	18.3%	15.7%	17.9%	3.3%	5.2%	5.5 %	24.7%	2.9 %	2.1 %	82.2 %	0.4 %	2.4 %
2008	2.2%	2.1%	9.2%	4.1%	2.4%	17.6%	15.1%	16.6%	3.1%	5.5%	4.7 %	22.0%	2.4 %	2.2 %	82.2 %	0.4 %	2.4 %
2009	2.5%	2.5%	11.2%	5.4%	2.7%	19.8%	17.6%	18.4%	3.6%	6.5%	5.3 %	24.4%	3.1 %	2.9 %	84.6 %	0.4 %	2.4 %
2010	2.5%	2.0%	10.9%	5.1%	2.8%	20.2%	18.9%	18.4%	4.0%	6.9%	4.8 %	24.7%	2.9 %	2.9 %	85.4 %	0.5 %	2.4 %
2011	2.4%	2.1%	10.4%	4.4%	2.9%	18.5%	16.5%	16.6%	3.5%	7.1%	4.2 %	22.0%	2.9 %	3.3 %	86.2 %	0.7 %	2.3 %
2012	2.2%	1.9%	9.6%	4.3%	3.7%	15.7%	13.1%	14.0%	3.2%	7.9%	3.9 %	18.7%	2.4 %	4.6 %	85.0 %	0.9 %	2.2 %
2013	2.0%	1.8%	9.2%	3.8%	3.7%	14.9%	12.4%	12.1%	2.8%	8.6%	3.6 %	17.3%	2.2 %	5.7 %	83.0 %	1.1 %	2.2 %
2014	2.0%	1.7%	8.4%	3.9%	2.9%	14.9%	13.2%	12.0%	2.7%	7.4%	3.5 %	17.3%	2.3 %	4.1 %	81.9 %	1.1 %	2.2 %

2015	2.4%	1.7%	10.1%	4.4%	3.9%	17.6%	13.7%	13.5%	3.0%	8.2%	4.2%	18.8%	2.5%	5.0%	81.8%	1.1%	2.3%
2016	3.0%	1.8%	11.5%	5.4%	4.4%	19.1%	15.5%	15.7%	3.3%	8.7%	5.0%	22.0%	2.9%	5.1%	83.4%	0.9%	2.4%

	ON		MB		SK		AB		BC		YK		NWT			NT		
	MB	QC	SK	ON	AB	MB	SK	BC	AB	YK	BC	NW T	YK	AB	SK	NT	NW T	MB
2002	3.9%	55.3%	18.2%	31.5%	65.5%	12.1%	22.1%	33.3%	52.3%	1.8%	36.3%	0.0%	2.5%	45.8%	3.4%	11.3%	77.4%	2.4%
2003	4.3%	54.5%	19.3%	32.5%	65.9%	12.5%	24.5%	34.5%	52.1%	1.6%	41.2%	0.0%	0.0%	41.8%	3.8%	9.4%	68.8%	3.8%
2004	4.5%	52.6%	17.7%	30.7%	67.4%	11.0%	25.2%	33.6%	51.6%	1.5%	42.6%	1.2%	2.2%	46.7%	3.7%	8.0%	62.7%	4.3%
2005	4.2%	51.3%	16.3%	29.5%	69.5%	9.9%	23.9%	30.6%	51.3%	1.4%	40.4%	0.6%	3.3%	45.8%	4.8%	8.4%	39.5%	5.1%
2006	3.6%	48.1%	16.7%	26.8%	72.4%	9.1%	21.0%	26.6%	54.5%	1.6%	44.2%	0.0%	3.9%	47.8%	3.9%	5.9%	23.1%	6.6%
2007	3.7%	44.1%	17.0%	25.6%	71.6%	9.3%	18.6%	25.7%	55.1%	1.6%	40.2%	0.6%	4.5%	46.2%	2.5%	7.0%	34.1%	6.7%
2008	4.2%	41.5%	19.4%	25.7%	69.9%	9.5%	17.1%	26.0%	56.3%	1.6%	40.3%	0.9%	3.3%	41.2%	3.6%	8.1%	43.1%	5.6%
2009	5.0%	45.1%	21.2%	27.5%	68.6%	10.3%	18.1%	29.1%	54.1%	1.9%	43.7%	1.0%	4.1%	43.9%	4.1%	7.0%	17.8%	7.9%
2010	4.8%	45.1%	23.5%	28.4%	68.0%	10.2%	18.6%	31.3%	54.4%	2.3%	44.2%	1.4%	4.3%	36.6%	3.5%	8.2%	55.4%	3.7%
2011	4.2%	45.3%	26.8%	26.8%	67.9%	10.2%	18.3%	33.3%	57.0%	2.6%	44.8%	0.9%	4.9%	39.7%	4.2%	8.0%	22.0%	7.7%
2012	3.9%	41.6%	27.3%	26.2%	68.5%	9.7%	16.2%	33.7%	60.4%	2.1%	40.2%	1.3%	5.1%	40.7%	3.4%	7.8%	19.7%	9.3%
2013	3.7%	39.2%	26.1%	24.8%	69.8%	9.9%	14.8%	33.6%	62.9%	1.5%	38.6%	1.3%	3.3%	43.5%	3.0%	7.0%	20.1%	8.1%

2014	3.6 %	38.8%	25.0%	26.2%	69.9%	9.6%	14.0 %	34.2 %	63.7%	1.3 %	37.4 %	0.6 %	3.3 %	46.0 %	3.0 %	5.0 %	19.6 %	5.8 %
2015	3.7 %	42.1%	24.0%	31.9%	66.5%	9.9%	14.7 %	35.8 %	59.8%	1.3 %	36.5 %	1.2 %	3.5 %	44.2 %	2.8 %	6.7 %	14.9 %	4.5 %
2016	3.9 %	46.3%	21.8%	33.2%	64.0%	11.0%	16.8 %	36.9 %	54.5%	1.4 %	44.4 %	1.0 %	4.5 %	38.9 %	2.3 %	6.0 %	16.5 %	7.5 %