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INTERPROVINCIAL EMPLOYEES FROM NEWFOUNDLAND AND LABRADOR, 2005-2014

STATISTICS COMPONENT REPORT, ON THE MOVE PARTNERSHIP

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ABSTRACT: This report seeks to examine interprovincial employment from Newfoundland and Labrador between 2005 and 2014. The data was provided from the Canadian Employer-Employee Dynamics Database (CEEDD). In terms of analysis, a geospatial visualization approach was taken using mapping software where the data was visualized through maps at the rural secretariat level. Visualization through graphs and tables was considered as well. Through an examination of factors including age, gender, marital status, province of employment, industry, employer size, earnings and percent of earnings from interprovincial employment, it was revealed that those who participated and at what rate varied spatially by rural secretariat. This variation also occurred from year to year. From a policy perspective, these findings can provide evidence for governmental initiatives for families relying on earnings from interprovincial employment.

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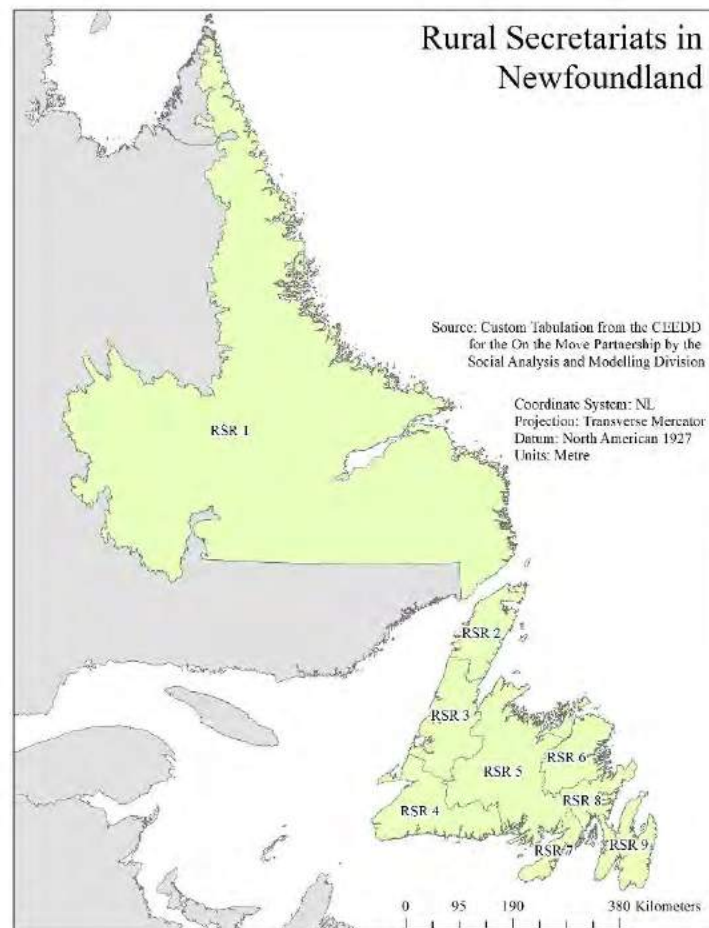
TABLE OF CONTENTS

Abstract.....	1
Acknowledgements.....	1
Introduction	3
Sources.....	4
Total	4
Age	6
Gender	9
Marital Status.....	13
Province of Employment.....	17
Industry	21
Employer Size.....	29
Earnings.....	33
Percent of Earnings from Out-of-Province	36
Conclusions	38
Bibliography	39



INTRODUCTION

These maps, graphs and tables depict statistics on interprovincial employees from Newfoundland and Labrador and those employed in Newfoundland and Labrador between 2005 and 2014. The data includes sociodemographic variables such as: total employment, age, gender, marital status, province of employment, industry, employer size, earnings and percent of earnings from out-of-province. Each variable constitutes a separate section. All Newfoundland and Labrador data has been mapped at the Rural Secretariat level. The Rural Secretariats were “developed for the Rural Secretariat of Executive Council...[and] boundaries were created by merging census consolidated subdivisions” (Newfoundland and Labrador, 2014). The Rural Secretariats include: Avalon Peninsula Region (RSR 9), Burin Peninsula Region (RSR 7), Clarenville-Bonavista Region (RSR 8), Corner Brook-Rocky Harbour Region (RSR 3), Gander Region (RSR 6), Grand Falls-Baie Verte-Harbour Breton Region (RSR 5), Labrador Region (RSR 1), St. Anthony-Port aux Choix Region (RSR 2), and Stephenville-Port aux Basques Region (RSR 4).

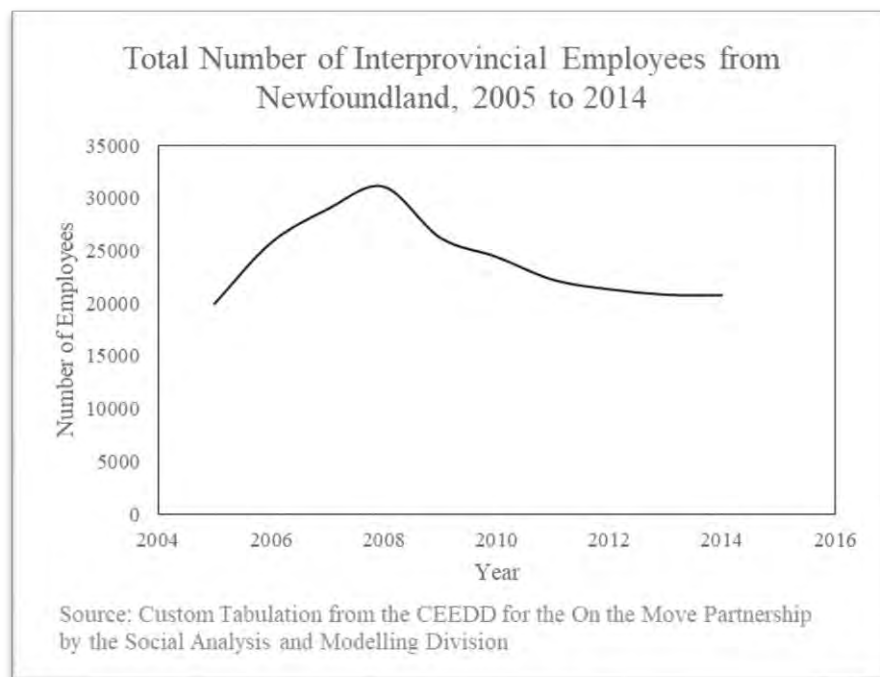


Source: Custom Tabulation from the CEEDD for the On the Move Partnership by the Social Analysis and Modelling Division

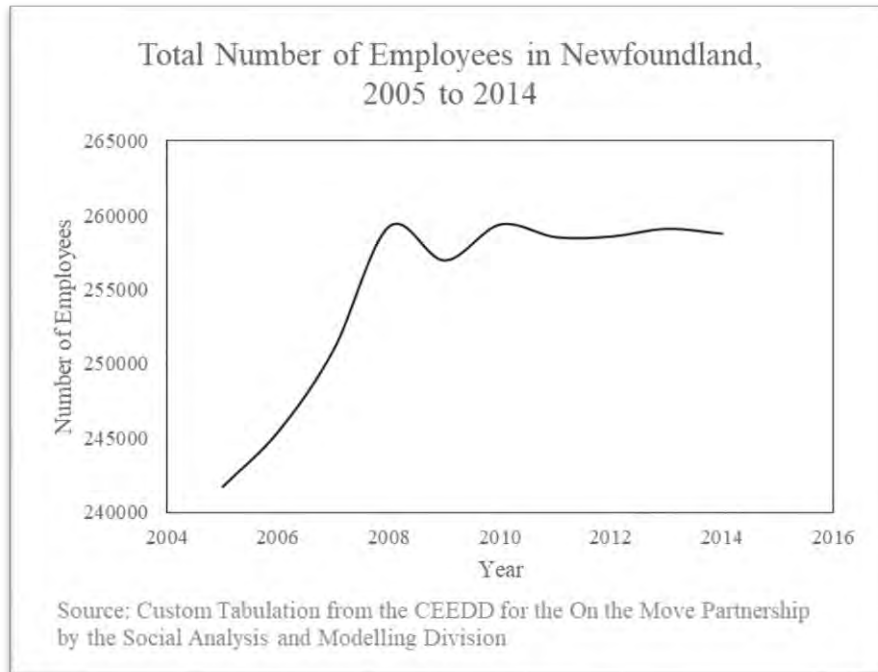
SOURCES

The data presented in this document has been derived from the Canadian Employer-Employee Dynamics Database (CEEDD) for the On the Move Partnership by the Social Analysis and Modelling Division (Statistics Canada 2015, Newfoundland and Labrador 2018). The data comes from “a link between various tax files including the T1 personal, family and business declaration files, the T2 files (corporate tax return and owner files) and the T4 supplementary and summary files, as well as the longitudinal immigration database (IMDB)” (Statistics Canada 2018). On these forms people indicate their birth date (age), gender, marital status, province of employment, employer code and earnings. The data was aggregated and provided in tables at the provincial and rural secretariat levels.

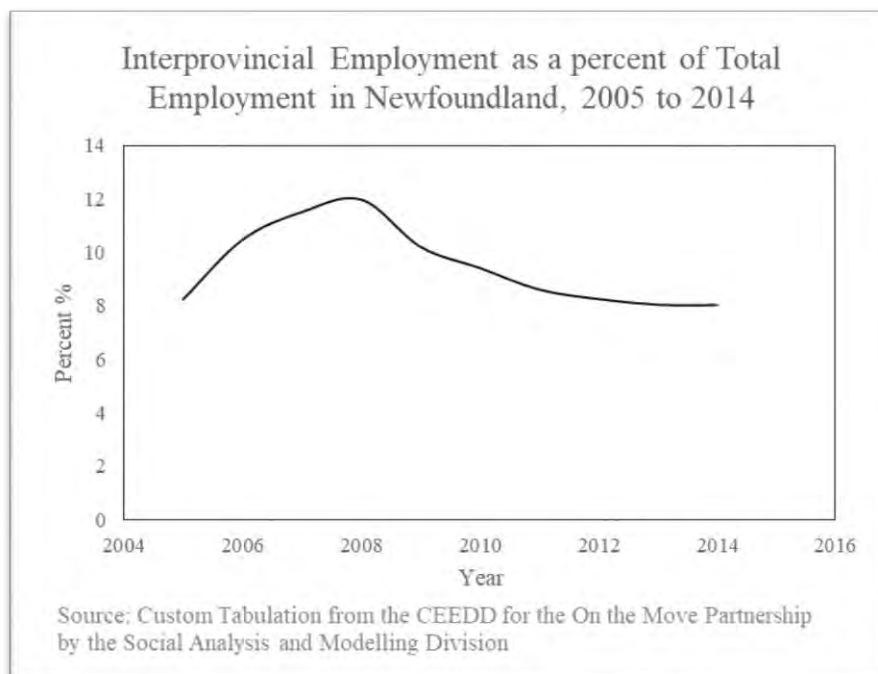
TOTAL



Number of interprovincial employees from Newfoundland and Labrador between 2005 and 2014. There was an increase in interprovincial employees to just over 31000 in 2008. After 2008 there was a decline back to just over 20000 employees.



Total number of employees in Newfoundland between 2005 and 2014. The total rises from 2005 to 2008 with some variability before stabilizing at just under 260,000 employees.

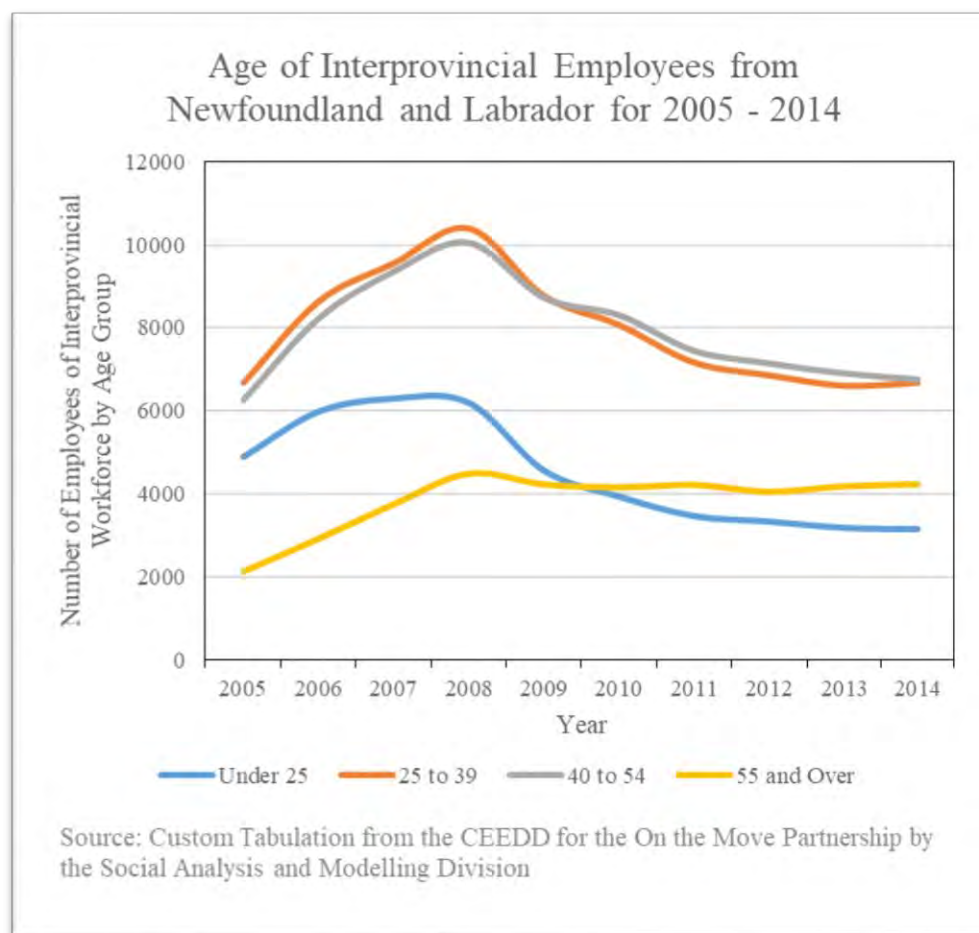


Interprovincial employment as a percent of total employment. As the graph above indicates, the percentage of interprovincial employees as compared to all employees in Newfoundland and

