

OVERVIEW OF SECONDARY MIGRATION OF IMMIGRANTS TO CANADA

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A Pathways to
Prosperity Project

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Introduction

Canada has admitted upwards of 200,000 permanent residents per year since the early 2000s¹. Their distribution within Canada is of major interest to academics, policy makers, settlement service organizations, and municipalities that take into consideration the number of annual arrivals to make operational and budget decisions. Where does this information come from?

Official statistics on immigrant flows to various parts of the country are published by Citizenship and Immigration Canada and are useful in determining how many newcomers arrive in each province or city on an annual basis. However, immigrants are not bound to their initial landing communities, nor are they bound to report their subsequent relocations (only *intended* initial destination information is asked at time of landing). Consequently, it is difficult to assess the size of immigrant communities beyond even the first few months after arrival using publicly available information.

Secondary migration redistributes immigrants across Canada in ways that are not yet fully explored. How long do immigrants stay in their initial landing community? Are there some provinces or cities that retain immigrants longer or in higher numbers than others? Do immigrants move mostly to nearby locations or are they prone to make cross-country moves? Are there 'magnet destinations' that draw immigrants from all over the country?

This comprehensive analysis sheds light on the trends in the subsequent relocation patterns of permanent residents to Canada. Using data from the Longitudinal Immigrant Database, an administrative dataset stored at Statistics Canada, we cover the timing of secondary migration, both nationally and provincially, the destinations of secondary migrants, and over-time immigrant retention in provinces, cities, and census subdivisions.

Data

Data for this project come from the Longitudinal Immigrant Database (IMDB), which links immigrant landing files (LIDS) that contain demographic data with subsequent T1 Tax Returns to obtain longitudinal information on mobility and earnings². At this point in time, tax information is only available until 2012. Longitudinally consistent

¹ <http://www.cic.gc.ca/english/pdf/research-stats/facts2010.pdf>

² For more information, see:

<http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5057>

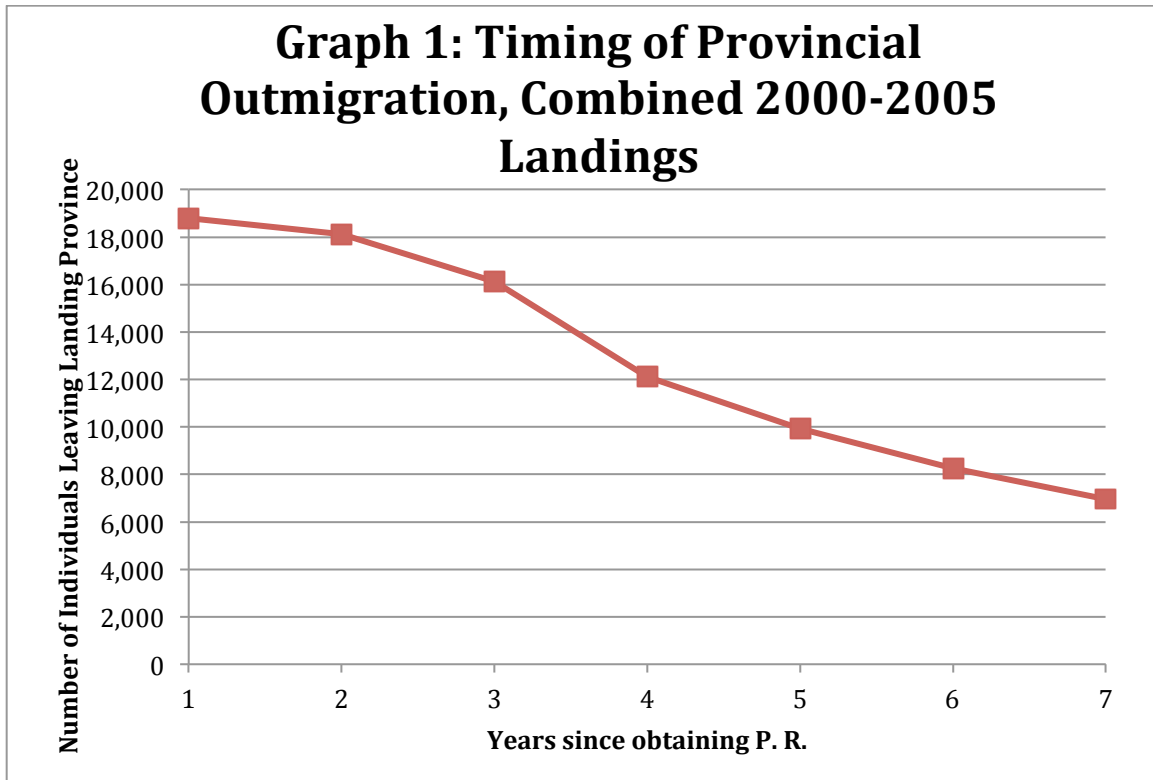
census subdivision (CSD) identifiers were linked to the data using individual postal codes.

For the purpose of this project, we defined immigrants who constitute a 'landing cohort' as those who both identified a particular region (province, census agglomeration, or census metropolitan area) as their intended destination and filed taxes for the first time in that community either in the year of landing or the subsequent year. In some cases (Graphs 1, 2, and Table 1), we do not track original landing cohorts to a specific region, but, rather, include only those who first filed taxes within the first year of landing.

Numbers in these tables should not be taken as official immigrant counts (official numbers come strictly from Citizenship and Immigration Canada) as there are a number of potential issues in identifying immigrants to various regions. In some cases, immigrants do not state an intended destination, their place of residence cannot be determined, or their landing files could not be linked to subsequent T1 tax returns (the IMDB linkage rate is roughly 80%). Some immigrants, such as accompanying spouses of principal applicants who may take longer to find employment and younger immigrants, like children and students, who do not have jobs, may also be less likely to file taxes right away. Moreover, counts are randomly rounded to the nearest 5, which may affect accuracy, especially in regions with fewer immigrants. These estimates are nonetheless useful in seeing general trends and tendencies in the immigrant population.

Timing of Secondary Migration

Secondary migration is defined as immigrants' subsequent relocation after reaching their initial destination. It can be defined at the local (census subdivision), municipal, provincial, or even national level. At what point in time does secondary migration primarily occur? Graph 1 plots the timing of the first inter-provincial secondary migration of those who became permanent residents between 2000 and 2005.

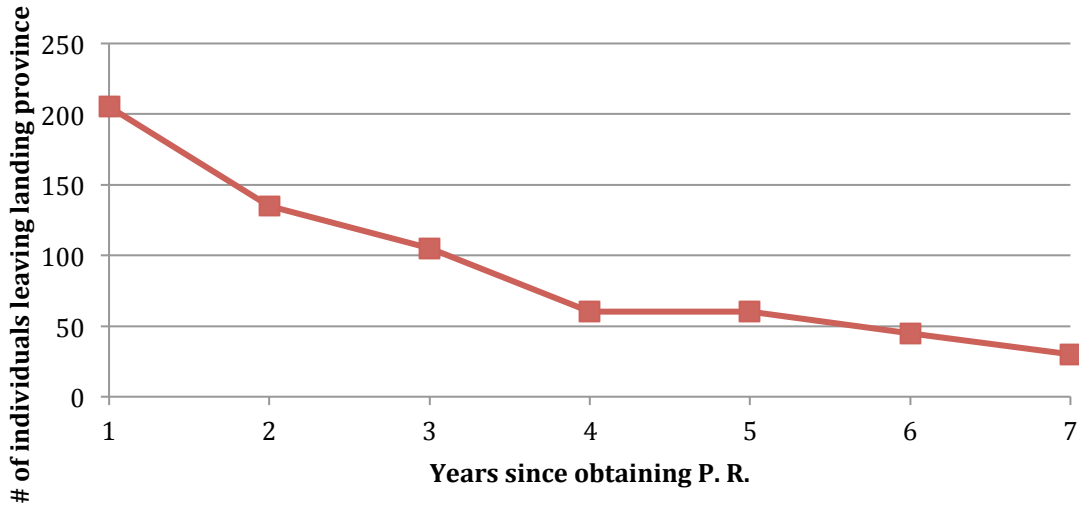


Source: Longitudinal Immigrant Database

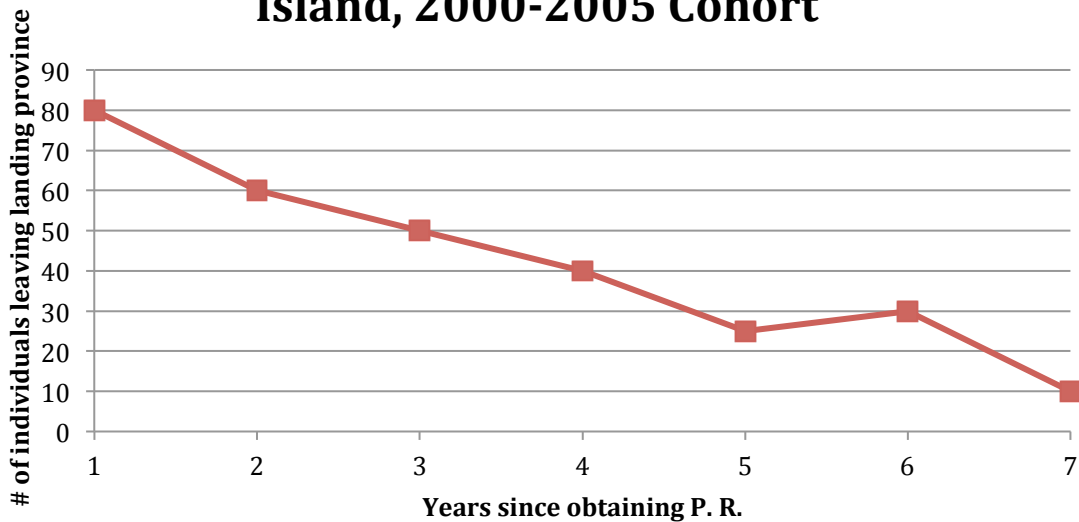
Graph 1 illustrates that, among those who leave, secondary migration occurs almost immediately after landing and less frequently with each subsequent year. The relationship between secondary migration and time is, however, nonlinear – the rate of outmigration is high, but relatively constant in the first three years, decreases sharply after the third year, and steadily declines from then on. Graph 1 makes clear that immigrants are most likely to leave their landing province within the first three years - of those who leave in the first 7 years, more than half leave within the first three.

Looking at this trend by province, the curve looks somewhat different.