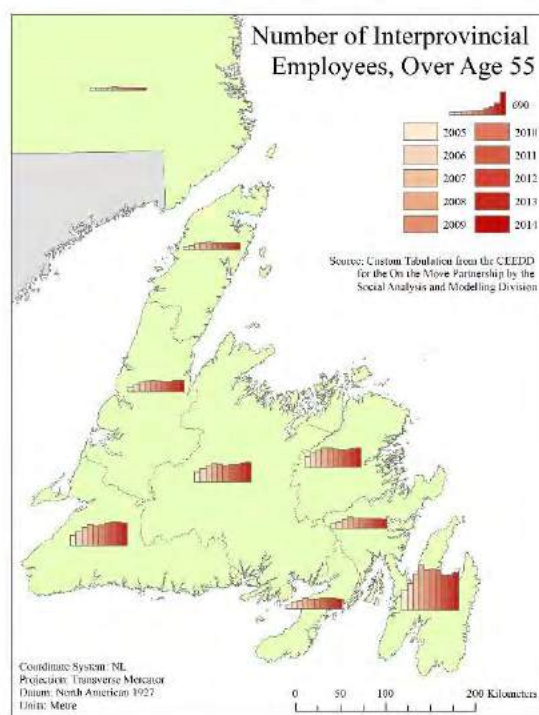
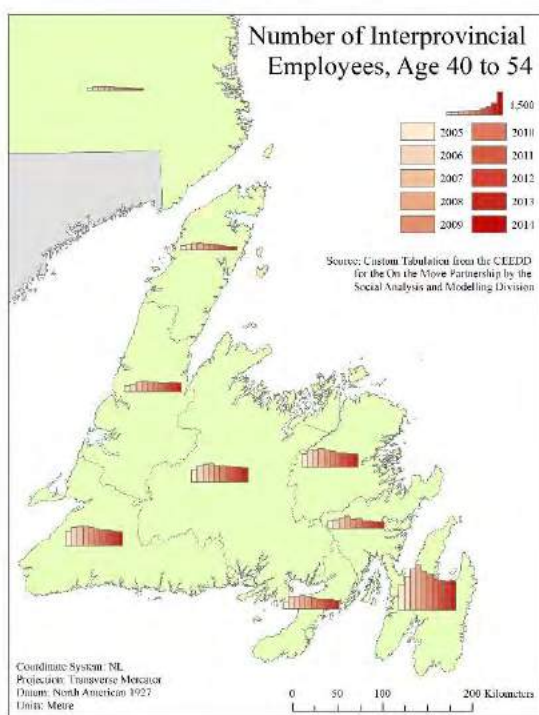
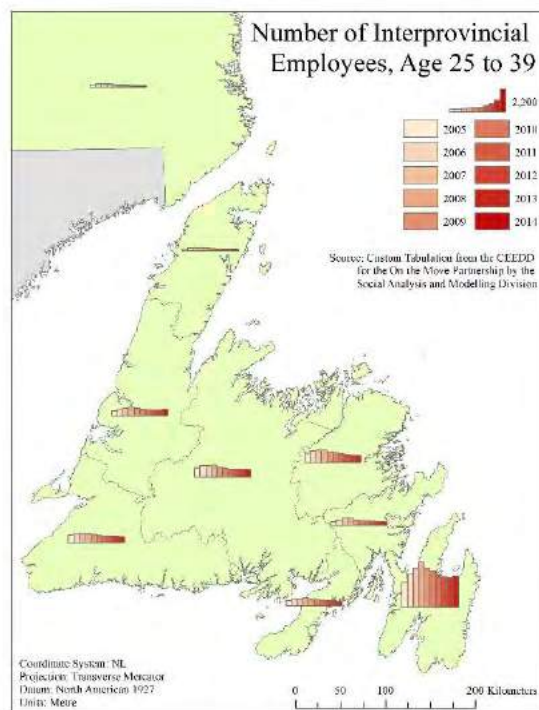
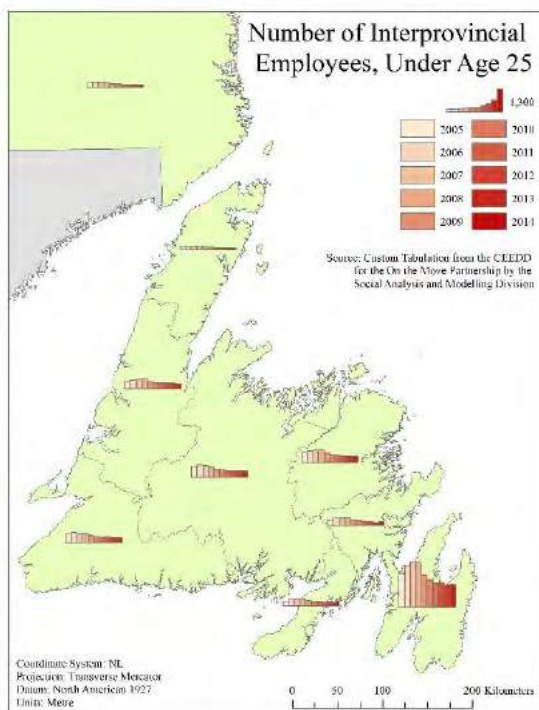
Labrador rises to a peak of 12% in 2008 before declining and leveling off at 8%. This graph has a similar pattern to the total number of interprovincial employees as discussed above.

AGE

Age has been classified into: Under 25, 25 to 39, 40 to 54 and 55 and Over.



Age ranges of interprovincial employees from Newfoundland and Labrador between 2005 and 2014. The number of interprovincial employees under the age of 25 declined after 2008 while the number of those over the age of 55 increased and then remained relatively constant. The middle ranges (25 to 39 and 40 to 54) followed the same pattern of increasing in 2008 at around 10000 employees each before declining.



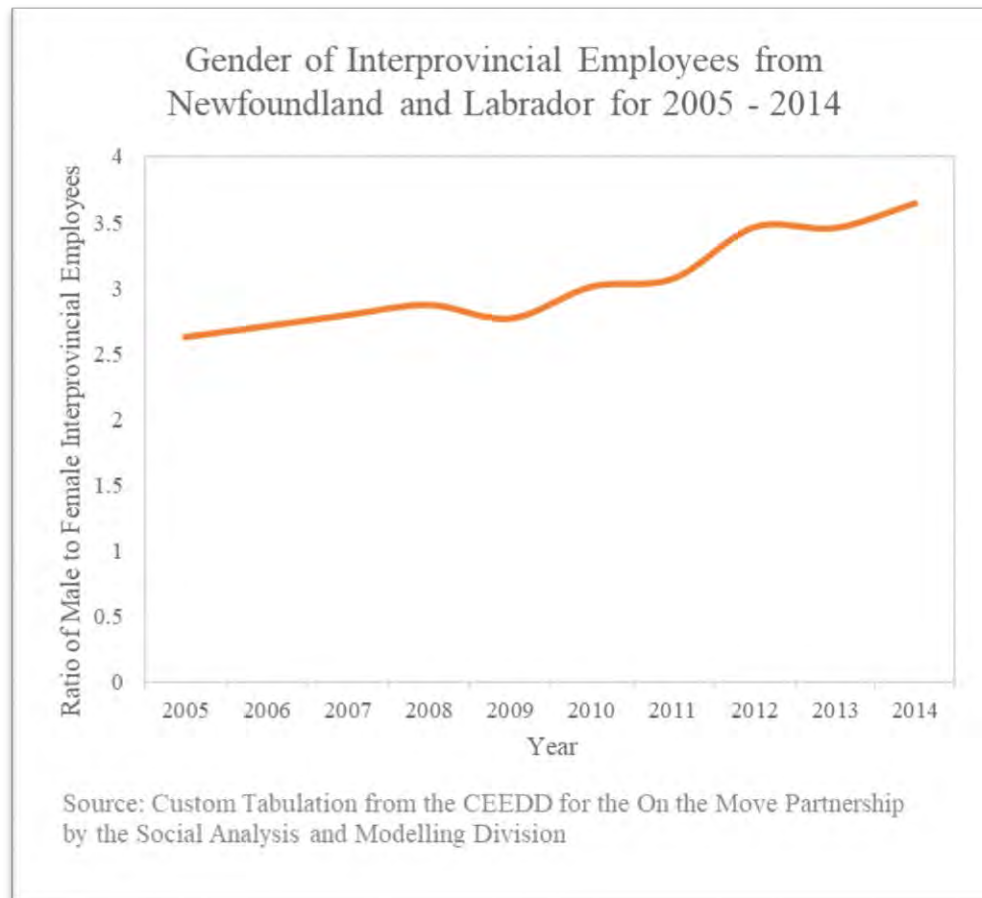
Overall, the largest number of interprovincial employees came from the Avalon Peninsula Region. Very few came from the Labrador Region. Note that as the age increased there were more interprovincial employees coming from other Rural Secretariats such as the Gander, Grand Falls-Baie Verte-Harbour Breton and the Stephenville-Port aux Basques Regions. As the legends indicate, most of the interprovincial employees are between the ages of 25 and 39 with the fewest in the age 55 and over group.

Region	% IPEs Under 25	% IPEs 25 to 40	% IPEs 40 to 55	% IPEs 55 and Over	% All IPEs
<i>Labrador</i>	7.98%	4.52%	3.42%	2.86%	4.37%
<i>St. Anthony - Port au Choix</i>	18.13%	14.80%	13.05%	11.97%	13.46%
<i>Corner Brook - Rocky Harbour</i>	11.38%	9.62%	7.40%	7.13%	8.26%
<i>Stephenville - Port aux Basques</i>	19.69%	21.76%	19.18%	20.88%	19.99%
<i>Grand Falls-Windsor - Baie Verte - Harbour Breton</i>	13.67%	14.33%	12.31%	11.26%	12.34%
<i>Gander - New-Wes-Valley</i>	14.64%	14.92%	12.44%	11.19%	12.78%
<i>Clarenville - Bonavista</i>	14.47%	13.12%	10.37%	9.84%	11.59%
<i>Burin Peninsula</i>	16.35%	22.31%	18.34%	13.50%	17.97%
<i>Avalon Peninsula</i>	7.97%	7.49%	4.83%	4.93%	6.22%

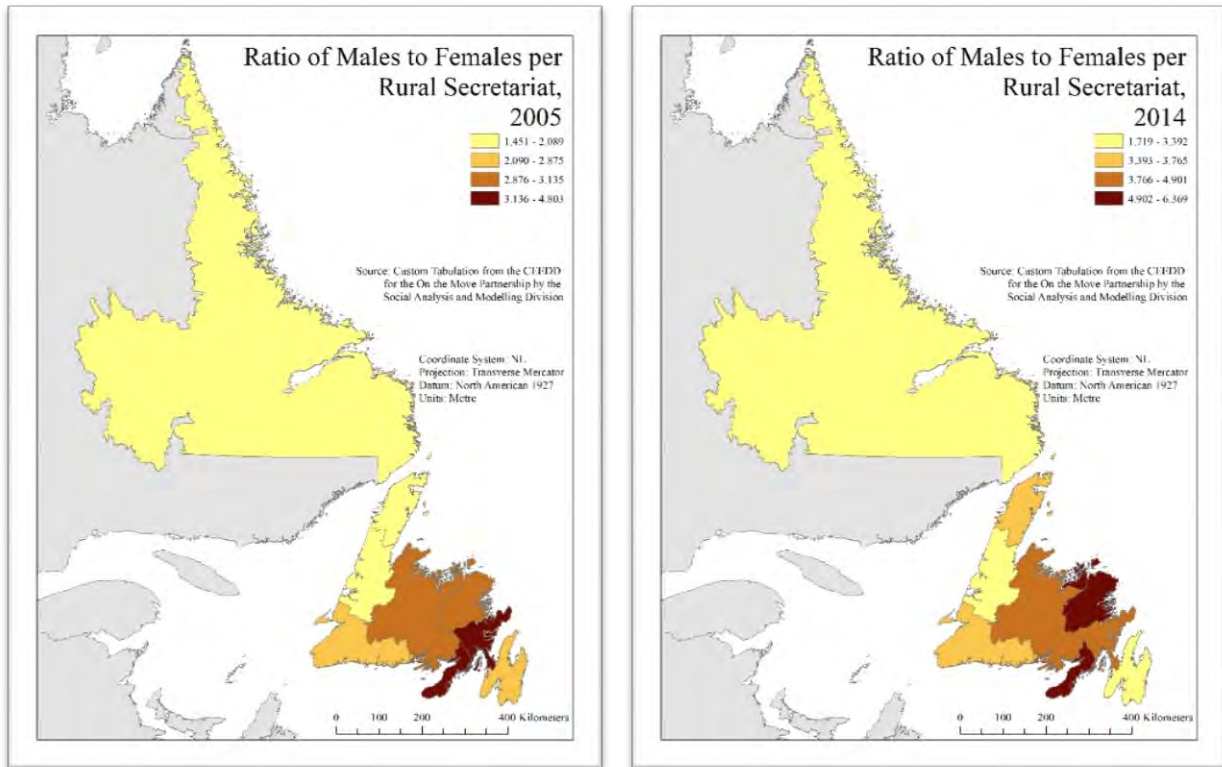
Table indicates the percentage of the median number of interprovincial employees to the total number of those employed per rural secretariat between 2005 and 2014. The table indicates the Stephenville - Port aux Basques Region has the largest proportion across all the age groups at around 20%. The highest proportion was for those aged 25 to 39 in the Burin Peninsula Region.