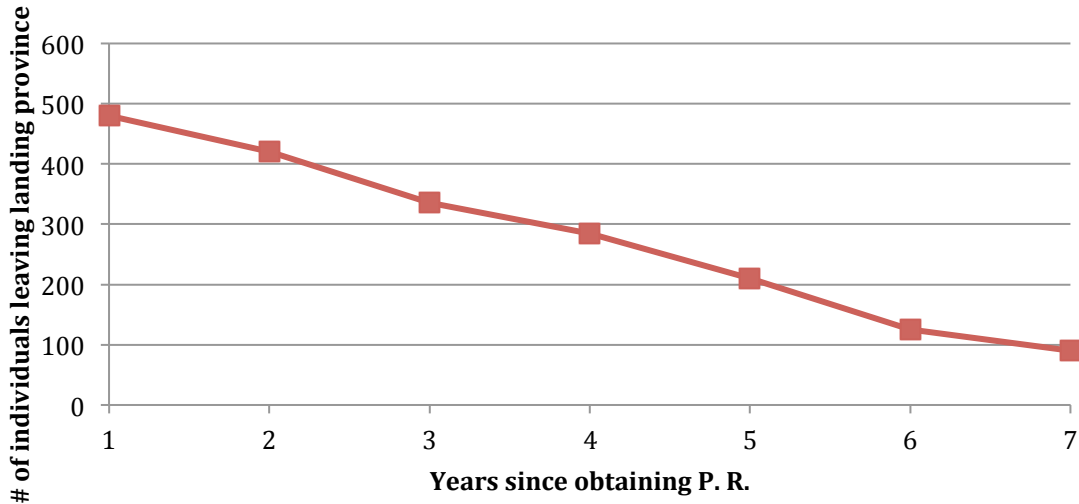
Graph 2.1: Timing of Provincial Outmigration from Newfoundland, 2000-2005 Cohort



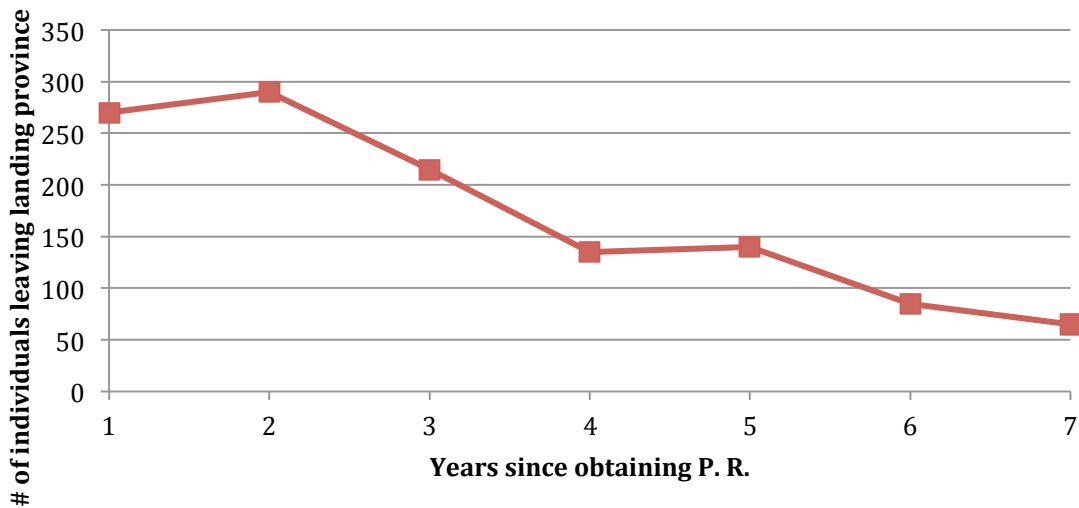
Graph 2.2: Timing of Provincial Outmigration from Prince Edward Island, 2000-2005 Cohort



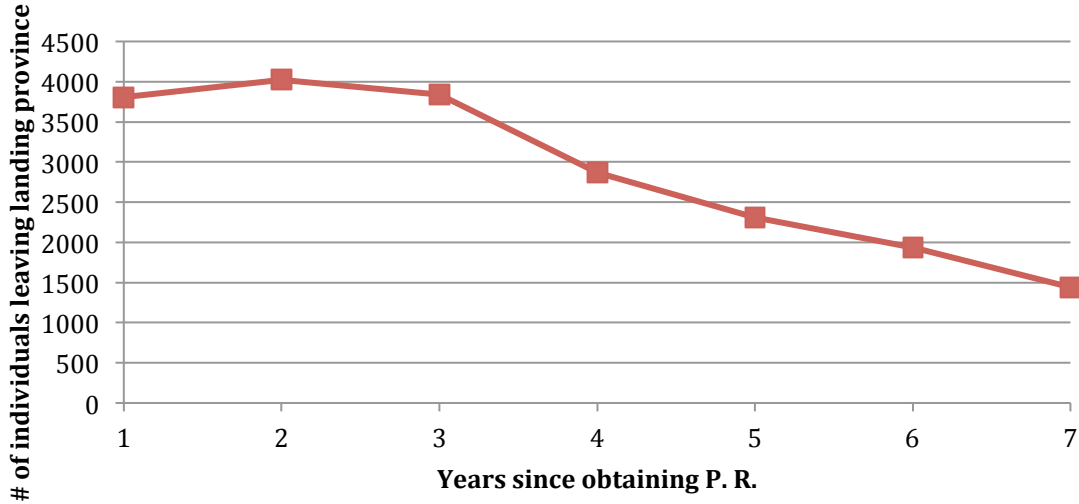
Graph 2.3: Timing of Provincial Outmigration from Nova Scotia, 2000-2005 Cohort



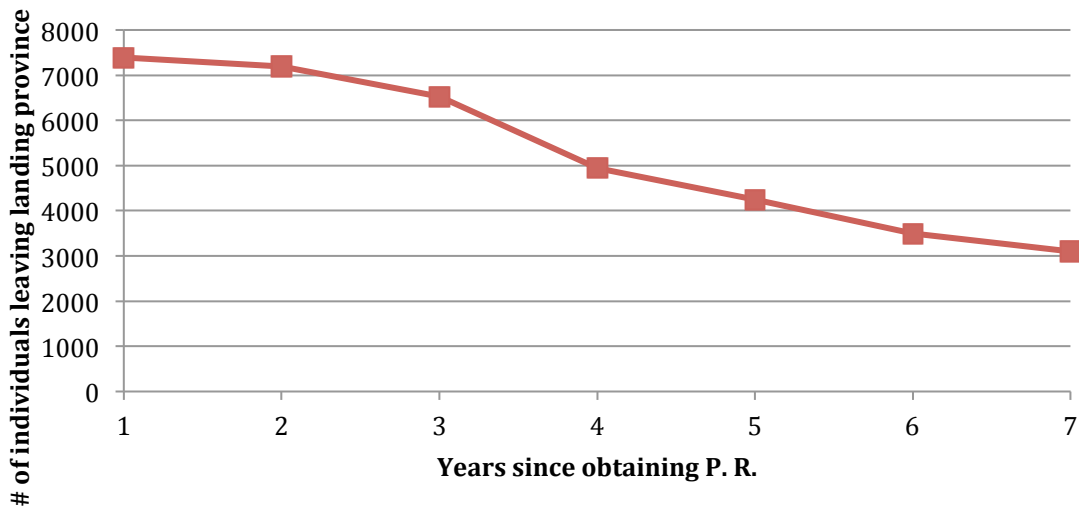
Graph 2.4: Timing of Provincial Outmigration from New Brunswick, 2000-2005 Cohort



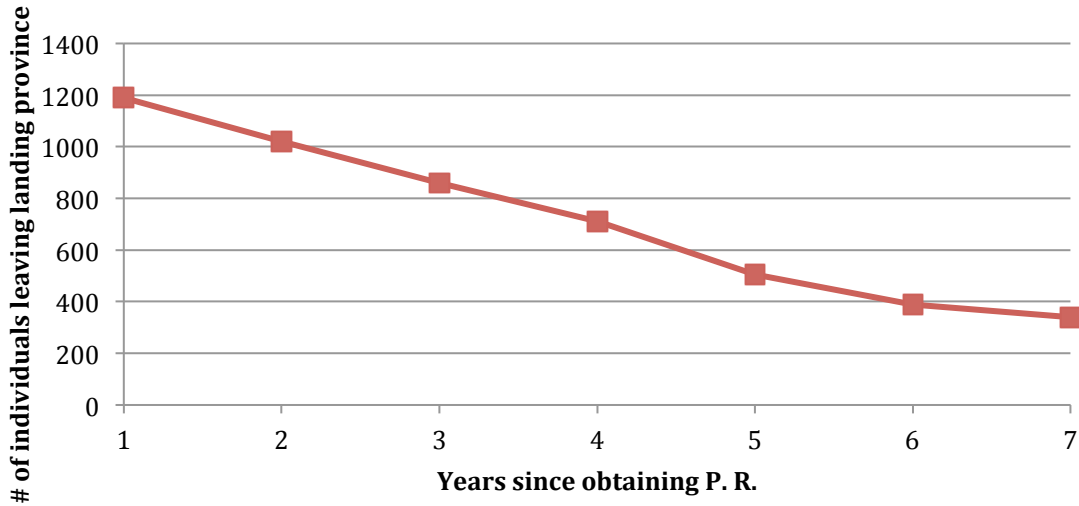
Graph 2.5: Timing of Provincial Outmigration from Quebec, 2000-2005 Cohort



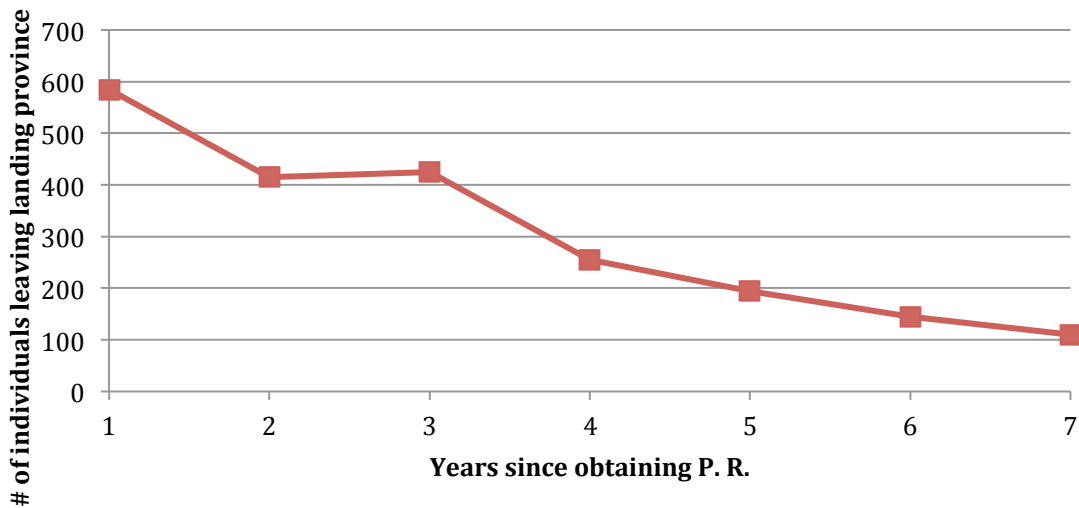
Graph 2.6: Timing of Provincial Outmigration from Ontario, 2000-2005 Cohort