GENDER

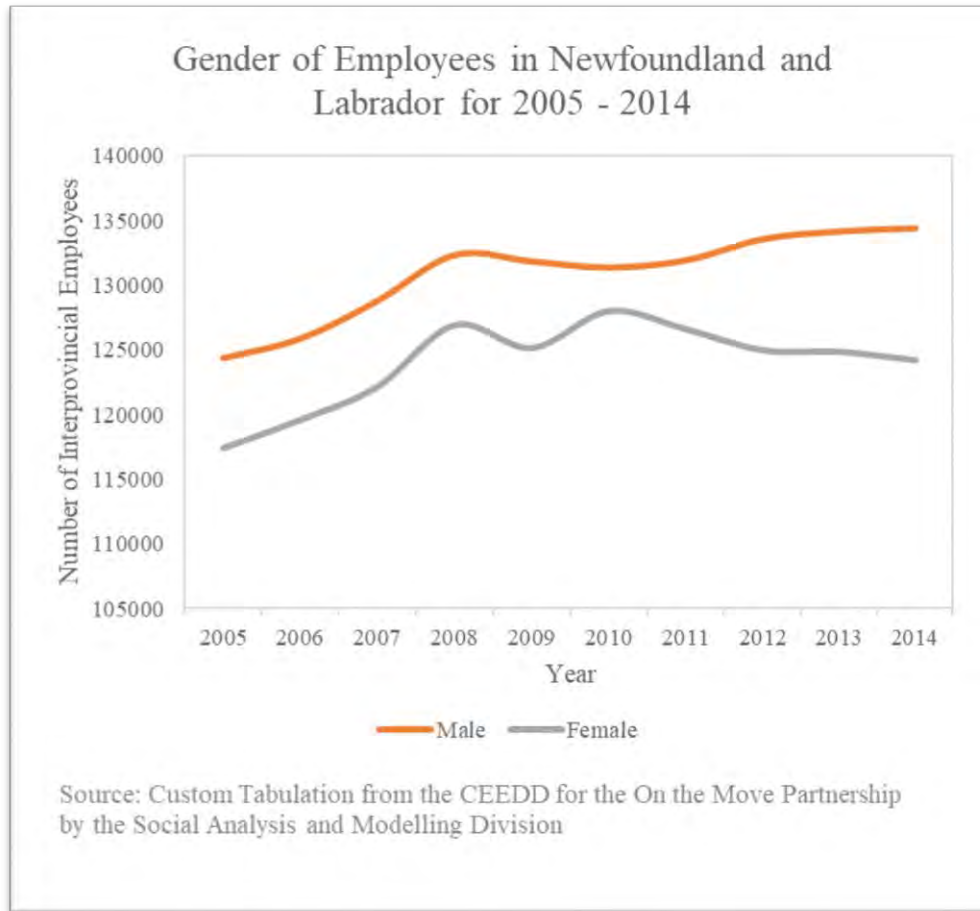


Ratio of male to female interprovincial employees from Newfoundland and Labrador between 2005 and 2014. The data indicates an increase in the ratio of male workers to female workers.

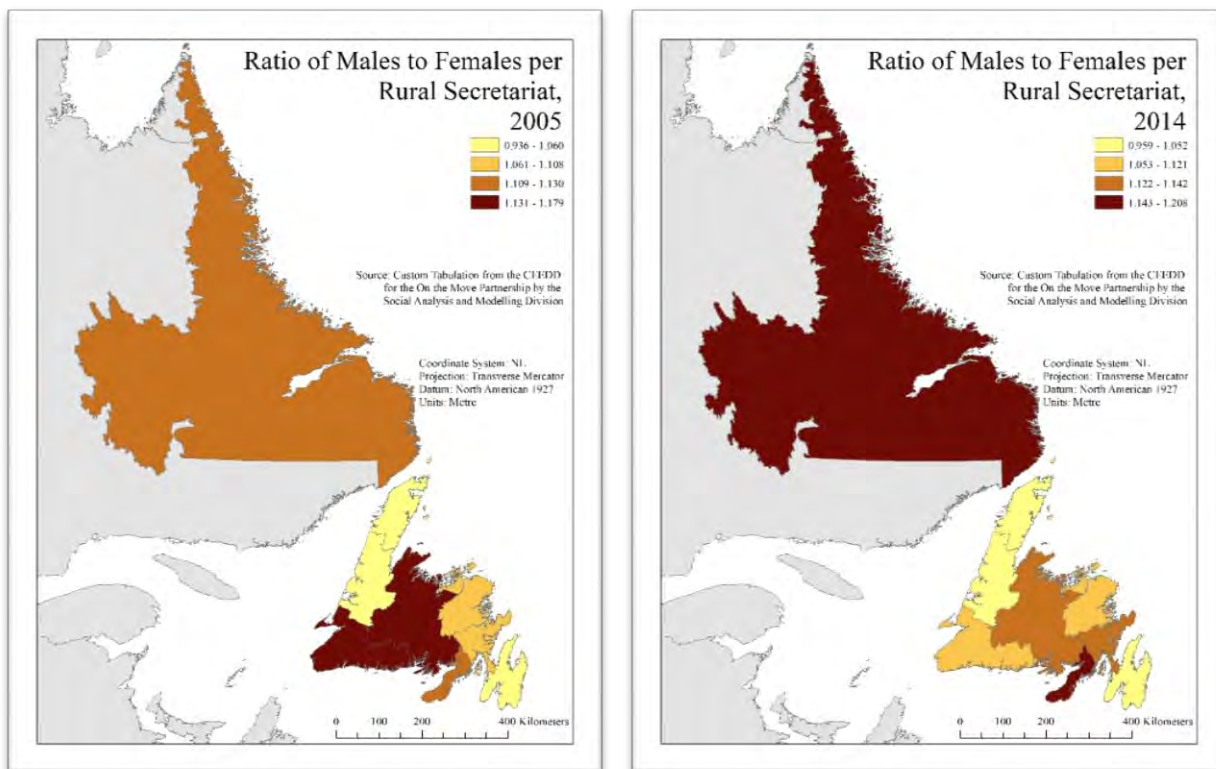


These maps depict the spatial variability of the ratio of males to females in the interprovincial workforce from Newfoundland and Labrador in 2005 and 2014 at the Rural Secretariat level. The maps indicate that the ratio varies from 1.5 to 5 with some variability. The lowest ratio is in the Labrador Region while the highest ratio is in the Burin Peninsula Region.





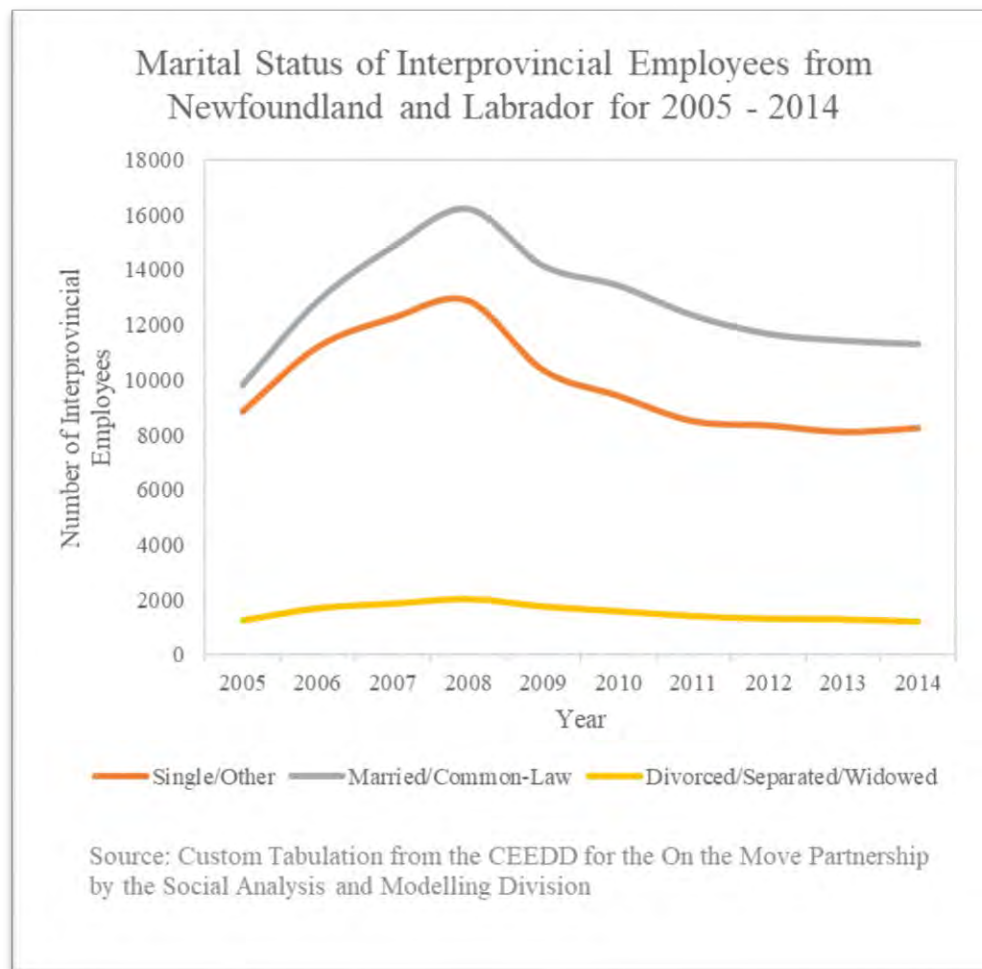
Gender of employees in Newfoundland and Labrador between 2005 and 2014. The data indicates there are more male workers than female workers. After 2010, the trends tend to diverge with an increase in male workers and a decline in female workers.



The first map depicts the spatial variability of the ratio of males to females in the entire workforce in 2005 at the Rural Secretariat level. The second presents the same ratio in 2014. The maps indicate the ratio is close to 1 to 1 with some variability. The lowest ratio is in the St. Anthony - Port aux Choix Region, while the highest ratio is in the Stephenville - Port aux Basques Region in 2005 and the Burin Peninsula Region in 2014.

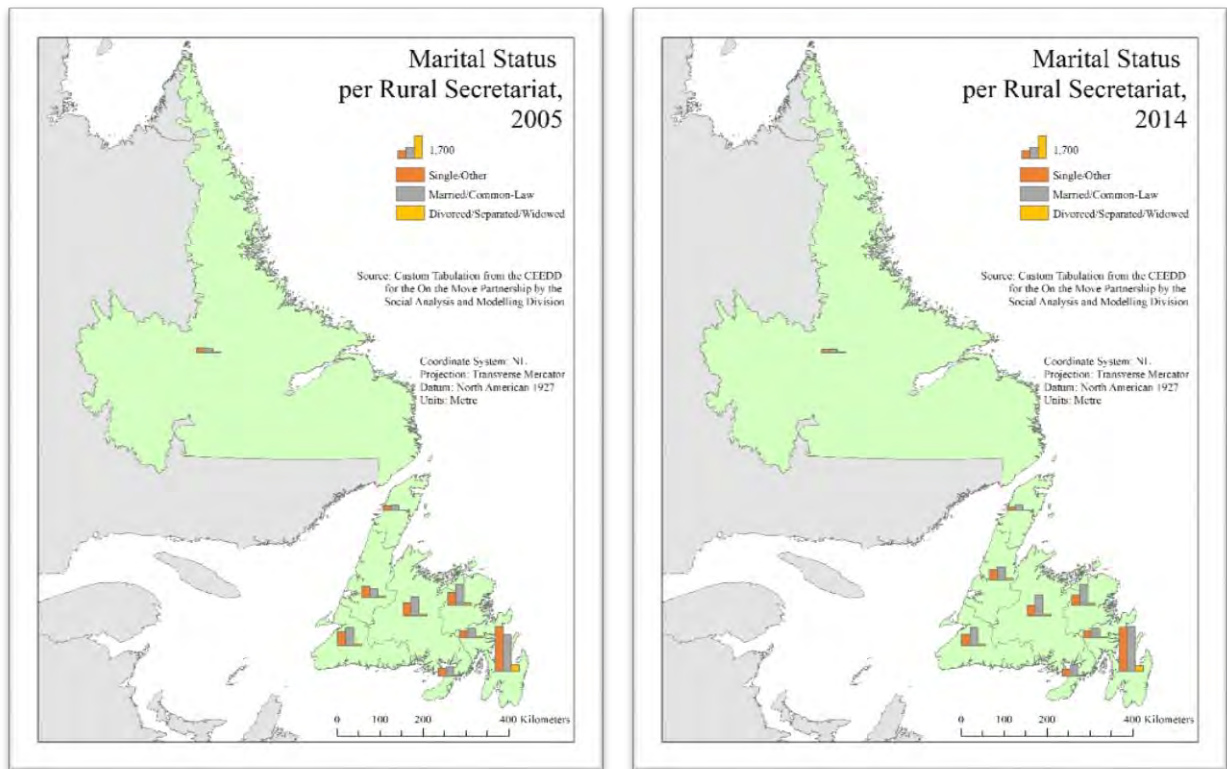


MARITAL STATUS

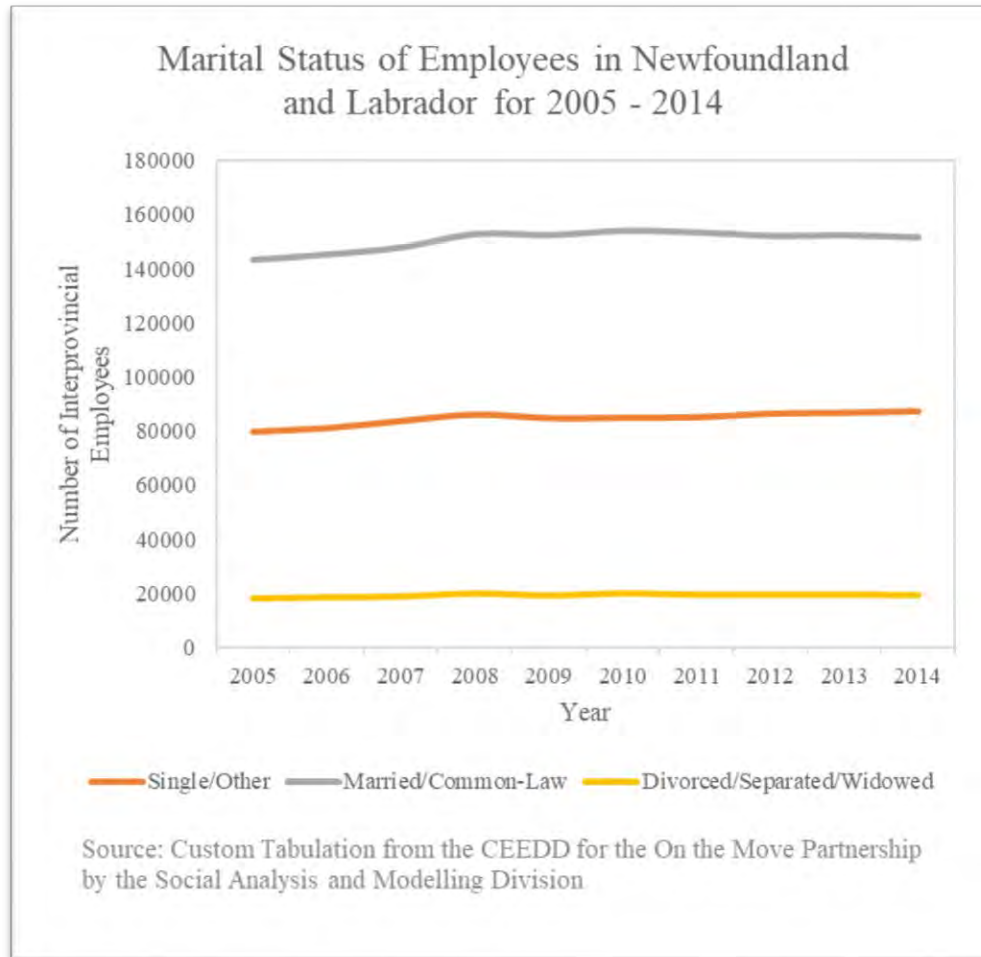


Marital status of interprovincial employees from Newfoundland and Labrador between 2005 and 2014. The number of single/other versus married/common-law employees followed a similar trend to the total number of employees with a rise to approximately 13000 and 16000 employees respectfully in 2008 before declining and levelling out. The number of divorced/separated/widowed employees followed the total trend as well but did not vary greatly. Note, marital status is self-declared on the T1 tax forms.