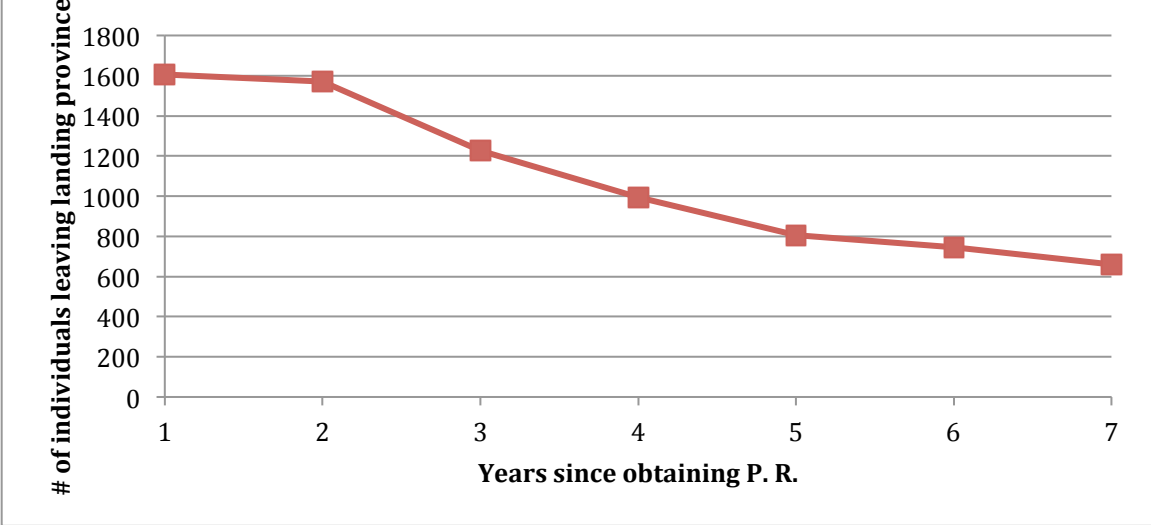
Graph 2.7: Timing of Provincial Outmigration from Manitoba, 2000-2005 Cohort



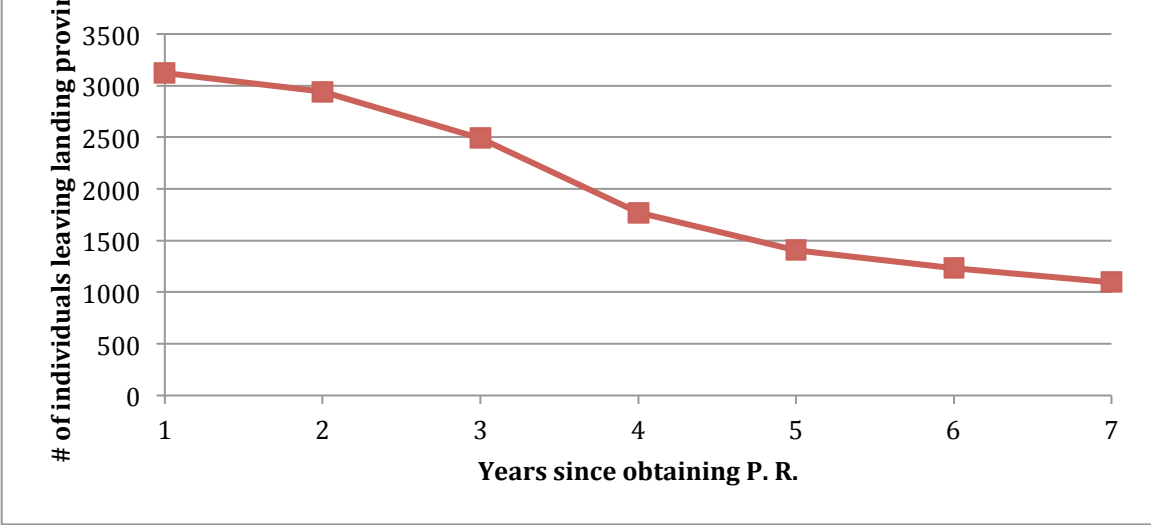
Graph 2.8: Timing of Provincial Outmigration from Saskatchewan, 2000-2005 Cohort



Graph 2.9: Timing of Provincial Outmigration from Alberta, 2000-2005 Cohort



Graph 2.10: Timing of Provincial Outmigration from British Columbia, 2000-2005 Cohort



Graphs 2.1-2.10 illustrate the timing of initial outmigration of individuals who first landed in each province. Notably, the general trend of declining rates of outmigration over time persists. Outmigration slopes in many of the provinces (Quebec, Ontario, and British Columbia to a lesser extent) mimic the national trend. High, relatively constant rates of outmigration in the first three years are followed

by a sharp drop and subsequent steady decline. A number of other provinces (Newfoundland, Prince Edward Island, Nova Scotia, and Manitoba) exhibit a more linear relationship, with a relatively constant slope over time. More immigrants leave New Brunswick and Quebec in their second year after landing than in the first. Saskatchewan is unique in that the number of immigrants leaving in the second and third years is more similar than the first and second.

Province of Destination

The above graphs illustrate that provincial outmigration is a reality for all provinces, big and small. But where do these immigrants leave? Table 1 breaks down the destination of the first provincial outmigration, by landing province, for those who became permanent residents in 2000-2005.

Landing Province	Province of First Outmigration (%)										
	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	Territories*
NL	--	0.74	8.15	2.22	8.15	39.26	2.22	1.48	29.63	8.15	0.00
PE	0.00	--	13.11	8.20	4.92	42.62	0.00	0.00	21.31	9.84	0.00
NS	2.14	0.71	--	4.29	9.76	49.29	0.95	0.95	21.19	10.48	0.24
NB	1.17	1.17	6.61	--	13.62	44.75	1.17	0.78	22.96	7.39	0.39
QC	0.33	0.22	1.13	1.08		57.53	1.46	1.63	25.63	10.62	0.38
ON	0.90	0.28	2.99	1.28	15.82	--	4.54	5.86	45.56	22.02	0.75
MB	0.18	0.27	0.72	0.54	3.89	30.50	--	2.53	41.18	19.82	0.36
SK	0.22	0.22	1.09	0.44	3.70	28.32	4.14	--	41.39	20.26	0.22
AB	1.10	0.23	1.73	0.98	5.59	38.47	3.17	7.79	--	39.62	1.33
BC	0.37	0.19	1.56	0.69	7.01	47.16	3.05	3.77	35.41	--	0.78

*Numbers of secondary migrants originally landing in territories too small to disclose by province of first outmigration

NB: First outmigration that took place any time between landing and 2012

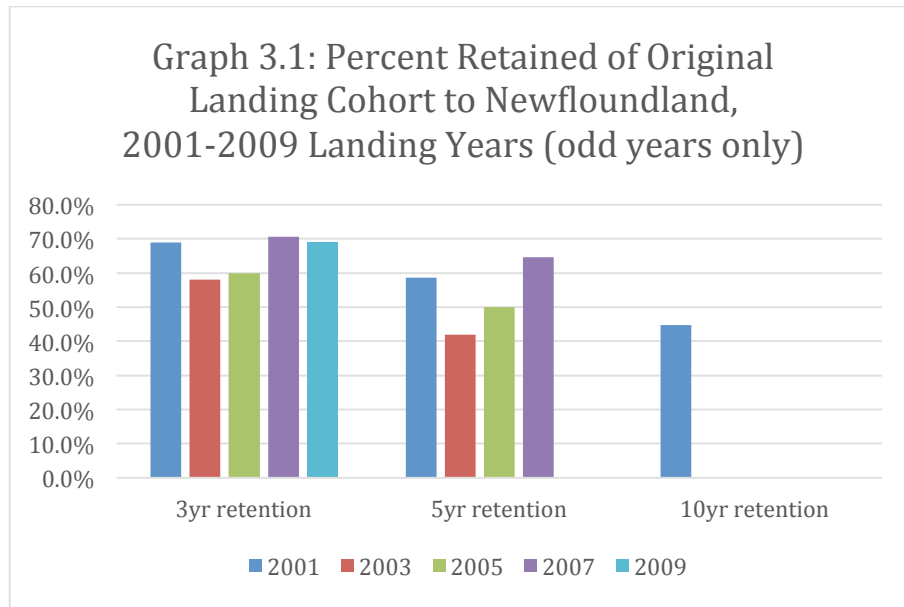
Source: IMDB

Not surprisingly, Canada's economic centres, Ontario and, to a lesser extent, Alberta, receive the most recipients of secondary migrants. Provinces in the east and British Columbia contribute most to Ontario's gains in secondary migrants: 57.5% of Quebec's immigrants who leave head to Ontario. On the other hand, the largest share of Alberta's secondary migrants comes from Ontario and the Prairies. A comparable number of immigrants leaving Alberta move to either Ontario or British Columbia.

In the Atlantic Provinces, a region that benefits least from secondary migration, Nova Scotia is the most popular destination for migrants. A sizeable proportion of New Brunswick's secondary migrants relocate to Quebec.

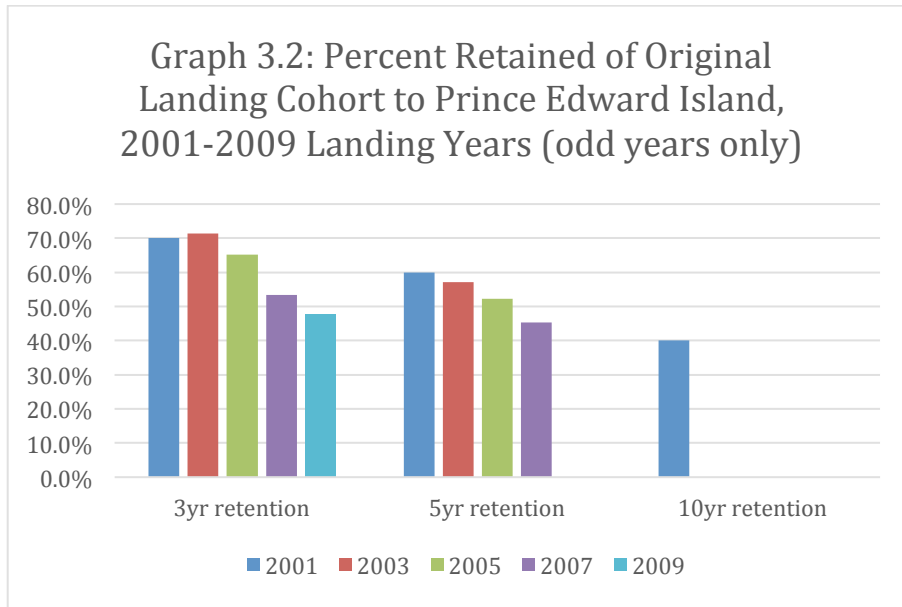
Provincial Retention

While the above graphs focus on the trajectories of immigrants based on their original landing province, the remainder of this report focuses on the originally recruited landing cohort. The landing cohort is defined as immigrants who stated a province/city as their destination and, subsequently, filed taxes there within their first year of landing. Considering that the critical period for outmigration is the first three years after landing, these graphs focus on 3-year retention, followed by 5-year and 10-year retention when data allow. Ten year retention is compared across all provinces in Graph 4 and is addressed there.