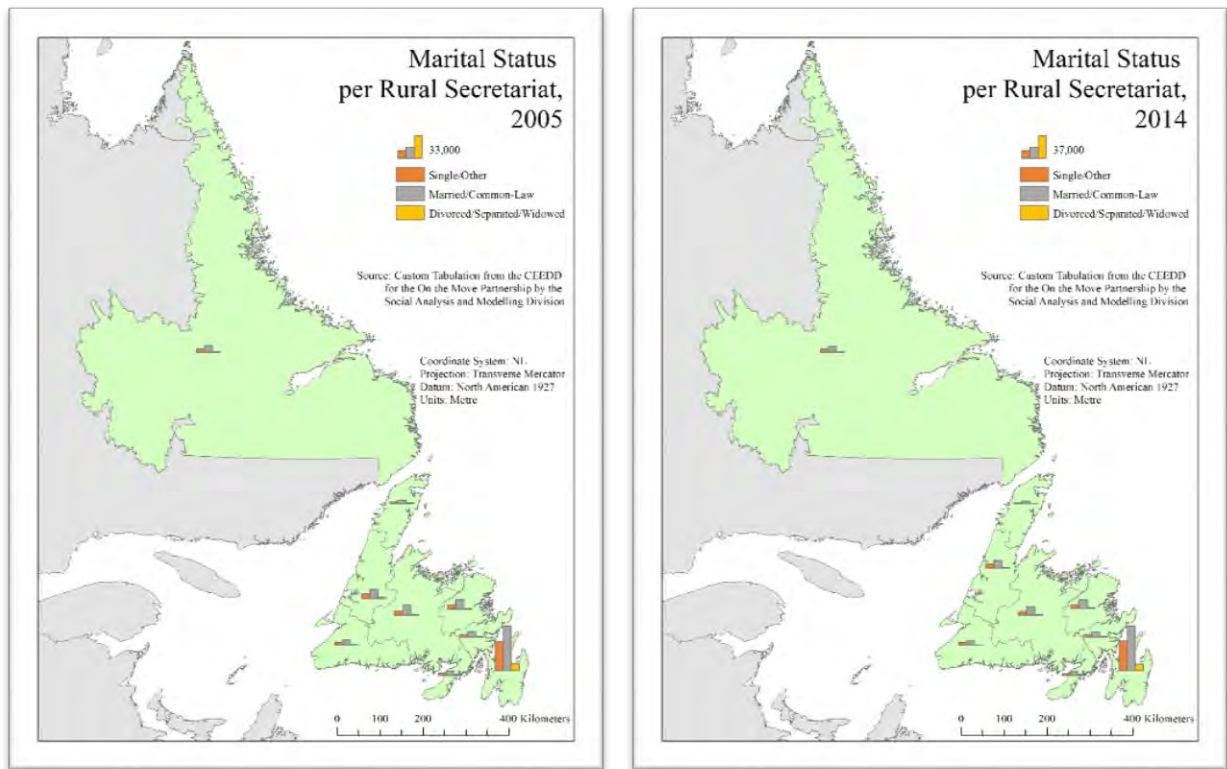




These maps depict the number of single, married and divorced/separated/widowed interprovincial employees by Rural Secretariat in 2005 and 2014. In the majority of places, most interprovincial employees are listed as married. However, in the Avalon Peninsula Region and the Labrador Region, the number of single interprovincial employees appear to be greater than or similar to the number of married interprovincial employees for 2005 and 2014 respectively.

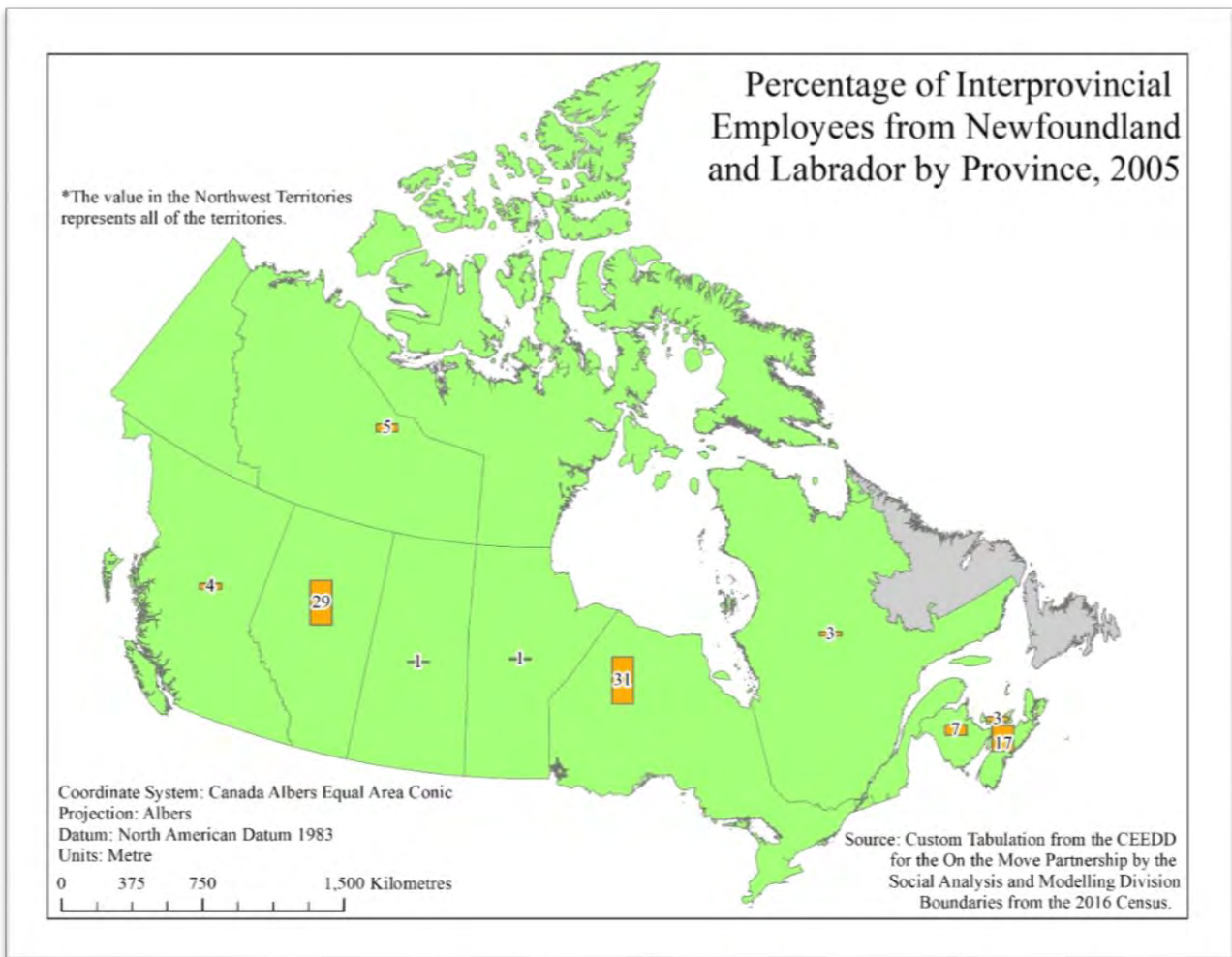


Marital status of all employees in Newfoundland. The totals in each category appear to be relatively constant. Note, marital status is self-declared on the T1 tax forms.



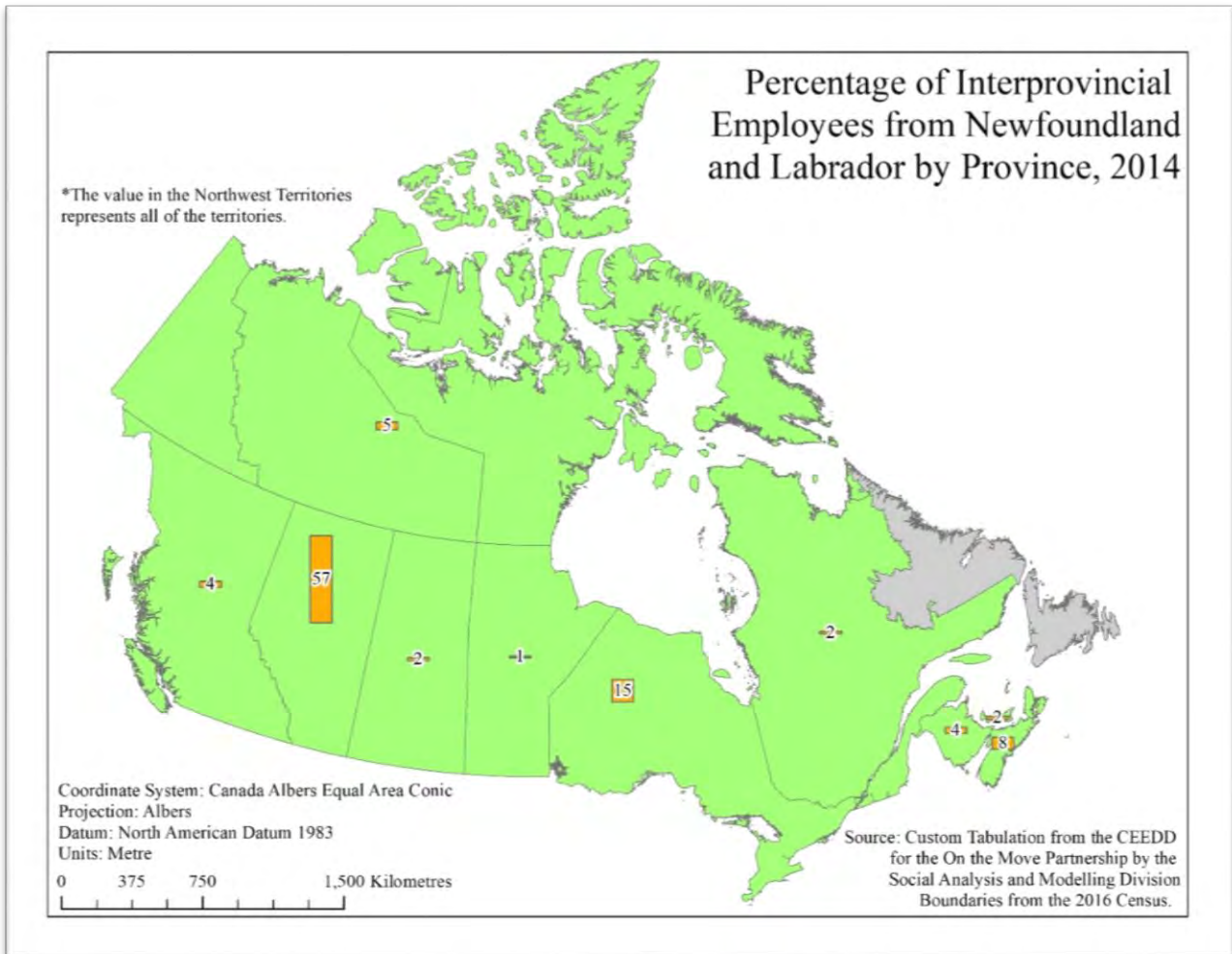
These maps depict the number of single, married and divorced/separated/widowed employees by rural secretariat in 2005 and 2014. In the majority of places, most employees are listed as married.

PROVINCE OF EMPLOYMENT



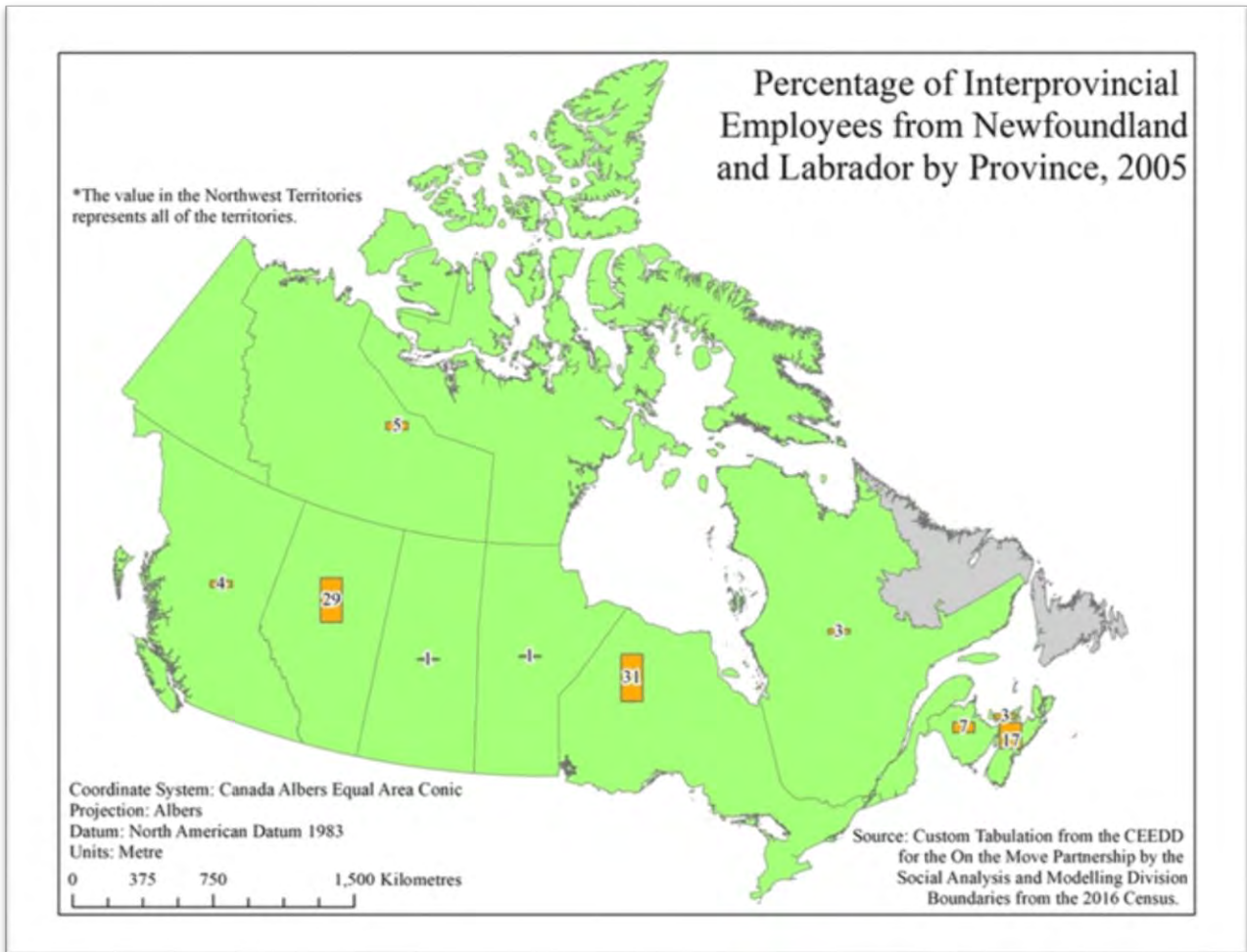
This map depicts the percentage of interprovincial employees from Newfoundland and Labrador by province in 2005. The province with the largest number of interprovincial employees is Ontario, followed closely by Alberta. Nova Scotia is in the middle with 17%. Most of the provinces and territories have under 10%. The fewest are in Manitoba and Saskatchewan.