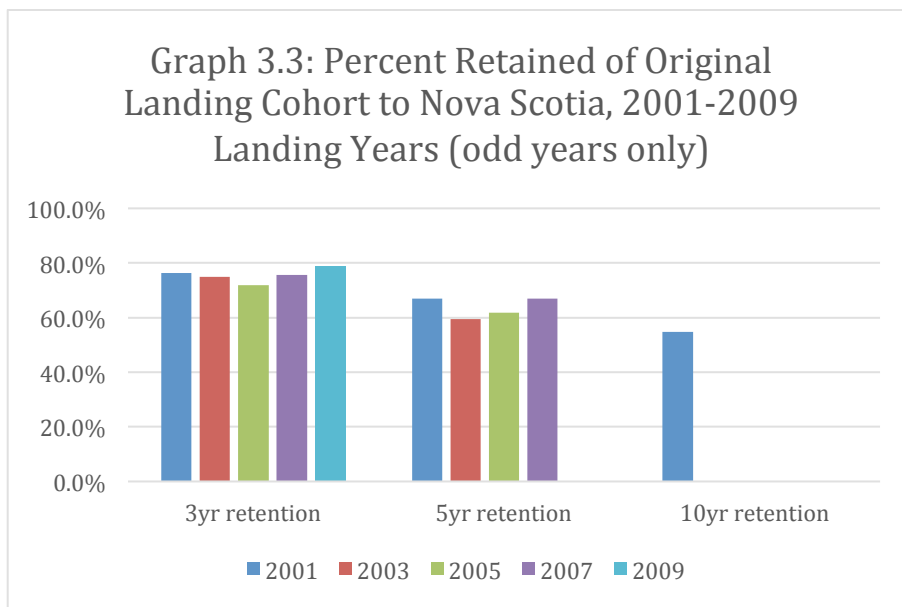


Retention patterns in Newfoundland (Graph 3.1) show considerable variation between the different cohorts. Because the cohort size is small (between 145-255 individuals in each) proportional differences are more drastic³. The 2003 and 2005 cohorts have the lowest 3-year and 5-year retention rates, dipping below 50% in the latter; however, 3-year retention of the most recent cohorts meets or surpasses the 2001 levels. Notably, even 3-year retention is consistently 70% or less, lower than any other province.

³ For example, an outmigration of 5 individuals constitutes a larger percentage decrease of an initial cohort of 100 than an initial cohort of 4,000.

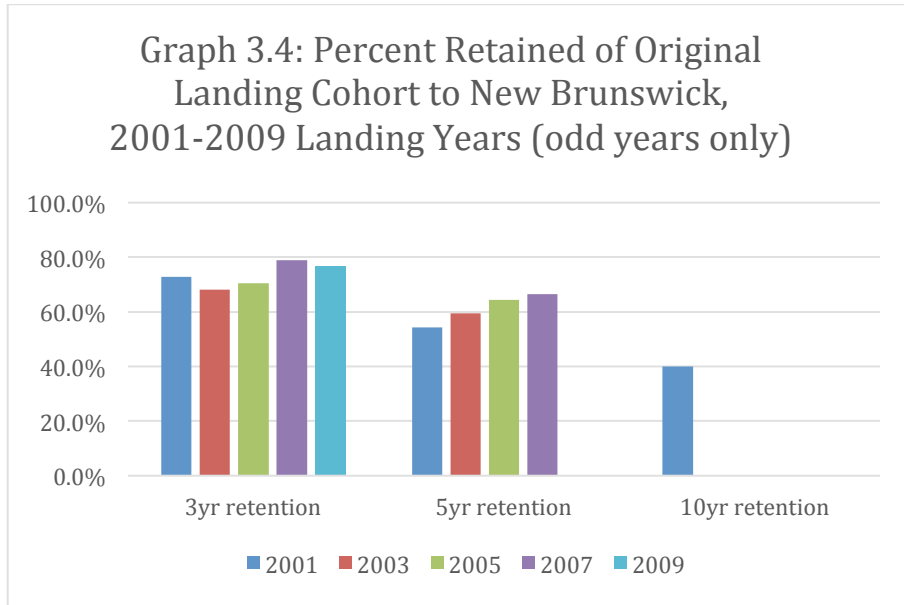


In Graph 3.2, we see that retention of the original cohort in Prince Edward Island is also low and arguably lower than Newfoundland at the 3-year mark. It is the only province where 3-year retention is below 50% for any cohort, although the 2003 cohort showed 71% retention after three years. Most interesting is the trend over time in 3-year and 5-year retention, with each subsequent cohort showing lower retention. Prince Edward Island is the only province to show progressively lower retention rates.

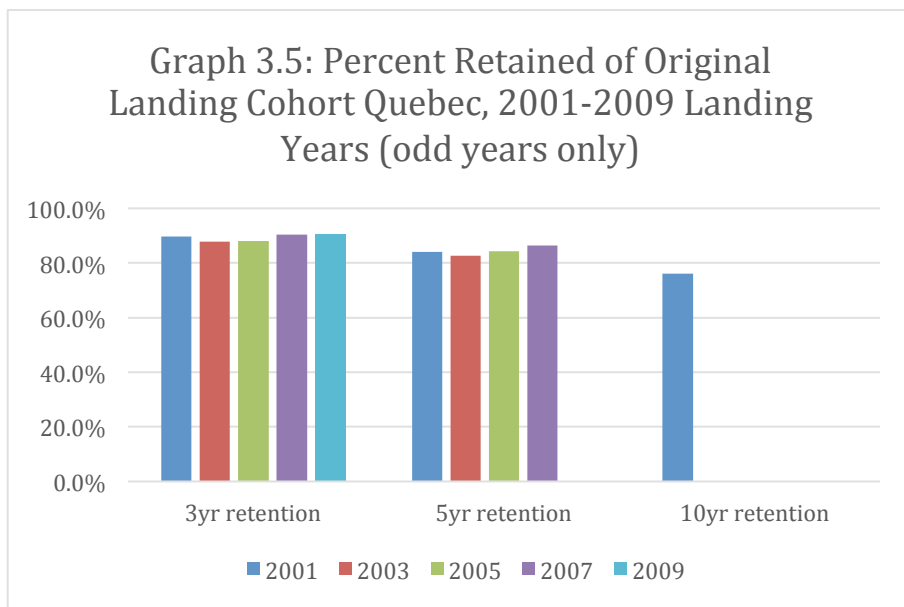


Nova Scotia’s retention (Graph 3.3) is the highest amongst the Atlantic Provinces, with the 10-year retention dropping below 50% of the original cohort size. Although

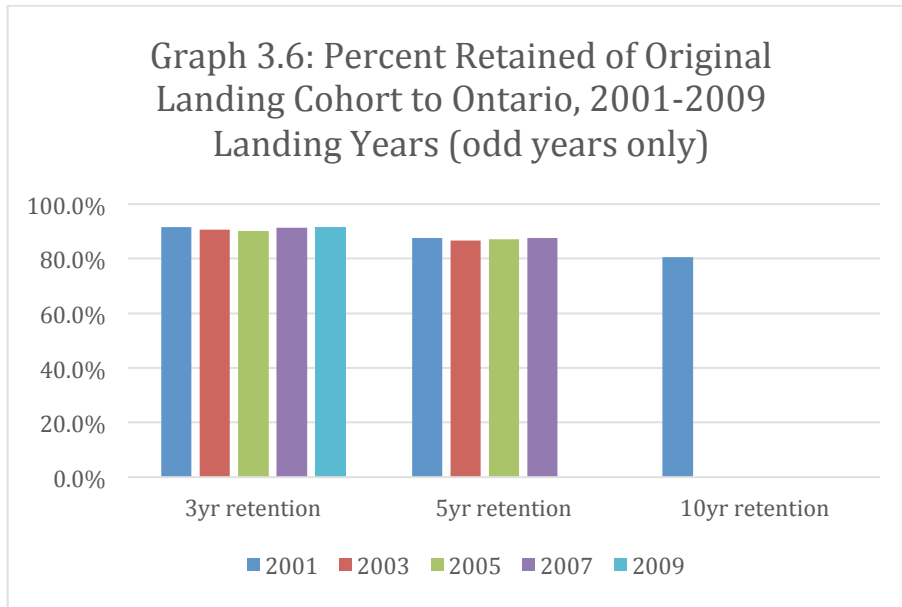
3-year retention decreased from 2001-2005, it increased again and reached its peak in the latest cohort.



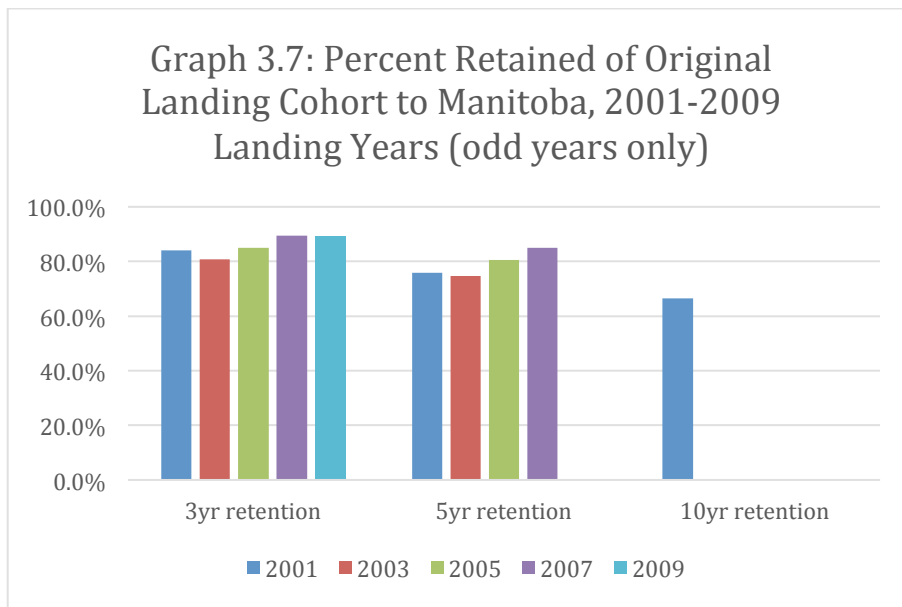
Retention in New Brunswick (Graph 3.4) is similar to that in Nova Scotia, although retention for the 2001, 2003, and 2009 cohorts is lower at each time interval. There is an improvement over time in 5-year retention and a slight improvement in 3-year retention between 2003 and 2007 cohorts.



In Graph 3.5, we see retention rates consistently surpass 80% of the original landing cohort, both 3 and 5 years after landing. There is a slight improvement in retention in the later cohorts.