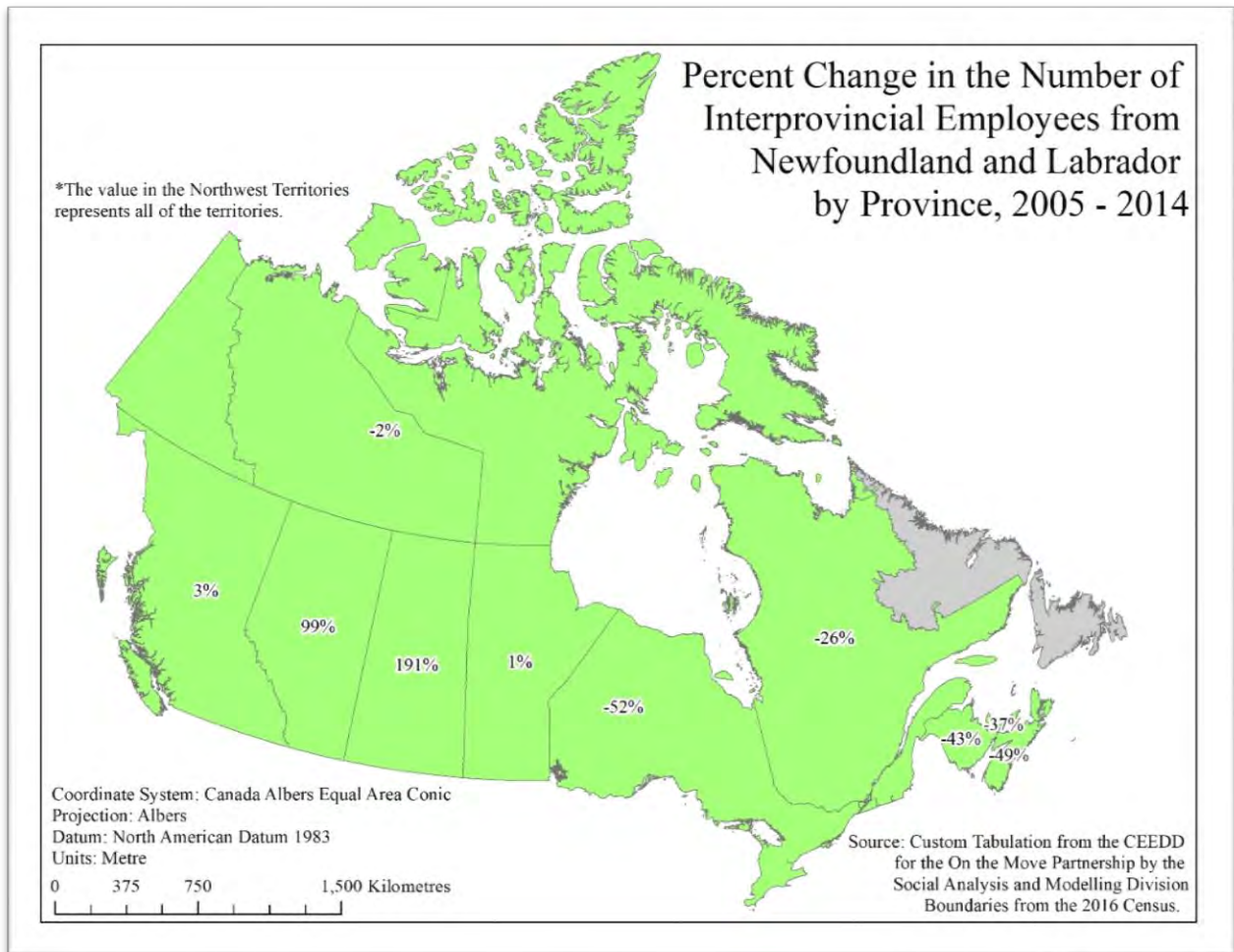


Percentage of interprovincial employees from Newfoundland and Labrador by province in 2014. As indicated on the map above, the province with the largest number of interprovincial employees from Newfoundland and Labrador in 2014 was Alberta. Ontario has the next largest total with 15%. The remaining provinces and territories have under 10%. The fewest are in Manitoba.





This map movie (click [here](#) for online moving GIF version) depicts the percentage of interprovincial employees from Newfoundland and Labrador by province between 2005 and 2014. The maps indicate the fluxes in the numbers by province over time.



Percent change in the number of interprovincial employees from Newfoundland and Labrador by province between 2005 and 2014. The province with the largest percent increase is Saskatchewan with 191% followed by Alberta with a close to 100% increase. Manitoba and British Columbia saw very modest gains with every other province and territory recording percent losses.

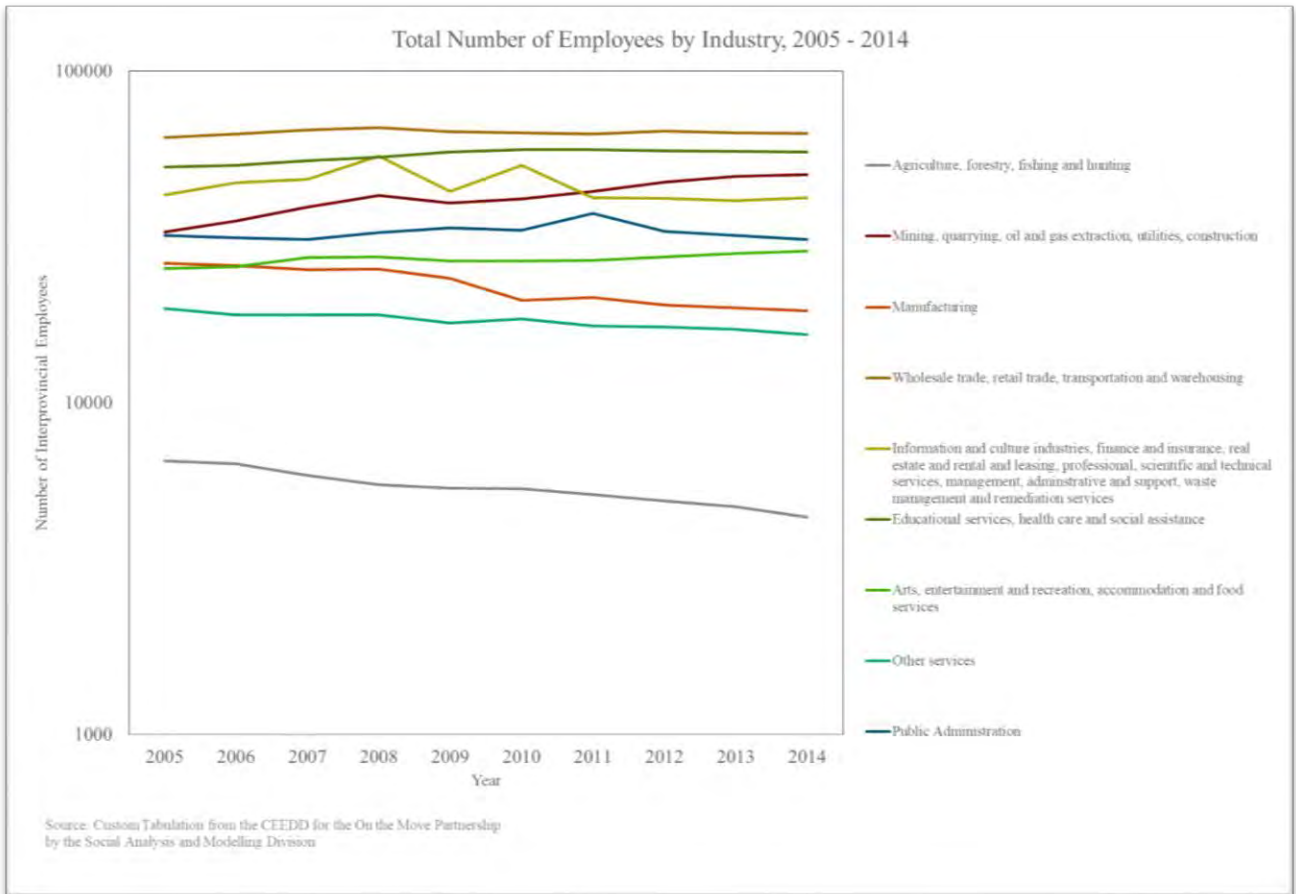


INDUSTRY



The mining, quarrying, oil and gas extraction, utilities and construction industries have the largest number of interprovincial employees, while agriculture, forestry, fishing and hunting have the fewest. As the graph indicates, most interprovincial employees leave Newfoundland and Labrador to work in the construction and oil and gas industries while few work in the food production and forestry industry.





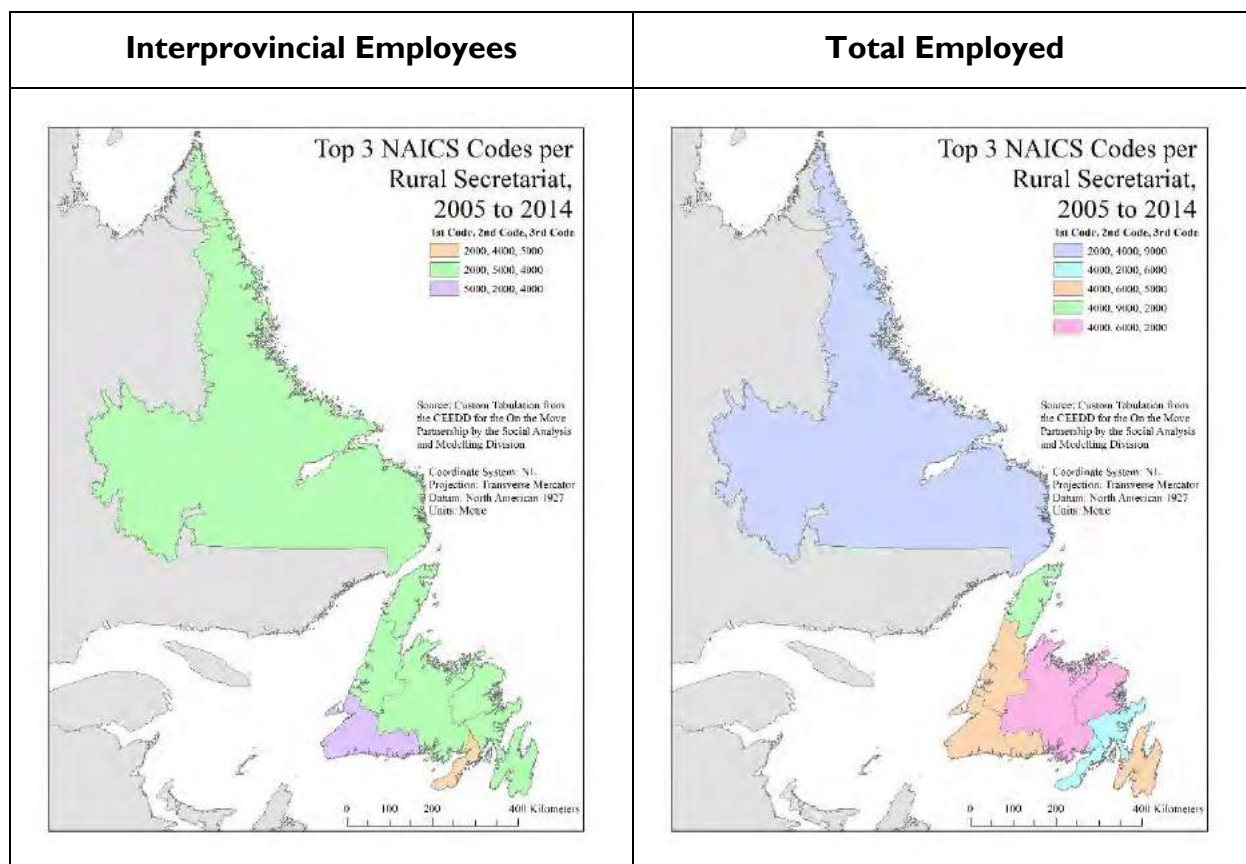
The largest number of employees in Newfoundland and Labrador are in the wholesale trade, retail trade, transportation and warehousing industry and the educational services, health care and social assistance industry. The mining, quarrying, oil and gas extraction, utilities and construction industry and the information and culture industries, finance and insurance, real estate and rental and leasing, professional, scientific and technical services, management, administrative and support, waste management and remediation services are also prominent here as well. Once again, the agriculture, forestry, fishing and hunting industry has the fewest employees.



The industries are defined by NAICS code. These codes and descriptions are provided below.