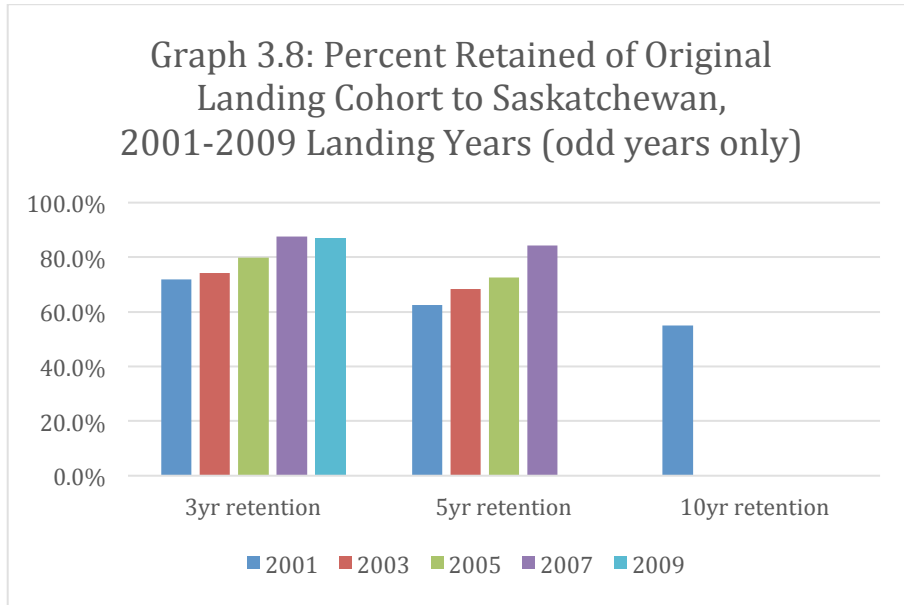


Retention in Ontario (Graph 3.6) is one of the highest in Canada with 3-year retention surpassing 90% in all five cohorts. Although 5-year retention is slightly lower, the difference between the 3-year and 5-year retention figures is smaller in Ontario than it is in Quebec and British Columbia, two provinces with comparably high retention rates. The trends over time are not apparent, and retention appears relatively stable, with a range of 1.5% at the 3-year point and just 1.1% after 5 years.

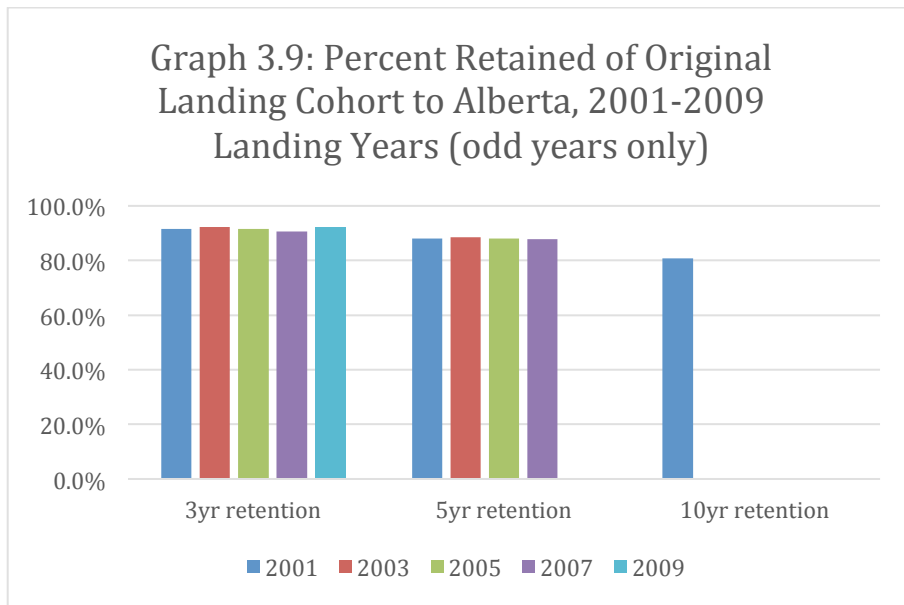


Manitoba's retention (Graph 3.7) is comparable to that of Quebec, with consistent retention of 80% or more at the 3-year mark; however, 5-year retention is decidedly lower, hovering around 75% in the two earliest cohorts, and rising to 80% and 85%

thereafter. Manitoba shows over-time improvement in both 3-year and 5-year retention.

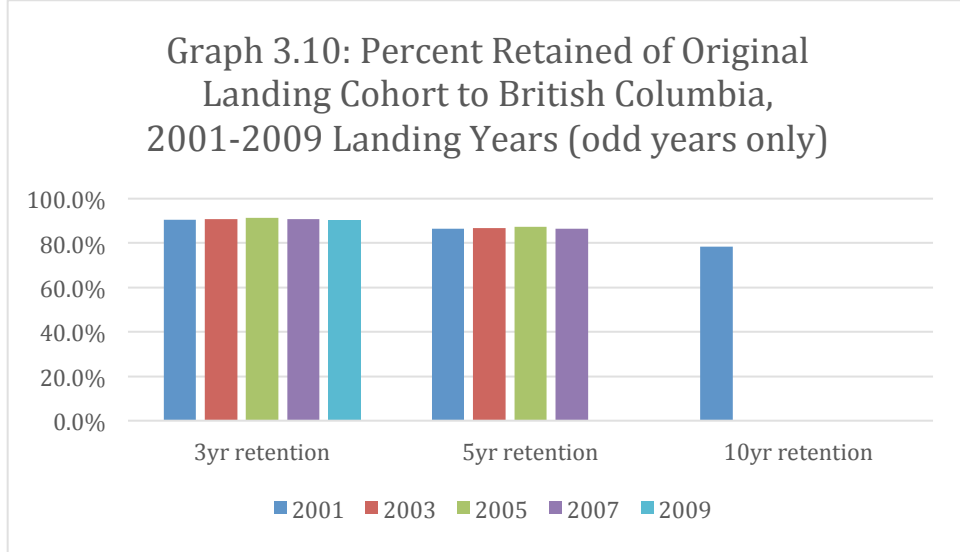


Saskatchewan (Graph 3.8) exhibits the most remarkable improvement in retention, with 3-year retention rising from 71% in 2001 to 87% in 2009, and 5-year retention increasing from 62% to 84% between the same two cohorts. Although earlier retention rates resembled those of the Atlantic Provinces, retention of the 2007 and 2009 cohorts is on par with retention in Manitoba.

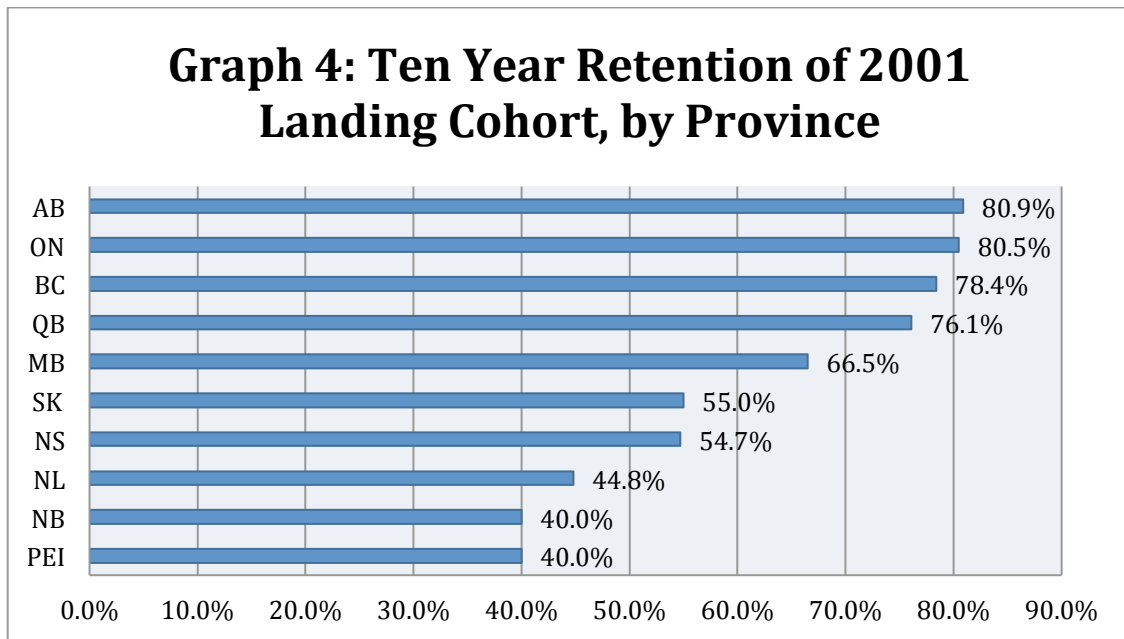


Alberta (Graph 3.9) exhibits the best retention of all provinces, with consistently higher retention figures than Ontario, the province with the next best retention. The

3-year retention figures surpassed 91% and reached an all-province high of 92.3% in the 2003 cohort. Alberta also exhibits the smallest drop in retention between the 3-year and 5-year marks. There are no apparent over-time trends, with retention varying only by 1.5% and 1.2% at the 3-year and 5-year time periods respectively.



Graph 3.10 exhibits provincial retention in British Columbia. Generally high and steady between the cohorts, British Columbia retains more than 90% of its immigrants in the first 3 years and at least 86% after 5 years, in each cohort.

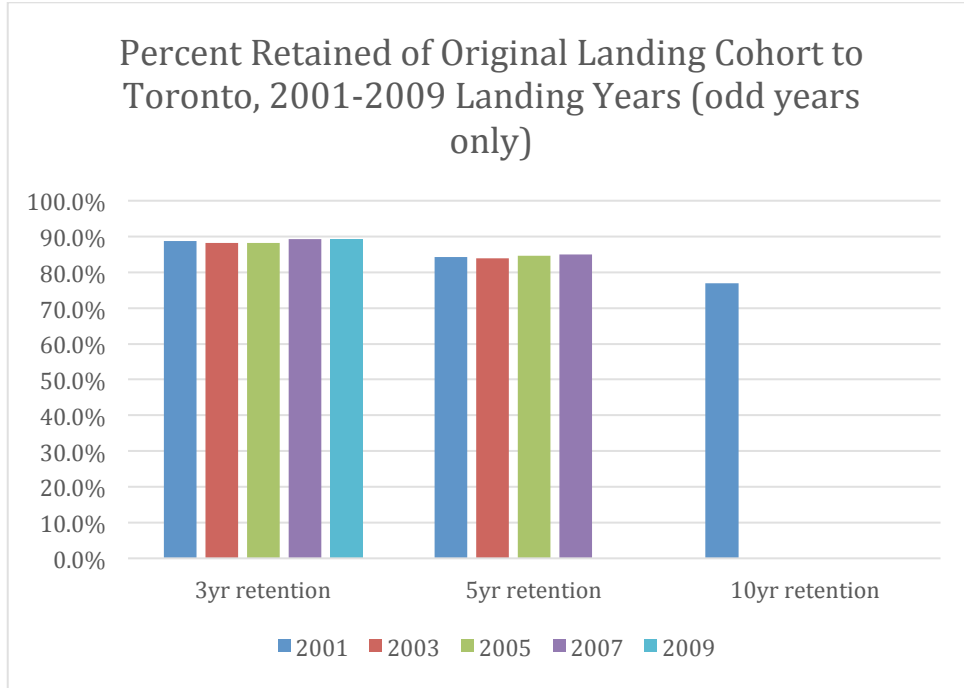


Graph 4 compares 10-year retention of the 2001 landing cohort in all provinces. Alberta has the highest retention, with nearly 81% of the original landing cohort still