NAICS	Code Description
1000-Level	Agriculture, forestry, fishing and hunting
2000-Level	Mining, quarrying, oil and gas extraction, utilities, construction
3000-Level	Manufacturing
4000-Level	Wholesale trade, retail trade, transportation and warehousing
5000-Level	Information and culture industries, finance and insurance, real estate and rental and leasing, professional, scientific and technical services, management, administrative and support, waste management and remediation services
6000-Level	Educational services, health care and social assistance
7000-Level	Arts, entertainment and recreation, accommodation and food services
8000-Level	Other services
9000-Level	Public Administration

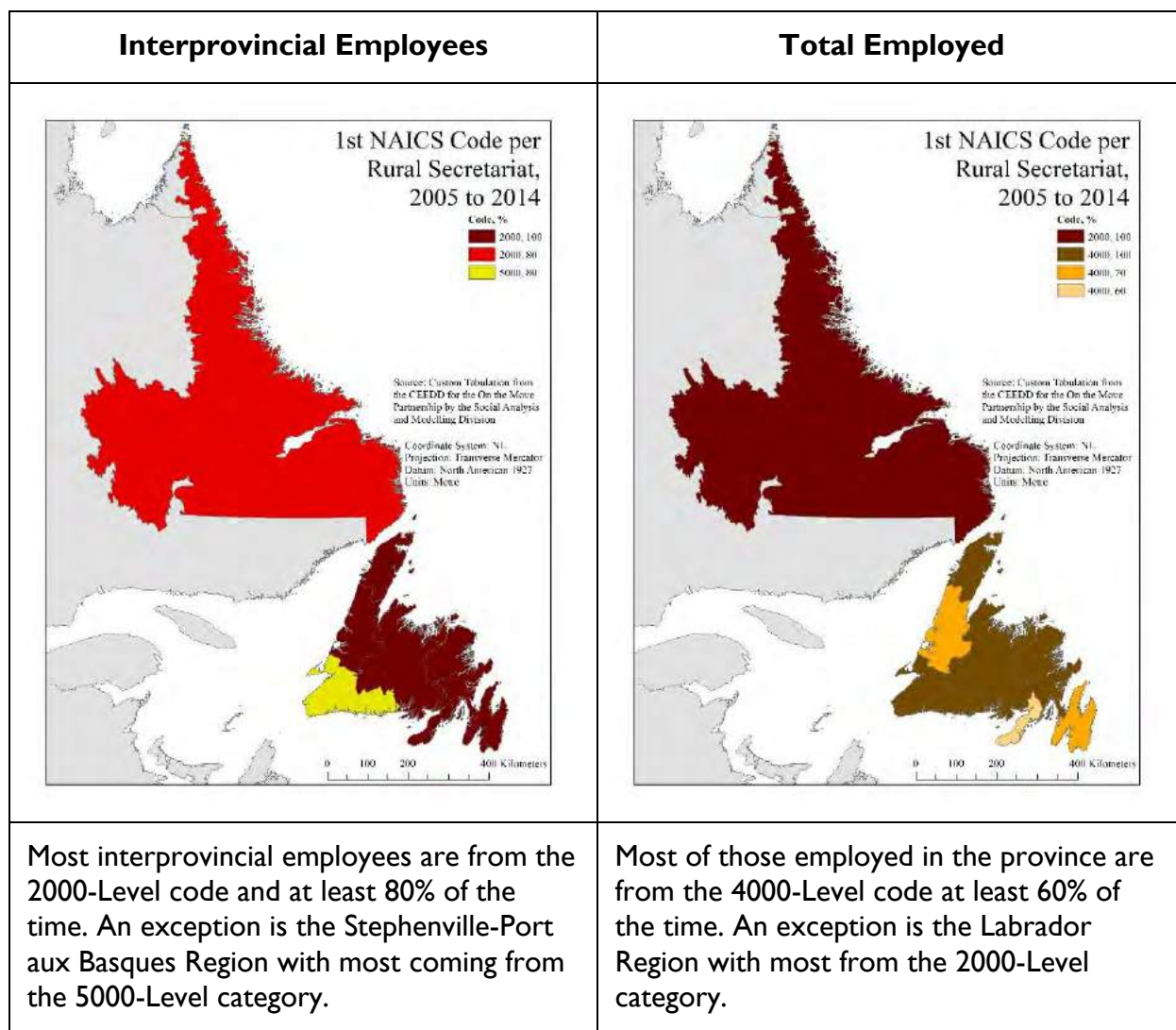


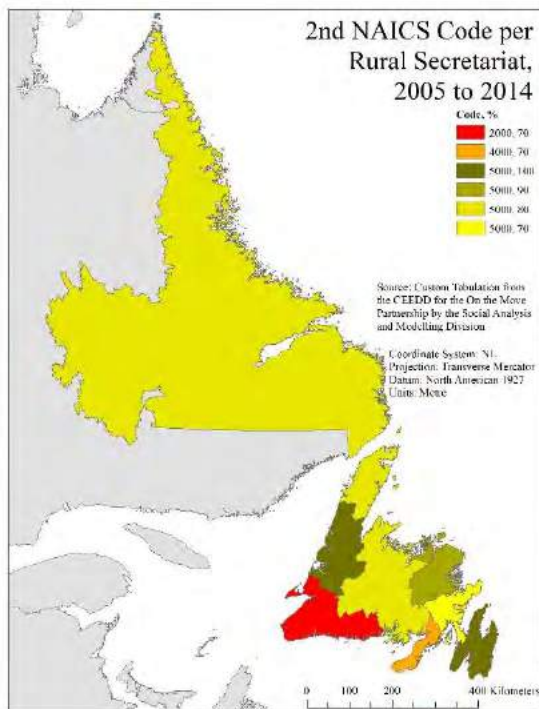


The map on the left indicates the top three NAICS codes per Rural Secretariat level between 2005 and 2014 for interprovincial employment. The map on the right indicates the top three NAICS codes per Rural Secretariat level for total employment. On the left, most areas follow the graph above with the 2000-Level as the largest number of interprovincial employees followed by the 5000-Level (second largest) and the 4000-Level (third largest). On the right, there is more spatial variability in the codes and their order between the Rural Secretariats.

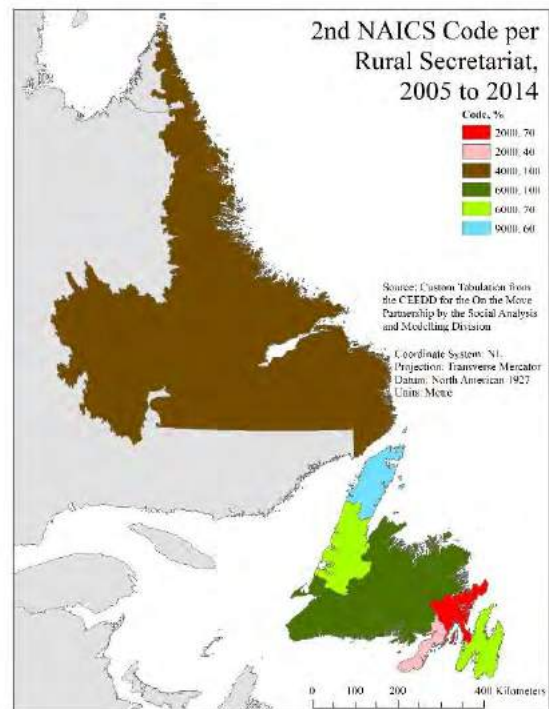
The following maps look at the number of years the top NAICS codes occurred per Rural Secretariat between 2005 and 2014 as expressed as a percent.





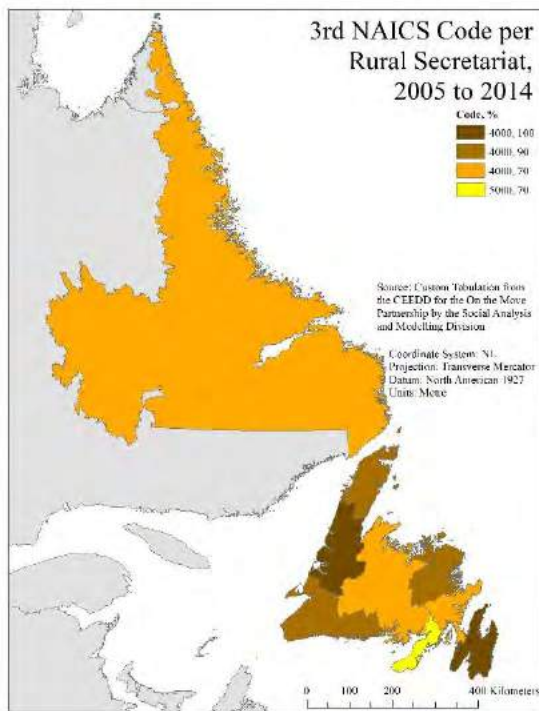


The second most common NAICS code is the 5000-Level occurring at least 70% of the time. The 2000 and 4000-Levels also occurred at 70% of the time.

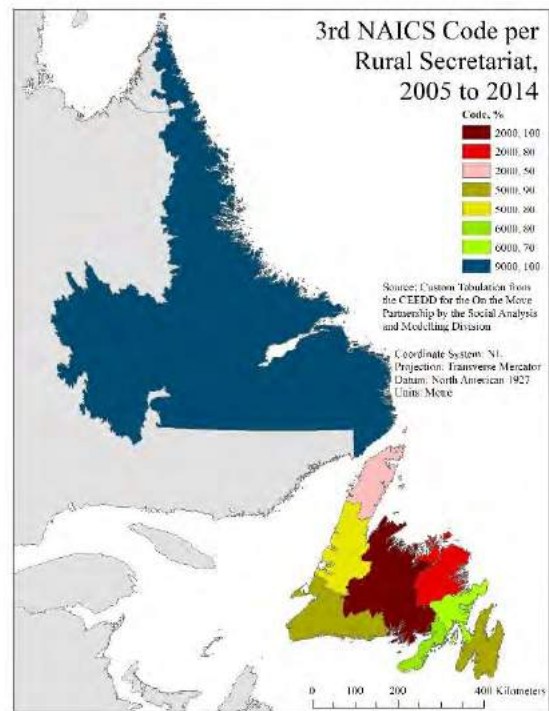


The second most common NAICS code for those employed in the province varies spatially and includes the 2000, 4000, 6000 and 9000-Level codes at least 60% of the time. In the Burin Peninsula Region, the 2000-Level code occurs 40% of the time which indicates greater variability.





The third most common NAICS code is the 4000-Level at least 70% of the time. An exception is the Burin Peninsula Region with most from the 5000-Level category.



The third most common NAICS code for those employed in the province varies spatially and includes the 2000, 4000, 6000 and 9000-Level codes at least 70% of the time. Most regions are over 80% of the time. In the St. Anthony-Port aux Choix Region, the 2000-Level code occurs 50% of the time which indicates greater variability.



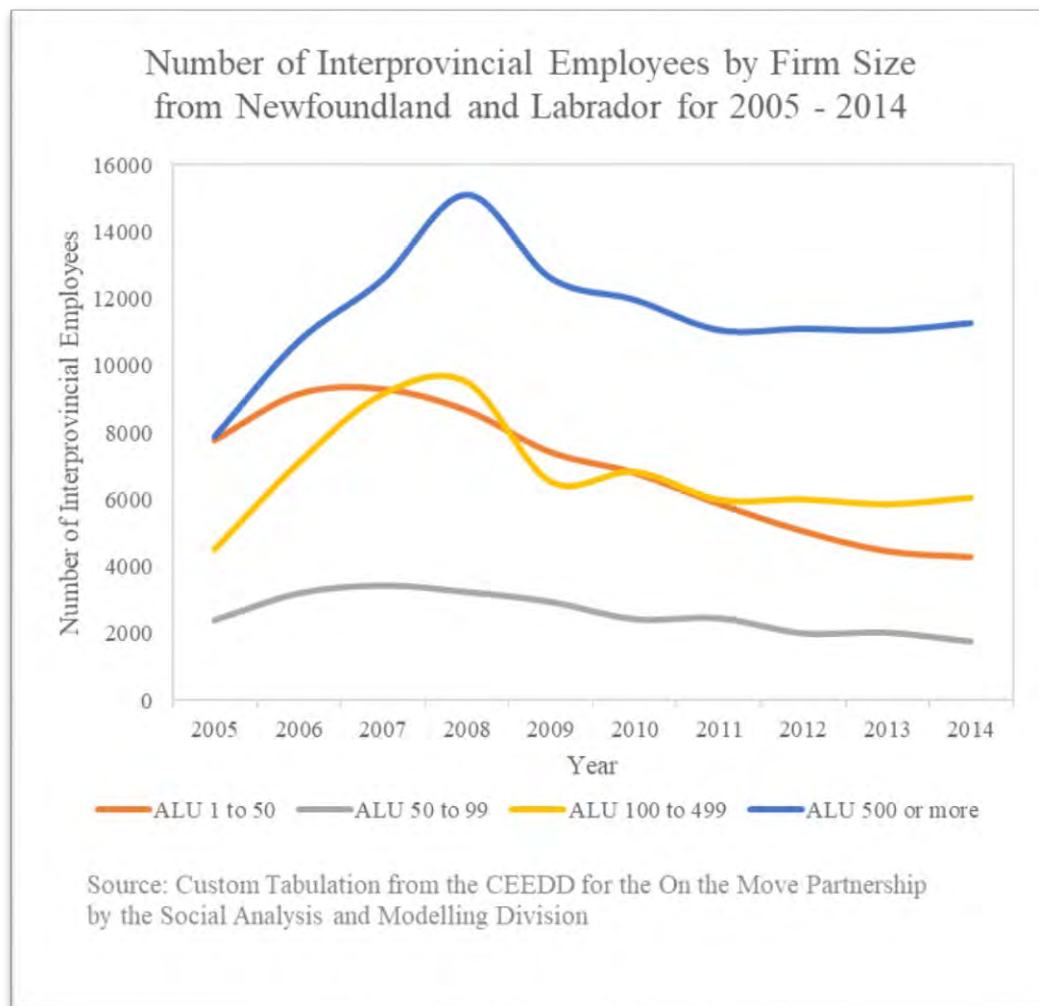
Region	1000- Level	2000- Level	3000- Level	4000- Level	5000- Level	6000- Level	7000- Level	8000- Level	9000- Level
<i>Labrador</i>	9.38%	3.79%	4.35%	2.46%	6.67%	5.01%	3.68%	4.61%	2.10%
<i>St. Anthony - Port au Choix</i>	10.99%	40.79%	6.27%	7.56%	26.03%	3.88%	6.99%	4.72%	2.84%
<i>Corner Brook - Rocky Harbour</i>	7.03%	26.54%	5.29%	5.46%	14.94%	2.64%	5.10%	6.25%	4.31%
<i>Stephenville - Port aux Basques</i>	46.12%	39.68%	32.63%	14.98%	37.26%	3.28%	12.21%	9.75%	6.58%
<i>Grand Falls-Windsor - Baie Verte - Harbour Breton</i>	6.28%	34.02%	11.45%	7.51%	17.80%	2.61%	9.13%	5.97%	3.43%
<i>Gander - New-Wes-Valley</i>	11.12%	37.53%	7.76%	8.34%	23.84%	2.33%	6.45%	8.34%	4.21%
<i>Clarenville - Bonavista</i>	7.62%	28.36%	3.06%	9.10%	21.16%	1.98%	5.96%	6.35%	4.21%
<i>Burin Peninsula</i>	7.74%	45.67%	12.77%	11.30%	18.44%	1.70%	8.69%	5.55%	4.84%
<i>Avalon Peninsula</i>	6.97%	17.51%	4.56%	4.57%	7.31%	2.16%	4.48%	4.61%	3.79%

The table above displays the percentage of the median number of interprovincial employees to the total number of those employed between 2005 and 2014 by NAICS Code. The table indicates the 2000-Level code has the largest proportion across all the rural secretariats. The highest proportion were those in the 1000-Level code in the Stephenville - Port aux Basques Region.