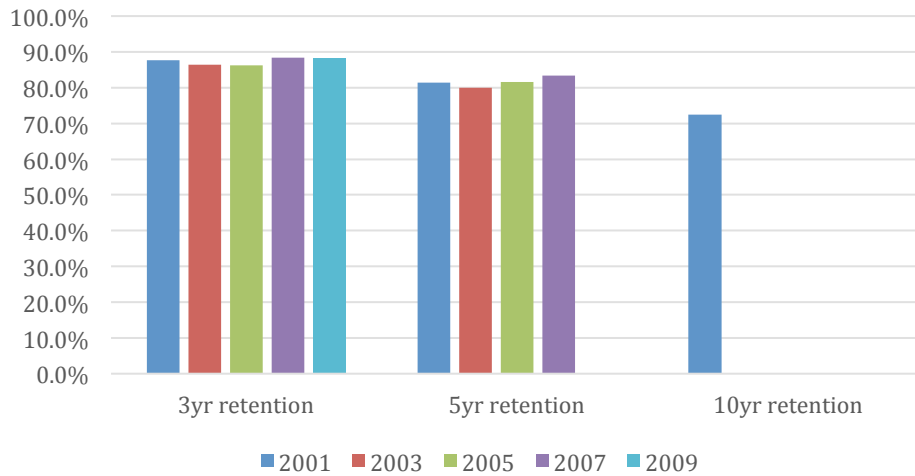
filing taxes in Alberta in 2011; Ontario is a close second; and the Atlantic Provinces, specifically New Brunswick and Prince Edward Island, have the lowest retention.

CMA/CA Level Retention

Using the same methodology, retention of original landing cohorts was calculated for twelve selected cities. Rather than discussing each city separately, major trends and comparisons are discussed at the end.



Percent Retained of Original Landing Cohort to Montreal, 2001-2009 Landing Years (odd years only)



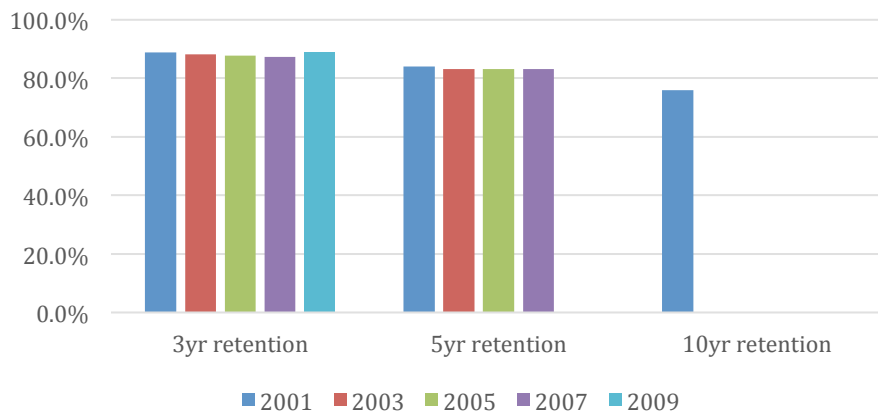
Percent Retained of Original Landing Cohort to Vancouver, 2001-2009 Landing Years (odd years only)



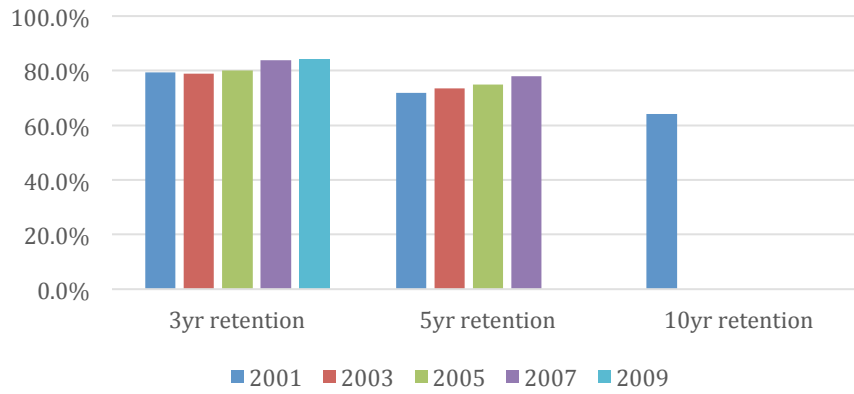
Percent Retained of Original Landing Cohort to Calgary, 2001-2009 Landing Years (odd years only)



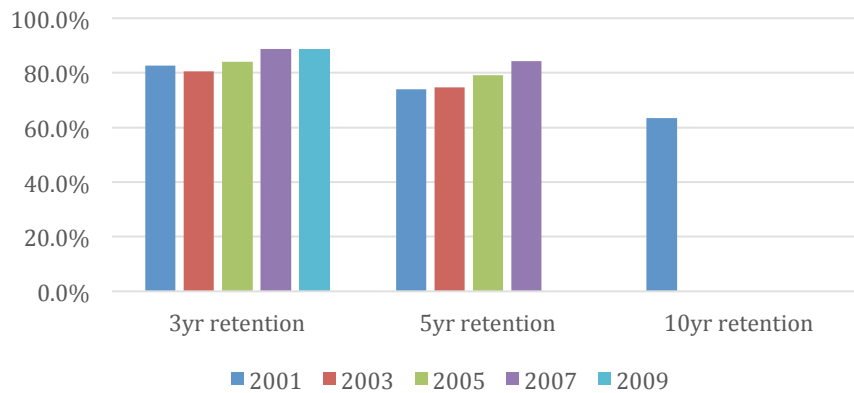
Graph 5.5: Percent Retained of Original Landing Cohort to Edmonton, 2001-2009 Landing Years (odd years only)



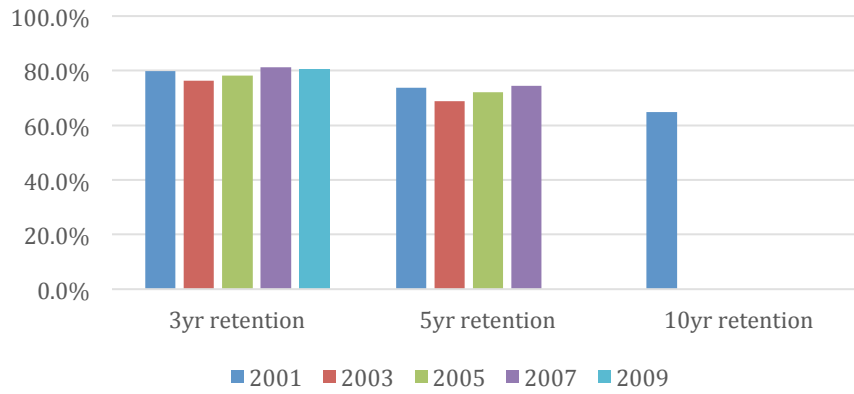
Graph 5.6: Percent Retained of Original Landing Cohort to Ottawa, 2001-2009
Landing Years (odd years only)



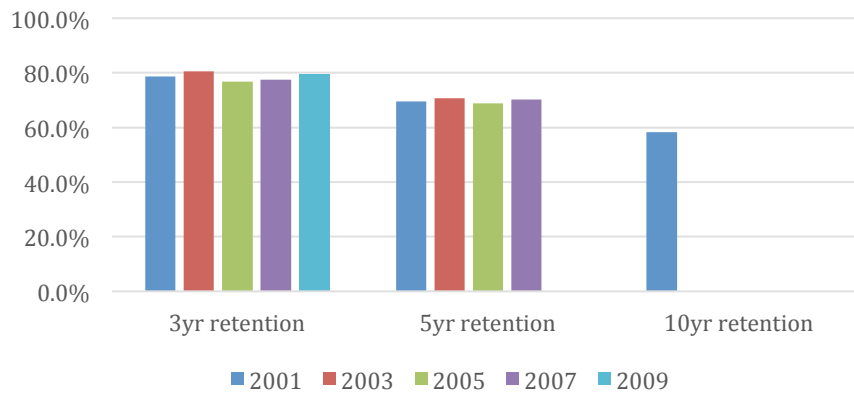
Graph 5.7: Percent Retained of Original Landing Cohort to Winnipeg, 2001-2009
Landing Years (odd years only)



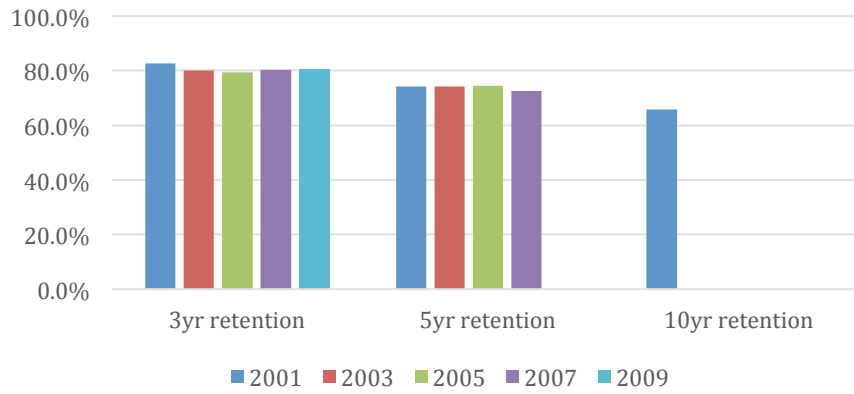
Graph 5.8: Percent Retained of Original Landing Cohort to Hamilton, 2001-2009
Landing Years (odd years only)



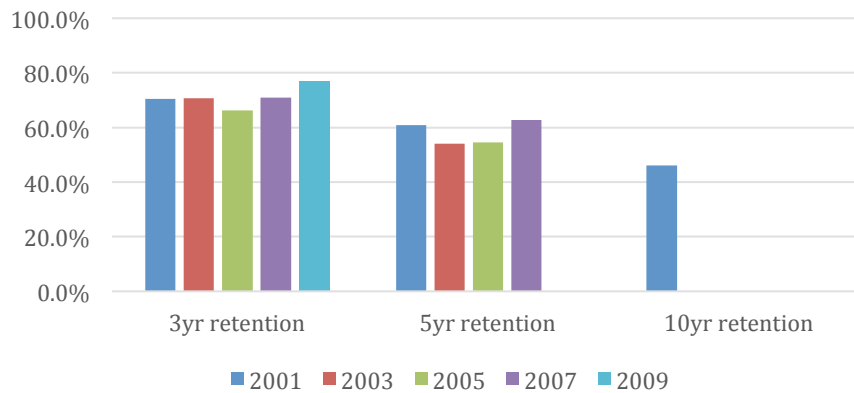
Graph 5.9: Percent Retained of Original Landing Cohort to London, 2001-2009
Landing Years (odd years only)