EMPLOYER SIZE

Employer size has been classified into the number of employees.



ALU “is calculated by dividing the total payroll of the company by the average earnings for all full- and part-time employees in the province, industry, and firm-size category to which the firm belongs” (Green, Liu, Ostrovsky & Picot, 2016).

The graph above depicts the number of interprovincial employees by firm size from Newfoundland and Labrador between 2005 and 2014. Between 2005 and 2014, the number of interprovincial employees in firms under 50 employees declined after 2007 while the number of those in firms over 500 employees increased to approximately 15000 in 2008 before declining and leveling off at around 11000. The most variability was in the number of interprovincial employees of firms sized 100 to 499 employees with a peak of 9500 in 2008, a drop to 6500 in 2009 and then a rise again in 2010 to 6800 before levelling off at around 6000 employees. The number of employees in firms sized 50 to 99 employees declined from 2007.

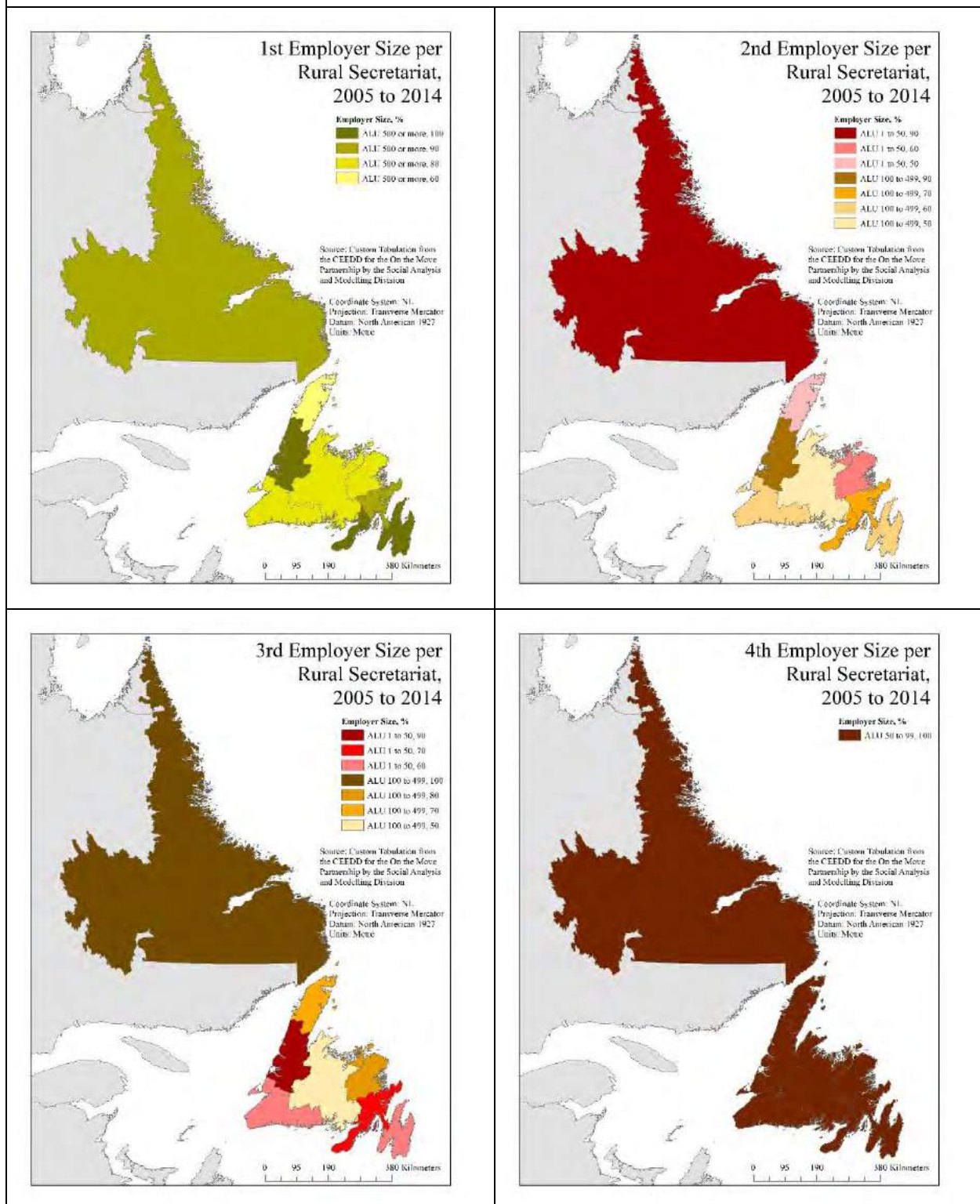


Region	ALU 1 to 50	ALU 50 to 99	ALU 100 to 499	ALU 500 or more
<i>Labrador</i>	3.59%	4.10%	3.62%	1.71%
<i>St. Anthony - Port au Choix</i>	9.12%	15.82%	22.48%	4.89%
<i>Corner Brook - Rocky Harbour</i>	5.62%	9.16%	12.71%	4.13%
<i>Stephenville - Port aux Basques</i>	13.99%	26.53%	32.15%	8.42%
<i>Grand Falls-Windsor - Baie Verte - Harbour Breton</i>	8.36%	15.76%	19.34%	5.81%
<i>Gander - New-Wes-Valley</i>	9.94%	15.05%	15.59%	5.72%
<i>Clarenville - Bonavista</i>	7.40%	11.10%	19.55%	4.90%
<i>Burin Peninsula</i>	10.05%	16.00%	22.15%	10.84%
<i>Avalon Peninsula</i>	4.14%	5.28%	7.13%	3.29%

The table above displays the percentage of the median number of interprovincial employees to the total number of those employed between 2005 and 2014 by employer size. The table indicates the companies with over 500 employees account for the smallest share. The largest share is in those companies with between 100 to 499 employees. The share of those in companies sized 50 to 99 employees also account for a large proportion of interprovincial employees.

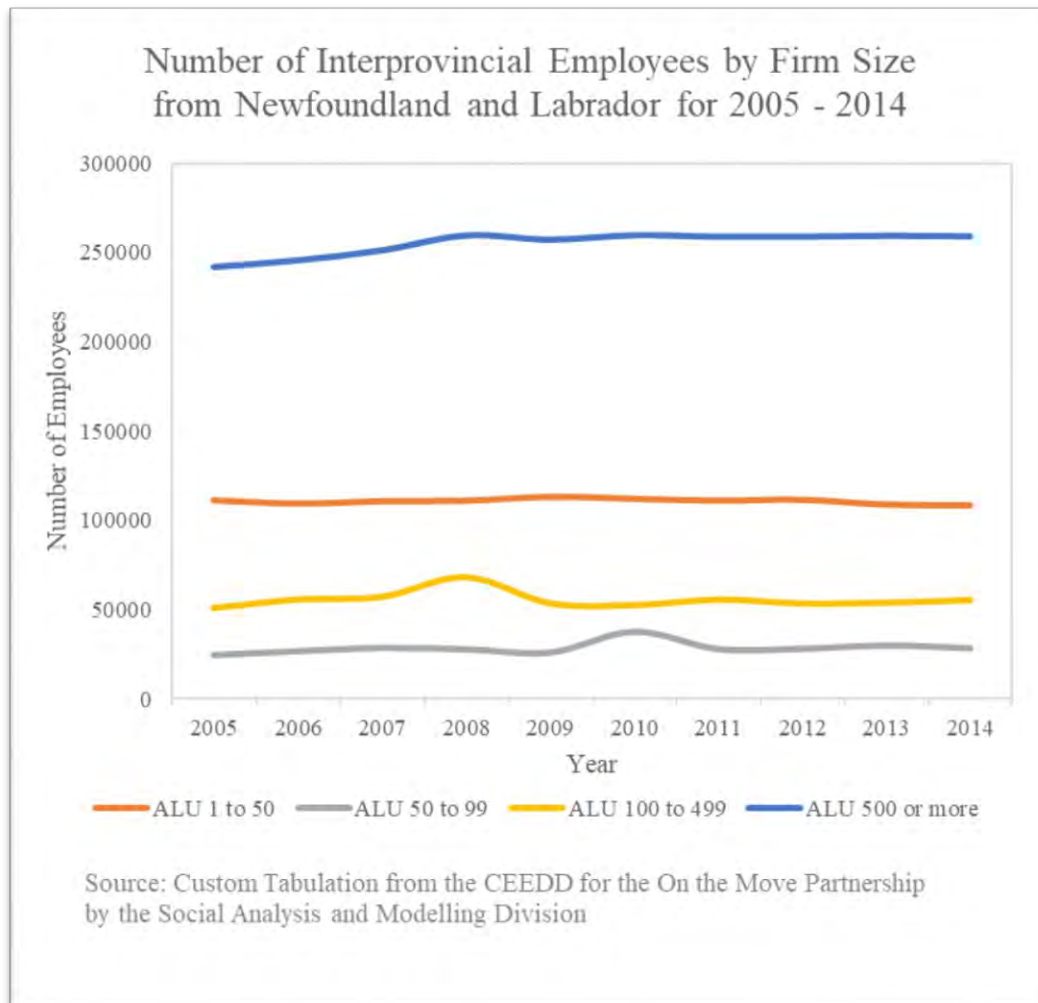


Interprovincial Employees



Most interprovincial employees work for large companies with over 500 employees. However, there is some spatial and temporal variation in the number of times a particular sized company classification was the 1st, 2nd or 3rd largest employer. The fewest interprovincial employees consistently work for companies with between 50 and 99 workers.