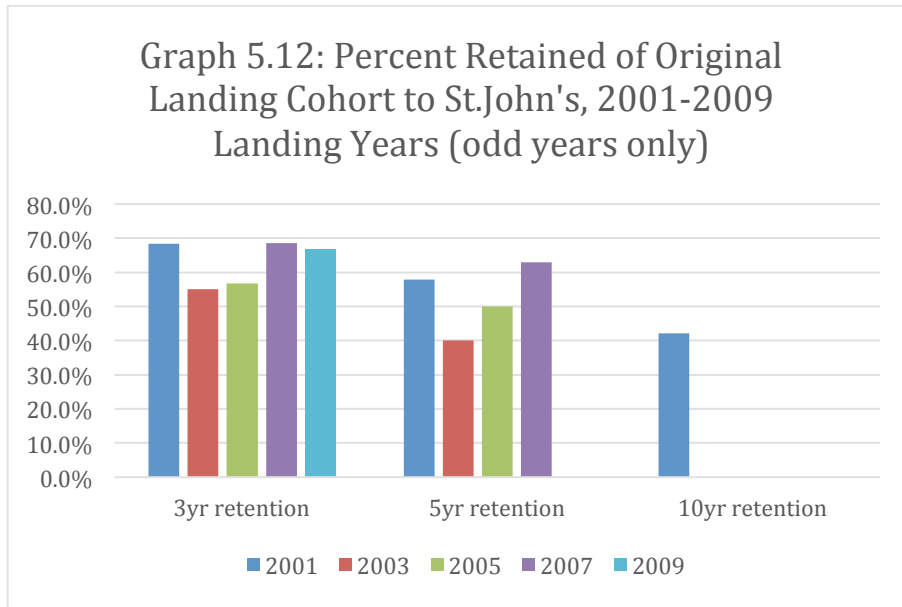


Graph 5.10: Percent Retained of Original Landing Cohort to Kitchener, 2001-2009
Landing Years (odd years only)



Graph 5.11: Percent Retained of Original Landing Cohort to Halifax, 2001-2009
Landing Years (odd years only)





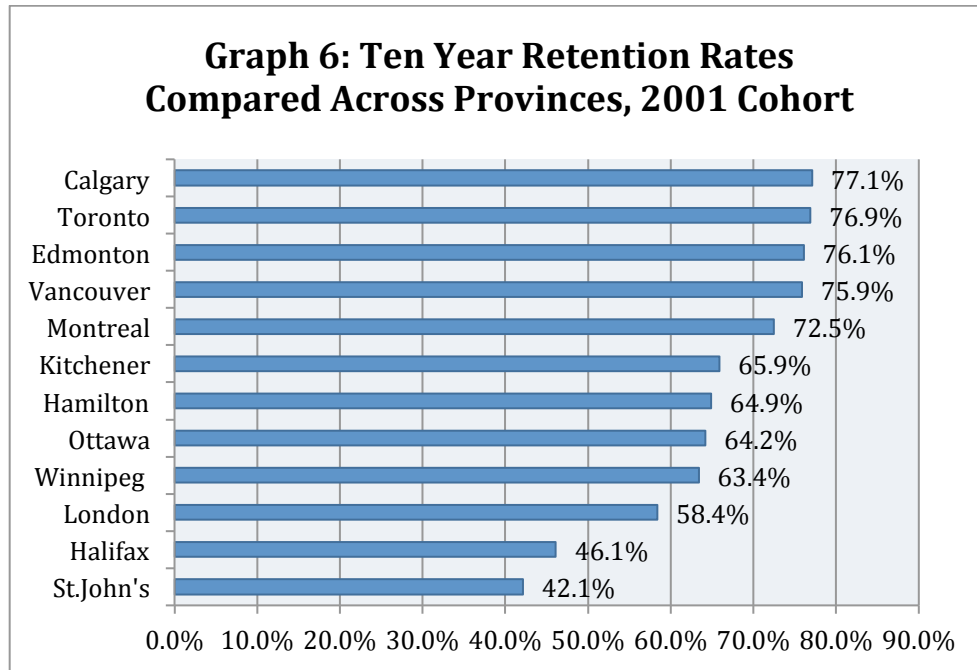
The above graphs are organized in descending order by city population. Retention in the top four CMAs (Graphs 5.1-5.4), each with a population greater than 1 million, is similar, with 3-year retention ranging from 86.3% in Montreal (2005 cohort) to 90.3% in Vancouver (2005 and 2007 cohorts). Five year retention is lowest in Montreal (79.9% in the 2003 cohort) and highest in Calgary and Vancouver (85.9% in 2003 and 2005 cohorts, respectively). Over time, the only city to show continuous improvement in retention is Toronto; other cities fluctuate or are relatively constant.

Although cohort retention in these large cities is better than in smaller tier cities, a closer look shows that size is not directly correlated with retention. Toronto is Canada's biggest city; however, Vancouver has the highest 3-year and 5-year retention rates, although the differences are small. Calgary's retention is also consistently high, with only the 2007 cohort reporting lower 3-year retention than Toronto. Montreal's retention is the lowest, despite being the second largest city.

The second set of cities represents medium sized cities (Graphs 5.5-5.10), located largely in Ontario, with the exception of Edmonton and Winnipeg. Of these cities, Edmonton exhibits the highest retention rates at the 3-year mark (with a peak of 88.8% in the 2001 and 2009 cohorts), and Winnipeg has the highest five year retention (84.3% in the 2009 cohort). Similar retention is found in London, Kitchener, and Hamilton – London tends to have the lowest and Kitchener the highest. Retention in Ottawa is comparable to London, Kitchener, and Hamilton in the earlier cohorts, but it improves more quickly after 2003. Winnipeg and Ottawa show the biggest improvements in both 3-year and 5-year retention over time.

The two smallest cities, Halifax and St. John's (Graphs 5.11 and 5.12), have the lowest retention. St. John's is the only city to lose more than half the original landing cohort (2003) after 5 years. However, both cities demonstrate some improvements

over time – 3 year retention of the 2009 cohort in Halifax peaked at 77.8% and 5-year retention climbed from 40% in the 2003 cohort to 63% in the 2009 cohort in St. John’s.



Graph 6 compares 10-year retention across all provinces, sorted in decreasing order. The top four cities are clustered within a range of 1.2%. Calgary has the best 10-year retention of the 2001 cohort, while retention in Toronto is only 0.2% lower. The largest cities typically have the highest retention; however, Edmonton, decidedly smaller than Vancouver and Montreal, has the third highest retention, and Ottawa, a relatively large city, is positioned in the bottom half.

Intraprovincial Secondary Migration

Lastly, we look at secondary migration at the CSD level and examine how intraprovincial migration compares to interprovincial migration in all provinces. For these tables, we look at the movement of individuals in the original landing cohort to each province with known CSD of residence.

		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	57.1	14.3	21.4
	5yrs Since Landing	46.4	10.7	32.1
	10yrs Since Landing	32.1	10.7	39.3

2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	45.2	12.9	29.0
	5yrs Since Landing	32.3	9.7	41.9
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	50.0	10.0	32.5
	5yrs Since Landing	42.5	7.5	40.0
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	62.7	7.8	21.6
	5yrs Since Landing	52.9	11.8	25.5
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	57.4	11.8	25.0
<i>Source: IMDB</i>				

Table 2.1 shows the distribution of immigrants who were recruited by, and landed in, Newfoundland by the location of their residence. As expected, most migrations, both within and out of the province, occur within the first three years. The proportion of residents moving within the province is considerably smaller than the proportion leaving, likely due to Newfoundland's small size. Interestingly, in the 2001-2007 cohorts, the proportion of the cohort that moved within the province declines between the 3-year and 5-year time periods, while the proportion of those moving outside the province increases. This suggests that those who moved CSDs within the province after 3 years tend to leave either the country or province 5 years after landing.

		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	40.0	30.0	20.0
	5yrs Since Landing	30.0	30.0	30.0
	10yrs Since Landing	10.0	20.0	30.0
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	42.9	28.6	28.6
	5yrs Since Landing	28.6	28.6	35.7
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	30.4	34.8	21.7
	5yrs Since Landing	17.4	34.8	30.4
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	30.7	24.0	44.0
	5yrs Since Landing	21.3	24.0	49.3
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	27.3	21.6	46.6
<i>Source: IMDB</i>				

Table 2.2 presents the same information for Prince Edward Island. We see very high mobility, both intraprovincial and interprovincial, in this province. As little as 17% of the original landing cohort remains in the same CSD 5 years after landing (2005 cohort). Retention at the CSD level worsens between the cohorts, with only 27.3% of immigrants remaining in their landing CSD after 3 years in the 2009 cohort (compared to 40% and 43% in the 2001 and 2003 cohorts, respectively). In contrast to Newfoundland, the number of immigrants in Prince Edward Island who move within the province is the same as or higher than the number who leave after the first three years (2001-2005 cohorts). This trend reverses in the 2007 and 2009 cohorts, where immigrants are almost twice as likely to leave the province as move internally 3 years after landing. There is a sharp increase in the number of immigrants leaving the province within the first 3 years after landing in the two latest cohorts.

Table 2.3: Over-time Secondary Migration Trajectories of Original Landing Cohort to Nova Scotia, as Percentage of Original Cohort, 2001-2009 (odd years) (%)				
		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	57.6	18.0	15.8
	5yrs Since Landing	45.3	21.6	20.1
	10yrs Since Landing	30.2	23.7	24.5
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	56.8	17.6	17.6
	5yrs Since Landing	42.6	16.9	23.6
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	55.7	16.4	17.9
	5yrs Since Landing	43.8	17.9	22.9
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	59.5	16.0	16.0
	5yrs Since Landing	48.6	18.7	21.0
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	59.4	20.1	14.9

Source: IMDB

Retention in Nova Scotia is presented in Table 2.3. There is a gradual increase in the proportion of immigrants moving within the province between 3 years and 5 years after landing (2001, 2003, and 2005 cohorts), as well as an increase in interprovincial moves in each cohort. For the most part, immigrants moving within the first 3 years are at least as likely to stay in the province as they are to leave for another province (2005 cohort being the exception).

Table 2.4: Over-time Secondary Migration Trajectories of Original Landing Cohort to New Brunswick, as Percentage of Original Cohort, 2001-2009 (odd years) (%)				
		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	56.5	17.4	20.3
	5yrs Since Landing	39.1	14.5	34.8
	10yrs Since Landing	27.5	11.6	36.2
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	53.6	14.5	24.6
	5yrs Since Landing	43.5	15.9	30.4
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	57.7	12.4	22.7
	5yrs Since Landing	49.5	14.4	25.8
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	63.3	15.4	17.2
	5yrs Since Landing	49.7	16.6	25.4
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	62.9	13.4	18.8
<i>Source: IMDB</i>				

Table 2.4 presents the secondary migration trajectories of New Brunswick's original landing cohort. As seen in the other Atlantic Provinces, the proportion of immigrants remaining in their CSD of landing drops to nearly half within the first three years. Three year CSD retention improves between the cohorts, surpassing 60% in the two latest cohorts. Notably, New Brunswick's immigrants who leave their CSD of landing are more likely to move outside the province than within it, at all points in each cohort. The proportion of immigrants migrating intraprovincially is comparable to Newfoundland.

Table 2.5: Over-time Secondary Migration Trajectories of Original Landing Cohort to Quebec, as Percentage of Original Cohort, 2001-2009 (odd years) (%)				
		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	63.4	26.2	4.3
	5yrs Since Landing	49.5	34.6	6.8
	10yrs Since Landing	33.5	42.6	8.9

2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	59.4	28.4	6.3
	5yrs Since Landing	46.8	35.9	8.5
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	60.6	27.3	6.5
	5yrs Since Landing	48.3	35.9	7.7
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	63.6	27.1	4.1
	5yrs Since Landing	51.1	35.5	5.8
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	63.6	27.3	4.4
<i>Source: IMDB</i>				

Quebec's provincial retention (Table 2.5) appears in stark contrast to the Atlantic region, with interprovincial moves constituting less than 10% at each point. Over-time trends show steady retention, with 3-year retention rates slightly above 60% and 5-year retention hovering around 50%. The increase in intraprovincial moves between the 3-year, 5-year, and 10-year time periods is greater than the increase in interprovincial moves, demonstrating that those who leave their initial CSD (or who have already migrated internally) are more likely to stay in the province.

Table 2.6: Over-time Secondary Migration Trajectories of Original Landing Cohort to Ontario, as Percentage of Original Cohort, 2001-2009 (odd years) (%)				
		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	60.2	31.3	2.6
	5yrs Since Landing	49.3	38.3	3.9
	10yrs Since Landing	36.8	43.7	5.1
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	62.1	28.5	3.7
	5yrs Since Landing	52.2	34.5	5.0
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	64.4	25.7	4.4
	5yrs Since Landing	54.3	32.7	5.1
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	66.2	25.2	2.9
	5yrs Since Landing	56.2	31.6	3.9
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	66.7	24.8	2.9
<i>Source: IMDB</i>				

The trajectories of Ontario's secondary migrants are presented in Table 2.6. The proportion of immigrants retained in their original landing CSDs steadily increases between cohorts, both at the 3-year and 5-year time intervals, while intraprovincial moves, although still higher than interprovincial, decrease in occurrence (both 3 years and 5 years after arrival).

		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	74.7	9.2	11.5
	5yrs Since Landing	66.3	9.4	18.0
	10yrs Since Landing	56.3	10.3	23.4
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	74.7	6.1	15.5
	5yrs Since Landing	68.1	6.7	19.2
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	79.1	5.8	11.3
	5yrs Since Landing	74.0	6.6	14.2
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	84.4	5.2	7.5
	5yrs Since Landing	79.0	6.1	10.5
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	83.3	5.8	8.3

Source: IMDB

Table 2.7 presents a picture of Manitoba's secondary migration patterns. Both the proportion of intraprovincial and interprovincial migrations, after 3 years and 5 years, decreases between cohorts. Although immigrants are consistently more likely to move out of the province than within, they are more likely to not move at all. More than three quarters of all immigrants remain in their original CSD of landing after the first three years. This proportion increases from 74.7% in the 2001 cohort to 83.3% in the 2009 cohort. Even after 10 years, more than half of all arrivals can still be found in their CSD of landing. Interestingly, Manitoba retains the highest proportion of immigrants in Canada (followed closely by Alberta). At each time period, at least 90% of immigrants originally recruited by Manitoba and landing there remain in Canada.

		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	61.1	10.7	21.5
	5yrs Since Landing	49.7	12.8	28.9
	10yrs Since Landing	43.0	12.1	32.9
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	60.8	13.5	20.5
	5yrs Since Landing	55.0	13.5	22.8
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	68.5	11.3	15.3
	5yrs Since Landing	58.6	14.4	18.5
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	73.7	13.9	8.8
	5yrs Since Landing	68.9	15.1	10.9
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	72.9	14.1	9.3

Source: IMDB

As seen in Graph 3.8, as well as Table 2.8, retention in Saskatchewan improves dramatically over the time period. The proportion of immigrants leaving the province decreases considerably at both the 3-year and 5-year time intervals, from 21.5% to 9.3% (2001 and 2009 cohorts) and from 28.9% to 10.9% (2001 and 2007 cohorts), respectively. Saskatchewan's immigrants are more likely to either stay in their landing CSD or move within the province in the later cohorts. In the 2007 and 2009 cohorts, the proportion of intraprovincial migrations is higher than the proportion of interprovincial.

		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	84.1	7.5	4.1
	5yrs Since Landing	78.6	9.3	5.4
	10yrs Since Landing	69.8	11.0	7.5
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	84.0	8.3	3.8
	5yrs Since Landing	78.8	9.9	5.3
2005	Initial Cohort	100.0	0.0	0.0

	3yrs Since Landing	84.3	7.2	3.8
	5yrs Since Landing	79.6	8.4	5.1
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	83.2	7.6	4.2
	5yrs Since Landing	78.6	9.4	5.2
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	83.2	8.9	3.8
<i>Source: IMDB</i>				

Secondary migration of Alberta's immigrants is presented in Table 2.9. While we have seen that Alberta has the best rate of provincial retention, it is clear that it also has high CSD retention levels as well, with more individuals remaining in their CSD of landing than in any other province, except Manitoba in the 2007 cohort, at the 3-year and 5-year marks. The proportion of immigrants moving within the province is higher than the proportion moving outside, although both figures are some of the lowest in Canada.

Table 2.10: Over-time Secondary Migration Trajectories of Original Landing Cohort to British Columbia, as Percentage of Original Cohort, 2001-2009 (odd years) (%)				
		Same CSD	Intraprovincial move	Interprovincial move
2001	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	70.8	24.7	4.5
	5yrs Since Landing	61.9	31.6	6.5
	10yrs Since Landing	52.4	39.3	8.4
2003	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	70.1	25.0	4.8
	5yrs Since Landing	63.1	30.7	6.3
2005	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	70.1	25.0	4.8
	5yrs Since Landing	63.1	30.7	6.3
2007	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	72.6	23.2	4.2
	5yrs Since Landing	64.6	29.8	5.5
2009	Initial Cohort	100.0	0.0	0.0
	3yrs Since Landing	72.9	22.3	4.8
<i>Source: IMDB</i>				

Finally, we look at the secondary migration patterns of immigrants to British Columbia in Table 2.10. Although provincial retention is similar in British Columbia and Alberta, we see above that there is more internal movement within British Columbia, compared to Alberta, where immigrants are the most likely to stay in the CSD of landing. Although CSD retention is low, compared to nearby Western provinces, it is nonetheless higher than CSD retention in Ontario, Quebec, and the

Eastern provinces. Both 3-year and 5-year CSD retention increases slightly over the cohorts, while the proportion of both intra and interprovincial migrations declines. This table also demonstrates the importance of disaggregating provincial retention at the CSD level.

Conclusion

This report used data from the IMDB to track secondary migration patterns of immigrants to Canada between 2000 and 2009. Several clear conclusions can be made.

At the national level, interprovincial secondary migrations occur soon after obtaining permanent residence, with most migrations occurring in the first three years. There is some provincial variation – for example, Nova Scotia and Manitoba do not experience an initial surge, but a constant rate of outmigration over the examined time period. Most intraprovincial migration also occurs within the first three years, as seen in Tables 2.1-2.10, as the proportion of permanent residents moving within the province does not increase drastically between the 3-year and 5-year mark, with an even smaller increase between 5 and 10 years after landing.

Ontario is the destination of a large proportion of immigrants who leave other provinces. Nearly half of all emigrants from Prince Edward Island, Nova Scotia, New Brunswick, and British Columbia, and more than half of Quebec's outmigrants head to Ontario. Alberta is the most popular destination for immigrants initially settling in Ontario, Manitoba, and Saskatchewan. These two economic centres pull in immigrants from all over the country, although Ontario draws immigrants primarily from the Eastern provinces and Alberta is more popular among immigrants settling west of Ontario.

Proximity plays a role as well. Secondary migrants from the Atlantic Provinces are, proportionately speaking, most likely to relocate to other Atlantic Provinces, especially Nova Scotia.

Looking at over-time retention, we take advantage of the IMDB's longitudinal structure to follow individual landing cohorts to specific locations and determine the number of originally recruited immigrants that stay in the province over the long term.

Focusing first on provinces, we see varying rates of retention across the country. The lowest retention rates are found in the East, with Prince Edward Island showing evidence of progressively worse 3-year and 5-year retention rates between the 2001-2009 cohorts, with less than 50% of the cohort retained after 3 years in the latest cohort. This may reflect the surge of investors coming through the Provincial Nominee Program who settled outside Prince Edward Island, Nova Scotia, and New Brunswick. On the other hand, retention of later (2007 and 2009) cohorts improves, although 3-year retention does not surpass 80%.

Quebec, Manitoba, and Saskatchewan also show considerable over-time improvements in 3-year and 5-year retention, with Quebec showing the highest retention figures. The best provincial retention is seen in Ontario, Alberta, and British Columbia, with each retaining over 90% of the original cohort at the 3-year mark and at least 85% of the cohort still filing taxes in each province after 5 years. Alberta and Ontario both retained over 80% of their initial 2001 cohort in 2011. These high retention rates show little variation between cohorts.

In terms of cities, larger metropolises, with a population of greater than a million, have the best retention, although population size is not strongly correlated with retention. For instance, Edmonton's retention is similar to Montreal's, which is lower than Vancouver's, despite being more populated. Most second-tier municipalities have lower retention than the large metropolitan centres, with 3-year retention in the 70-80% range, compared to the 80-90% range found in the largest cities. Ottawa, Winnipeg, Halifax, and St. John's show the most dramatic over-time improvements in retention.

Comparing secondary migration within the province to between provinces, we again see many differences across the country. Most secondary migrations of immigrants in the Atlantic Provinces, Manitoba, and the earlier cohorts in Saskatchewan, are interprovincial. On the other hand, immigrants in Quebec, Ontario, Alberta, and British Columbia move much more within the province than outside. Although Alberta and British Columbia have similar provincial retention rates, there is much more internal movement within British Columbia.

While this report provides an overview of provincial and municipal trends, even more remains to be learned about who is most likely to outmigrate. How do secondary migrations vary by admission category? Do younger permanent residents differ in their mobility patterns? What about immigrants who have held temporary work permits before obtaining permanent residence?