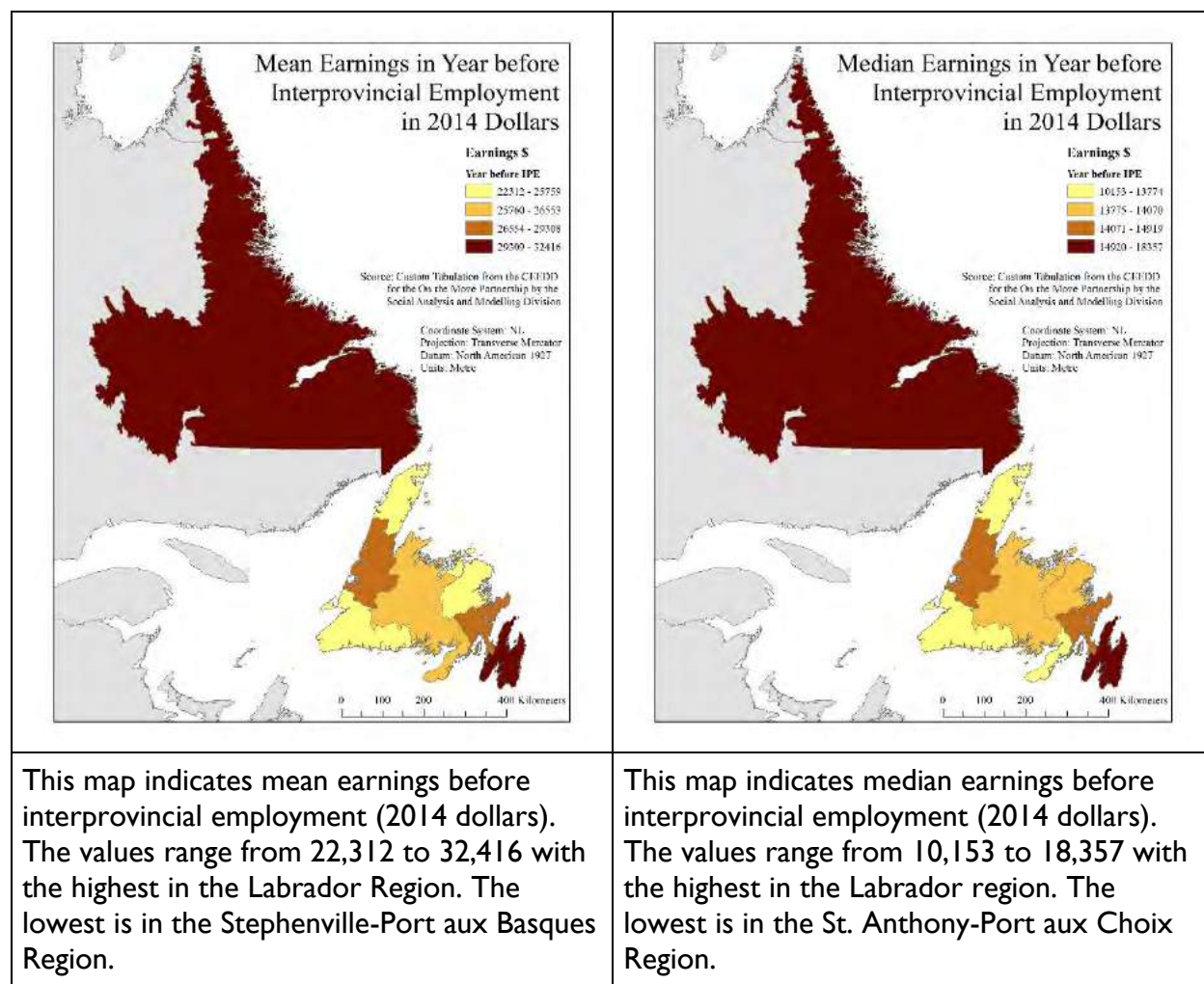


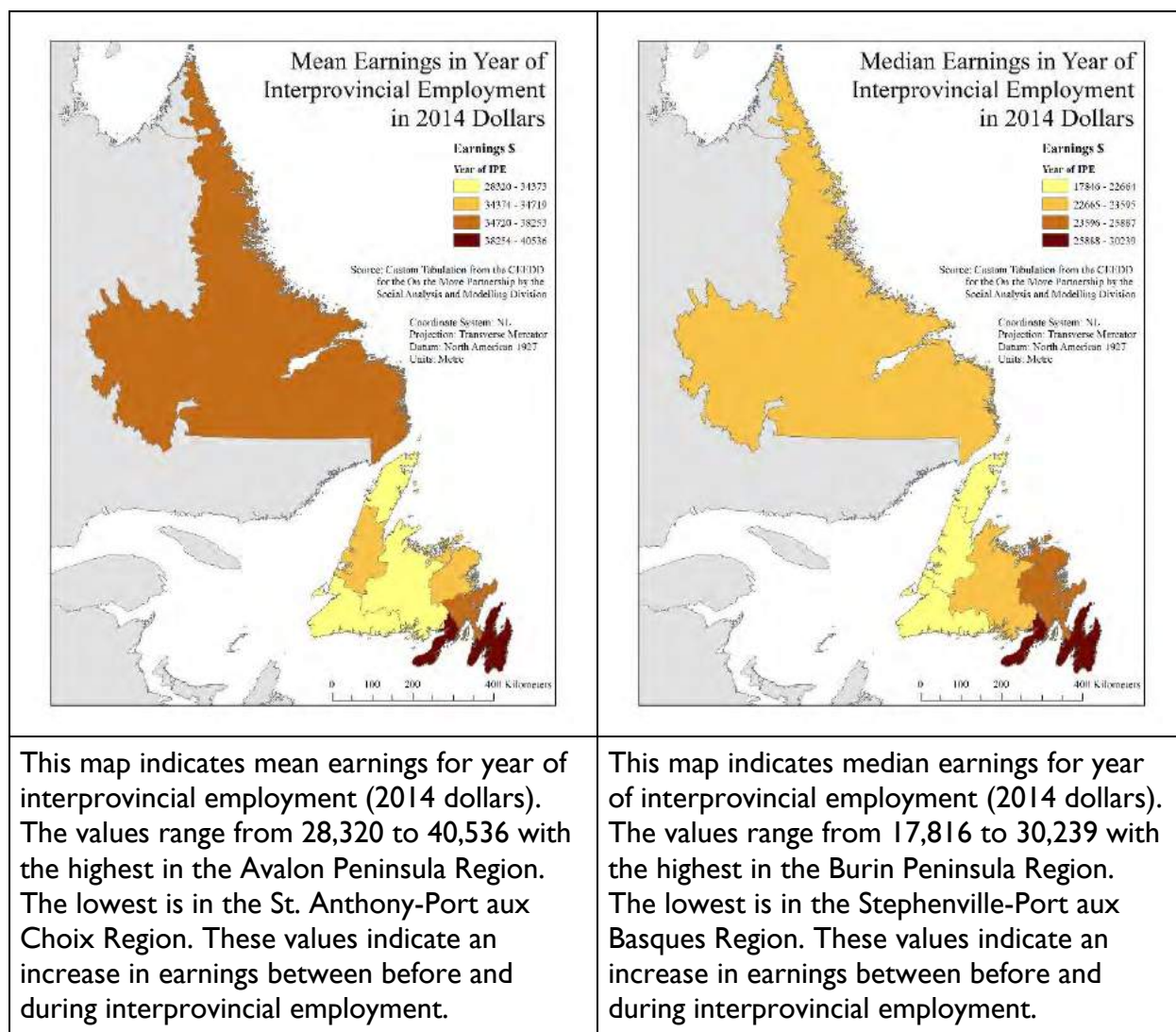


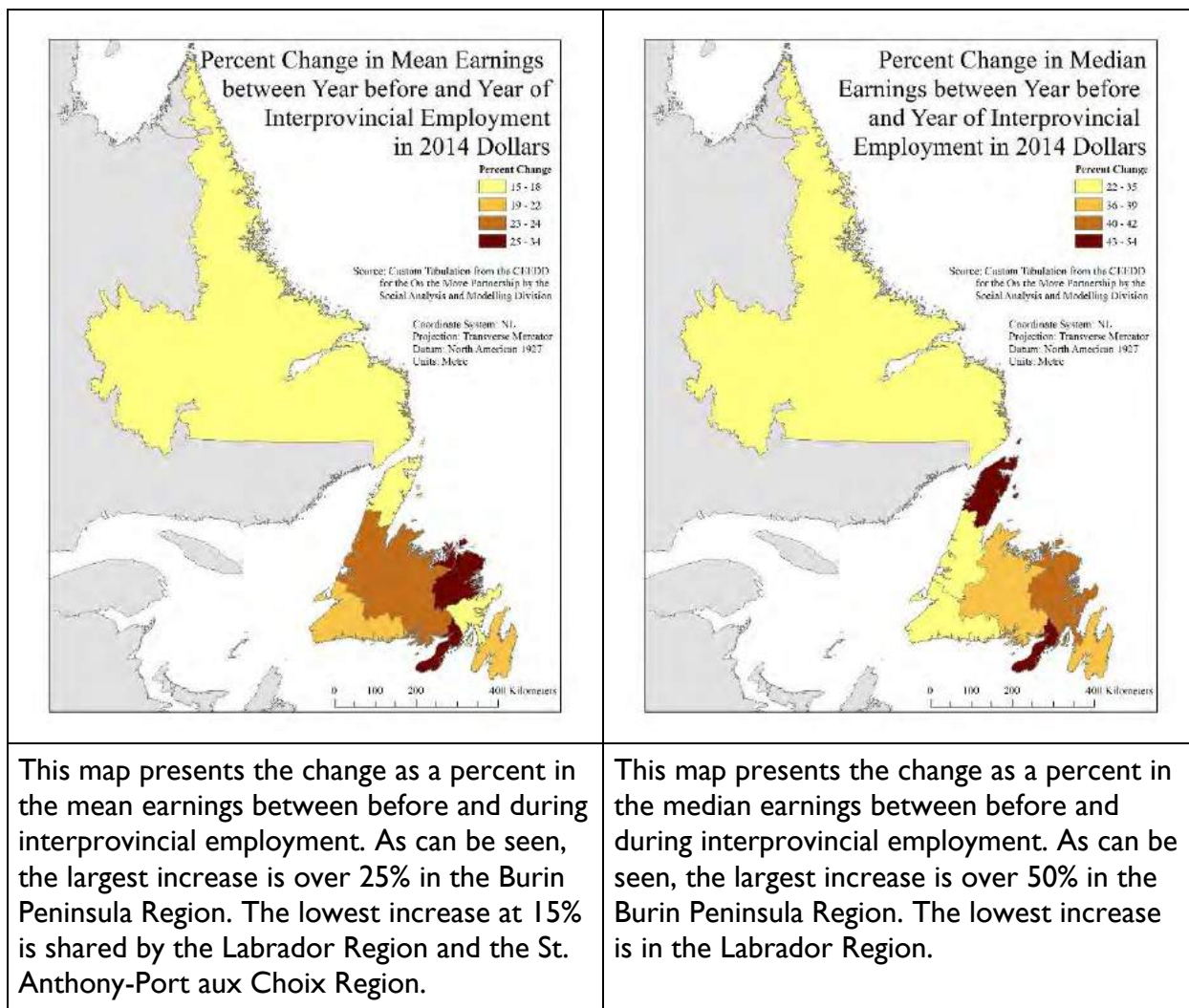
This graph depicts the number of employees by firm size in Newfoundland and Labrador between 2005 and 2014. Between 2005 and 2014, the number of employees in firms under 50 employees remained constant. The number of employees in firms sized 50 to 99 employees was the lowest and remained constant except for an increase in 2010. The number of employees in firms sized 100 to 499 employees remained constant except for an increase in 2008. The number of those in firms over 500 employees increased to approximately 260000 in 2008 before leveling off. At the rural secretariat level, the order of employer size by employees as depicted in the graph above, is the same across all the rural secretariats for each year.

EARNINGS

Mean (average) and median (middle value) earnings was aggregated at the Rural Secretariat level.



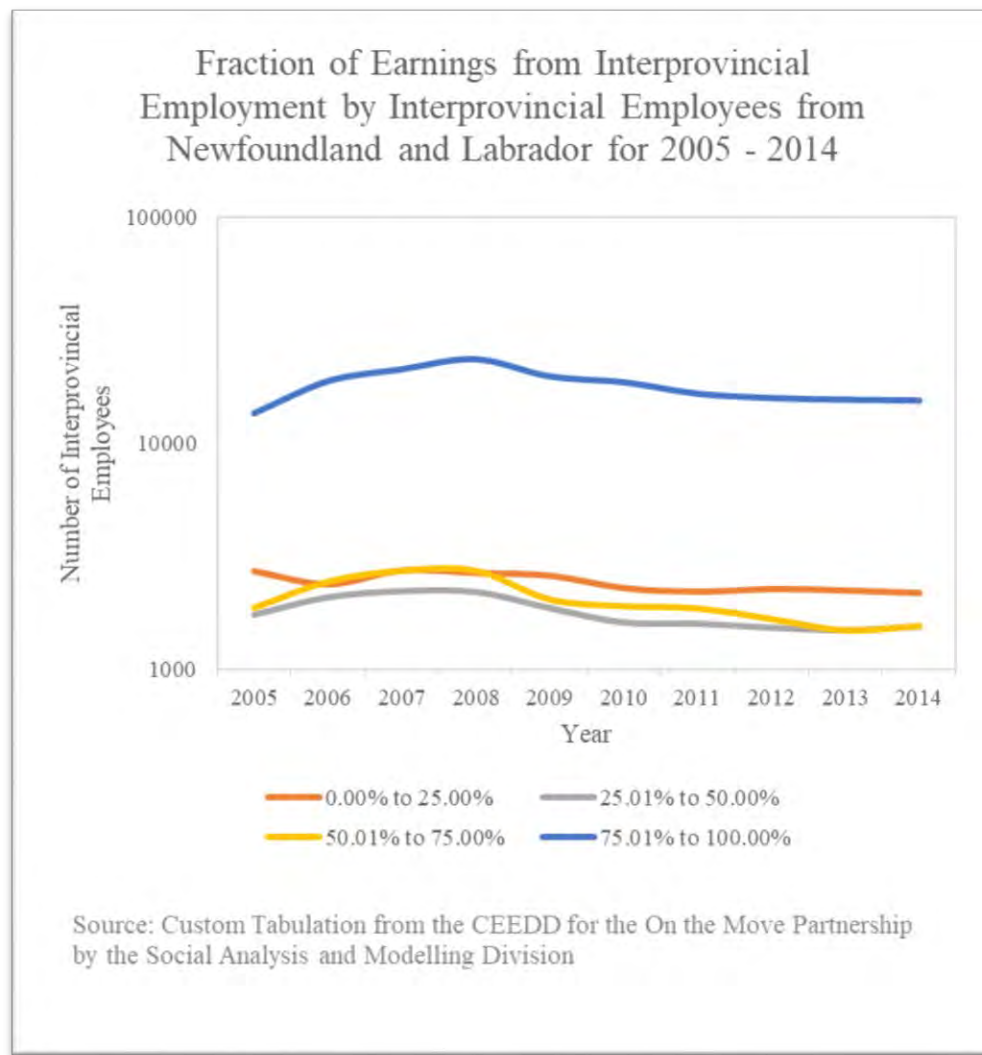




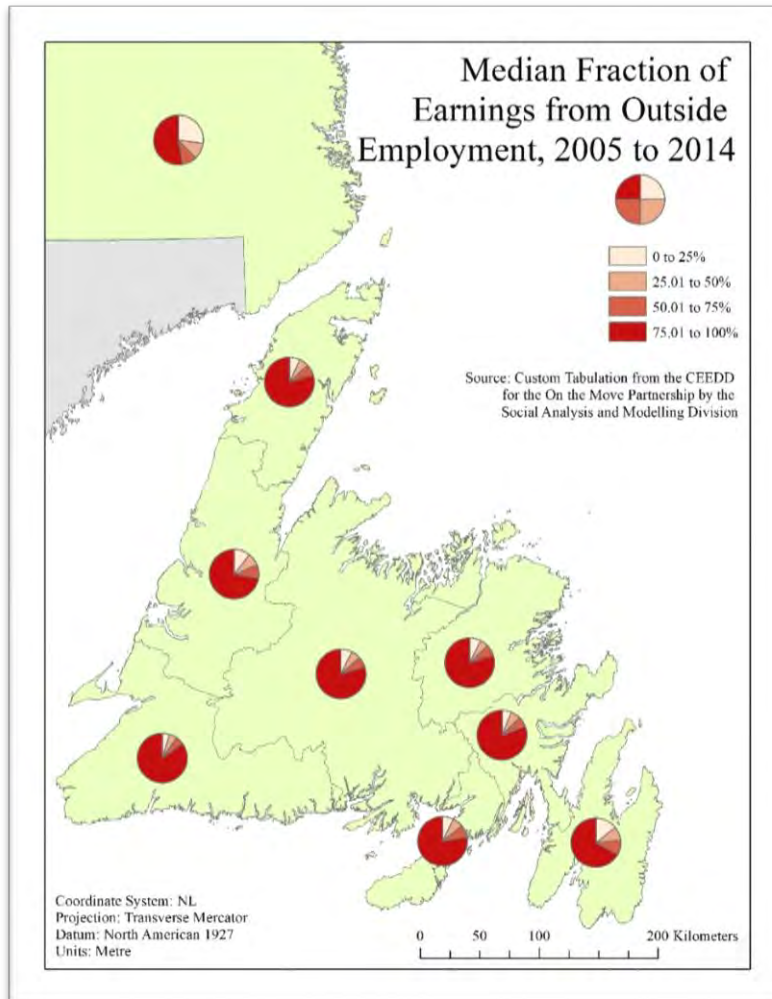
In general, these maps indicate that the impact of interprovincial earnings varies by Rural Secretariat.



PERCENT OF EARNINGS FROM OUT-OF-PROVINCE



Fraction of earnings from interprovincial employment by interprovincial employees from Newfoundland and Labrador between 2005 and 2014. The graph above indicates most interprovincial employees earn at least 75% of their earnings from interprovincial employment.



This map indicates how the median fraction of earnings from out-of-province employment varies spatially. In Labrador, 75 to 100% of earnings account for only around 50% of all earnings. However, everywhere else, 75 to 100% of earnings account for at least 50% of all earnings with most places at between 60 and 85%.

CONCLUSIONS

There are several conclusions which can be drawn from this visualization of employment statistics for interprovincial employees from Newfoundland and Labrador. These include:

1. Most interprovincial employees are in the 25 to 39 age range.
2. Most interprovincial employees are male.
3. The ratio of males to females in interprovincial employment varies spatially.
4. The vast majority of interprovincial employees are married or live common-law.
5. The number of interprovincial employees varies by province with the most in Alberta.
6. The most common interprovincial employment industry is the mining, quarrying, oil and gas extraction, utilities, and construction category.
7. Most interprovincial employees work for large companies while the fewest work for companies with between 50 and 99 employees.
8. Earnings before and during interprovincial employment vary spatially.
9. The difference in earnings between before and during interprovincial employment varies spatially.
10. Most interprovincial employees earn 75 to 100% of their earnings from interprovincial employment.

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